

AN INSTRUMENTAL UNLOCKING WITH PERFORMER AS  
INNOVATOR: THE OBOE AS PROTAGONIST IN RE-THINKING THE  
RELATIONSHIPS BETWEEN PERFORMANCE, IMPROVISATION, AND  
COMPOSITION

by

MELINDA MAXWELL

A thesis submitted in partial fulfilment of the requirements of  
Birmingham City University for the degree of  
DOCTOR OF PHILOSOPHY

Royal Birmingham Conservatoire

Birmingham City University

August 2023

## Table of Contents

Table of Contents .....	2
Portfolio Compositions.....	5
Audio Examples .....	6
Illustrations .....	11
Acknowledgements.....	13
Abstract.....	14
Introduction .....	16
Definition of Oboe Sound with Interrelationships to Improvising, Performing and Composing and Ultimately to Practicing and Teaching .....	20
Oboe Perception, Instrumentality, Improvisation, and Performance.....	22
Summary: From Improvising to Composing, to Performing.....	27
Chapter 1: Preparations and Beginnings.....	31
General Background .....	31
Oboe Performance Context and Oboists .....	32
The Roles of Improvising, Composing, and Performing.....	35
Instrumental Route of the Oboe: Historical and Geographical Backgrounds.....	38
Performer/Improviser: Instrument-Led Improvisation and Performance.....	40
Composer and Composition Grounded in Improvisation.....	46
Chapter 2: Journey Routes: Explorations and Findings .....	55
Three Instrument Case Studies.....	58
1)The Ancient Greek Aulos .....	58
2)The South Indian Nadaswaram .....	60
3)The Western European Baroque Oboe .....	61
Three Composer Case Studies .....	63
Final Composition, <i>Janus</i> : Amalgamation of Research Processes.....	66
Summary.....	66
Chapter 3: Three Case Studies on Specific Instruments .....	68
1) Aulos Case Study.....	68
Introduction .....	68
General Context, Setting the Scene, and Images.....	69
The Sound and the Music .....	76
Ancient Greek Music Theory .....	78
Pitch and Tuning .....	79
Musical Structures.....	81
My Findings .....	82

Aulos Pitches and Sounds.....	89
Some Music .....	91
Complementary Oboe Music .....	96
New Piece for Solo Oboe: <i>Aulos Transfer</i> .....	101
Extra Aulos Music .....	102
<i>A Satie Gymnopédie</i> for Louvre Aulos.....	102
<i>A Bellermand Rondino</i> .....	104
New piece for Louvre aulos: <i>Aulos Awakes</i> .....	109
Conclusion.....	110
2) Nadaswaram Case Study.....	111
Introduction .....	111
The Instrument and its Context.....	112
A Nadaswaram Portrait.....	116
Nadaswaram Methods .....	121
Outcomes .....	132
Summary.....	137
3) Baroque Oboe Case Study .....	138
Introduction .....	138
Phase 1 .....	139
Musical Process: Making Crossover Links .....	143
Technical Process and Collaboration .....	154
Phase 2: Further explorations with improvisation of the musical material within <i>Ancestral Traces</i> .....	155
Chapter 4: Three Case Studies on Specific Composers: .....	162
Introduction .....	162
1)Varèse Case Study .....	162
Context.....	163
Open Scores .....	165
<i>Sounding Out Varèse</i> : (one-page score) for any mixed ensemble .....	171
<i>Sounding Out Varèse</i> : (one-page score) for a solo instrument .....	176
Critical Review and Summary .....	177
2)Britten Case Study .....	178
Introduction, Historical Context, and Intentions .....	178
Preparation and Process.....	186
Harmonic Thinking and Analysis.....	188
Improvisation Processes on Pan .....	191
Aulos Improvisations and Process .....	194

Final Improvisations.....	196
Composition .....	197
Compositional Form .....	198
Harmony.....	199
Transcription to Composition .....	202
Conclusion.....	205
3)Birtwistle, Holt & Sergeant: Collaboration and Creativity.....	209
Introduction .....	209
Context.....	210
Performance and Improvisation .....	214
Revisions of Old to New .....	217
Pulse Sampler (1981) for oboe and claves .....	218
Critical Reflection.....	221
Endless Interrupted Melody (1997) for oboe and piano.....	222
Holt & Sergeant: Collaborative Ongoing Relationships .....	225
Chapter 5: Final Project: Commentary on <i>Janus</i> : .....	229
Preparations and Outcomes.....	229
Concepts and Background Sonorities .....	233
Compositional Structure and Process.....	234
Post-performance Reflection.....	246
Conclusion.....	249
Bibliography.....	257
Discography.....	266
Performances.....	268
Audio Examples Secondary Listening List.....	269
Appendices .....	272
Aulos Case Study Appendix .....	272
Nadaswaram Case Study Appendix.....	292
Britten Case Study Appendix .....	301
Janus Commentary Appendix .....	302
Sonic Diary List of Improvisations .....	303

## Portfolio Compositions

(in alphabetical order)

*Ancestral Traces* (2019) original version for baroque oboe, G violone (large bass viol), harpsichord c. 12'20"

*Ancestral Traces* (2019) revised version for baroque oboe, G violone (large bass viol), harpsichord  
(Baroque Oboe Case Study)

*A Taste of Tamil* (2018) Duet for oboe doubling nadaswaram (optional) and trumpet

*A Taste of Tamil* (2018) Solo oboe doubling nadaswaram (optional)  
(Nadaswaram Case Study)

*Aulos Transfer* (2022) for solo oboe c. 5'

*Aulos Awakes* (2022) for Louvre aulos c. 3'56"  
(Aulos Case Study)

*Janus* (2022) for small ensemble and live electronics for oboe/Louvre aulos/nadaswaram, Louvre aulos 2, Bb clarinet/bass clarinet, Bb trumpet, double bass, percussion 1 & 2, live electronics. c.36'

*Pan – A Solo Improvisation* (2021) (duration free)

*Six Meditations and Responses after Britten* (2021) for solo oboe c. 10'  
(Britten Case Study)

*Sounding Out Varèse* (2019) for any mixed ensemble (duration)

*Sounding Out Varèse* (2019) for a solo instrument (duration free)  
(Varèse Case Study)

## Audio Examples

The digital file names take the format 'Audio Ex. (number)'.

Corresponding audio and video files are found on the accompanying USB stick in two lists: Primary listening list (for examples in the text itself), and Secondary listening list (for extra background listening if wanted as shown in the Discography). There are three online video files listed separately as 28 a) b) and c).

There is also a sonic diary list shown in the Appendix as material available on request.

All sound files are live improvisations or readings taken from performances, workshops, or from my study at home. Some contain talking and extraneous noises off.

### Aulos Case Study

#### Primary listening

01) RBC Jazz Research Group Presentation, Feb 6, 2020. Live improvisation. Order of instruments: 2 auloi, oboe and aulos, oboe and bagpipes, aulos and bagpipes (with spaces to change instruments). Begins at 40" Duration 16'30"

02) Surge Festival, April 2019. This is a rehearsal run-through as performance recording is lost. Contents: opening aulos music with 'tuning', chorale (Fig 12b) and aulos melody. 2 auloi, oboe and aulos, oboe and bagpipes. Duration 25'58'

03) *Aulos Transfer* for solo oboe, Jan 2022. One take. Duration 5'

04) Oboe and Aulos improvisation, Nov 2021. Duration 5'19"

05) *A Satie Melody*, Apr 2020. One take. Duration 2'23"

06) *Bellermann Rondino* One take, imperfect. Duration 3'23"

07) Arrangement of Britten's *Pan* for Louvre aulos, Jan 2022 Duration 2'44"

08) Four tracks. Improvisations using grace notes and finger exercise patterns.

09) Two tracks. *Aulos Awakes* for Louvre aulos. Track 1; 1<sup>st</sup> part, duration 1'46, Track 2; 2<sup>nd</sup> part, duration 2'10" May 2023

### Nadaswaram Case Study

#### Primary listening

10) Two tracks, Kasim playing with his brother Track 1; *Chinnama*, Track 2; *Manasu Nilupa*

- 11) Original *Sri Vali Deva* 2 Nadaswarams and percussion. Duration 8'19"
- 12) Four tracks. *A Taste of Tamil* duet oboe/nadaswaram/trumpet Tracks 1; Section A with background (3'52") Track 2; Section A without background., (4'48") Track 3; Section B (oboe/trumpet) with background (4'59") Track 4; Section B (oboe/trumpet), without background (6' 05"). Dec 2017
- 13) Seven tracks. *Jekyll & Hyde and Beauty and the Beast*, collaboration with Dr Simon Hall oboe/nadaswaram + electronics, Feb 2018  
Track 1; Improvising oboes with *Sri Vali Deva* melody with 2) added by Dr Hall 5'35"  
Track 2; Nadaswaram/Oboe. Original improvisation (pre-distortion) with oboe improvisation over it 3'41"  
Track 3; Taking 2) with Nadaswaram improvisation over it. Dr Hall interjecting 1) =3 elements 5'26"  
Track 4; Oboe multiphonics of key notes, one bar at a time 5'08"  
Track 5; Plain *Sri Vali Deva* melody 3'17"  
Track 6; Nadaswaram improvisation over a distorted version of a previous improvisation. Distortion distilled with elongated sounds. Singing & playing together producing multiphonics 4'52"  
Track 7; Oboe improvisation with 1) and 2) added by Dr Hall = 3 elements 5'06"
- 14) 26 Catalogued Sounds as live electronic background for *A Taste of Tamil* Nov 15, 2018 (hard copy CD available).
- 15) Improvisation in *Emulsion Sinfonietta* concert in Shrewsbury with Nadaswaram (Melinda Maxwell), trumpet (Percy Pursglove), and live electronics (James Dooley).
- 16) Public performance outdoors for Surge Festival at Birmingham Midlands Arts Centre Tony Dudley-Evans introduces and Melinda Maxwell explains about instrument before playing with James Dooley live electronics.
- 17) Public performance Bath Spa University recital. Nadaswaram and (non-live) electronics (file made by James Dooley). Nov 14, 2018.
- 18) *Stranger Danger* audio of concert with John O'Gallagher introducing. Oboe/ Nadaswaram. Please begin at 5'13" 1 hr 16' Nadaswaram enters at 48.00' Nov 28, 2018.
- 19) Live recording N4 Library London. Story Telling (Dr Naidu) with Music Improvisations (Maxwell, Oboe/Nadaswaram). Hard copy CD available Nov 17, 2018.
- 20) BBC Podcast recorded at BBC Roundtable discussion (Maxwell, Dr Naidu, Prof Orsini) *Being Human" SOAS Multilingual Locals + Significant Geographies*. Oboe improvisation/tanpura at 16'23" – 17' 36'. Maxwell explaining her work followed by a workshop moment she gave on pulse. 22'02" – 28'21". Hard copy CD available. Nov 29, 2018.

## **Baroque Oboe Case Study**

### Primary listening

Phase 1:

21) Live concert performance of *Ancestral Traces* (original version) in concert 21 Feb 2019 Melinda introduces at 1'23" Piece begins at 3'45". Total 12'20"

22) Oboe Improvisation on Bach 3'01" Nov 2018.

23) Baroque oboe multiphonics Nov 2018 1'04"

24) Public performance of Berio's *Sequenza VII* at Bath Spa University recital followed by an improvisation on it at 9'38" until 11'45" Nov 2018

25) Three tracks Gail Hennessey & Melinda Maxwell exploring *Ancestral Traces* material with spoken explanations and introductions to each track.

Track 1; explorations on the note B. Two baroque oboes. 2'11"

Track 2; GH multiphonics and MM on harpsichord. 2'46"

Track 3; MM playing *Ancestral Traces* related chords, GH *Ancestral Traces* melody 5'18",

Nov 2018

Phase 2:

26) Seven tracks. Workshop session with harpsichordist David Gordon & Melinda Maxwell oboe.

Track 1; adding a C scale into Bach form 4'40"

Track 2; *Ancestral Traces* on modern oboe and harpsichord 8'36"

Track 3; Berio style improvisation over the Bach harmony 4'22"

Track 4; Improvisation on chords of *Ancestral Traces* 2'31"

Track 5; Oboe playing original Bach, harpsichord improvising 4'31"

Track 6; Oboe improvisation over Bach with rhythmic additions 3'00"

Track 7; Whole original Bach followed by an improvisation 8' 49"

## **Varèse Case Study**

### Primary listening

27) *Sounding Out Varèse* for any mixed ensemble. Public performance in *Stranger Danger Night* of graphic scores by John O'Gallagher, Melinda Maxwell and Mike Fletcher. 34' 00" – 40'00" Hard copy CD available. Nov 2018.

28) Two tracks. *Sounding Out Varèse* for any mixed ensemble. Two versions performed by the woodwind quartet in residence at the Contemporary Composition and Performance Course in July 2019 at the Britten-Pears School for Advanced Musical Studies in Snape, Suffolk. Melinda Maxwell, woodwind tutor. Track 1 & Track 2; 3'45". Hard copy CD available.

**Additional** 28 a) b) and c); these three online videos are listed separately on the USB stick. *Sounding Out Varèse for a solo instrument*: three online presentations given during Covid 19 lockdown by Melinda Maxwell as online demonstrations.  
a) BCMG online presentation <https://www.youtube.com/watch?v=qJvcJKvT8XA>  
b) London Sinfonietta Live Lockdown Series <https://youtu.be/v-df-hxxU>  
c) BCMG/NEXT (PG students on the BCMG Contemporary Music Performance Course) <https://www.youtube.com/watch?v=Kfa6rWjB-vg>

## **Britten Case Study**

### Primary listening

29) Thirty tracks of improvisations inside and outside the form on all the six Britten “Metamorphoses” (listed in alphabetical order)  
Twelve tracks on the first movement *Pan*. After preparatory improvisations Dr Hall and Melinda Maxwell made studio recordings of as many improvisations in the time allowed, recorded Feb 2021.

*Arethusa* Inside; 2 tracks Outside; 1 track

*Bacchus* Inside; 2 tracks Outside; 2 tracks

*Narcissus* Inside; 1 track Outside; 2 tracks

*Niobe* Inside; 2 tracks Outside; 2 tracks

*Pan* Inside; 6 tracks Outside; 6 tracks

*Phaeton* Inside; 2 tracks Outside; 2 tracks

30) Four tracks. Aulos improvisations and process:

Track 1; Oboe improvisation the second inside the form with aulos improv over it 2’47”

Track 2; Original *Pan* on oboe with aulos improvisation over it. 2’39”

Track 3; *Pan* on the aulos 2’47”

Track 4; *Pan* on aulos with oboe improvisation over it 2’49”

31) Three tracks. Final improvisations:

Collaborative improvisations with Dr Hall and Melinda Maxwell:

Track 1; Improvising live over fragments of material from one of the originals fed into my headphones by Dr Hall. 4’06” “Chop up 1”

Track 2; Improvising live over a recorded improvisation. 2’58” “Chop up 2”

Track 3; Improvising outside the form with Dr Hall reacting to it by feeding Melinda fragments from any of the previous recorded improvisations and distorting extracts. 2’37” “Chop up 3”

32) Oboe improvisation on *Pan* outside the form. This is an example of reworking an improvisation into a composition relating to *Response 1* only in *Six Meditations and Responses after Britten*. 2’33”

## **Birtwistle Case Study**

### Primary listening

33) Live public performance of *Pulse Sampler* Milton Concert Hall London Radio 3, Nash Ensemble Birtwistle portrait concert. *Pulse Sampler* features at 1:18:25 with interview before performance with Melinda Maxwell and Richard Benjafield. Sept 2017

34) Live public performance of *Pulse Sampler* "Celebrating Sir Harrison Birtwistle at 85" BCMG concert with BCMG percussionist Julian Warburton. 10'50" Sept 2019

35) Professional recording of *Pulse Sampler* for CD *Harrison Birtwistle Chamber Works Nash Ensemble* Hard copy available Track 3 BIS-2561. Recorded at Kings Place London. 10'06" Jan 2021

36) Live public performance of *Interrupted Endless Melody* for oboe and piano in London Sinfonietta concert at Queen Elizabeth Hall 14'14" Oct 2019

### **Commentary on *Janus***

#### Primary listening

37) Four tracks. Workshop exploring aulos and trumpet sonorities and pitch, and explorations of *Janus* material with trumpeter Percy Pursglove (Hamburg June 16, 2022):

Track 1; exploring unison note E 1'19"

Track 2; aulos/trumpet improvisation (B/F sharp on aulos) 2'30"

Track 3; exploring high aulos register improvisation with trpt 00.46"

Track 4; *Janus* slow fanfare material tryout (2 takes) 2'17"

38) Recording of *Janus* performance RBC Nov 2022 36'14"

## Illustrations

- Figure 1. Woman playing an aulos 475-425 BC, Capitoline Museum Current Collection: Rome: Athenian Vase number 213590.
- Figure 2. Fragment (one of three) of a polychrome tomb-painting, British Museum EA37984.
- Figure 3. Marble relief of a satyr in a Dionysiac procession Roman sarcophagus about c. 100AD from the Villa Quintiliana on the Via Appia south of Rome. British Museum.
- Figure 4. Women making music. Apulian pelike (southern Italian ceramic drinking vessel with handles) in Copenhagen. 4th century BC. (Copenhagen VIII 316).
- Figure 5. Symposium scene. Red-figure cup Attic, c.480 BC Munich 2646.
- Figure 6. Image of my Louvre Aulos made by Thomas Rezanka.
- Figure 7. My aulos reeds made by Max Brumberg.
- Figure 8. An aulete wearing a phorbeia. Image from a Red-figure cup by Epictetus, C.500BC British Museum E38.
- Figure 9. High pipe and low pipe pitches.
- Figure 10. A slow tuning exercise.
- Figure 11. The “extra” diamond-shaped pitches.
- Figure 12 a). Tuning the fourths and unisons.
- Figure 12 b). Chorale in 3/4
- Figure 12 c). Dance in 11/8
- Figure 13. Oboe multiphonics for which the main notes correspond to the aulos mode.
- Figure 14. Chromatic, angular oboe melody.
- Figure 15. Aulos melody in a Phrygian mode on F-Sharp.
- Figure 16. *A Satie Gymnopédie* for Louvre aulos.
- Figure 17. Ex.a
- Figure 17. Ex.b
- Figure 18. First page.
- Figure 18. Second page.
- Figure 19. My nadaswaram.
- Figure 20. My nadaswaram reed and ivory needle.
- Figure 21. The first 5 bars of my transcription of *Sri Vali Deva*.
- Figure 22. Combined rhythmic groupings.
- Figure 23. The *tihāī*, a form of triple repetition as shown in the Coda section.
- Figure 24. Improvising in the presentation. Photograph taken by the husband of Dr Radhika Balakrishnan.
- Figure 25. Oboe melody, Adagio, from Bach’s *Easter Oratorio* for oboe and strings
- Figure 26: Transcription of improvisation on Bach melody.
- Figure 27. Baroque oboe multiphonics.
- Figure 28. Showing the Bach string accompaniment.
- Figure 29. Scale in the top line.
- Figure 30. First part of Bach-like melody for baroque oboe.
- Figure 31. Some rhythmic patterns.
- Figure 32. My score of Berio’s *Sequenza VII*.
- Figure 33. Baroque oboe B fingerings.

- Figure 34. Baroque oboe multiphonics with the note B prominent.
- Figure 35. Oboe multiphonics (some taken and extended from those of the baroque oboe).
- Figure 36. Patterns of tri-chords.
- Figure 37. *Sounding Out Varèse* for any mixed ensemble (to see in more detail please refer to hard copy attached).
- Figure 38. *Sounding Out Varèse* for a solo instrument (hard copy attached).
- Figure 39. Opening oboe melody from *Octandre* by Varèse (as shown in *Sounding Out Varèse*).
- Figure 40. Pitch Relationships & Transpositions.
- Figure 41. *Pan* from Britten's *Six Metamorphoses after Ovid*.
- Figure 42. Re-construction of Britten's *Pan* for Louvre aulos.
- Figure 43. The seven "insider" pitches.
- Figure 44. The five non-Britten "outsider" pitches.
- Figure 45. The numbered "insider pitches" and the lettered "outsider pitches".
- Figure 46. The overlapping pitches of *The Meditations*.
- Figure 47. Revision of the percussion pulse mobile at the beginning of *Pulse Sampler*.
- Figure 48. My oboe part with Birtwistle's rhythmic idea top left to be used in the improvisation.
- Figure 49. Nicholas Poussin *Dance to the Music of Time* is licensed under CC BY-NC-ND.
- Figure 50. Diagram of Janus' structure.
- Figure 51. Etruscan painting c. 470 BC Tomba dei Leopardi, Tarquinia.
- Figure 52. Young man piping, courtesan dancing with castanets. Re-figure cup by Epictetus, c. 500 BC British Museum.
- Figure 53. Diagram and explanation of The Greater Perfect System.
- Figure 54. *Phaeton*, the second of Britten's *Six Metamorphoses after Ovid*.
- Figure 55. BCMG Programme for *Janus*, November 2022.

## **Acknowledgements**

I would like to thank Prof Tony Whyton, Prof Joe Cutler, Dr Simon Hall, Dr Hans Koller, and Dr John O’Gallagher for their invaluable feedback in their supervisions, and for the support of RBC Research department. I would also like to express my gratitude to my collaborative musicians who joined me on specific case studies, Dr Percy Pursglove, Dr James Dooley, Dr Sebastiano Dessaney, Liam Halloran, Gail Hennessey, and Callum Armstrong. Finally, I would like to acknowledge and thank Stephan Meier from BCMG for commissioning my final piece, *Janus*.

## **Abstract**

In the older cultures of Asia, the Middle and Far East the sound of the modern oboe's ancestors was expressively powerful, and improvisation was a fundamental component in performance. In Western classical music improvising and performing composer instrumentalists was also common, but from the 18th century these skills began to drift apart. The skill of improvising in performance is now mostly a lost art and a performer composing is unusual. Today the combined skills of improvising, performing, and composing have become compartmentalized into separate activities in our systems of delivery in classical mainstream music making and in education. In the splitting of these musical activities, I believe we have neglected something significant. And a context in which oboists from the contemporary Western classical tradition improvise their own music in concert and compose from this experience, are rare.

This commentary draws on practice-led methodology that connects these skills to explore the sound and creative potential of the oboe by a classically trained professional oboist. My research question is: how can the modern oboe re-connect with its past to find a character in its sound that fuses old and new sonorities, and what potential does this offer for the development of a new improvisatory and compositional language within a contemporary classical context? To begin, there will be three chapters on background context, including one on methodology. This is followed by a series of six case studies and a final commentary on a new work. The case studies will examine methods that reinvent ways of hearing the instrument, explore the music of its different

historical roots, and attempt to reconfigure the oboe's place in a 21st century context. This practice-led submission explores perceptions of oboe character through creative practice, and places improvisation at the heart of composition and performance, reclaiming a vital part of music making that fuses player, improviser, and composer. Through collaboration and the reworking of established repertoire, I aim to make a contemporary music where the oboe amalgamates its older voice with a new one, where the discipline of improvising feeds into composing, and where performing and live music making can generate different perceptions of oboe character.

## Introduction

As a professional oboist versed in all styles of music with a particular interest in the contemporary, I have often wondered if improvisation could hold the key to making links between how we hear and play, how we interpret repertoire, and ultimately how we think about music. It concerns me that there is relatively little improvising practice in classical mainstream music making. We have opportunities for cadenzas in baroque and classical contexts that require stylistic improvisations, or moments in more contemporary graphic or proportional notations where we can improvise within specifically composed structures, but there is a lost tradition of player as innovator and improviser in a contemporary musical context, especially for oboists. In my experience I became aware of this discrepancy during my masters in jazz performance where it was standard practice to combine these skills. There is evidence now of electives in improvisation for classical performers at music conservatoires<sup>1</sup> and at university music departments.<sup>2</sup> But in music making for today's classical musicians, there is no established forum or performance opportunity to combine these skills; this has led me to find out why and how this is the case, what has happened to close off this form of instinctive expression, and if there is a way of addressing it. I wonder in what ways this could be beneficial not only to instrumentalists but how it could directly affect levels of communication, interaction, and dialogue in our wider musical communities.

---

<sup>1</sup>For example, the Guildhall School of Music and Drama has a course (Centre for Creative Performance & Classical Improvisation) run by Professor David Dolan.

<sup>2</sup> For example, Goldsmiths at the University of London offer a BMus course that 'reflects the diversity...of music in the 21<sup>st</sup> century, taking in everything from classical music to contemporary jazz and electronic practices.'

Reflection and private thinking enable us to find out what we think and why. When transferred in relation to music making, whether improvising, composing, or performing, it exemplifies a state of being that inspires a process of exploration within the imagination. As the American jazz saxophonist and composer Henry Threadgill says: “Everything is about exploration. We get to where we are because of exploration. That's why improvisation is so important... We won't improve anything unless we have an improvisational approach to life.” (Threadgill, 2018).

The improvisational approach to music (as to life) is, I believe, fundamental to finding out what we feel and think about music. It forces us to find out who and what our musical personalities are. This, in turn, lends confidence to what we believe and enhances our methods of performing and communicating. However, this approach has become lost for some classical musicians today. As Dalya Alberge noted in *The Observer*, “improvisation skills were all but lost by the 20<sup>th</sup> century and few classically trained musicians can now do so in any style” and “performances suffer because they are so dependent on the printed score” (Alberge, 2020).

Both Professor John Mortensen (whose words Alberge is quoting above) and Robert Levin are American classical pianist improvisors who use improvisation in their performances and teaching of classical works. For Levin this skill anticipates ideas for his own compositions. This exemplifies the natural consequence of improvising and performing lending credence to the act of composing, one benefiting the other, and all three skills working together. This creative response to making music and using improvisation as a key element in the working process has become lost. Improvising is cordoned off into a different

category as a minor, nonessential activity, and is not considered a serious or core practice. David Dolan, pianist, and educator who teaches at the Guildhall School of Music and Dance (GSMD) in London states: “A common general belief is that the ability to improvise is a natural talent that cannot be taught therefore, improvisation tends not to hold a place within the everyday musical activities of the classical music student” and that this reinforces the “‘specialist’ reputation that improvisation seems to have within the classical music world”. (Dolan, 2005: 110). There are, it must be said, one-off opportunities within some forms of education for students and outreach projects for orchestral musicians within orchestral programmes, but there is no accepted criteria or widespread general course of study that encourages and explains the process and value of improvisation as a viable creative and performance tool. Within this context, the role of professional improviser - one who has studied the art of improvisation and performs with it in their music making - is lost.

However, there is a shift, albeit gradual, taking place among some instrumentalists. In the UK today there are a few classical musicians who have dedicated time in their working careers to some form of improvisation in their roles as solo players and within certain instrumental groupings and whose musical pathways include the performance of contemporary music.<sup>3</sup> In this contemporary music setting there are occasions and opportunities in certain scores, to improvise, and of course, there are many ways to improvise. What I’m searching for and thinking about is: what types of improvisation are there, how

---

<sup>3</sup> This includes myself, as well as some fellow UK contemporaries: cellist Matthew Barley, violinist Thomas Gould, and trumpeter Torbjörn Hultmark, to name a few.

does this process function and affect composition and performance, and ultimately the whole musical personality, and why this skill needs attention.

Structured, prescriptive, and free improvisations are different standpoints, and some composers of the 20<sup>th</sup> century began to make inroads into these types. In *Aus den Sieben Tagen* (1968), Stockhausen was revolutionary in composing pieces for improvisation. Here 15 prose texts inspire and encourage an intuitive music making of the imagination, however, these pieces are rarely heard. In scores for ensembles or orchestras beginning in about the 1960s onwards (such as those by Witold Lutoslawski and Bruno Maderna), there are improvisatory sections that are prescriptive, but which nevertheless allow each musician to interpret a way into their own musical expression. In my experience these moments are often unguided and under-rehearsed. There is a lack of knowledge about how to proceed with an improvisatory process because it remains an activity that is alien to most classical musicians. The players are left to their own devices. “Keep playing something” is what tends to happen, with, in my experience, the resultant music lacking clarity and character and sounding strangely broken. More recently, in 2016, the Austrian composer Beat Furrer (b.1954) set up *SCAN An Interaction Composing and Improvising Project* in Darmstadt where musicians have an opportunity to re-interpret notation via improvisation, but again, the context is highly prescriptive. In the UK there have been groundbreaking activities; from 1969 onwards with, for instance, Cornelius Cardew and the experimental *Scratch Orchestra*, there have been attempts to embed improvisation into experimental ensembles. In 2005, for example, I co-founded the group called *Notes Inégales* set up by Peter Wiegold. Both forums enable a creative approach to making music and gives the musician licence to

experiment and discover what and how they can contribute to the musical discourse in hand.

However, for a classically trained musician the established paths are well defined: either train as a performer or a composer; improvising is secondary. At least in live performance, with its built-in risk factor, there are possibilities for this freshness to appear. In the languages of jazz and folk music across the world the three skills are combined automatically. In Western classical music with its vast repertoire and the machinery of a music business industry selling and fashioning specific styles and forms of music, attitudes are changing; however, the categories overall remain separated. This research aims to bring them together and, at the same time, explore how to invent a new music, one which is created, improvised, composed, and performed by an instrumentalist - in this case, an oboist.

### **Definition of Oboe Sound with Interrelationships to Improvising, Performing and Composing and Ultimately to Practicing and Teaching**

How would we define perceptions of oboe sound, what are its characteristics, and how is it understood within the existing repertoire? One fact about the very sound of an oboe itself, whether ancient or modern, is that its core sound is extremely penetrative. In orchestral contexts it provides the A for tuning because it can always be heard across a busy sonic texture. Even with developments in its construction that have modified the sound to make it less direct, softer, and unobtrusive, its sound still carries.

Unfortunately, the oboe is an unpopular instrument in schools. It is notoriously difficult to learn and as a result the instrument is now considered

endangered in education.<sup>4</sup> The double reed itself is an expensive and delicate piece of equipment that lasts a few months at most and when blown, it creates the vibrations that determine the character of the tone. All professionals make their own reeds so they can control the type of tone they wish to make, and this is a time-consuming craft. Initially, it is difficult to make what one might call an acceptable sound when learning the oboe - young players sound earthy and wild – but eventually with patience and practice, the sound can settle. All in all, it is an instrument that requires a lot of attention and dedication to learn.

Supposing we take a sideways step and open a perception of the oboe's sound in which players can develop different ways of making and listening to it and explore other avenues of expression. A place where the preconditioned views of its character can be turned around to show a notion of "the other", a place of experimentation to increase its breadth of sound and expression. This experimentation has to be led by a different approach to the instrument, one in which, as Bailey (1992: 99) stresses, "The instrument is not just a tool but an ally. It is not only a means to end, it is a source of material." Exploring the sound and sourcing its qualities can lead to the unexpected. Applying processes of an accidental nature to forms of playing where the listening deepens, can free up habits of playing. The concentration involved in the very act of doing and making

---

<sup>4</sup> T W Howarth, the famous British firm that makes oboes, has a quote in the Argus magazine of July 2007: "The oboe has been listed as one of five classical instruments on a national "endangered species" list because too few people play it and orchestras have struggled to recruit members in their woodwind sections. Now a Sussex firm is leading an attempt to redress the balance by getting children to start playing it again. (T W Howarth in Worthing, which supplies woodwind instruments to several London orchestras, has designed and built the first child-friendly version of the instrument".)

can bring out a type of creativity that spotlights a different character on to the instrument.

By working with improvisation, I am interested in examining whether it would be possible to find a different way of listening to the oboe sound and create a new type of music with it. Could a direct connection to it by an oboist, improviser, and composer with experience in contemporary techniques offer an opportunity to redefine its sound and broaden its perception revealing a different language in music making? Given the presence of improvisation in different cultures and earlier forms of oboe practice, could an exploration of the unruly and liberated sounds of older double-reed sonorities and their playing techniques add an extra dimension to the perception of the oboe's sound? The blaring, plangent and sensual sounds of the older oboes could help to define a new way forward.

### **Oboe Perception, Instrumentality, Improvisation, and Performance**

The late composer and conductor Pierre Boulez wrote:

The performer is dependent on instrumental habits, since contact with the instruments is how the musical culture on display was acquired. Performers remain prisoners of their raw reflexes, like it or not, and these reflexes inescapably mean avoiding fundamental questions of creativity. (Boulez, 2018: 116).

I question Boulez's notion that "performers remain prisoners of their raw reflexes". Performers *can* outwit these reflexes by experimenting via improvising to address "fundamental questions of creativity" using some of these new techniques; this would involve the ear leading the music to different instrumental sounds and procedures. The ear can be challenged to create new

sounds, new avenues of expression via instrumentalists who have a direct hands-on and ears-open connection to this exploration. The perception of any instrument is tied in with styles that are associated with it, and in the oboe's case, it is a pastoral, classical one. In a sense all instruments express their history and heritage. For example, however the violin is played (whose design has not changed for the last four centuries), it carries and expresses its historical legacy. As Berio (2006: 26) noted, "Instruments take a long time to transform themselves, and they tend to lag behind the evolution of musical thought". The oboe (whose design, unlike the violin, continues to change), thanks to some enlightened and resourceful players and composers (particularly the Swiss oboist/composer Heinz Holliger), has extended techniques that have only come to the fore in contemporary music from the mid-20<sup>th</sup> century, which now form a part of the sonic unruliness I mentioned earlier. For example, the unusual sounds of oboe multiphonics, of which there are over 400, have opened sonic possibilities in timbre and pitch. This resource can extend and enrich the oboe's known lyrical sound world. I believe it is also possible to rethink other dimensions of an instrument's sound and allow these to influence a style of making music. And particularly, in the representation and perception of the oboe, it would be intriguing to have a change of direction, not to forego the old, but to add a new way of hearing it. Why? Because there is a part of its character that I believe needs to be re-evaluated and given attention; to give it a wider scope to sound more quixotic, beguiling, wilder, mysterious, and tied into a broader set of cultural influences and practices; hidden qualities that it possessed in the past.

These hidden qualities will be explored initially through my journey into past territories of older oboes, and in one case an ancient one. Here, any previous instrumental memory will cease to automatically exist as these instruments are unknown. Can the sounds of older instruments, which to Western ears have no preconceived habits of instrumentality, affect and direct a certain music making? In this research this freedom of approach with the physical sounds in situ will inspire the invention and lead the explorations, particularly so when transferred to the modern oboe. These procedures are not about finding or aping historical authenticity; rather they are about finding an oboe character that comes directly from within the sound source that influences the music making.

How will this process begin and what will this music be? Certainly, creativity confronts the relationship between structure and material. With the solo oboe line, the idea of melody, its shape and contour, will be a determining factor. Added to this will be the harmony that the melody suggests. The horizontal linear melody and vertical blocks of harmony are the dimensions that can open a fertile area of invention via improvisation. As Messiaen states,

The melody is the point of departure. May it remain sovereign! And whatever may be the complexities of our rhythms and our harmonies, they shall not draw it along in their wake, but, on the contrary, shall obey it as faithful servants; the harmony especially shall always remain the “true”, which exists in a latent state in the melody, has always been the outcome of it. (Messiaen, 1944: 8).

The melodic material and the act of improvising with it generate the form and this makes the improvisation structured in design. Added to this, once the original material is found, either improvised or taken from a notated source elsewhere, an act of reflection ensues. “The phenomenon of music is nothing other than the phenomenon of speculation...the basis of musical creation is a

preliminary feeling out". (Stravinsky, 1942: 27) For this study, the "feeling out", the speculating and reflecting, go hand in hand in the improvisatory process.

This state of being is acutely aware of the moment (indeed the epitome of being alive), and for improvisation to function it requires the utmost reflection before and during its activity <sup>5</sup>. This reflecting, speculating, and thinking is constantly at work (particularly in the preparation of any improvisation), if the music is to have meaning because you must deal with the reality of making something valid and significant. With the preparing and reflecting the thrill of improvisation comes in the reinvention in the moment of a different version of the original. The American soprano saxophonist Steve Lacy, for example, states: "to make a language structure you need time to work on it, time to think about it and prepare it ... And you can play it ... differently each time" (Lacy, 2006:189 – 190). For Lacy, planning enriches ways of reflecting and improvising. If there is a total lack of this it "can rob you of a lot of control, growth, even freedom". This will "enable you to develop skills that you need for spontaneous, present moment, improvisational thought" (Blake et al., 2010: 55).

When improvising we draw on the wellspring of our own musical memories, the music we listen to and love. This choice mirrors not only the personal but also social and political contexts. It defines personality and cultural identity. "The ear must be served by a learning process. This process, along with constant curiosity, investment and re-investment in listening, is the informing

---

<sup>5</sup> Afterwards, there may be thoughts on different approaches. By then it's too late but there will always be another opportunity and version next time.

soul of an improvisational style” (Blake et al., 2010: 57). This state of being, of reflecting, takes place all the time, whether practising or ultimately performing. It is an act of reflection. Daily practising, aside from keeping techniques in trim, is also a form of concentrated meditation on whatever process is in hand. It is a most serious and precious activity because ultimately, I believe types of practising influence and reflect types of performing. Preparing improvisation for performance (and this applies to preparing notated music as well), requires finding the relationships between the structure and material. The constant reinvention daily of the same material being prepared for performance is the stuff of music making. And the joy of this is that there is a direct contact of the sound to the ear and to the imagination. Whether interpreting or improvising, the repeated search for clarity of thought and communication is the key and the endgame in performance.

The Argentinian-born pianist and conductor Daniel Barenboim KBE corroborates these views. He talks about learning and studying a composed piece of music, learning its anatomy, understanding the structure in preparation for performance. The innocence and freshness of the first “reading” must be re-found once the study has been completed. The British pianist Clifford Curzon (d. 1972) called this act “the second simplicity”. He wrote, “When you first play a piece you can often fully comprehend it immediately. But what is needed then is to go away and take it apart and slowly work your way back to where you can play it just as well as you did the first time but now fully understood. That’s what I call the second simplicity.” (Robertson, 2016). The aim in performance is to play as if for the first time and inventing as you go. As Daniel Barenboim noted:

Very often, after having worked in depth this way, something will unexpectedly occur to me during the performance, making me go in a direction that never struck me in all the times that I had played it at home. This spontaneous realization, though, would not have been possible without all the repetitions and the familiarity resulting from intense study. This is why improvisation – going in an unexpected direction, allowing the fingers, the heart, the brain, the belly, to cooperate in an unpremeditated way – is a very blessed state in the life of a human being, as well as the basis for making music. (Barenboim, 2008: 58).

These words explain what can happen in performance and the “very blessed state in the life of a human being” is significant in its importance. This categorically shows that the art of improvisation, particularly in performance (and in this case it is about releasing its spirit within a notated score), is at the heart of communication and from an instrumentalist’s point of view, essential in keeping the music we play alive. This skill is fundamental to performing. This is what I needed to know about in my student performing experience, when I thought I could nail down “the perfect interpretation” in performance. The very thought of trusting my ear in the moment to change a preconceived idea was never considered. And this non-consideration of the instinct, but rather the premeditated way of performing, remains generally the case today in how we teach interpretation for performance. Within this context, Barenboim understands the power of reflection in the moment, the instinctual trust of the ear, and the improvisatory approach to performance in whatever guise, because it keeps the music alive and ultimately communicates the music more powerfully.

### **Summary: From Improvising to Composing, to Performing**

If we know the nuts and bolts of any harmonic form and how material develops within it, this enriches and influences interpretation. And not only this

but it gives us insight into the nature and craft of composition itself. Most importantly and intriguingly this way of working, automatically and naturally reflects personality, adding a depth of understanding and knowledge that empowers confidence and performance energy. Also, there are infinite ways of playing the same phrase differently. This phenomenon encourages the element of risk and the exploration of inventiveness. The risks in improvisation provide surprises that can only come to the surface by the actual doing and making of it. The bringing together of all these skills enriches experience, enhances our consciousness, and feeds into a much broader understanding of the role of any musician.

In order to remember ideas and decisions made through the experience of improvising, the skill of notating and crafting them into finished compositions in a score format is the final, but nevertheless secondary act in this research process. It is secondary because ultimately the performance is the primary act because this is where the music lives. Musical notation can be ambiguous at the best of times but for the interpreter performer the actual hearing of the music in real time in the acoustic in which it is situated can also determine its ultimate expressive progress. A diminuendo can begin and end in slightly different places than is indicated in the score to suit the acoustic, so the act of interpreting needs degrees of flexibility. The act of notation is a means to an end and not an ultimatum on how exactly the music should sound. The performer needs an understanding and flexibility in seeing from the score where the essence of the music lies. The score does not set the music in stone rather it requires a trust of instinct and an improvisational and tactical approach in the reading of it. The interrelationships between improvising and composing then come together in

the final act of performing. The ideas that germinate in improvisation are the compositional elements of “fusion, pitch modification, and direct coupling, [that] often act as partners in formulating chains of ideas. In addition, related processes, contour crossover and overlap, occur when two shapes intersect one another.” (Berliner, 1994: 186). Improvisation reworks and deconstructs, and composition involves “significant elements of planning, deliberation, pre-conceptualization” (David Sterritt, quoted in Cook, 2000: 19). Both skills unite in performance where the music lives and breathes.

To conclude, my aim in this research is to shift perceptions of listening with reference to my instrument, the oboe, to initiate creative approaches to it that involve improvisation within a contemporary classical context. I want to show how to bridge the gap between the ear and the instrument, between the past and present, to allow a space to think freely and imaginatively, and to develop material that in turn feeds into a new energy in classical performance giving.

The relationships between composer, player, and improviser in the culture of Western contemporary classical music show a gap that this research can begin to address. I intend to make a music created by a player-composer with first-hand knowledge of an instrument, a lifetime experience of performing, commissioning new music, and experience of improvising within free and constructed models, in jazz and contemporary music. Varèse talked about music as “organized sound” and said of orchestral instruments, like the oboe, that they “had conditioned our ears to accept only an infinitesimal part of the infinite sounds in nature” (Stubbs, 2009: 34). A different approach to “organized sound” and in this case an unlocking of oboe sound, could make a difference to

perceptions of listening to it and ultimately to communicating a new music with it. In my endeavour to break down boundaries there may be societal and political questions to challenge regarding hierarchy and equality. Music has qualities that can respect difference, supportiveness, responsiveness, and that contribute to a sense of wellbeing in life more generally. These qualities are more important than ever in our troubled world, and as the writer Jeanette Winterson so eloquently wrote, “I feel settled in myself. To put it another way, I am a settler in myself. I inhabit my own space” <sup>6</sup>. To “feel settled” is the beginning to feeling wholesome and to becoming a holistic musician. From here we can communicate with a sense of urgency and risk that will draw all and every type of listener into the joy of hearing live music.

---

<sup>6</sup> From the Afterword by Jeanette Winterson in *The Living Mountain* (1977) by Nan Shepherd (Aberdeen University Press P.112)

## Chapter 1: Preparations and Beginnings

### General Background

Continuing with the idea of inventing and reinventing set out in the introduction, the traditional meaning of the Latin word *inventio*, one of the five canons of rhetoric made by the Roman philosopher Cicero,<sup>7</sup> was more to do with elaborating and developing arguments rather than inventing from scratch. This chimes with a form of structured improvisation that is about inventing different interpretations and versions of the same musical idea by improvising with it, to find out and understand it in greater depth, what it means, and how to communicate it in performance. As Edward Said wrote, “Invention is ... a form of creative repetition and reliving” (Said, 2006: 128). Creative repetition is the mainstay of invention. Making an improvisation is a form of rhetorical statement, showing and arguing a dialogue with existing material and revealing the thought processes. This aspect of creativity is about working through ideas and having the technical ability to do so, rather than waiting for inspiration to inform it. It is “through diligence, leaving the unconscious to take care of itself” (Harvey, 1999: 76) that is at the heart of this type of creativity. It is also about the relationship between the structure and its material and finding the inspiration and methods to express it.

In the areas of contemporary jazz (which also include experimental and electroacoustic music), these roles are not split, and performers make and play their own music; the roles are combined. There are a few composers of

---

<sup>7</sup> *De Inventione*, written in about 50BC, is a guide to the art of rhetoric as a performing art and to the art of writing.

contemporary classical music who perform with improvisation, and there are a few instrumentalists who improvise, and even fewer who add this to a form of composition. My experience in jazz performance has led me to believe that classical performance could embrace similar methods to those in jazz and awaken a form of creativity that can have a profound influence on methods of delivery, engagement, and learning. The idea, therefore, of a holistic musician, with these skills coming together, with performer as innovator, is a rare phenomenon. A holistic perspective is one that embraces the discovery of musical self, identity, and personality with improvisatory explorations that inform a mind that is ready to make music and perceive deeper understandings of repertoire and how it is interpreted. Access to this type of perspective is enriching to all aspects of music making, whether performing or composing, and in pedagogical terms, it can transform expectations and give confidence.

### **Oboe Performance Context and Oboists**

In the international field of classical contemporary oboe performance, the interrelationships of performer-improviser-composer are sparse. Exceptions exist in the field of jazz, where two outstanding examples are Paul McCandless (USA) and Jean-Luc Fillon (France). Both are classically trained oboists and multi-instrumentalists who improvise in conventional jazz contexts with great success. However, the most important figure to have challenged perceptions of what an oboist can be and do in the classical contemporary domain is the Swiss oboist Heinz Holliger (b. 1939) who has, in his extraordinary career, touched on every type of performance role, including as conductor, collaborator, and composer, and to a smaller extent (but now abandoned), improviser. In addition

to commissioning and performing new works by Berio, Henze, Lutosławski, Frank Martin, Krenek, Stockhausen, and Penderecki (to name a few), he collaborated with the French-Slovenian trombonist/improviser/composer Vinko Globokar (b.1934) whose *Discours III* (1969) for 5 oboes and *Atemstudie* (1971) for solo oboe (a breathing study to be played continuously for eight minutes) were both premiered and written for Holliger (a recording of *Discours* includes Holliger's students). These pieces pushed the boundaries of technical possibility for the oboe and this collaboration gave Globokar an insight into the possibilities of extended oboe techniques, guided by Holliger. In *Discours III*, there is space in the piece for the players to invent sounds within the compositional structure, including the singing and speaking of a Baudelaire text. Holliger was open to this type of freewheeling and encouraged an approach of exploration within this context. Globokar, a virtuoso performer, is also a free improviser (who worked with Stockhausen), and this combination of instrumental virtuosity, coupled with a freer sensibility, entered his compositions. These pieces are rarely heard today in the UK. Holliger has also written groundbreaking technical and musically challenging oboe pieces. For example, his *Chordal Study* or *Studie über Mehrklänge* (1971) for solo oboe is a piece constructed entirely of chords or multiphonics that is to be played without a break, requiring circular breathing throughout (as does Globokar's *Atemstudie*). Circular or double breathing is a technique that is not new, but it is classified as an extended technique. It was common in much earlier wind playing techniques in Asian cultures and was known to be used by the ancient Greek aulos players. As Holliger said, "we never had a Paganini in the 19<sup>th</sup> century to develop new ways of playing the instrument, and basic oboe methods changed very little until about 25 years ago.

In my piece, I get chords through special fingering as well as using different lip and air pressures” (Davis, 1981). This unique piece is also rarely heard in the UK, but it opened up a new oboe sound world, one that gives insight into sounds inherent to the oboe and understood by a composer/performer. His excellent book of oboe studies, *Pro Musica Nova Studien zum Spielen Neuer Musik* (1972) begins to address the learning of extended oboe techniques, and these composed studies prepare the player for particular pieces, for example, the *Sequenza VII* (1969) by Berio. The extended techniques are given musical meaning by being couched within a composed study and, importantly, are not used as mere instrumental “tricks”. This oboe treatise is the only one that adopts this stance; however, there is no mention of applying these techniques creatively within forms that encourage improvisation for the player. It is composer-led, and the notation is what describes and directs the music. For whatever reason, Holliger has not pursued an improvisational path. Having studied with Sándor Veress and Pierre Boulez, composition, rather than improvisation, has become the predominant creative activity for Holliger and remains so alongside his worldwide performances as chamber musician, soloist, and conductor.

There are also oboists (like myself), who devote their lives to the contemporary, and with this comes the occasional opportunity to improvise within scores by others and in collaboration with composers. For example, the oboist Peter Veale (New Zealand) whose tireless performances of some of the most complex scores continue to influence the oboe community and beyond. His excellent book, *The Techniques of Oboe Playing* (1994), is one of the most comprehensive oboe guides. Likewise, Chris Redgate (UK), with his restructuring of a 21<sup>st</sup> century oboe with additional key work to access a higher register and

facilitate quartertone tunings (Redgate, 2016), has inspired new compositions. They are champions in this field; however, neither of them compose.

### **The Roles of Improvising, Composing, and Performing**

In the field of contemporary classical music, there is a more accessible opportunity to finding a mix of these roles. It can be a flexible medium, and the role divisions that exist can become blurred. For example, in the music of Cage or Stockhausen, there are scores that contain opportunities to empower performers by asking the player to improvise and determine the character of the resultant music.<sup>8</sup> In my own experience in education workshops with the London Sinfonietta in the 1980s (created by Gillian Moore MBE, Director of Music and Performing Arts at Southbank Centre in London), I found myself playing by ear, improvising within and without specific structures and supporting young musicians to do the same. This experience was compelling, inspirational, completely fulfilling, and made me realize that this type of creative music making emboldened delivery and fed into how I practised and how I thought and interpreted music.

The early music movement in our contemporary modern culture has, to some extent, reawakened the idea of improvisation. Instead of playing written out cadenzas, players of authentic instruments are encouraged to invent their own, and this is now very much part of the work of such ensembles as the

---

<sup>8</sup> In Stockhausen's *Spiral* (1968) for soloist and shortwave receiver, for example, the performer determines dynamics, register and rhythmic permutations in response to the receiver. Although the improvisation is within a restricted format it begins to address the idea of performer as initiator.

Academy of Ancient Music or Musica Antiqua Köln. However, there are scholars of the classical repertoire who cannot accept that Mozart improvised his own cadenzas. In Taruskin's *Text & Act* (1995), for example, he quotes the German musicologist Christoph Wolff who "wants us to believe that Mozart wrote out cadenzas for himself, and that he did so because the idea of cadenzas as improvisatory elements failed to correspond and harmonize with his development as a composer". (Taruskin, 1995: 287-288). In a description of a Mozart recital in Prague: "Indeed we did not know what to admire more – the extraordinary composition, or the extraordinary playing ... At the end of the concert, when Mozart extemporized alone for more than half an hour at the fortepiano, raising our delight to the highest degree, our enchantment dissolved into loud, overwhelming applause" (Zaslaw, quoted in Taruskin, 1995: 282). In addition, another contemporary of Mozart, the Austrian composer Abbé Stadler reflects: "In the art of free improvisation Mozart had no equal. His improvisations were as well ordered as if he had had them lying written out before him. This led several to think ... he must have thought everything out, and practiced it, beforehand. (Taruskin, 1995: 287). As Mozart's sister Nannerl noticed, he never practised after the age of seven "for he always had to improvise, to play at sight, and to play concertos in front of people" (Komlós quoted in Taruskin, 1995: 289–290). Today we practice giving immaculate renditions with the emphasis on perfection. The performer has become "a museum caretaker, pledged to preserve intact the accumulated wealth of the ages. The mystique of performance passed from that of creating ephemeral excitement to that of producing a flawless reproduction" (Taruskin, 1995: 290). The excitement of any form of risky extemporization has become lost, and

instead we have a situation where the player preserves a fixed and correctly stylistic interpretation in performance, and the magic spell of performing can become rather lifeless and dull in expression. Mozart was exceptional but, even so, improvisation was common among musicians at the time. There existed a space in which the composer was both performer and improviser and the three roles of composing, improvising, and performing were combined in one act of creativity. Taruskin discusses why scholars are so anti-improvisatory when the evidence shows to the contrary it was a natural part of performance. It seems the “wholly finished, idealized work-object” (Taruskin, 1995: 289) or the written score is sacrosanct and any idea of giving credence to a performable style that could include improvisation is somehow invalid. This attitude is still prevalent. However, although it has been lost in the classical domain, improvisation has remained present in other musical genres.

For example, the new African American music from the early 20<sup>th</sup> century, the style of jazz and all its progeny, included improvisation as a major factor in music making. But even here, there were critical and negative reviews of the quality of this type of music as to whether it constituted “art” music, although much of this negative discourse revolved around issues of race and the music’s link to popular culture (Lewis, 1996). Attitudes towards forms of improvisation in classical performance today are changing but very slowly. In the genre of contemporary music, with its scores of chromatic and serial structures and complex atonality, the performance of it has become a niche market and draws in relatively small audiences. Often the music has to be explained in wordy programme notes. Suppose we add an element of surprise, of musical intuition, into concert giving, one where the musicians take ownership of their music and

communicate it in different formats and where the skill of improvisation leads the narrative? Adding this procedure (so natural in the modern jazz fraternity, where musicians give voice to their ideas) to existing frameworks would enrich our musical lives and open connections to a vibrant and experimental quality in music giving. Perhaps audiences could then find themselves more engaged (and not alienated) with this new music.

These divisions of roles and performance conventions have not always been in place. Indeed, delineated roles of performer-composer and the absence of improvisation are relatively recent developments in music history. For the oboe itself, both in terms of instrument design and performance practices that combined performer and composer, there has been a long trajectory going back to ancient times.

### **Instrumental Route of the Oboe: Historical and Geographical Backgrounds**

The historical trajectory of oboe sound is multifaceted in that it covers a vast area of forgotten music that includes modes of unusual sonic character. In ancient cultures, its voice was full-toned, wild, and used in outdoor rituals and festivals. In some parts of the world, particularly India, traditions of double-reed playing still draw on its past music. In Western European music, the oboe (and the music written for it) has been tamed and brought indoors to blend with other orchestral instruments; arguably, its lively sonorous character has become suppressed. In the extended techniques of contemporary classical music, instrumental virtuosity and instrument design have led to discoveries of new sonorities with, for example, double harmonics, multiphonics, and quartertone tunings. At times, these sounds produce a primordial and precarious effect

because they require exacting techniques; it is as if the “difficult to reach” sounds hint of an older, ancient voice struggling to speak. It is a diverse and long sonic history that offers an opportunity to redefine the oboe’s voice, to reconnect the modern oboe to its older voices and to explore an alternative personality. Within the vast array of historical double-reed instrumental cultures, and for the purpose and scope of this research, I have decided to explore three older cousins of the oboe that span its history and act as stepping-stones to the modern instrument. These are the *aulos* from ancient Greece – the oldest and most unknown double reed and double pipe oboe, the *nadaswaram* from Tamil Nadu in South India – a large loud oboe unchanged in design and still played today in the last and oldest civilization in the world (the Dravidian culture), and the baroque oboe of 17<sup>th</sup> century Europe – the most popular wind instrument in the music of Bach and Mozart and the precursor of the modern oboe. The arc of development stretches from the ancient world, through Asia and the Orient, to 17<sup>th</sup>-century Europe and onwards to today. There exists a rich context around all three instruments that feeds into their aural identities.

Compared to the modern oboe sound, the older versions, were richer in sonority and much louder. A study of the oboe’s roots and the music that may have been played with it reveal a rich area of musical expression. Habib Hassan Touma’s *The Music of the Arabs* (1996) defines the historical musical context of modes and scales from Arabia with explanations about the wind instruments from which these modes derive. They employed tuning systems that explicitly make use of differences in pitch, tuning, inflection, and timbre to maximum effect. For Arabian musicians today, improvisation remains at the heart of their music making. The famous Oud player Taiseer Elias (b. 1960) noted that “Most

Arabic art music is improvised. You cannot separate the fixed part from the extemporised part when you practise; nor when you teach and learn.” (Dolan, 2005: 108).

### **Performer/Improviser: Instrument-Led Improvisation and Performance**

The key to developing a new approach is to find improvisation procedures that could provide openings to creative music making for the oboe, and a significant place to start is by exploring sonic possibilities in preparation for improvising. The manuals mentioned above spell out extended techniques, not only as a guide for composers to use in their compositions but for players to understand, for example, how multiphonics work using different air pressure and embouchure formations. This is essential practical knowledge for unlocking the potential of the instrument, a quest to discover hidden sounds, sounds that live inside the instrument and are inherent to oboe character. As Anthony Storr has highlighted, “instruments with reeds, like the oboe, produce many overtones; and it is this series of overtones which causes the particular timbre of the instrument” (Storr, 1997: 58).<sup>9</sup> As I have mentioned before, it is as if with the most sophisticated oboe designs yet, and now with the 21<sup>st</sup> oboe designed by Chris Redgate,<sup>10</sup> there is an opportunity to put to one side the covered beautiful and monophonic sound of today’s oboe and search for one that liberates and makes possible a multi-phonetic, untamed, primeval, and instinctive sound. It can

---

<sup>9</sup> Fewer overtones generate a duller and more monotonous sound.

<sup>10</sup> Chris Redgate (UK): *21<sup>st</sup> Century Oboe Project*. As mentioned earlier, Redgate has pioneered a twenty-first century oboe where the range has been extended upwards and additional keys have enabled exact fingerings of quartertone tunings.

sound untamed because the techniques are difficult to achieve, hard to control, and often behave unpredictably. It is as if the instrument is dictating events and the player is not quite in control of it. The instrument becomes the master initiator and dictates a music driven by a player into uncharted waters.

This element of risk can be most excitingly explored in performance, and particularly within improvisation. In jazz improvisation, Miles Davis was the arch risk taker. He defied standardized trumpet techniques and experimented, for example, with looser types of embouchures “that helped him to produce a great variety of tone colours and articulations, by striving for dramatic gestures rather than consistent demonstration of mastery, and by experimenting with unconventional techniques” (Walser, 1993: 356). There is no need to show a “consistent demonstration of mastery” because the music that develops is the initiator. In the activity of performance, this experimentation can electrify communication, and the dialogue and interaction between instrument and material can lend a sense of “playfulness, complexity, struggle” (Walser, 1993: 358).<sup>11</sup>

Other instrumentalists in the field of modern jazz also use risk as a defining factor in free and structured improvisations and the following double-reed musicians, some of whom explore non-western musical styles, have found creative ways of exploring this improvisatory spirit: Kathy Halvorsen (oboist/improviser USA), Lindsay Cooper (the unique bassoonist and oboist composer/free improviser UK), the structured improvisations of Yusef Lateef

---

<sup>11</sup> These qualities that generate a sense of playfulness are much the same as in a Mozart improvisation as outlined above.

(multi-instrumentalist including jazz oboe) and Charlie Mariano (alto saxophonist) who combined playing the Indian nadaswaram within his jazz improvisations.

The idea of “a consistent demonstration of mastery” and the making of a polished performance are integral to classical performance because the interpretation and instrumental delivery of the score demand as near to perfection as possible. To make a mistake shatters confidence, not only for the player but also for the listener’s trust of the player. In a contemporary music performance context where there is a flexible aesthetic concept, a window of opportunity exists where the performer can accept risk taking as part of the performance (not only with the difficulty in executing extended techniques but with a form of improvisation), and to make the listening more about how and what makes the music work. This approach could enable a rethink in how we present contemporary music. For the oboe, there is also a chance to alter its sound perception, with the instrument and its music leading the music making.

As a performer of contemporary oboe repertoire, I am versed in extended techniques and with performing experience of pieces, for example, Luciano Berio’s *Sequenza VII* (1969) for solo oboe or Simon Holt’s *Banshee* for solo oboe and percussion (written for me in 1994 and recorded for NMC in 1997). I have knowledge, for example, of double harmonics, multiphonics, microtonal and quartertone tunings, wide vibratos, and all sorts of trills and tremolos. With this knowledge, I have explored and tried to find similar sounds on the aulos, the nadaswaram, and the baroque oboe. For example, I discovered a high register on the aulos (when the whole reed is placed in the mouth, the sound becomes loud and shrill with added irregular tuning), some multiphonics on the baroque oboe,

and on the nadaswaram, a type of overblowing that splits the sound. These “extended techniques” that are inherent to the modern oboe, have a quality that can be both brash and delicate. They can connect the new to the old, bringing new sounds together with past sounds. On the older oboe types, the forms and methods of music making with improvisation that belong to them also inform and interlink with the music made with the modern oboe. There is a space to bring together the work already achieved by Halvorsen, Cooper, Lateef, and Mariano and deliver another musical angle from an oboist’s point of view.

And it is in performance that these sonic relationships come into being, especially when the performance is informed by the creativity of improvisation. In solo improvising, it is the case that, in the American trumpeter Lonnie Hillyer’s words, it is “like a guy having a conversation with himself” (Berliner, 1994: 192). This suggests that the melodic shapes have logic and follow some form of narrative and musical structure. This form of structured improvisation includes “a constantly changing balance between material planned in advance and spontaneous extemporization” (Durant, 1989: 267). Being spontaneous is not incompatible with preparing beforehand. Although planned, improvisation is about split-second decision-making. It is always spontaneous because it has “a way of developing on its own, so that one is never completely in control and can never be certain in advance about what will happen”. (Benson, 2003: 142)

The solo aulos players, such as those seen painted on ancient Greek vases, or the nadaswaram player heard live in Chennai with his drum accompaniment, improvise(d) alone in a form of contemplation using structures of pitches to guide the music. In collective improvising, this contemplation opens out to include communication and interplay between other musicians. It is a space in

time, in performance, when instrumentalists have an opportunity to enter a place where music reveals its instinctive self. Alfred Schutz writes about the idea of inter-subjectivity and what he calls inner time and making music together that engages two or more people: "This sharing of the other's flux of experiences in inner time, this living through a living present in common, constitutes ... the mutual tuning-in relationship, the experience of the 'We', which is at the foundation of all possible communication" (Schutz, 1964: 173). Inner time is the home of improvisation. Learning to foresee or anticipate and learning how to be prepared for whatever occurs belongs to this inner space is, as Nicholas Cook explained it, "a subjective temporality essentially unrelated to the 'outer' time shown by the clock ... 'outer' time can be divided into equal lengths, whereas 'inner time' there are no such yardsticks" (Cook, 2004: 5-6). This sharing between the collective of improvising musicians (or the meditations of a solo musician) in a living present produces the fundamentals for making music and communicating it.

In performance, the thrill of musical risk and the creation and presentation of music in situ is the most exhilarating appeal of improvisation. Experiencing a living present where the "creation is done publicly, without the chance for correction" (Benson, 2003: 134) lends a type of concentration that communicates a unique power. It is as if the music has its own voice, one that the performers enable and direct. All the phrases, dynamics, pitches, character, and energy have only one chance. There's no predetermined route and there's no such thing as a mistake. "When an improviser makes a mistake there is no 'net' – no score that spells things out – to rely on and no 'eraser'" (Benson, 2003: 134). The concept of mistake does not exist. What transpires is what the music is. This

flexibility of outcome, the belief and trust in it, are fundamental qualities of improvisation. As British anthropologist Tim Ingold noted, “experiences of tactility ... with regard to creativity ... distinguishes the improvisatory creativity of labour that works things out as it goes along” (Ingold, 2013: 20). It is in the making that we find out where and how to proceed. The very nature of improvising is about a fleshing out, a way of inventing and concocting what is in hand, and about providing a space in which to dwell. In *The Origin of the Work of Art*, German philosopher Martin Heidegger (1971) wrote about setting up a world in which to create a work of art, a dwelling place in which to reflect and invent. In music, this dwelling place (that is the performing space, mental and physical) is where improvisation allows the music to happen. In Latin, the term *improvisus*, unforeseen, is the derivation of *improvise*, or the French *emprouer*, to invest profitably, to improve and cultivate; these are words that ring true within a dwelling place. However, dwelling is not simply “taking up space”. Rather, it necessarily transforms the space in which one dwells” (Benson, 2003: 32). The transformation that comes from improvising (cultivating music in its truest form) is the dwelling place of music making.

In a sense, we can apply the word *improvisation* to the activity of interpretation. The American composer, performer, and Professor of Music at the University of Michigan, Ed Sarath, stated, “For even in works entirely composed, performers will have some degree of creative options through volume dynamics, inflection, tempo, frequency of vibrato and other expressive nuances” (Sarath 1996: 21). For the music to sound spontaneous, certain choices of nuance take place, even in scores that have been performed countless times. In performance, “improvising” with or without a score, the music takes off and out time

disappears, and inner time enters with all the performer personalities and their contributing subjectivities happening in real time. Indeed, the interaction of personalities could be “a metaphor for society” and “a counterpoint of personalities expressing themselves towards a common musical or community goal” (Pitsiokos, 2017: 272). This is the dwelling place of music, and “the score is left behind, it is no more than the prehistory of the performance” (Cook, 2004: 17). In all genres of music making, whether playing a Mozart quartet or a jazz standard, the moment of entry into the performance space is where the music lives, and the score remains only as an object of reference. My experience in jazz performance has shown me there are no boundaries between genres, and improvisation, in whatever guise, is the keystone to all other musical activities. The empowerment it gives in performance could return a form of concert giving that transforms expectations and experiences.

### **Composer and Composition Grounded in Improvisation**

This research consists of both composed new work and composed music from transcriptions of improvisations and open scores for improvisation. The processes in these pieces were informed by knowledge of traditions that began in the 20<sup>th</sup> century that opened music to improvisation and chance elements, and not least, to the influence of jazz music from America.

Experimental styles and theories of improvisation developed in jazz as early as 1959 when Ornette Coleman embraced the idea of free jazz. His *harmolodics* (Morton and Cook, 2010: 245) concept inspired an avant-garde freeing up of melodic parameters into diverse rhythms and distinctive

harmonies. In the history of contemporary music, this seeped into the consciousness of contemporary composition, and some composers began to include methods of improvisation into their scores. The term “third stream”, coined by Gunther Schuller in 1957, “is a concept of composing, improvising, and performing which seeks to fuse, creatively, jazz (and other vernacular musics) with contemporary classical concepts” (Schuller, 1989: 12). This idea was groundbreaking and somewhat controversial in its time, but it led the way to later developments.

Chance techniques opened areas of freedom for the performer, and in the scores of Stockhausen and Cage in the 1960s there was investigation of improvisation within composed forms.<sup>12</sup> These scores contain freed up sections of music where an element of chance is brought in within confined limits. For example, the written text from Stockhausen’s *Verbindung of Aus den Sieben Tagen* (1968) asks the player to respond to the text and “play a vibration in the rhythm of his or her body” as an inroad into exploring an intuitive section of music led by the composer. In his book *Silence* (1961), Cage revolutionized ways of thinking about music and inspired the idea of experimental music that opened ways of listening and perceiving music. In the UK, Cornelius Cardew, who founded the Scratch Orchestra with Michael Parsons and Howard Skempton in 1969, believed in an experimental music that emphasized improvisation.

---

<sup>12</sup> I have already mentioned Stockhausen’s *Spiral* (1968) for soloist and shortwave receiver, in which the performer determines dynamics, register, and rhythmic permutations in response to the receiver.

Later, some influential musical processes that were discussed in Michael Nyman's *Experimental Music Cage and Beyond* (1974), turned composed music away from expressive player input towards a mechanized music of games and processes, a music that exists automatically in itself. These types of games and processes, which have a clearly defined and logical format, can be starting points for structured improvisations. In America, minimalist composers Steve Reich and Philip Glass, for example, were (and remain) leading proponents of these techniques. In Reich's *Clapping Music* (1972) for two players, there is a rhythmic pattern or formula that is repeated by one player while the other plays it as well but skips a beat in every cycle to create a phasing counterpoint. After a specific number of cycles, they reach a unison to finish. This idea of a logical mechanical process going through a predetermined cycle can be a useful structure on which to hang and develop an improvisation.

The breakthrough in electronics and *musique concrète* transformed perceptions of sound that introduced machine logic away from instrumentalists. When electronics are applied to instruments, players can direct the new sonorities and determine outcome to a certain extent within improvisations and within the logical dictates of the technology. Electronics opens our ears to other ways of producing acoustic sounds with instruments using extended techniques. The American composer George Lewis (b. 1952), who is uniquely a trombonist, composer, and free jazz improviser, composes music that involves complex layers of electronics that are interactive and controlled in performance. For example, his 2021 Proms BBC commission piece, *Minds in Flux*, used spatial electronics to exploit the vast acoustic of the Albert Hall. The orchestral players of the BBC Scottish Symphony Orchestra played using extended techniques that

were enhanced and distorted electronically. There are also composers who have explored other avenues of musical communication with multimedia, as well as electronics. Examples include the Dutch composer Michel van der Aa, who has incorporated film, theatre, and electronics into his scores. In his piece *Oog* (Eye) for cello and tape (1995) the electronic sounds, derived from the cello itself, merge and often overcome the acoustic sound in which extended techniques, including thumping the base of the instrument, create a multiplicity of unusual sounds. British composer Anna Meredith has used electronics, film, and extraneous techniques to enhance her music. In a piece called *HandsFree* (2012) for the National Youth Orchestra, she requires the musicians to not play their instruments, but instead to clap, stamp, sing, and employ the hip-hop technique of beatboxing. The music is memorized and creates a powerful level of communication and commitment. Equally, the Norwegian jazz saxophonist Marius Neset uses extended techniques in his solo improvisations to heighten a ferocious expressivity. His use of multiphonics, flutter tonguing, and overblowing are techniques common to contemporary music. This widening of the contemporary language connects contemporary music to styles of avant-garde rock, jazz, and multimedia practices.

In addition, today there are composers such as Richard Barrett (b. 1959) who, in his electronic duo called *Furt* (set up in 1986) with Paul Obermayer, explored free improvisation with types of systematic composition.<sup>13</sup> Barrett uses free improvisation as a method of composition and, in 2003, he joined Evan Parker's Electro-Acoustic Ensemble. The Australian contemporary music group

---

<sup>13</sup> <https://furtlogic.bandcamp.com/>.

*Elision* (for whom Barrett has written) is made up of virtuoso performers (including the oboist Peter Veale) who perform new complex, multimedia scores, and forms of structured improvisation. The jazz performer-composer-improvisers, Americans Pauline Oliveros (d. 2016), John Zorn, and Alvin Curran, are all dedicated improvisers who have explored acoustical boundaries in experimental and electronic processes in their music making. The American composer/pianist Fred Rzewski joined the group *Musica Electtronica Viva* with Alvin Curran, which places collaboration and improvisation at the heart of their work.

These styles of chance, system-led and electronic music within composed forms are directed via the notation from the outside. In free and structured improvisation, influenced by this revolution in electronic sound and mechanical processes, the music is directed from the inside by the performers and enables the human angle to be expressed and the personality of the player to have more control. It also crosses social boundaries, particularly in jazz, and opens ideas of how differences linked to race, gender, and disability in music can be expressed (see for example, Fischlin and Heble (2004) and Lubet (2004)).

These concepts have fuelled imaginative leaps between contemporary classical music and modern jazz. Musicians such as Anthony Braxton and Steve Lacy explored electronic-related sounds in their free improvisations. Ronald Radano's book *New Musical Figurations: Anthony Braxton's Cultural Critique* (1993) and John Corbett's *Extended Play: Sounding Off from John Cage to Dr. Funkenstein* (1994), for example, provide insights in the crossover between free improvisation and contemporary music. In the UK, some of the leading figures of free improvisation were Derek Bailey, whose book *Improvisation: Its Nature and*

*Practice in Music* (1992) is a thorough investigation of his art, and Evan Parker, whose complexity of style is discussed in *Sync or Swarm Improvising Music in a Complex Age* (2005) by David Borgo. Both musicians empowered their playing by expressing their own music without composed scores. This remains a powerful form of musical dialogue as addressed by David Toop in *Into the Maelstrom* (2016). Traditions within jazz have enabled links between improvisation and composed forms and there are artists who reinvent ways of tackling musical ideas through their instruments. In his book on rhythm (Guilfoyle, 2005), the Irish bassist, Ronan Guilfoyle developed a guide to rhythm patterns designed around his playing experience that show intricacies and multiplicities of polyrhythms for use in improvisations.

Unlike in contemporary jazz and free improvisation, the gap between player and composer in the domain of contemporary classical music (although more flexible in some areas) is still present. Improvisation linked to composition is, on the whole, made by composers not players. However, there are some notable exceptions. For example, British musician Philip Thomas, pianist in the group Apartment House, used the term *comprovisation* as the title for his latest CD (Thomas, 2007) of “solo piano compositions reflecting upon improvisation”. The Instant Composers Pool (1967), a Dutch group of players, use free improvisation to make “instant composition”. The previously mentioned saxophonist Marius Neset has combined jazz improvisation within composed symphonic forms, as I experienced in concert when Neset collaborated with the London Sinfonietta (2016). These activities fuse improvisation and composition within performance, but in the latter example, the non-jazz players do not participate in the improvisations. In terms of the power of performance

(especially when linked to a form of improvisation), it seems that the classical musicians are outside because they are in the service of the written score. It is an act that is almost secondary, and one of duty and conformity to perform it. The reading of notation is a closed scenario, and no player personality takes real shape. Neset's project was designed to fuse the working practices of jazz and contemporary players, but instead it showed the differences in execution and how the real musical power lies with the jazz players. Notably, in the wider context of jazz, it is the performers who have agency. As Witkin has noted, "Jazz musicians have often seen the history of jazz as ... a history of great performances through which new music was made and old music made new" (Witkin, 1998: 176). The making of music in performance is paramount. This reveals a possibility of returning to a form of performing in the classical domain that gives more creative and improvisatory power to the performer, where performance and its executors have the final say. For this research, the making and performing of a new music in situ makes this possibility happen and is the crux of the investigation.

Further light can be shone on the widening gap between composer and player particularly when extended techniques are required. These techniques, which are itemized in methodologies, offer what is possible from an instrumentalist's point of view, and from there, the composer hopes that the instrumentalist's choices can be delivered in whatever musical context is required. However, not all techniques function for every player because of the complexities of instrumental setup, and there can also be discrepancies in production. This then compromises the notation, the interpretation, and future expectations. The separate specialisms of player and composer have created a

divide in the process of how to deliver the music. However, there are collaborations between composers and players that have been extremely fruitful and for the oboe; as previously mentioned, Holliger has been exceptional. I will show some of my own collaborations in the case study on living composers.

For composers, extended techniques are part of a specific instrumental virtuosity that offer access to improvisatory sounds that are at the edge of technical possibility and that have a frailty about them as if the player is searching for something unattainable. This delicate, fragile, and uncontrolled world has its own unique energy. Berio's set of *Sequenze* showcase instrumental daring adding a sense of theatre to the music, and the British composer Michael Finnissy took keyboard virtuosity to remarkable lengths particularly in his *Verdi Transcriptions* (1972-2005) for solo piano, for example. Music that requires extreme and unprecedented demands on instrumentalists has been labelled "new complexity", and one of the greatest exponents in this field is the British composer, Brian Ferneyhough. In these examples, the notation directs the player into an uncontrollable space where the information on the page is too complex to deliver completely accurately. There is a tremendous feeling of risk in performance. And this is precisely the intention because this produces a music that has its own powerful force. This can be an alienating experience for players because they do not have autonomy with the material unless they spend extortionate amounts of time unravelling it. However, the American percussionist Steven Schick has done this (in a piece written for him by Ferneyhough called *Bone Alphabet* of 1991) and his perceptions on the journey of learning it and how it influenced his own practice are extremely thought provoking (Schick, 1994). In order to learn the music, he memorized it, and to

memorize it, he had to analyse the form to understand the structure; this made an enormous difference to how he interpreted it and performed it. This confirms the idea that memorizing and analysing influences and deepens musical understanding and communication in performance, and particularly so with reference to any preparation for improvisation. Johnson-Laird, the American psychologist has written revelatory articles on musical cognition and reasoning and the quote below endorses the power of memory and internalization of musical material as a fertile tool for any structured improvisation. As Dolan noted, “Johnson-Laird’s model suggests that the more the knowledge base is internalised and mastered at a deep level of memory, the freer the improviser is to generate coherent extemporisations on the surface” (Johnson-Laird, 1991 cited in Dolan, 2005: 109).

To conclude, Alex Ross comments in his book *The Rest is Noise* (2009) that contemporary classical music “still sends ripples of unease through concert audiences and makes little perceptible impact on the outside world” (Ross, 2009: xvi). However, in the context and culture of today’s classical contemporary music making, stemming from the transformations developed in the 1960s (which includes the influence of jazz practices), there has been a gradual shift in perceptions and a searching for different ways to communicate a new music, both live and digitally. In the field of contemporary oboe, extended techniques have revealed an exotic sound world that has challenged how we can play it and how we listen to it. If we add to this sound world a form of communication in performance that combines improvisation that alludes to older improvising and jazz practices, this instrument could redefine its voice as well as reconnecting the skills of performing, improvising, and composing.

## **Chapter 2: Journey Routes: Explorations and Findings**

In my response to the issues raised in the previous chapter and to my research question, there is, as I see it, a need to integrate a form of improvisation into methods of classical contemporary music making and to redefine perceptions of the oboe's character. There are several approaches to tackling this, including re-connecting to past performance and compositional traditions, exploring other methods of interpretation, and discovering methods of making music that re-invent and re-construct existing music. In the chapters that follow, I demonstrate these approaches through a series of case studies that involve methods and investigations in which the governing principles are the making of new music with forms of structured and unstructured improvisation in performance, the formation of a musical style, and the reinvention of the oboe's sound. The final process of the research involved making compositions that are either closed (a finished product) or open (an unfinished product that includes improvisation within the heart of the piece). As I proceeded, I evaluated each step using logbooks and recorded sound diaries, which ensured that the process was constructive and reflective and that I was able to build on what I found at each step along the way. It is the mechanism that holds everything together. Finally, I combined all the strands of these case studies into one piece of work that incorporated my improvising collaborators within this research. Together, these case studies represent a culmination of my explorations into some older types of oboes and methods for incorporating improvisation into a composed score, as well as a celebration of this through live public performance.

In all, there are six case studies: three are based on instrument journeys of discovery and three are based on music by composers who have written

specifically for the oboe, including some who have written specifically for me. The selected instrument types are ones that have fascinated me for years, but which I had not yet explored. The instruments traverse a long history, and two of them have no known aural presence in the UK. The composer choices relate to music of the 20<sup>th</sup> and 21<sup>st</sup> centuries that, in my mind, celebrate the sound and temperament of the modern oboe, one of which is a famous piece in the oboe repertoire that is well known in the oboe literature. Having three in each category provides a balance and an opportunity for comparison. The instrument case studies explore older and ancient oboes, connecting their sounds and musical identities to the modern oboe. This exploration includes an examination of scales and modes that, in some cases, use idiosyncratic tunings and colourings, and older traditional performance practices that use improvisation. It also brings together information about the legacies and playing histories of each. The composer case studies concentrate on specific pieces of music, in which I show deconstructions and reinventions of material via improvisation and the making of new pieces from these deconstructions. This demonstrates a way of addressing the gap I have identified in classical contemporary music making by using methods of improvisation that guide the style, direction, and outcome. It shows the relevance of this activity and how it links to my experience working with jazz improvisation methods. It attempts to build on some of the significant inroads already made by the previously mentioned performing artists, who, through their improvisations, have created new styles in music. All case studies include: recorded live music of the material, because performance, as outlined previously, is the essential factor in delivering and experiencing ways of processing material; sketches and exercises for improvising, because these are

important formats to initiate and build upon different types of improvisation; resultant scores of compositions, because it is necessary to show that the technique of notation transforms material in different ways to improvisation; and a commentary on the procedure of each case study, because the reflections can bring together and explain the processes and demonstrate why and how connections are made.

As outlined in the previous chapter, I addressed three primary problems through this work. The first is the character of the oboe and the contrast between its role throughout its history and in the contemporary music of today. I have explored ways of enriching and broadening perceptions of the oboe, making oboe-led music derived from this exploration. The second is the restricted role of the performer and the required specialization that musicians adhere to today. I examined how to amalgamate the skills of improviser, composer, and performer, exploring the benefits this would have in the development of a more holistic musical persona. The third problem I addressed is that there are few study methods for oboe that nurture and advance improvisation skills, either structured or free. I considered the types of methods that could provide an entry into a form of improvisation that can exploit wider tools for expression, empower personality, and release a new type of performance energy. I tackled these problems through the following research objectives:

- a) To explore the potential of earlier forms of the modern oboe in order to challenge perceptions of the instrument having a purely pastoral voice.
- b) To embed improvisation in the creative process to free up restrictions, both technical and musical.

c) To develop projects that involve collaboration with performer colleagues and composers to rework and reinvent specific material and to create new works via specific methods of improvisation.

With this in mind, the six case studies that address the above are as follows:

### **Three Instrument Case Studies**

#### **1) The Ancient Greek Aulos**

I chose the Ancient Greek aulos because it has held a fascination for me all my life and because it is the earliest known form of double-reed instrument or oboe. Not much is known about it, but, as I discovered, this is beginning to change. Empirical research about the instrument is in early stages, with discoveries still being unearthed and sounds reconstructed.<sup>14</sup> There is a community of dedicated international double-reed aulos and bagpipe players called *The Workshop of Dionysus*: “a place to inspire the revival of ancient double pipes” (The Workshop of Dionysius, 2021). I joined this group on a course in Tarquinia in 2018,<sup>15</sup> and continue to receive inspirational guidance from two British musicians connected to it, Barnaby Brown, and Callum Armstrong. Both are bagpipe players, and although Armstrong was a student of the baroque oboe, there are no known oboe players researching this instrument in the UK. My involvement with *The Workshop of Dionysus* has given me invaluable information

---

<sup>14</sup> Unearthed literally, as archaeologists continue to discover remains of instruments buried in graves in Southern Italy, North Africa and Southern Turkey and Greece.

<sup>15</sup> In May 2018 I attended the first international doublepipes school in modern times, organised by the European Music Archaeology Project (EMAP) an organisation that is promoting the re-discovery and learning of the aulos.

about the aulos' pedigree, playing history, and methods, as well as access to meticulous musical theory regarding tuning systems through some excellent work done by Austrian music historian Stefan Hargel (2009) and Barnaby Brown (European Music Archaeology Project, 2015).

From my readings of ancient Greek music theory and the practical experience I gained on the course in Tarquinia, I learnt, understood, and internalized the scales associated with the Louvre aulos. The scales were based on tetrachords, and the interval of the fourth was the fundamental building block of harmonic and melodic patterns and transpositions. These tetrachord progressions are related to modes of limited transposition in contemporary classical music and modern jazz, as are the rhythms, which tend to be divided into a three/two irregular pattern (Barker, 1984; West, 1992). With connections to linguistic forms, dialects, and ancient texts, it is possible to make some links to what the music of the aulos might have sounded like.<sup>16</sup> Certainly, in ancient Greece, the oldest poetry is based on dactylic hexameter, which as Barker (1984: 480) noted, “also formed the metrical foundation of elegy... (and) what is certain is that .... we are faced with an amazing proliferation of metrical and rhythmic patterns”. From these forms of oral traditions of poet-singers and those of ancient Greece, I drew similarities to rhythmic and melodic structures in styles of instrumental music.

---

<sup>16</sup> The Oxford University Scholar Professor Armand D'Angour continues to research this aspect <https://www.humanities.ox.ac.uk/article/vc-per-awards-professor-armand-dangour-ancient-greek-music-hearing-long-lost-sounds-again>

I built on the progress noted in my logbook – for example, technical breakthroughs, fingerings, and exercises to help double breathing – and built on improvisational sketches I recorded in my sonic diary. Here, I invented improvisations on modes, on rhythmic Bellermand<sup>17</sup> patterns learnt on the EMAP course, and on melodic ideas that sprung from the instrument. This process contributed to creating further material explored in collaborations (with trumpet, double bass, and percussion) using improvisation that fed into developing forms for composition.

## **2) The South Indian Nadaswaram<sup>18</sup>**

I had the good fortune of travelling to Tamil Nadu in 2016 and decided to make enquiries into this instrument while I was there. I met the nadaswaram player Kalaimamani Kasim in Chennai, who sold me an instrument and showed me the basics of playing it. I recorded and then transcribed this interview, documenting all the information, and used his playing suggestions and advice to further my study. As far as I am aware, there is only one design of this instrument, which has remained unchanged for centuries.

As in the aulos case study, the intention was to explore the technical parameters of this instrument and the music inherent to it. This provided a direct line to exploring a musical language that revealed new perceptions of the

---

<sup>17</sup> In 1841 Johann Friedrich Bellermand discovered some Byzantine manuscripts that contained a dozen little melodies and exercises. They are called the *Anonymous Bellermandi*.

<sup>18</sup> There are many spellings: *nadaswaram*, *nadhaswaram*, *nagaswaram*, *nataswaram*, and *nathaswaram*. I will spell it *nadaswaram*, which is how I heard it pronounced in Chennai. It was also agreed by Dr Radhika Balakrishnan who I met at RBC in 2023 and played it in one of her RBC presentations.

oboe's character and facilitated approaches to improvisation and resultant compositions. The Indian academic and historian Lalitha Ram has expertly described the playing of a famous 90-year-old nadaswaram player of today, Acharyapuram Chinnathambipillai, noting the sad fact that the tradition of playing this instrument is dying out, as no young musicians are carrying it forward (Govindarajan, 2018). His playing shows how expressive and evocative this instrument can be and inspired my efforts in this case study.

My study of this instrument was a solitary one, but using a practice logbook, I charted and developed ideas about technical and musical endeavours alongside observations in ways of thinking about tuning, sound production, articulations, vibrato, types of trills, and dynamics. Listening to existing recordings revealed a specific character of music. I transcribed a chosen piece and began a process of deciphering form and content for further dissemination. This process involved learning to play this music and reconstructing and developing it through exercises involving improvisation and collaborations with trumpet and live electronics. The resultant composition was developed from this experience into scores requiring improvisation.

### **3) The Western European Baroque Oboe**

I chose this instrument because as a student, I studied and played it and remember enjoying its quality of sound. I enjoyed the ease of holding it, both because of its lightness and because it requires a much more relaxed form of blowing than the modern oboe. Its history began in 17<sup>th</sup>/18<sup>th</sup> century France, where it was very popular. Listening to recordings of authentic instruments performing, for example, Rameau and the 18<sup>th</sup> century pastorales *Les Fêtes*

*D'Hébé* performed by the Orchestra of the Eighteenth Century under Frans Bruggen, or music by Bach with, for example, the English Baroque Soloists under John Eliot Gardner with Anthony Robson, baroque oboe, provides a revealing impression of what this instrument is capable of.

The instrument's trajectory and development stem from the pommers, shawms, and crumhorns of medieval Europe, offering a musical history of dances and marches frequently played outdoors. Later, the three-jointed baroque oboe maintained this outdoor character (for example, in the wind serenades by Mozart that were played outdoors, such as for an evening in a garden), but also found a softer sound for the indoors (for example, in the trio sonatas by Couperin, his *Concerts Royaux*, or the many sonatas by Telemann).

Its popularity, as indicated in *The Eloquent Oboe* (Haynes, 2001), inspired composers, such as Bach, to write more melodies for the oboe than for any other wind instrument. My stance for this case study was to start my dissemination and improvisations with one of Bach's most famous melodies, the oboe solo in the *Sinfonia* from Bach's *Easter Oratorio* BWV 249. The key is B minor, and the note B has significance with another piece, Luciano Berio's *Sequenza VII* for solo oboe, which has a drone on B throughout, creating polyphonic textures with the oboe line. My aim was to find ways of connecting the modern oboe sound to that of the baroque to redefine another type of oboe character and to find any musical levers and relationships between them. I will show procedures using these two pieces as roots for further explorations into forms of improvisation and composition.

## **Three Composer Case Studies**

***1) Benjamin Britten***

***2) Edgar Varèse***

***3) Collaborations with contemporary UK composers Simon Holt (b. 1958) and Matthew Sergeant (1984), and in the main, Sir Harrison Birtwistle.***

The methods used in these composer case studies reflect some of the improvisatory methods used in the instrumental case studies; that is, the process of using a series of tasks that employ improvisation as a key activity. The aim was to show that improvisation can be a conduit to building a journey of discovery and to show a place where improvisation is the primary medium for testing the limits of expression, form, and language. For the Britten and Varèse case studies, I employed the following strategies:

- 1) Memorizing the material to internalize the music.
- 2) Analysing the harmony to understand how it worked within the form.
- 3) Designing different structures for improvisation that stayed inside the form, but which gradually moved away from it harmonically.
- 4) Designing different structures for improvisation that did not stay within the form but moved outside into other structures.
- 5) Developing procedures for improvisation that involved, for example, the rotation of note cells and rhythmic cycles.
- 6) Transcribing improvisations that could be reworked into composition.
- 7) Composing new work from this process that reflected the improvisatory findings.

#### 8) Composing open scores for further improvisation.

Each category was logged, and the processes were recorded on a Zoom recorder and in arranged times within a recording studio.

The defining factor for each case study was that the choice of music demonstrated a vivid quality of oboe character that, once processed, could be transformed into many various representations of itself. In the Varèse case study, the music chosen was the long oboe solo from his octet for seven wind instruments and double bass, *Octandre* (1923). This melody infuses an instinctive understanding of the expressive qualities of the oboe's sound. It is intensely lyrical, with the use of wide dissonant intervals. The implied harmony and intervallic relationships offered the opportunity to develop the melody into other versions of itself. In the Britten case study, the chosen music was primarily the first movement, *Pan*, of his *Six Metamorphoses after Ovid* (1951) for solo oboe. All six movements are miniatures that demonstrate many facets of oboe character that work together with a very clear compositional idea, that of metamorphosis. This also offered many opportunities for musical transformation through improvisation.

In the third case study, music by living composers, I took a slightly different stance because there was an opportunity for collaboration. As the previous chapter showed, collaboration defines how the working relationship between player and composer can influence outcomes. This case study comprises three parts: separate collaborations with Holt and then with Sergeant show how my work as a player can influence compositional decisions. The Holt collaboration used a composed work, but the collaboration and interpretation of the music required a flexible approach to ways of thinking and instrumental

virtuosity. The techniques involved are extreme and required an understanding of technical methods to perform the work. The Sergeant collaboration was also based on a composed work, but unusually, there are moments for improvisation that have evolved and been developed through my collaborations with him. I show how these two aspects developed.

The main part of this case study focuses on my collaboration with Sir Harrison Birtwistle. *Pulse Sampler* for oboe and claves written for me in 1981 and *Endless Interrupted Melody* for oboe and piano (written for Nicholas Daniel in 1997) are pieces that, through collaboration with Birtwistle, were revised with added improvisations. My strategy for these collaborations was similar to those mentioned above: memorizing the music, analysing the intervals and harmony, practising different versions to explore areas of approach, and ultimately improvising inside the form. *Endless Interrupted Melody* involves making choices of direction that are not predetermined before performance, so there was already a built-in element of chance. I took this one step further and interrupted the melody line through structured improvisation. I have performed *Pulse Sampler* many times and recorded it. Over the last few years, Birtwistle decided to revise certain aspects of it. In workshop sessions I show these aspects that are additional; they include melodic material, small improvisatory sections, and extra percussion instruments. I show how these changes develop and how this eventually produces a new version of the piece, which is informed by my research into improvisation, now recently recorded in December 2020.

## **Final Composition, *Janus*: Amalgamation of Research Processes**

The final piece of work, *Janus*, is a score that captures the essence of this research and brings together unknown aural traditions into a contemporary musical context, thus posing an answer to my research question. The instrumentation includes my collaborative colleagues in improvisation and those I work with professionally in Birmingham Contemporary Music Group (BCMG). I planned workshop sessions with my colleagues to try out material using the improvising methods of this research, recorded these sessions, documented the process, and finally, composed a piece in which all three elements of improvising, composing, and performing are combined. I recorded the performance of the piece for commercial release with the Royal Birmingham Conservatoire (RBC)-based Birmingham Record Company (BRC). This project celebrates my working relationships, not only with BCMG, but with my collaborating colleagues at RBC.

## **Summary**

The improvising methodology I used attempts to address the problems I previously outlined (in my Introduction and Chapter 1) with the gap that exists in classical music making in bridging the areas of improvisation, composition, and performance. It is an attempt to draw together these three skills as one act of musical activity, where there are no divisions of these roles, allowing each one to feed into the other two.

In terms of wind playing and the field of contemporary oboe, this methodology takes the capability of the instrument one step further, utilizing the activity of improvisation as a tool to invent a personalized music and to present

it as a valid and recognized skill in performance and composition. Within the specific area of oboe performance, this amalgamation of skills demonstrates a wider perception of this instrument, with the invention of a music that is predominantly oboe-led, and which seeks to fuse and transcend instrumental cultural styles through the direction of a performer-improviser-composer. It demonstrates that the reflections on sonority and theories of playing that stem from the three instrument case studies, the methods of improvisation linked to harmonic analysis, and different approaches to interpretation in the composer case studies can generate a new perception of the oboe's character and personality, as well as a more rounded approach to music making.

The following chapters will address the research question outlined in the Abstract: How can the modern oboe re-connect with its past to find a character in its sound that fuses old and new sonorities and what potential does this offer for the development of an improvisatory and compositional language within a classical contemporary context?

## Chapter 3: Three Case Studies on Specific Instruments

### 1) Aulos Case Study

#### Introduction

The aulos, or doublepipe, where each pipe has a double reed, is, according to archaeologists, probably the first known oboe in the world (at least the fact that it had a double reed makes it so) and was the most popular wind instrument of Ancient Greco-Roman civilization. The word *aulos* has often been misleadingly translated as *flute*, but it is definitely a reed instrument, and specifically a double-reed instrument.<sup>19</sup> I have included this instrument as part of my research on oboe character, because its ancient sound represents the beginnings of what constitutes an oboe sound. The ancient sound of the aulos is, of course, unknown, and contemporary experiments vary widely. The few working auloi we have today are reconstructions after originals unearthed between the early 19<sup>th</sup> century and 2005 that are held in museums across the world. This material evidence, including a reed sketched in the 1890s, is the critical factor in revealing to us how they may have sounded. When playing and listening to reconstructions, the contemporary ear will likely inflect the pitch and the tone differently from how musicians did millennia ago; however, an aural exploration of auloi will reveal a new dimension of the general perception of oboe sound and its inner qualities. This case study aims to explore the character of the aulos by

---

<sup>19</sup> As the two pipes are cylindrical, they emit a pitch an octave lower than the oboe, which is conical. They also overblow at the twelfth, not the octave. Acoustically, therefore, they behave and sound more like a clarinet than an oboe: only the odd harmonics are available as upper registers.

investigating how it was played and what kind of music it might have played within its historical context, and, with this knowledge, to invent new music for it in a contemporary context.

I purchased a Louvre Aulos by Thomas Rezanka in 2018. This is a copy of an original housed in the Louvre that is thought to be from a Greco-Roman context in Egypt, so anything from around 400 BC to 200 AD.<sup>20</sup> The two pipes are played simultaneously, sounding a fourth apart. Each pipe has its own six-note scale with a wandering bass note that can be changed between pieces but not during them. A wide range of polyphonic effects are possible thanks to the independence of hands comparable to a keyboard. However, it differs from a keyboard in two important respects: first, each hand can produce only one pitch at a time, and second, its pitches are not fixed. Like the human voice, its intonation, microtonal inflection, vibrato, portamento, and timbre are fluid. Importantly, the character and sound of the aulos depend on how the reeds are made and blown. I will show my findings of this instrument, the sounds I have discovered through improvisation, and the music I am writing and have written for it.

### **General Context, Setting the Scene, and Images**

Some images of the aulos I've noticed on my travels to museums over the years were painted on ancient Greek vases and in frescoes, and some sculpted in stone reliefs or in mosaics as floor decorations. Figure 1 shows a photograph I took of a vase painting during a visit to the Capitoline Museum in Rome years

---

<sup>20</sup> Please refer to Aulos Case Study Appendix a) for further context.

ago. It shows a player concentrated in the act of performing, cheeks puffed out, and hands beautifully placed over the pipes.



**Figure 1. Woman playing an aulos 475-425 BC, Capitoline Museum Current Collection: Rome: Athenian Vase number 213590.**

The aulos is most often depicted on Athenian vase paintings from the 6<sup>th</sup> and 5<sup>th</sup> centuries BC, and there are many references to it in Greek literature. Plato wrote about it at symposiums and in the education of the ruling class, and Homer mentioned music a lot in his epic poems the *Odyssey* and the *Illiad*;

however, he only refers to the aulos a little as an instrument of popular music making (West, 1992: 329).<sup>21</sup> There were many music theorists, philosophers, poets, and playwrights who mentioned the sound and character of the aulos in detail, for example, Pindar (died c. 438 BC), Aristoxenus (born c. 375 BC), and Aristotle (born c. 384 BC). It was revered for its versatility and dramatic expressivity, and as a result, it was played in all sorts of public and private events, accompanying singers and choruses in sacred and secular contexts and leading musical culture in all strata of society.

Archaeologists have excavated thousands of fragments of auloi, the early ones made from silver (c. 2500 BC), Common Reed, and deer tibia bones that were hollowed out. They were also made from wood, as was the original of my own aulos, and sometimes vulture bones. Some had brass sliders to operate the wandering bass note on each pipe, and Roman-era instruments were further mechanized to enable the opening and closing of holes that were out of reach. (Barker, 1984: 15). The Megara aulos (from Megara in Greece) had these mechanisms and dates from about 300 BC.

I am intrigued by these instruments and curious about how they might have sounded. We know that stretching a blade of grass between our two thumbs and blowing through it produces a vibrant sound; this mechanism of two blades vibrating in response to the breath is fundamentally how a double reed functions. Press a wild barley or oat straw flat between your lips, and you have a primitive oboe reed. Switch to a stronger tube, scraped down towards the tip,

---

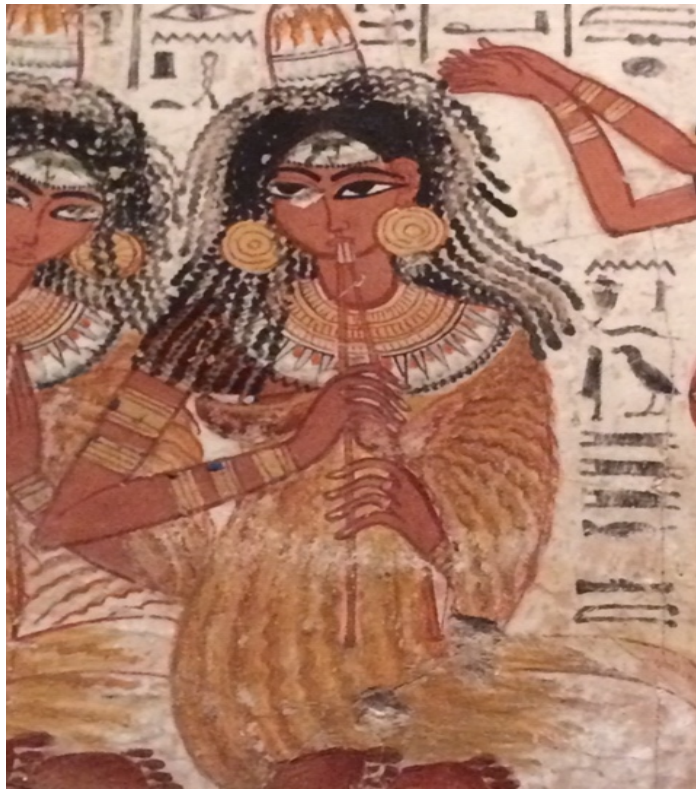
<sup>21</sup> In the *Illiad* Agamemnon hears the Trojans playing auloi at night around their campfires.

and you have an aulos reed, the most likely material for which was *Phragmites australis* (Common Reed). “The history of reed instruments begins with a four thousand-year long ‘double pipe era’” (Baines, 1967: 195). From this belongs an extended family of double-reed instruments (including bagpipes), popular throughout Europe, the Middle East, and Asia. Although the oboe is, of course, a single pipe, its sound and musical lineage indisputably connect with the aulos tradition. The doublepipe is its most powerful ancestor.

Here are further images of this instrument to give an idea of what it looked like, who played it, and the settings in which it was played.<sup>22</sup> Literature, art, sculpture, and archaeological finds show unequivocally that this instrument thrived in places where Greek culture enjoyed privilege, from Portugal to Pakistan to Sudan, and that it was used for every occasion, inside and outside, and played professionally by both sexes. Figure 2 below is from a painting on the ancient Egyptian Tomb of Nebamun from the 18<sup>th</sup> dynasty (1550–1292 BC) located in the Theban Necropolis, but now on display at the British Museum in London. It depicts a kneeling female doublepipe player playing, unusually for our eyes, with her hands across the pipes.

---

<sup>22</sup> For more images, see Aulos Case Study Appendix c)



**Figure 2. Fragment (one of three) of a polychrome tomb-painting, British Museum EA37984.**



**Figure 3. Marble relief of a satyr in a Dionysiac procession Roman sarcophagus about c. 100 AD from the Villa Quintiliana on the Via Appia south of Rome. British Museum.**



**Figure 4. Women making music. Apulian pelike (southern Italian ceramic drinking vessel with handles) in Copenhagen 4th century BC. (Copenhagen VIII 316).**

In ancient Greece, the men's symposium was the main occasion for informal domestic music making. Music was part of the good life and a civilized society, as we can see in the above image (Figure 4) of women making and dancing to music "from the women's room with various instruments being played" (West, 1992: 27). In Figure 5, a typical symposium scene, the aulos player is accompanying a guest who is singing from his couch with a cup of wine in his hand.



Figure 5. Symposium scene. Red-figure cup Attic, c.480 BC Munich 2646.

The aulos, as I have discovered in my exploratory work, is a sophisticated instrument, one that requires a professional apprenticeship to do it justice; this involves how to blow it, hold it (the finger stretch is unusual), how to make it play relatively in tune according to cultural expectations or academic conjecture, and, most importantly, how to make its reeds.<sup>23</sup> Its basic sound world has two extremes. One is soft, mellow, and stable; the other is raucous, loud, and wild. These opposing qualities are brought under control by changes in embouchure that exploit these extremes. I have found that I look forward to playing it because

---

<sup>23</sup> After a 1500-year hiatus, the art of aulos reed making must be patiently re-learned by trial and error. This process is barely a decade old; with historically accurate materials and techniques, it is only three years old: the revival has only just begun to treat the substantial evidence with respect, above all the writings of Theophrastus (c.371-c.287) philosopher and botanist who wrote extensively about plant structure, its reproduction and growth and pertinently about types of cane.

it always surprises me. One of its obvious delights is the fact that it has *two* pipes, and this encourages constant listening, not only to the mix and pitching of the notes together, but also to how the pattern of the finger movement can influence the making of melodies with drones or more complex polyphony.<sup>24</sup>

### **The Sound and the Music** <sup>25</sup>

In ancient Greece, the auloi would accompany dancing and wild revelry in keeping with the Bacchanalian festivals of Dionysus. The Phrygian mode, the mode of ecstasy,<sup>26</sup> was this instrument's primary mode, and the locale of Phrygia is where the aulos is believed to have originated. The effect of Phrygian aulos music was often emotional and hugely popular, perhaps in some cases even a little too colourful.<sup>27</sup> It was seen as usurping the proper position of the learned bard who could sing epic poetry in the noble style, accompanied by the cithara without the tricky modulations that defiled the reputation of the instrument and lowered the tone of music making in the minds of the fourth-century elite, whose writings distort history. The opinions of the majority are invisible, but they may be deduced with reasonable confidence. However, we do know that the aulos was extremely versatile and had an extensive expressive range, particularly in its

---

<sup>24</sup> Please refer to Aulos Case Study Appendix a) Historical Instrumental Context and e) The Reeds for an extended discussion.

<sup>25</sup> Please refer to Aulos Case Study appendix b) for more context.

<sup>26</sup> "The Phrygian mode was associated with the aulos...to a range of moods, from cheerful bonhomie or piety to wild excitement or religious frenzy" (West, 1992: 180)

<sup>27</sup> For this reason, the instrument was disapproved of by the more conservative moralisers and philosophers, beginning with Plato and Aristotle, who wrote that one should only learn the aulos in adulthood when one's character is sufficiently balanced to undertake an instrument of wild excess. "Auloi should not be introduced into education ... the aulos is not a moral instrument but rather one that excites the emotions, so that it should be used in the kinds of circumstances where the spectacle offers more potential for *katharsis* than for learning" (Barker, 1984: 177).

ability to modulate, possibly by lip bending to semi- and quartertones, something the lyre could not do so easily or successfully.

Unlike Plato, Aristotle was less direct and dogmatic in his research and teachings about music. He was concerned with the psychology of hearing and listening. For him, music was about “wellbeing”: living well and nurturing a balance between the mind, the body, and the emotions. It was not simply about amusement or entertainment; it had a much more significant role to play in sustaining a way of life that was good for a well-adjusted society. The performance of music therefore had a significant part to play.<sup>28</sup> It is refreshing to hear how valuable music was to the ancient Greeks in terms of its psychological and philosophical benefits. The same positive thoughts apply to our own modern society, particularly in the field of music therapy, in showing music to be a powerful healer in the expression and understanding of personality. The music invented in this case study is a quest to find a meaningful and significant musical expression using the sound of an aulos, and to discover, and, in a way, restore, aulos-generated music to a living tradition. And, from this, add a new perception to listening and hearing, embodying the spirit of the ancient Greeks.

---

<sup>28</sup> Music could be cathartic in that it could excite the soul to the themes of pity, fear or ecstasy, but also act as a cure in putting things right or working these harmless emotions off in a harmless way, as if taking some form of medicine. In terms of the instruments playing the music, the aulos, “should be used in the kinds of circumstances where the spectacle offers more potential for *katharsis* than for learning” and is a sort of purging and cleansing of the soul. (Barker, 1984: 177). There is very little left to us from Aristotle’s writings, but in his incomplete work *Politics*, he says specifically on the conduct of leisure, “music is conducive in some degree to virtue, on the grounds that just as gymnastics produce modifications of the body, so music has the power to modify the character ... the nature of music is more honourable ... and we ought not only to gain from it the common sort of pleasure ... but ought also to see whether it has tendency to improve the character and the soul” (Barker, 1984: 173–174).

## **Ancient Greek Music Theory<sup>29</sup>**

As instruments and techniques evolved and cultures mingled, three modes established themselves as the core of a tonal system: Dorian, Phrygian, and Lydian. These appear to have been canonized by panhellenic musical contests in the 6<sup>th</sup> century BC.<sup>30</sup> The Dorian style became associated with moderation and firmness; it was considered “manly” in sound and had the quality of steadfastness. The characteristics of the Phrygian style inspired a type of ecstatic excitement that came from the music played by the “Phrygian slave auletes ... [who] were not unfamiliar figures in Archaic Greek society” (West, 1992: 331). The characteristics of the Lydian style inspired elegance and an educative soul. Before Aristoxenus, each style had its own distinctive characteristics in the design of its intervals and in the colourings and shades of pitching within the tuning. The Dorian was, “in many respects central to ancient Greek music ... and the most highly esteemed by both Plato and Aristotle” (Hagel, 2009: 9). The differences between all of these modes, in terms of the expressive, aesthetic, and emotional qualities, could have an effect on the temperament of the listener, and this was of great interest and importance to the ancient Greeks.

---

<sup>29</sup> This is a complex subject with a literature that is impenetrable to most musicians. For an extended explanation, please refer to the Aulos Case Study Appendix d), where I limit my exposition to what I have understood and what appears to be relevant to a composer’s exploration of the aulos: a practitioner’s digest, not the whole story, and certainly not to be taken as truth; there are tremendous disagreements between leading specialists and no sign of consensus in 2022. The ancient Greeks had a different approach to how they listened to pitch compared to how we listen today. To understand the basics of their thinking, I have set out a précis of what I understand to be the main concepts, which will explain how this has influenced my own aulos music.

<sup>30</sup> The character and quality of these modes were linked to regions with a strong ethnic identity: Doria, Phrygia, and Lydia could be compared to Germany, Italy, and France, each associated with a musical style.

The *harmoniai* <sup>31</sup> and their tunings, therefore, had properties that could relax, educate, inspire ecstasy, or induce pity or fear, and, as Aristotle believed, they had “educative power” (Barker, 1984: 179).<sup>32</sup> Today, in listening to the instrument and playing its scales, I have found new musical satisfaction and enjoyment. I have also found a means of expression that automatically relates to my own aural history. It is fair to say that a lot of contemporary music today exploits differences in pitch and micro-tunings. I am familiar with these on my oboe, and it is enjoyable to find such flexibility on my aulos. I have exploited this phenomenon because the sounds are constantly shifting, and within this I have found my own music and character. Perhaps this shows the latent power of these ancient scales that still beguile and inspire.

### **Pitch and Tuning**

Aristotle had a theory that the cycling of scales or modes was a form of cosmic harmony that, in turn, linked to the music of the spheres. The division of the octave by Pythagoras at the end of the 6th century BC linked the maths and the music together in a spiritual and meaningful way. However, as we know, the maths doesn’t quite add up, and pitch itself was far from settled, which is why this is so intriguing in a lot of ways. Tuning is a living, breathing phenomenon that fluctuates according to circumstances; however, navigating this territory while playing the aulos means that you must also embody the mind of a piano

---

<sup>31</sup> “The old scales set forth by Aristides Quintilianus and identified as Dorian, Phrygian, and so on, are described as *harmoniai*” (West, 1992: 177). See Appendix d), pp 278-282.

<sup>32</sup> They had specific moral functions in terms of educating the young (initially through singing and lyre playing), and then confirming the correct way to behave when older (with the advanced understanding of their power with an aulos).

tuner. It is about listening to interference beats between the two pipes. You have to be proactive, making the vibrations within the sound relax, slow down, and disappear. This is most palpable with unison notes. As soon as the beating stops, the note is “in tune”.<sup>33</sup>

Ancient Greek, like Chinese, is a tonal language and pitch inflected in that it lilted up and down. This influenced music making in terms of pitch inflection and rhythm (certainly the lip pitch bending may come from this). The rhythm of the words was irregular, with patterns of long and short groupings, as in the dactylic and iambic rhythms of the music of *Pythikos nomos*.<sup>34</sup> In the recited audio texts of, for example, Ovid and Plato, given by the American classicist Stephen Daitz in the 1980s, one can hear his interpretive idea of the lilting legato quasi-singing contours of the lines and how the breath defines the phrasing.<sup>35</sup> Circular breathing is thought to have been a common aulos technique that would have allowed the players to play continuously for long periods of time. This endless blowing sounded supernatural and added to a sense of the divine, particularly when accompanying religious ceremonies, contributing to the effect of trance. An unbroken sound, without interruptions for breath, is more

---

<sup>33</sup> See Aulos Case Study Appendix g) for further notes on playing the aulos.

<sup>34</sup> In the 6<sup>th</sup> century BC, *Pythikos nomos* was the name given to a traditional set piece in the great pipers' competition at the Pythian Games. See Appendix p. 275.

<sup>35</sup> Stephen Daitz (d. 2014), Professor emeritus of Classics at City University of New York, made numerous recordings of ancient Greek texts with attention given to the pronunciation and metrical rhythm of the poetry. He believed this literature was written to be recited. His love of music underpinned his resuscitation of the sounds of Classical literature. Information from: New York Times Obituary 2014. To listen: [https://soundcloud.com/rhapsodoi/ovid-metamorphoses-8\\_183-235-perf-by-stephen-g-daitz](https://soundcloud.com/rhapsodoi/ovid-metamorphoses-8_183-235-perf-by-stephen-g-daitz)

powerfully magical and psychologically transporting, and possesses a superhuman quality.

### **Musical Structures**

The musical structures of ancient Greece were often in the form of Paeans or Hymns to the gods, particularly Apollo. They were also, as mentioned earlier, in dance forms that would have been used as accompaniments to victories in games or sports. Most importantly, there were many interpretations of the same song or hymn. Music suited the moment and was adapted to complement the attitudes or expectations of the listeners. Embellishment of a known song was what was expected. I hold on to this idea because it establishes the fact that improvisation was a prevailing skill in performance, with the player's ear and musical instinct leading this activity. It is thought that musical notation was established by the middle of the third century BC, since this is when the first preserved documents of ancient Greek written music date back to (Hagel, 2009: 1); however, it is highly probable that music was most commonly learnt and handed down by ear. Certain melodies and songs became well known, and famous auletes who wrote scripts about technique, Lasus of Hermione being one,<sup>36</sup> wrote about their repeat performances, noting that versions of the same song attracted favour in how they varied what they played. There is a connection to be made here in how we make aulos music for today. In this research, the music I find on my aulos is determined by what my ears and musical instinct

---

<sup>36</sup> Lasus of Hermione was active as an aulete, composer and music theorist in Athens in the last quarter of the 6<sup>th</sup> century (West, 1992: 225).

discover with the instrument, and this directs me to a music whose character will be defined by improvisation, a skill absorbed and celebrated by the ancient Greek players. In some instances, I use the same fragment of music on which to build further versions (shown later under “some music”).

### **My Findings**

To find an instrument and begin playing it, knowing it to be the precursor to all types of oboe, has opened my ears to another double-reed sound world.



**Figure 6. Image of my Louvre Aulos made by Thomas Rezanka.**

The top pipe (as shown in Figure 6) is the high RH pipe, and the lower one is the LH low pipe. The blue-tack is there to teach my fingers to stay in the right position, and the black rings are made of rubber to cover the holes when required.

Figure 7 shows a pair of aulos reeds made for me by Max Brumberg in 2018. They are made from *Arundo donax*. I oil the reeds with toasted sesame oil

(as recommended by Max) to keep the cane in good condition and to stabilize the sound and behaviour by reducing fluctuations in moisture content.



Figure 7. My aulos reeds made by Max Brumberg.

For training purposes, habituating the hand to unfamiliar hole positions may initially be uncomfortable due to the stretch required. Notably, Brown has argued that the little finger must have usually been held down because otherwise the bass notes feature little in the sonority. Expensive slide mechanisms are evidence that the bass notes were exploited, at least by professionals, and keeping the little finger down opens the doorway to four-part polyphony as practised by Launeddas players: two voices in each hand. (Bentzon, 1969).

Each pipe may thus be balanced between the little finger, thumb, and lips: this keeps each pipe steady while playing. The position of the fingers in the left

hand (the low pipe) has a wide stretch between the index and middle finger; this causes tension in the hand that can cause injury; however, that may ease with gentle long-term practice. You can also see that the holes are not drilled in a straight line; this is thought to ease finger strain. Robin Howell argues for an embouchure that is very forward, away from the teeth, with the wet part of the lips across the blades at the tip of the reeds, with high lip compression. This is not like an oboe embouchure where the lips are tucked in. The blowing is also very different, because the air flow is greater (at least with my current reeds) with the aulos. The oboist, on the other hand, only exhales a small amount (because the one reed is smaller and requires less air); each new intake of breath has to be preceded by exhaling unused old stale air. It is a double action: exhale old air, inhale new air.<sup>37</sup> Nowadays, circular breathing is considered an extended technique on the oboe, but it is one of the oldest blowing techniques in the world and is ubiquitous in classical musics of other cultures. For the aulos players of ancient Greece, a leather strap, or *phorbeia*, was occasionally tied around the head and cheeks (see Figure 8) to support this circular breathing, reducing strain on cheeks and lips, thereby reducing disfigurement, and enabling stronger reeds to be played for longer periods.

---

<sup>37</sup> The “old stale” air (as oboists call it) is the air remaining that is unused, and this builds up pressure in the lungs. To relieve the pressure the old air must be exhaled first. With an aulos the air is expelled immediately (like a flute or clarinet).

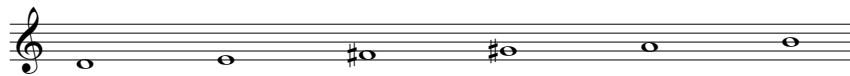


**Figure 8. An aulete wearing a phorbeia. Image from a red-figure cup by Epictetus, C. 500 BC British Museum E38.**

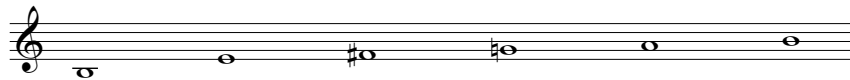
As I learnt to play my aulos, my reaction to it and my musical ideas began to take shape. 21<sup>st</sup> century met 400 BC in an attempt not to recreate a sound and music that “might have been”, but to make a music inspired by the sound I could elicit from the instrument via the scales and their tunings. I continued to read about the historical evidence and debates surrounding the interpretation of technical and musical ideas, which influenced my chosen procedures. For instance, knowing that ancient rhythms were influenced by the rhythms of speech and poetry, and that there is a lilt of uneven rhythms in twos and threes, has resulted in some of my improvisations having melodies in 11 and 13/8 or multiples of threes and twos. The mixing of 2s and 3s, unfamiliar to Western European classical music of the Baroque, Classical, and Romantic periods but very popular in the folk music of Eastern Europe (West, 1992: 140), has pride of place in Greek drama: the emotional climax was conventionally composed in Dochmiacs, or feet, in a 3+2+3 pattern with variations (Brown and D’Angour, 2019).

The scales are rich in potential. Each of my aulos pipes has several possibilities of scales, giving me a total of seven scales to experiment with within the basic key of three sharps (A major/F-sharp minor). Of course, with only six notes in each hand, the scales can only be alluded to on one pipe, but when the two pipes play together, the scales can be shared between them.

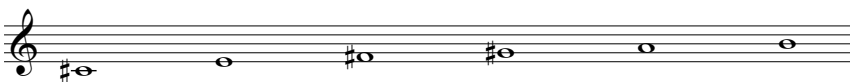
The high pipe (which has eight holes altogether) provides four potential scales:



1) a scale on D (all holes open) with an augmented fourth



2) a minor scale on E with a B a fourth below the E (closing holes 5 and 6)

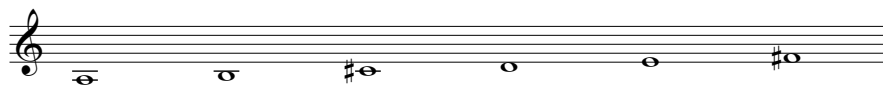


3) a scale on C-sharp that starts with the minor third C-sharp to E  
(opening the 6<sup>th</sup> hole only); and



- 4) a minor scale on E with an A a fifth below the E (closing holes 5, 6, and 7).

The low pipe (which has six holes altogether) provides three potential scales:



- 1) a major scale on A to F-sharp (all holes open)



- 2) a minor scale on B with an F-sharp a fourth below the B (closing holes 5 and 6); and



- 3) a minor scale on G-sharp that starts with the minor third of G-sharp to B (opening the 6<sup>th</sup> hole only).

Each pipe has a choice of low note (see Figure 9) altered between pieces by opening or closing bass holes (N.B. the Louvre is not equipped with bronze levers to operate bass holes while playing). The notes in brackets are those that can be lipped down or up in pitch (with or without the help of a slight uncovering of the finger holes) to produce extra chromatic notes.

## AULOS PITCHES

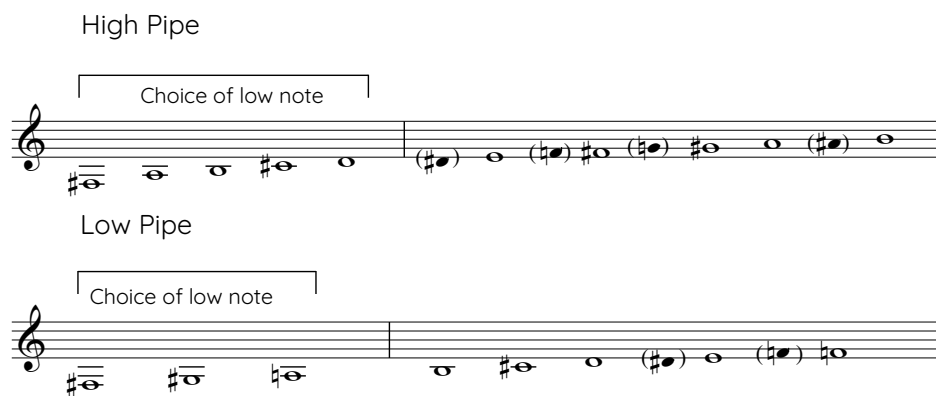


Figure 9. High pipe and low pipe pitches.

The natural *tonos*, or key, for this aulos is A major, with the *mesē* (middle note or tonal centre)<sup>38</sup> in one of two positions. If it is D (with the low pipe starting on A), we ascend to the high pipe with the G as a natural. The *mesē* D, giving D–G, forms the conjunct tetrachord. If we make a disjunct tetrachord of E–A using the *paramesē* (the note above *mesē*) E instead of D, the G can be sharpened to G-sharp. As discovered in the Greater Perfect System,<sup>39</sup> the *mesē* was fundamental to Greek melodies and “has often been compared with our

<sup>38</sup> Please refer to diagram in Aulos Case Study Appendix d) for explanation of *mesē* and later *paramesē*.

<sup>39</sup> For explanation, see Aulos Case Study Appendix d) pp. 283/4.

'tonic', but the comparison must be used with great caution" (Barker, 1984: 195 n. 39). In extant fragments of music, the *mesē* is not shown as the final note of a melody, which is considered as evidence that the ancient Greeks heard their scales differently from how we do. The *mesē* is not heard as the tonic, but rather as the middle note around which all the others revolved. It is the note from which there can be a branching to other *tonoi* or keys. The bending of a pitch can facilitate D- and A-sharps and C- and F-naturals. This positioning of pitches changes how one hears the harmonic movement of the notes, and this will become apparent in the explanations below of my own music for aulos and oboe.

### Aulos Pitches and Sounds

Having learnt these scales, I decided to focus on a particular pair that I liked the sound of together, and these were the two that have a fourth to begin: low pipe: F-sharp to B and high pipe: B to E. This provides consecutive 4ths, and I liked the sound quality of the low F-sharp (sounding below middle C) on the low pipe. This offers a *mesē* of B, from which there is the possibility of bending the B down to a B-flat or A-sharp. While I was learning this juxtaposition, I wrote some exercises in my aulos notebook to help work on hand positions, breathing, and tuning, as seen in Figure 10.

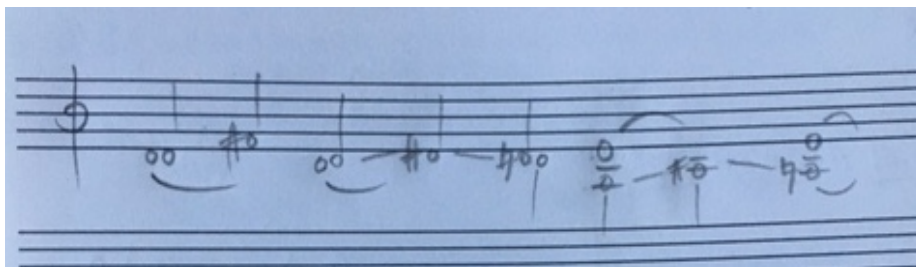


Figure 10. A slow tuning exercise.

In one of the tuning moments, I discovered that a slight bend in pitch up or down created a beating sound between the out-of-tune notes (described earlier as fluttering and known as the critical band) and decided to exploit this rather strange sound that happens automatically. This is equivalent to making two different timbral sounds of the same pitch, one being played on one pipe and the other inflected by lip bending on the other. This relates to modern enharmonic effects with pedal harps, where two strings with the same pitch are alternated, and where tremolos between the different colours of the same pitch produce a *bisbigliando* or whispering effect. This is similar to the types of vibrato that can be done with the fingers or *flattement* (a form of French baroque ornamentation) that can make large differences in pitch. The difference can be small or microtonal. This technique is still used in Balkan folk music and has a very expressive and evocative sound quality.

It must be said, returning to the mixing of unison sounds, that there is a specific moment when the position of the lips and the placing of the reed only feel correct when the sound that is produced becomes stable in pitch and starts to ring as if hitting just the right spot. One can feel the vibrations singing once everything is balanced and the sound blossoms; this does make the inside of one's head and ears ring. Another moment of revelation was the discovery that when I played the two top notes on each pipe together and bent the pitch of the B up to a C on the high pipe, a third note sounded (Figure 11 below). The third note is the low diamond-shaped pitch. This acoustical phenomenon of semitone harmonic sounds magically revealed itself and moved in contrary motion to the top notes.

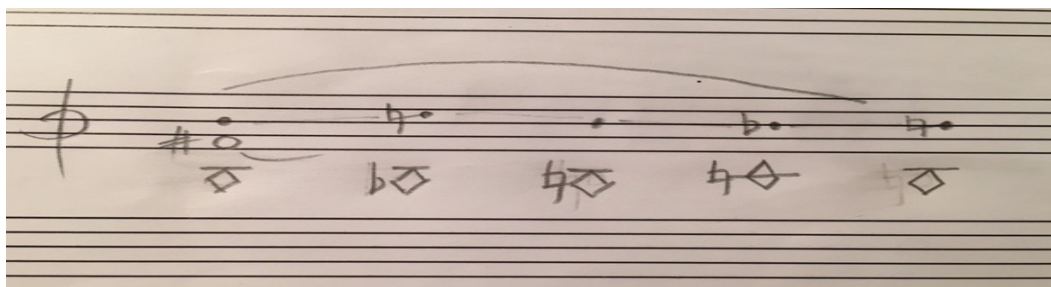


Figure 11. The “extra” diamond-shaped pitches.

They “presented” themselves when the tuning was balanced; perhaps this is what the ancient auletes also found. It was the *sound and the feel* of the in-tune-ness that told the player where and how to position the correct embouchure, and the buzzing of the sound is where it likes to live.<sup>40</sup> The scholars who are making aulos reeds today know that this sound is the criterion to aim for in design, quality of cane, and the dimensions of the scrape. Transferring these sounds to the oboe, that is, the double unisons, bisbigliando, finger vibratos, and adding multiphonics into the tunings, opens up the sound into the contemporary context of today (more of this later), and this transfer also returns and connects the modern oboe to its older roots, roots that explore sounds of double-reed character, which is exactly the aim of this research.

### Some Music

I began to write down some frameworks for improvisation that I could explore with my collaborator aulos player, Callum Armstrong (who is a member of EMAP and the doublepipes community). I recorded our improvisations, which were based on specific themes that I wanted to explore. These became audio examples for me to listen to and build upon later. The following six musical

---

<sup>40</sup> Not to be confused with pulsing sound = out-of-tune and non-pulsing = ‘in-tune’.

excerpts are the results of this process and form the basis of a seventeen-minute improvisation that Callum and I performed after a presentation I gave about the aulos to the RBC Jazz Research group at the RBC East Side Jazz Club in February 2020. (This improvisation can be heard in its entirety in **Audio Ex. 01** in Primary Listening list.) The first three examples, Figures 12 a) b) and c) below, are derived from material made after extended periods of playing the aulos by myself. The additional three examples show further melodic and textural input for the oboe that reflects, supports, and contrasts with the aulos music. In addition to two auloi, I play my oboe, and Callum plays his small Scottish pipes. I decided to add this instrument because our initial meeting, which took place on the EMAP course in Tarquinia, was a performed improvisation with Scottish pipes and oboe. The sounds blended beautifully and added another dimension to a double-reed sense of oboe character. The performance sequence has instrumental duets of two auloi, aulos and oboe, oboe and small Scottish pipes, and aulos and small Scottish pipes. As we each put down and pick up the next instrument, there is an opportunity to contribute a solo moment.

Figure 12 a) below is an exercise for use in improvisation that exploits the fluttering, knocking, and whispering to be found within the sound. Here, the B is the mesē and the middle note from which all other tones can develop. In fact, as we improvised with the three-pitch cells, the “finding” and the “exploring” became substantial because we didn’t know what we would find, and the journeying developed into long moments of music making. This process was productive, and I decided that it could be the framework for the beginning of our improvisatory piece.

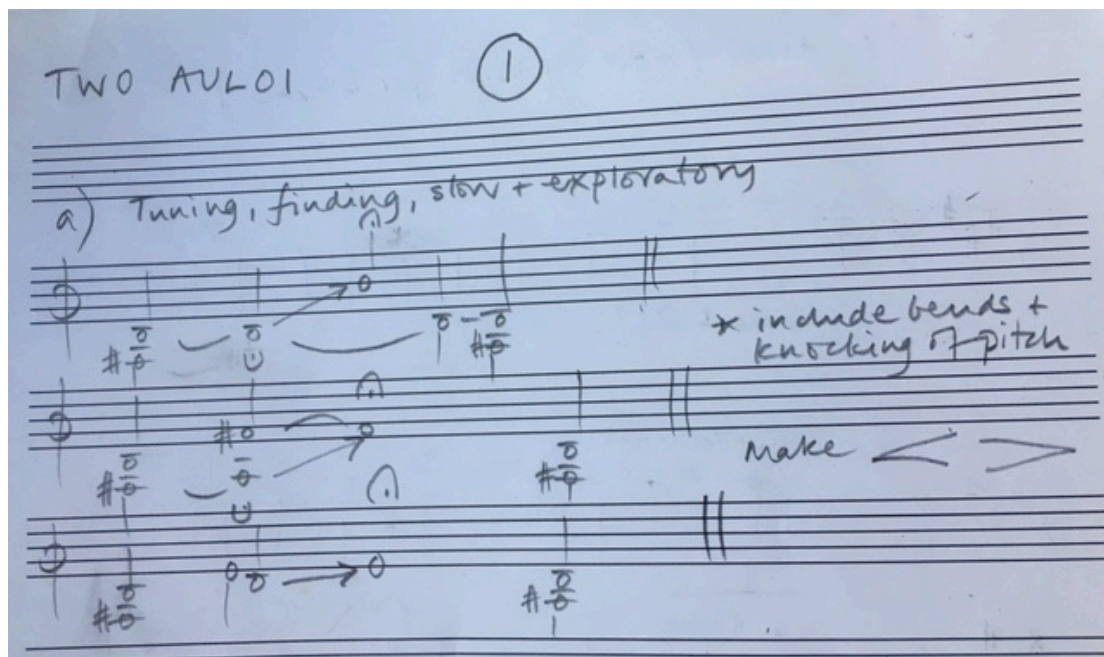


Figure 12a). Tuning the fourths and unisons.

One of the delights playing the aulos is that, with two pipes, I have an automatic form of counterpoint at my fingertips, which is so very different, of course, from the single line of the oboe. After getting my ears accustomed to the tuning (up to a degree, as I found it constantly shifting), I then spent time playing with the consecutive fourths between the pipes and began to understand the relationship between the fingers and the notes. Playing two pipes at once was initially strange, and the ache in my left hand caused by the large stretch between the index finger and the adjacent one became easier. However, the experience of discovering what to do and how to do it became the driving factor in overcoming obstacles. The sound and how it shifts so subtly constantly make the listening feed into ways of making and improvising with patterns and groups of notes. So initially, I found that moving the same fingers on each pipe at the same time was infinitely easier than moving the fingers in contrary motion, and I gradually transformed a series of improvisations into a chorale in  $\frac{3}{4}$  time (see Figure 12 b) below) with the fingers on both pipes using the same pattern. This

sequence has possibilities for additional moving drones and melodic invention above it, and the shifting G-sharp and G-natural lend harmonic ambiguity. In a further reworking, the emphasis shifts when reversing the rhythm, using the first dyad as a crotchet upbeat. This gives the music a more lilting effect, as in a lullaby.

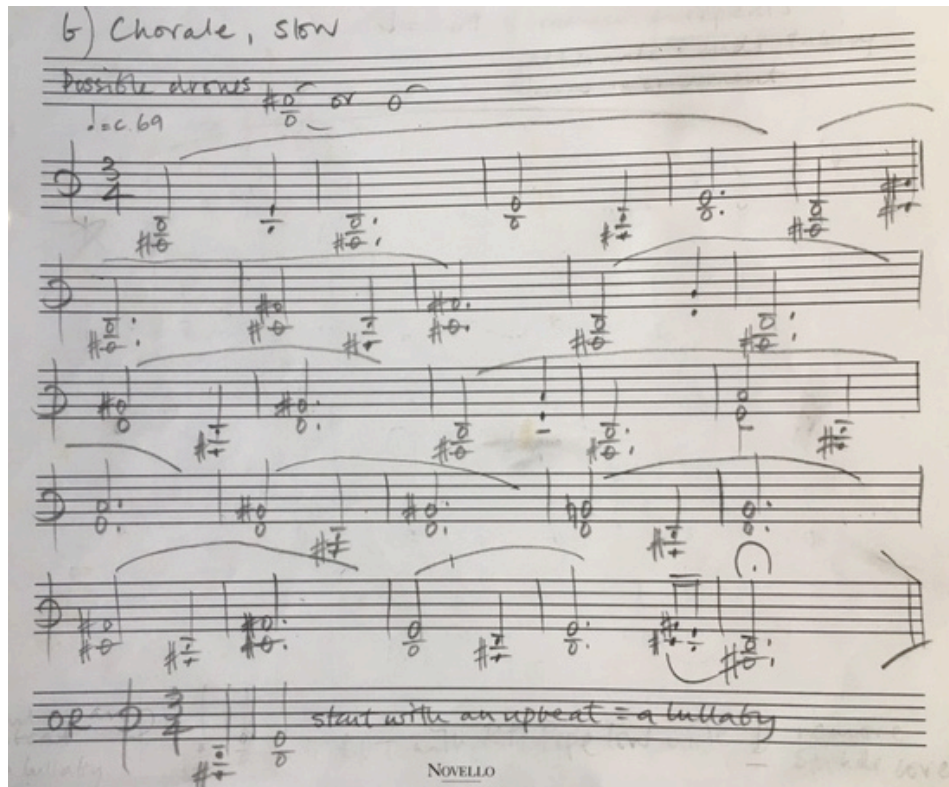


Figure 12 b). Chorale in 3/4.

All the tempi of the improvisations thus far are slow, for the obvious reasons of my limited technique, so once again, a symmetrical finger pattern exercise, as in the Chorale, brought me to this next extract, and because of its symmetry and finger logic, I could play it relatively fast. Once again, I arrived at it through many improvisations, and the result was a dance in 11 and 13/8. It is tongued and in an irregular rhythm (Figure 12 c) below). There are four four-bar repeated sequences, and on the second repeat at the end of the bar, an added rest makes the 11/8 a 13/8. This space creates a sense of anticipation and

unpredictability, in which perhaps a foot could be stamped or an addition of a small melisma. The numbers above the notes remind me which fingers to lift. This is a framework that can be developed, as indicated in the suggestions I've written at the bottom of the page.

c) Dance, fast  
Tongued

||: 1 2 3 4 Δ 5 6 | 1 2 Δ 3 Δ 4 5 A: || 2  
(Put angular melody on oboe over the top. Last chord B minor)  
Only in 13/8

Repeat 4 bar sequence  $\frac{11}{8} \rightarrow \frac{13}{8}$  to include fast stamp on last 3

On subsequent repeats add  $\text{TTT}$  to first beat or  $\text{TJ}$  of each bar

Suggestion:  $\frac{11}{8} \rightarrow \frac{13}{8} \rightarrow \frac{11}{8}$  including  $\text{TTT}$   $\frac{13}{8}$  without repeats? soft/end pause

Figure 12 c). Dance in 11/8.

An observation on the rhythm: this music reflects the irregular rhythms that belonged to the dances of Apollo and Dionysus, whose vitality we know the Greeks believed was the soul of music. Aristotle wrote, “Melody in itself is lax and inert, but when combined with rhythm it becomes hard-edged and active” (West, 1992: 129). Rhythms reflected the metres of verse texts that were sung and danced to. The short and long syllables of the words corresponded to patterns of long and short notes. According to Aristotle, Aristoxenus, and other writers on rhythm, there were various types of long and short; for example, dactyl = long-short-short. Adding another short to the latter was known as the paeonic rhythm, whose durational ratio was 2:3: a quintuple time, and paeonic rhythm was associated with energetic dance forms. In expanding a five rhythm into 11 and 13, I have exploited the inherent irregularity of this ancient rhythm. The above dance music could be my version of a Paean to Apollo.

### **Complementary Oboe Music**

The next stage in this process was to link the aulos music with music designed for the oboe and integrate it into this scenario. For the music belonging to Figure 12 a) above, I decided to find multiphonics for which the main notes corresponded to the mode of the aulos, and which could be brought into the moments of fluttering, or separately, at another moment (see Figure 13 below). The oboe’s multiphonics have their own individual identities, which are controlled mostly by the instrument, replicating the fluttering sounds between the two pipes of the aulos and their double reeds. With one oboe reed plus unorthodox fingerings, the oboe sound returns to an unpredictable place but also a contemporary one. Most of the notes (there are also notes of indeterminate

pitch) within the multiphonics are notes within B Dorian, the aulos scale I've chosen for these extracts, except on E, where a G-natural and a C-sharp co-exist (see line 3 in Figure 13), which is so very intriguing. The G-sharp of the mode has become naturalized, and G-natural and C-sharp are an augmented fourth apart, which, of course, is not an unusual interval but one that has interesting harmonic implications.<sup>41</sup> This is precisely the scale on the higher aulos pipe where the two Gs also co-exist as alternate possibilities by lip bending to be either a natural or a sharp. The acoustic properties of these oboe multiphonics explain something fundamental about the harmonic possibilities that lie latent within the fundamental notes of B, F-sharp, and E; each note and the notes within all the multiphonics are derived from the same scale. There is a sort of holistic beauty about it all, wheels within wheels, and a system where everything connects in hidden ways. The oboe and the aulos are not so far apart in their acoustical properties, thanks to the importance of a vital factor, the mouthpiece – that is, the double reed.<sup>42</sup>

---

<sup>41</sup> The pitch differences are also determined by the scrape of the oboe reed. Not all reeds produce the G. Some make it an F-sharp.

<sup>42</sup> The oboe is deemed a rare instrument in education today. Perhaps the aulos can begin the process of recognizing that the oboe's ancient cousins were 'super cool' instruments. They can be instruments of ecstasy and wild abandon, as can the oboe. Certainly, the double pipes community would like to see the aulos as an instrument of serious study in higher education.

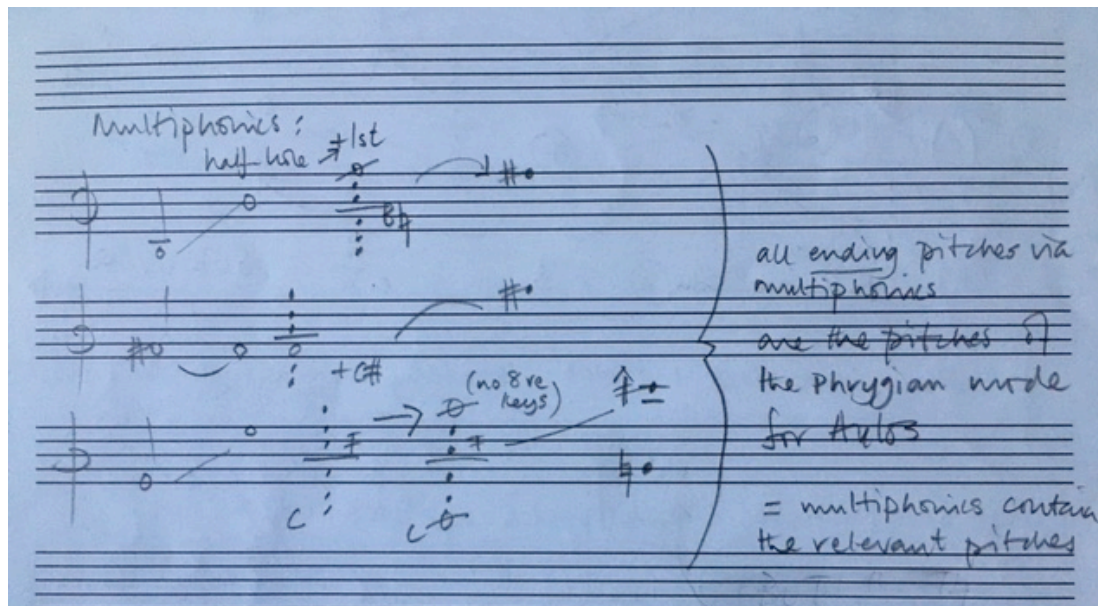



Figure 13. Oboe multiphonics for which the main notes correspond to the aulos mode.

For the dance music in Figure 12 c), I wanted to make a modern sounding oboe melody that pays homage to the music I discovered with the aulos. I designed an angular melody for contrast to be played in full, or alluded to, according to how the improvisation develops (see Figure 14 below). This melody, with its wide intervals, is not aulos-like, and I have deliberately added all the notes that are not part of the B Dorian scale to make it sound more chromatic and contemporary. These notes form a pentatonic scale on E-flat, F, G, B-flat, and C. The notes I've added to the aulos "key" of three sharps are the notes you can see written in the series of possible drones in fifths, except the missing notes, G and E-flat, that would make it fully chromatic (more of this in a moment). The melody sits in the lowest oboe register, and the dark tones of B-flat, B-natural, and C-sharp resonate with a markedly rustic sonority. I have kept the irregular rhythms of the aulos dance because the very irregularity is its character.


## Chromatic, angular melody

B Dorian, using pentatonic




scale of 'other' notes to make up chromatic scale

3 Use drones:



4 Emphatic, heavy, not slow



7 1. 2.




Figure 14. Chromatic, angular oboe melody.

Bearing in mind that I was always trying to make musical links that I could place in layers if needed, I decided to find another melody – one that was less angular and in the Phrygian mode. Thinking about “the missing” notes of G and E-flat, I designed a melody that was less angular (see Figure 15 below). The note G-sharp on the aulos is unstable in that its pitch can fluctuate a lot. The G-natural pitch (made on the aulos by pulling the reed away from the lips and reducing the air pressure) adds in a tritone mix, C-sharp – G, to the harmonic



part of the Surge Festival at the Midlands Arts Centre (MAC) in Birmingham. My collaboration with Callum Armstrong had begun in the previous months, and this was an ideal opportunity to explain and show the research I had done up to that point. To my intense regret, I failed to press the record button on my Zoom recorder before our performance improvisation and therefore have no record of this performance.<sup>44</sup> (However, **Audio Ex. 02**; is a run-through in rehearsal).

### **New Piece for Solo Oboe: *Aulos Transfer***

Subsequently, I decided to amalgamate the above oboe material into a new piece for solo oboe. *Aulos Transfer* is based on a transcription of one of my improvisations on this material. (Score attached and **Audio Ex. 03** available for listening). Playing the notated transcription never really brings the subtleties of the original improvisation back to life. Therefore, the intention here was to recreate another version of the same material, but this time via a composition process. As mentioned in the introduction, this process allows for a more considered amount of time, a time shift from inner (improvising) to outer (composing), to reconfigure and readjust the meaning of the material in minute detail. The result is a composed piece that will inevitably have a slightly different interpretation on each reading/playing, and also a new one by subsequent players.

In a quest to integrate all the discovered sounds of this case study, I decided to create an improvisation using both the oboe and the aulos. I use the

---

<sup>44</sup> I do, however, have recordings I made during workshops when Callum and I improvised in our investigations of my material. **Audio Ex. 01,02,03** in Secondary Listening list.

technique of overdubbing, that is, improvising live over a pre-recorded improvisation. In **Audio Ex. 04** you can hear a five-minute improvisation on the oboe that is based on the same material (Figures 12 a), b), c) with a free improvisation played over it on my aulos. This sonic mix of both the oboe and aulos is a unique sound world, the first of its kind, and I must admit that I find it strangely moving. The two double-reed instruments have come together and are combined in a new conversation. This music can only exist in an audio file, as there are no oboe/aulos players (yet) who might like to try this piece (if I were to transcribe/compose it); however, in time, there might be an opportunity to improvise with another oboist. I can also imagine it as a duet for two players.

### **Extra Aulos Music**

The following pieces are examples constructed from my improvisations and explorations with the aulos. They show the results of my thinking with the aulos and how I generate music for it. Some are based on specific exercises written by Barnaby Brown,<sup>45</sup> another on a Bellermand fragment (explained later), and one a little homage to Erik Satie.

### ***A Satie Gymnopédie for Louvre Aulos***

Satie's famous *Gymnopédies* were "probably inspired by a decoration on a Greek vase" (so says the introduction by Maurice Rogers 1975 to these pieces in a book of Erik Satie piano pieces). "The Gymnopedia was a yearly festival

---

<sup>45</sup> Barnaby Brown has written finger exercises based on patterns from his extensive knowledge of piping and those of contemporary Launeddas players and especially the famous Sardinian, Efisio Melis.

mentioned in Herodotus in honour of those who fell in Thyrea” (this was the siege of Tyre masterminded by Alexander the Great in about 322 BC in a campaign against the Persians). The now famous *Gymnopédies* (also orchestrated by Debussy) “represent the stately dance performed by youths before statues of the gods” (Rogers, 1975). The timeless quality of this 20<sup>th</sup>-century piano music that makes links to ancient Greece inspired me to create my own 21<sup>st</sup>-century *Gymnopédie* on the aulos, an instrument that most probably could have played at the ancient Gymnopedia. The result is a two-part melody that retains the original  $\frac{3}{4}$  time signature and uses my aulos mode of three sharps with the lowest notes as Low Pipe: low F-sharp and High Pipe: low D (see Figure 16 below).

Because of the alignment of the notes with the fingers, the melody follows the contour of the scale and sounds alternately major and minor. This mix of major/minor with the soft sound of the aulos, like the softness of the original Satie on the piano, and the very colour of the tones with their mingling sounds in the middle register, gives the music a sombre and rather melancholy character. This particular quality of aulos sound automatically gives the music its own identity. **Audio Ex. 05** is my first rendition of this piece. <sup>46</sup>

---

<sup>46</sup> On the repeat I move to the C sharp at bar 3.

## A Satie Gymnopedie

for Louvre Aulos



Figure 16. A Satie *Gymnopedie* for Louvre aulos.

### ***A Bellermand Rondino***

The *Bellermand Anonymi* are ancient unattributed texts first published by Johann Friedrich Bellermand in 1841, which contain half a dozen short instrumental tunes and finger exercises for beginner aulos players from the

Roman period. We learnt and played some of these tunes on the EMAP course in Tarquinia (as mentioned earlier in Chapter 2). I have chosen Documents of Ancient Greek Music (DAGM) 37 & 35, which both enjoy asymmetrical rhythmic groupings (see Figure 17 Ex a & b below). These are exercises I practised either with both pipes together and therefore sounding a 4<sup>th</sup> apart, or separately with one pipe and a drone on the other. In DAGM 37 (Ex. a.), I hear it as a sequence of four 9/8 bars (as seen with the brackets below), because the low A seems to define the phrasing. In DAGM 35 (Ex. b.), the phrasing is grouped in 4 bars of 11/8. In both exercises, the Greek text can be sung, and the words automatically give the irregular rhythmic groupings to the contour of the melodic line and give an understanding of how the music should be heard. I am continuing to work with both of these melodies to make further versions that are slightly different and embellished.

Documents of Ancient Greek Music  
DAGM 37

15	15	16	} this is the ancient notation. A dot = a rest?
17	16	17	

(left hand fing)  
B C# D E F#

\* TE ταη τωαω τα τε ταη τωα τωη τε τηα τηα τη τωα τωωω τωα τωη

low Pipe: open hole 6 - starting note will sound B  
= the vowel from messe  
B#, B, C#, D, E, F#

\* these are vowels, like a solfège system  
9 8

Figure 17. Ex. a.

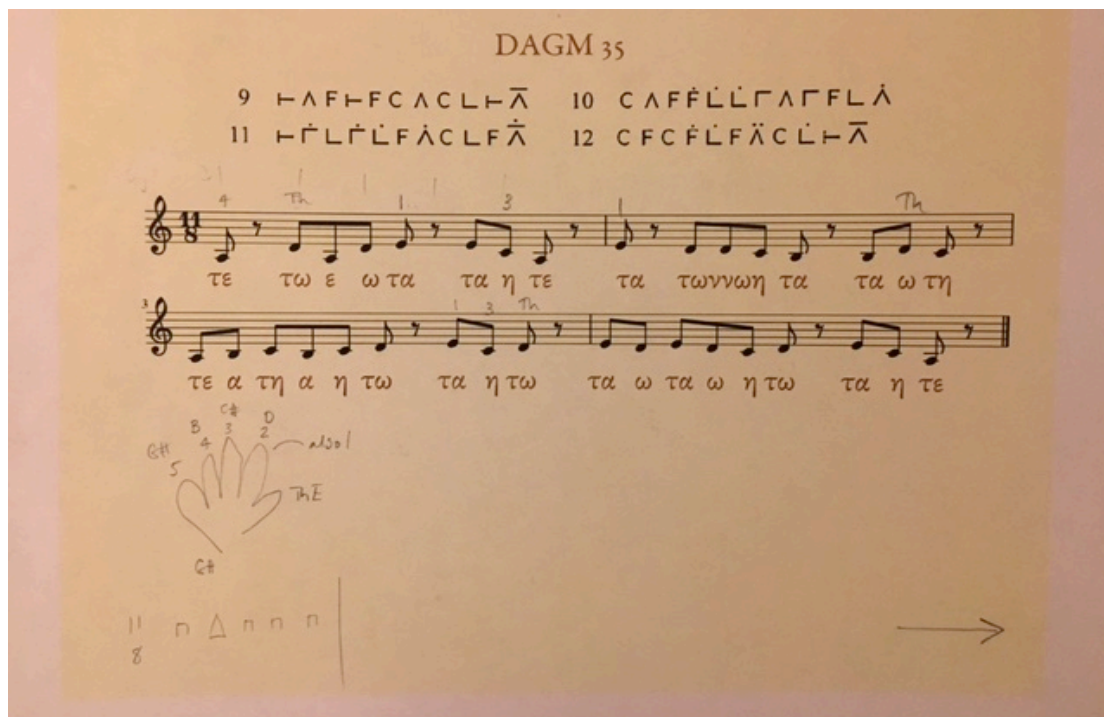


Figure 17. Ex. b.

In my own composition *A Bellermand Rondino* (see Figure 18 below, 2 pages), I set up a repeating theme A and B in 9/8 (which reverses registers at letter B), and in between, I made the melodic lines of each exercise into an extended 7/4 metre that gradually diminishes: 7, 5, 4, and 7, 6, 5, 4. Both of these metre patterns came about from extensive playing, listening, and recording snippets to improvise against. I have played this little piece to the online aulos support group because they recognize the original DAGM exercises and can hear how I have strayed away from them. **Audio Ex. 06** 'A Bellermand Rondino' is an early attempt to play it complete to give an example of the piece so there are various note mistakes and a repetition of B.

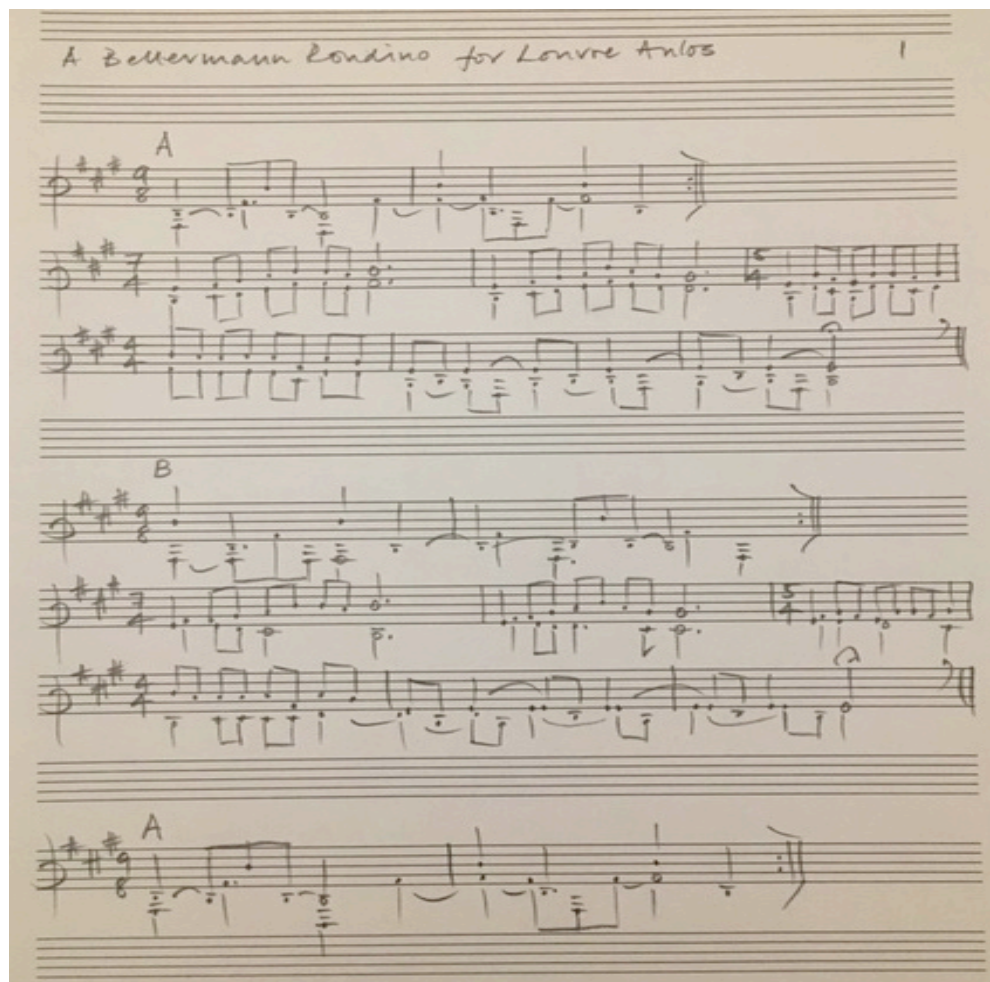


Figure 18. First page.

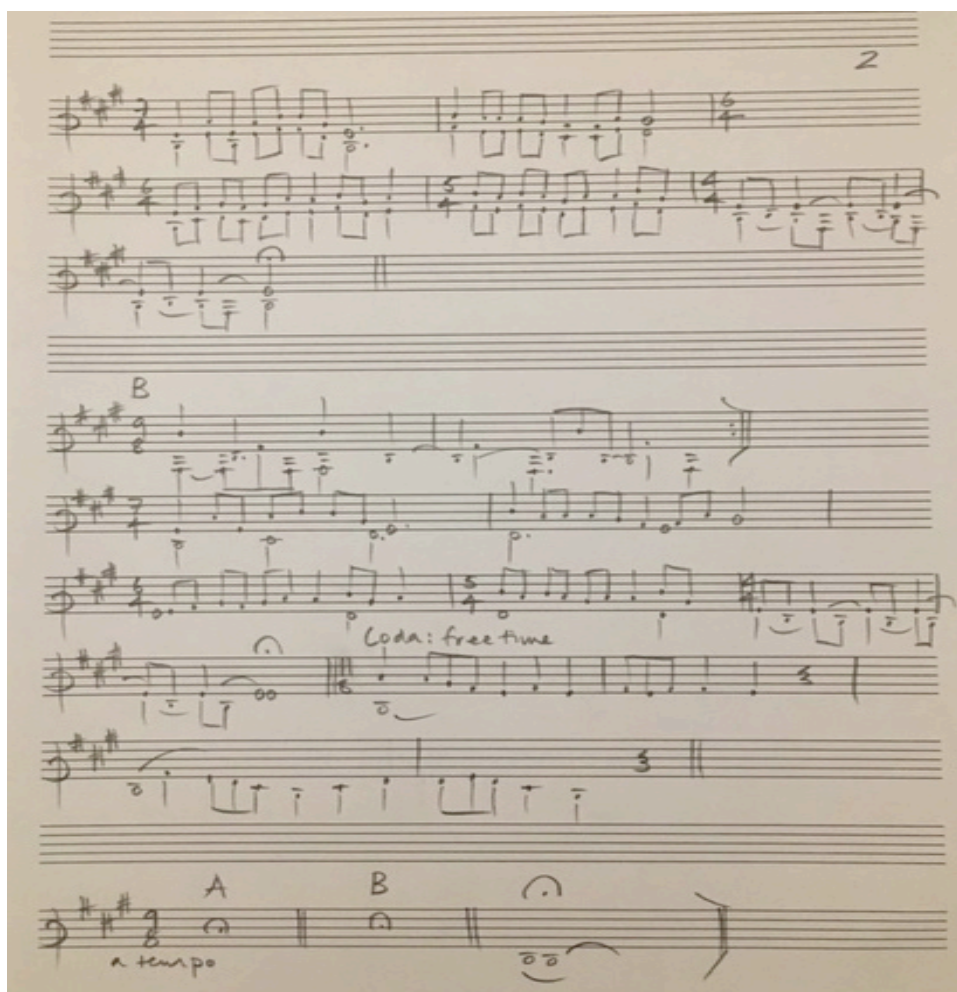


Figure 18. Second page.

### ***Pan for Louvre aulos* (Audio Ex. 07)**

In the Britten Case Study (Chapter 4), there is also an example of my adaptation and re-composing of *Pan* by Benjamin Britten from his *Six Metamorphoses after Ovid* for solo oboe, for the Louvre Aulos.

### ***Extra improvisations* (Audio Ex. 08 Four tracks).**

I have additionally played and written down, after improvisations, other similar miniature pieces based on and adapted from some finger exercises written by Barnaby Brown, which I have performed to the online aulos support group. It has been my aim to remake and fuse exercises into compositions via

improvisation. This is part of my ongoing activity to share my musical findings with my aulos colleagues as part of the general international research on this instrument. I will be adding these findings into written blogs and video demonstrations to my website and their website.

### **New piece for Louvre aulos: *Aulos Awakes***

The last stage of this case study is the making of a piece for aulos, which I will give to the aulos-playing community. It is called *Aulos Awakes* (score attached). As with the solo oboe piece *Aulos Transfer*, it is based on a transcription of one of my improvisations. I have also inserted and integrated extra material developed from some of my findings that I have collected and learnt in my study so far on the aulos. The process of composing it is the same as described for the oboe piece *Aulos Transfer*, in that time has enabled consideration of all angles and strategies of musical detail before making final decisions. Interestingly, the technical instrumental restrictions forced a concentration of harmonic ideas, but these restrictions I think give the piece a unified structure and flavour. The actual sound of the aulos when it is played generates its own laws that govern the movement of the sound at any one time. Therefore, there is space in the piece to allow this to happen, as the tempo relies on how the aulos “speaks”. This flexibility, as I have experienced, offers surprises with each performance, and hopefully will continue to do so. **Audio Ex. 09.** *Aulos Awakes*.

## Conclusion<sup>47</sup>

All the music so far is distinctly modal and represents the beginnings of making some music for the aulos with a beginner's technique. It is to be hoped that with the development of a more agile and flexible technique, I will be able to extend the musical expression and develop a more sophisticated harmonic approach by controlling the lip bending and adding chromatic notes. This will give the resultant aulos music the opportunity to move into a wider contemporary musical territory, but with the premise, as far as I am concerned, that its fundamental character remains intact. The instrument is still so young in its rebirth, and on the whole, we can, of course, only speculate about how the aulos sounded and what music was played on it. It is not the aim of this research to reproduce an authentic music for the aulos, but rather to find a spirit and character of music that is drawn out and directed by the sound itself, linked to ideas of ancient Greek musical theory, and with modern ears to guide it.<sup>48</sup> This approach will be shown later in my work, *Janus*.<sup>49</sup>

---

<sup>47</sup> See further conclusions at end of Aulos Case study Appendix.

<sup>48</sup> In the NMC Big Lockdown Music Survey 2021, one of my aulos and oboe improvisations was accepted, and in 2023, it was chosen by NMC for a digital release on Spotify and Apple Music and as a download on the NMC website. It is called *Pan Harmonium: an improvisation, oboe and ancient Greek aulos*.

<sup>49</sup> To accompany *Janus*, I made a short video about the instrument and my thoughts on composing this piece. BCMG Aulos/Janus film:

<https://www.youtube.com/watch?v=3L6BqaprAOg>

## 2) Nadaswaram Case Study

### Introduction

There is something mysterious about a sound that is made by air blown through two blades of grass or bamboo. As Anthony Baines mentions in his *Woodwind Instruments and Their History*, the South American Indians had pairs of one-note reed pipes called uanas, and there were “grass-blade squeakers of various kinds, used for imitating spirit voices” (Baines, 1967: 189). In the pre-ancient world, hundreds – and possibly thousands – of years BC, musicians began developing this sound by flattening one end of a bamboo tube or river reed and making finger holes in the tube to make a pipe. In its simplest form, the reed instrument is made from “vegetable material, since the vibrating reed is made by cutting, or flattening out, one end of the pipe itself” (Baines, 1967: 189–190). Later, this rudimentary reed pipe was improved into a more substantial instrument by making a separate reed, which resulted in only the reed needing to be replaced. Subsequently, the pipe itself began to be designed with greater care, resulting in explorations in types of bore and finger-hole positions to enable better tuning. This resulted in many varieties of double-reed instruments (the aulos from the previous case study being one of them) that had striking and characterful sounds that could be heard clearly.

The western oboe of today is the resultant product of these ancient findings, and its design continues to be reworked to improve intonation and key work. It is a much-refined instrument with a smooth, sophisticated sound. However, I have often thought there remains a quality within this sound that

alludes to a distant ancient history that is akin to something much wilder, and this quality is what drew me to the instrument as a teenager. I had no idea what the oboe was or how it was played, but one day, I was captivated by its tone, hearing it by chance on the radio. Its sound was so very enticing; it provoked an awakening in me, almost as if it had chosen me to learn it and to play it. Later, as a professional oboist, listening to recordings of older oboes being played by the Indians Bismillah Khan (d. 2006), who played the shennai, the North Indian oboe, and alto saxophonist Kadri Gopalnath (d. 2019), who played the nadaswaram, also evoked this feeling and expressivity of an earlier ancient aural history. Perhaps this is why I was initially instinctively drawn to the oboe. When I hear these distinguished musicians play their improvisations within the tuned sonorities of Indian traditional music, I feel near the ancient musical traditions, where this particular quality of sound lives so expressively with such timelessness.

### **The Instrument and its Context**

There are many types of double-reed folk instruments from across the world, and some of their older playing histories are being kept alive by musicians who understand the earlier aural traditions of music making with modes and scales of different sonic characters that belong to the instruments. This is particularly the case in India with the nadaswaram (or nagaswaram), where traditions of playing still draw on the music of its past. The music remains functional as part of the religious rituals and festivals in the temples of Southeast India and is still heard today. I had a chance to visit this part of India, Tamil Nadu, in December 2016, the home of the nadaswaram, and decided this was the

perfect opportunity to investigate this instrument and its music as part of my research.

The nadaswaram is one of the most popular classical musical instruments in Tamil Nadu and is mentioned in the ancient Tamil texts of poetry and epics in a literary tradition that spans more than two thousand years. It has a conical bore and is the loudest non-brass instrument in the world. Due to its intense volume and strength of sound, like its North Indian cousin, the shehnai, it is largely an outdoor instrument. In South Indian Hindu and Dravidian culture, the nadaswaram is considered to be a propitious instrument. It is part of a family of instruments known as *mangala vadya* (translated mangala, “auspicious” and vadya “instrument”). It is usually played in pairs and accompanied by a pair of drums called *thavil*.<sup>50</sup> For example, **Audio Ex. 10**.<sup>51</sup>

During my visit I experienced hearing these instruments (accompanied by the drums) as they were calling people to the Hindu temples in Chennai and Madurai. It is a sound that travels and cuts through the cacophony of traffic noise, particularly the incessant honking of car and motorbike horns. Its buoyant penetrative sound couldn’t fail to attract attention. Not knowing the streets or from where the sound emanated, I was able to follow the sound of the instrument to the temples. On one occasion, a single player and his accompanying drummer were also serenaded by the temple bell whose pitch seemed to blend into the music of the nadaswaram. On another occasion, two

---

<sup>50</sup> This information comes from personal correspondence with [nadhaskasim@yahoo.com](mailto:nadhaskasim@yahoo.com) and his company AlaphanA in Tamil Nadu. It is from Nadhaskasim that I bought my nadaswaram.

<sup>51</sup> The two nadaswaram players are Nadhaskasim, or Kasim, and his brother.

nadaswarams and drummers led the parade of a Hindu deity who was raised on a platform and followed by priests with torches of fire around a temple complex. This evocative sound was heard by William Dalrymple in a week of celebrations during Tamil New Year (in April) as he experienced a festival procession in honour of goddess Valli: “There was a roll of drums and a fanfare on the *nadeswaram*, the giant Tamil oboe whose raucous notes fill the air with a noise like the screech of peacocks” (Dalrymple, 2013: 181).

These were powerful experiences; unfortunately, today, the temple music that began in about the 15<sup>th</sup> century, is now beginning to die out, as no young players are coming forward to carry on the musical traditions or to play the *nadaswaram* in its traditional style. Its music is not written down, and there is scant cataloguing of it. However, the musicologist Dr B. M. Sundaram, in an interview published online in June 2016 in Sahapedia (Sundaram, 2016) talks about the *nadaswaram* tradition of playing in Tamil Nadu, and in particular, in Thanjavur (also known as Tanjore) with its famous 11<sup>th</sup>-century temples belonging to the Chola dynasty. He is one of the foremost authorities on the *nadaswaram*, and one hopes his documentation of it will keep its history alive. The Indian historian and writer of Carnatic music, Lalitha Ram, is also documenting this music. I have gathered the following information from Govindarajan (2018) in his article on a 90-year-old player called Acharyapurum Chinnathambipillai, who is from a family of *nadaswaram* musicians. After training under acclaimed players, he embarked on a solo career as a temple musician. The music he plays, using ragas that depict the mood of each of the daily temple rituals, is improvised around known songs. Sometimes his playing, joined by drummers, continues for hours, displaying skill in instrumental and

musical dexterity and mastery of the instrument. This music has greatly influenced the players of the nadaswaram who are booked to play at weddings, non-temple functions, and public concerts; however, in the temples, their sound is now becoming rare.

Before my trip, I made some enquiries because I wanted to order my own nadaswaram and meet a professional nadaswaram player to have a lesson and hear it being played. Through various contacts, I found Kalaimamani Kasim, who agreed to meet me in Chennai.<sup>52</sup> We had a two-hour meeting during which I interviewed him, and he gave me a lesson on the basics of nadaswaram technique. He brought an instrument for me to buy, which had three reeds, a wooden needle to clean the reeds, and an instrument case. I had brought an oboe with me, and after our discussion and interview, we finished by improvising together on oboe and nadaswaram. This was musically immensely significant because I could hear the workings of the nadaswaram expression and how phrases were shaped. It gave me insight into the technicalities of the instrument, especially into how the tuning, pitch bending, articulation, and legato worked. There was a limited amount of published material about this instrument, but I used the information given to me by Kasim in my interview with him. His words and facts represent an honest opinion from an experienced player.<sup>53</sup>

---

<sup>52</sup> *Kalaimamani S. Kasim* [www.kasimbabu.org](http://www.kasimbabu.org)

<sup>53</sup> See the Nadaswaram case study Appendix a) for a transcription of this interview. **Audio Ex.13** in Secondary Listening list is a recording of it with some playing.

### **A Nadaswaram Portrait<sup>54</sup>**

It is a double-reed instrument comprising two pieces. One piece is a long tube with a conical bore that gradually enlarges towards the lower end. Onto this is attached the second piece, which is a bell shape and acts as a horn or amplifier to the sound. As Kasim said to me, the long tube is “for the music”, and the horn acts as “an amplifier for multiple reflection and volume”. The reed is made of a type of bamboo grass called “Korakku Thatti”, which grows on the banks of the river Kaveri in southern India (Balakrishnan, 2016).<sup>55</sup> A tube is cut and flattened at one end with no separation along the sides (as mentioned above for the aulos, and unlike the oboe reed, which has two separate blades). It has a much thicker gouge than the oboe, which is one of the reasons it has such a loud dynamic. The bamboo reed is tied onto a copper staple, which is then inserted into a hole at the top of the instrument. Spare reeds can be tied along pieces of string that hang from the instrument, together with an ivory or horn needle. This is used to clear the reed of saliva and other debris and allows for the free passage of air. It has seven finger holes and five additional holes drilled at the bottom that can be stopped with wax to modify the tone. Traditionally, the body of the nadaswaram is made from a tree called Acha, or wood salvaged from demolished old houses. The old wood is considered best, as it makes the best tone (see in Figure 19 and 20 for photographs of my instrument and the reed and ivory needle).

---

<sup>54</sup> This material is based on my interview with Kasim.

<sup>55</sup> Dr Radhika Balakrishnan, Carnatic classical vocalist, visited the RBC in 2023 as part of the Indian Council for Cultural Relations. Her thesis is a study of the repertoire of the nadaswaram and its influence on vocal Indian classical music. We plan to make further investigations together of the music of the nadaswaram.



Figure 19. My nadaswaram.



**Figure 20. My nadaswaram reed and ivory needle.**

In preparation for playing the hands can be placed in one of two positions: with either the left or right hand covering the bottom three holes. This is similar to the western baroque oboes of the 16<sup>th</sup> century that had duplicate

keys on either side. The nadaswaram has no keys; the fingers are placed flat across the holes, with no curving of the fingers.

To fast forward for a moment, when I returned home and began my explorations, I discovered that my hands were too small to reach the final hole, even when playing in the standard Indian position with flat fingers placed across the holes. I should add here that my attempts to trace a nadaswaram player and teacher in the UK for assistance were unsuccessful. I made several phone calls to mosques in Birmingham and London, and I nearly established a meeting with someone in London, but it trailed off. I decided, therefore, after a lot of experimentation, that I needed to modify my nadaswaram and add a key that would facilitate the covering of the last hole, and in the absence of any advice this decision had to be made for me to play it. To adapt it, I asked an oboe repairer to add a metal key with a lever that I could reach to open and close the hole.

It follows that, in the circumstances, the lack of a teacher led me to make my own assumptions that could be considered to stray from what is considered “correct practice”. However, my ears guided my musical reasoning, which is pertinent to my research. I am searching for specific sounds inherent in the oboe’s character that can lead musical decisions, and therefore, I had to proceed with what I found. I was surprised to find the range of the instrument to be about a 12<sup>th</sup>, and my lowest note was a G below middle C. This is contrary to the information that Kasim gave me; his lowest note is a D above middle C. This is likely to do with the amount of air pressure blown through the reed and the position of the lips around the reed; however, the scale is the same, containing an F-sharp, but the C-sharp is difficult to control. In our meeting, Kasim didn’t

propose that I try my instrument, and I therefore assumed on return to England that I would be able to do everything he had done in our session.

Returning to the interview; after he showed me my instrument, Kasim began to play his own, and I experienced how the sound flowed and became expressive. He used a pentatonic scale on D, E, F-sharp, A, and B. At this point, the sound and the melody he played gave me a strong flavour of the *nadaswaram*'s character. He played using many small microtonal bends and small glissandi. I saw that he changed his facial expression according to the pressure of air, particularly in the higher register; these are important factors in the playing technique. To teach me the musical style, we played a call-and-response form, where I had to play back (with the oboe) an exact imitation of the phrase he played to me. We never moved on to the next phrase until I had perfected the last one, and the phrases differed in length and intent. We changed roles, and he imitated my phrases. This gave me a direct connection to the spirit and shape of his musical way of thinking. With his permission, I recorded his and our joint playing.

Kasim then explained that most of the music for the *nadaswaram* is derived from the songs of the Carnatic tradition of South India, and the lyrics of these songs define the instrumental articulation. (I presume that here, he was not specifically talking about temple music, but rather concert music). The improvisations occur at permitted and specific moments that must not "take advantage" of the song; instead, their purpose is to bring out the essence and beauty of the song. Each improvisation may be accompanied by different rhythmic patterns on the drums. There are "thousands of scales", but mostly they use specific "melodic" ragas called *Rakthi*, which give scope for elaborate

improvisation. These ragas have a semitone between the first and second notes and are very expressive. The seven-note scales are usually major, and they also use six- and five-note scales. Any quartertone tunings are not “fixed” and are used as ornamentation. The music always refers to the drone (usually played on a tanpura, a long-necked string instrument or electronic device) because it represents the final “place of rest”; it is the “home and the root of the music”. Kasim finished by saying that the music will not touch your heart or have any significance if there is no resting place because the drone is the root of the music. Here, we discussed the nature and meaning of the drone, and he very clearly said that for him, it represents the divine, and the return to it corresponds to a state of nirvana, the “coming home” to a blissful resting place.

### **Nadaswaram Methods**

I began my explorations in the spring of 2017, and without professional guidance about the instrument, my findings were made alone, intuitively, and instinctively. I kept a practice log of my technical and musical endeavours and made observations about ways of thinking about tuning, sound production, articulations, vibrato, types of trills, and dynamics. The instrument generally has a range of two-and-a-half octaves, but I was only able to find a smaller range of an octave plus a minor third. This may have had something to do with the fact that only one reed out of the three that I was given functioned freely. As with the oboe (and most if not all double-reed instruments), the reed influences every facet of tone production and delivery, and perhaps this affected the blowing possibilities. In any event, I decided that with limited time I had to stay with what worked. For a more detailed description of these explorations see the

Findings and Observations Sheet at the back of the score *A Taste of Tamil* for details.

I retained the live sound in my aural memory of the nadaswarams I had experienced in situ in the temples of Chennai and Madurai, and matched this with the sound I was beginning to make myself with it. I began listening and investigating nadaswaram music online and on CDs I had brought back to find out about the range of music this instrument commands (see the discography for a list of these CDs). This provided me with aural knowhow to find a language that could unlock a different stance regarding new perceptions of oboe character and facilitate approaches to improvisation and resultant compositions.

My listening eventually centred on a piece that inspired my ear and instinctively captivated me. It is a temple song that celebrates the son of the deity Shiva and is a song on “Muruga”<sup>56</sup> called *Sri Vali Deva*. Two nadaswarams play in unison, accompanied by drums and cymbals. The music is fast, joyous, and playful. It is in the Natabhairavi raga, which is a natural minor Aeolian scale. (Please listen **Audio Ex.11**). The form is an eight-bar melody that, over many repetitions, becomes more and more ornamented in increasingly elaborate figurations. The music sounds as if it is delivered in the moment by ear (I assume without notation), which lends it a certain type of energy that is akin to improvising, and this is heard in their performance. The skill of the players is revealed in how they experiment with the melody in ever-increasing flights of fancy. The abundance of motives that elaborate and ornament the repetitions is

---

<sup>56</sup> *Muruga*, also known as *Murugan*, is regarded as one of the main gods worshipped predominantly in Tamil Nadu.

one of the traits of Carnatic music. It is music that never rests, and the symbol of eternal movement is the dancing Shiva or *Nataraja*, which in Sanskrit means “Lord of the Dance”. The continuous restlessness is “an overflow of emotion, faith and fervour. It is a relentless endeavour on the part of the artiste to drive home to the spectator or the listener the vision and the ecstasy” (Gosvami, 1957: 204). The ecstasy is palpable in the delight of the inventiveness.

The form is underpinned by two drums and a pair of cymbals. I have transcribed the first entrance of this melody, which includes a nine-bar introduction on the drums and cymbals. (See Figure 21). It opens with a simple rhythm in a 4/4 two-bar shape (shown by the cymbals playing a single stroke every two bars) that repeats with faster rhythmic delineations in the first drum and articulated in cross rhythms in the second drum.

# Sri Vali Deva; Nadaswaram Duet with percussion

Transcription made from CD Nadaswaram (Vol.2) SICCD/139

Tempo 1: minim = c. 80

Nadaswaram

Nadaswaram

Percussion:

Low Drum

Cymbals

4

Figure 21. The first 5 bars of my transcription of *Sri Vali Deva*

On the fifth repetition, the drums cease, and a two-beat silence introduces the first nadaswaram, followed quickly by the second, after which the drums enter again. They play a short eight-bar introduction of the melody, followed by the melody proper played in unison. The blend of the doubling nadaswarams is rich and expressive. There are inflections of pitch, upwards and downwards, on notes and in-between notes that occasionally become wider glissando effects. This creates a natural phasing in and around the tones that sounds very silky and legato. It is this mixture of doubling sounds that led me to begin my own explorations of the idea of a different type of doubling. I decided to use a trumpet as a complementary partner to the nadaswaram (and the oboe) because of its flexibility in timbral colourings, with, and without mutes, and its wide dynamic range.

In the autumn of 2017, I set up two sessions with Percy Pursglove (RBC Visiting Lecturer) as my collaborator. The first session in November was an exploration to test the mix of nadaswaram and trumpet, for which I wrote brief sketches and outlines. The second session, held in December, included Dr. Simon Hall (Head of Music Technology, RBC), who recorded the findings and other material that I wanted for overlapping and overdubbing. For this session, I also wrote more extensive sketches that followed on from what I found in the November session.

Here is a list of procedures I undertook in this process:

#### Session 1:

Having improvised alone, I had, by this stage, found a rough melodic and harmonic form for an eventual duet improvisation, with various ideas based on the music of Kasim in Chennai and the CD song *Sri Vali Deva*. I wrote some

exercises based on these ideas, both to test how the nadaswaram sounded with the trumpet and to find out what sounded best.

Methods:

1) Pentatonic on D, with very slow explorations in pitch and sound. The use of slow glissandi and pitch bends to hear tuning relationships.

2) A “call & response” (as played in Chennai with Kasim) between the trumpet and nadaswaram with additions of melodic phrases.

3) The learning of the *Sri Vali Deva* melody with improvisations around it. Here, I decided to begin breaking with the tonality of the melody. (Please note: the transcription key is D-flat minor. I had to slow it down to hear the intricacies of the drumming patterns, and as a result, the pitch was affected. This is not a nadaswaram key. Its natural key is D major, and these are the pitches I found on my nadaswaram (except the C-sharp); therefore, the key in which the melody is notated for this, and subsequent sessions, is E minor. This is most probably the original key of the recording). I decided to think of it as a Phrygian mode on B, and from this mode, I transposed it via a cycle of fifths to four other scales: an eight-note scale on C major with a B-flat, a Mixolydian mode on C-sharp, an eight-note scale on E major with a D-natural, and an Aeolian mode on C. I then transferred these scales to the oboe. I chose these scales because of their differences and similarities in tonality to the main melody.

Having explored the above sketches with mini-improvisations, I recorded a selection of longer, more substantial improvisations based on the material with trumpet. (There are seven recorded tracks available to listen to on request).

Session 2: (with Percy Pursglove and Simon Hall in Recording Studio 1 RBC).

Following on from the previous session, I designed a form for improvisation in two main sections: the first with nadaswaram and trumpet with harmon mute, and the second replacing the nadaswaram with the oboe and with additional rhythmical material to enrich the textures.

Methods:

1) I used the studio's grand piano as a resonating chamber. With the sustaining pedal held down and the bell of the nadaswaram placed inside the lid of the piano, the sounds emanating became intensified, with certain piano strings sympathetically vibrating, very much like the strings resonating on a tanpura.

2) To create a background texture, I designed simple drone phrases with trumpet and oboe. We recorded unisons, fourths, fifths, and side-by-side tones to use, if needed, with the improvisations.

3) My research on thinking about how to create rhythmic interest was inspired by reading sections of *Time in Indian Music* (Clayton, 2000). I also wanted to continue with the idea of making rhythmic variations as a result of hearing the rhythmic patterns in *Sri Vali Deva*. Here, the articulation of specific beats to create syncopations and the use of silent beats within patterns led me to consider these options. The concept of rhythmic variation called *Laykāri* is a method of making distortions via syncopations and the use of rests against a steady pulse, the *tāl*, and the cross-rhythmic accenting and permutations create a sense of rubato. It is a performance procedure that increases rhythmic density and creates a feeling of acceleration with the patterning against a steady pulse. As Clayton (2000: 153) notes, "*Laykāri* is not an alteration in the rate of

succession of the *tāl*; one of its most important aspects is, on the contrary, the stepwise increase in rhythmic density relative to the *tāl*'s notionally stable tempo". The definition of *Laykārī* is interesting. *Lay* originally meant the space between the beats but has also come to mean both tempo and rhythmic density, and *Kārī* is defined as "doing, making, performing work" (McGregor, 1993: 192). This highlights the intensity of the rhythmic relationships that can be made in the process of performing and improvising. There is, of course, a wealth of knowledge about musical techniques involving rhythmic variation within Indian music making; suffice it to say that having read and thought about certain small aspects of *Laykārī*, I began to apply ways of adapting specific patterns to my own inventions.

#### Riffs:

I began by displacing accents within the 4/4 groupings and adding a 5/4 bar to dislodge any predictability. I combined two 5/4 bars into one larger 5/2 bar to create impetus (see Figure 22 below).



Figure 22. Combined rhythmic groupings.

In a riff pattern in 5/4, I used the *Laykārī* technique of creating a high-density cross-rhythm to increase the speed of the music towards a cadence. To do this, I placed a triplet pattern against a four pattern, resulting in a 2:3 that is repeated three times. This is called a *tihāī*, a form of triple repetition. This

method deliberately creates a sense of climax into the final beat of the pattern (see Figure 23 Coda). I also created an articulated repeated note pattern from the shape of the original melody and developed syncopations (see Figure 23 as shown from the beginning).

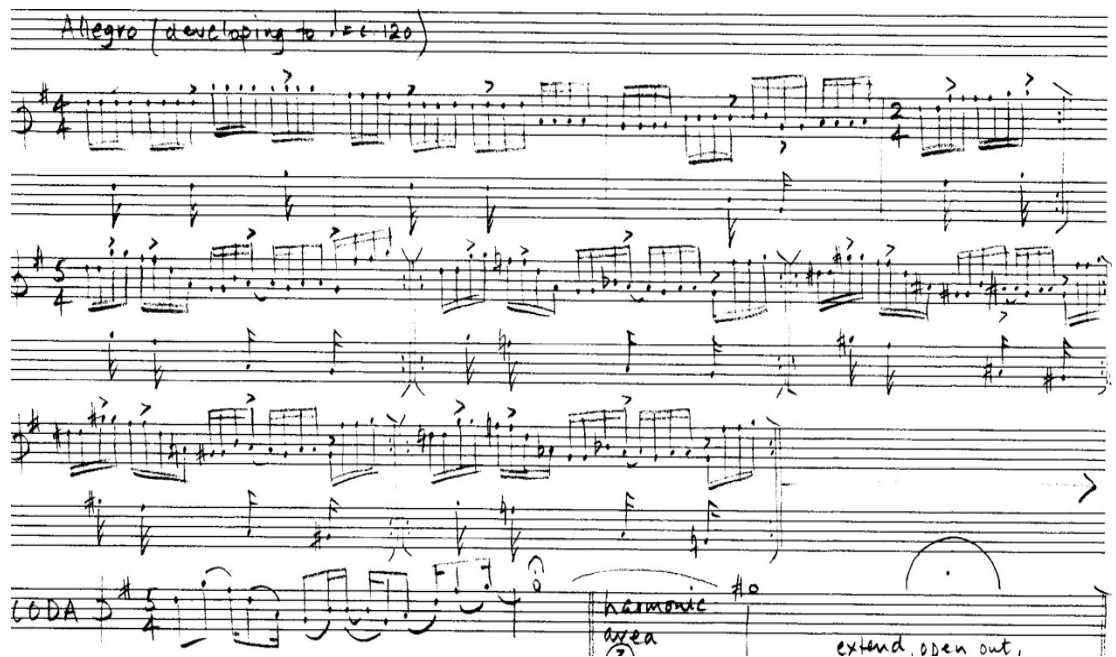


Figure 23. The tihāi, a form of triple repetition as shown in the Coda section.

Further harmonic extensions:

The Phrygian mode on B and the pentatonic mode on D both have an F-sharp and, as explained above, fit with the key of my nadaswaram. This prompted me to think about how to open this into a more contemporary harmonic setting as a way of developing improvisation. I chose the augmented scale, or bi-tonal scale on C because the first four notes are “white” C, D, E, and F, and the following sharps of F, G, and A, finishing on a B, effectively the beginning of an F-sharp major scale, combine two very different sounding scales via a

tritone. This is Messiaen's sixth mode of limited transposition. This suited my need to use the link of the F-sharp as it were to force the nadaswaram to journey into unknown territory. This session resulted in four tracks encompassing the above ideas. (**Audio Ex. 12**)

Part of my research is to propagate new material into a language that comes from a type of oboe character, in this case via the nadaswaram, and take the material in a different direction. In this instance, I wanted to explore how the application of oboe and nadaswaram multiphonics could add further dissections of the sounds themselves. This led me to instigate a third session, this time with my next collaborator, Dr Simon Hall, in February 2018. I wanted to investigate the effects of sound distortions and, with these, make loops against which I could improvise.<sup>57</sup> We recorded seven tracks. (**Audio Ex. 13** Dr Hall and I named them 'Jekyll and Hyde' or 'Beauty and the Beast' because of the contrasting and diverse sounds.)

Session 3:

On Oboe:

1) Recording the original *Sri Vali Deva* melody to bring it into the mix at some point.

2) I had researched some multiphonics based on specific notes in the melody; G, D, E, B, and C, where these notes are prominent in the chord. I recorded a phrase at a time with one multi-phonetic and changed lip and air

---

<sup>57</sup> The techniques used are based around "old fashioned" brassage techniques of musique concrete: editing, fragmentation, reversing, duplication and mixing. This was all manually done on the fly within the Pro Tools environment, whilst capturing the live improvised sound simultaneously. No plugins were employed beyond those of an overall production mixing process. (Dr Simon Hall, personal communication, 28 November 2023).

pressure to “aggravate” and distort the chord into different tunings. I

interspersed them into the melody and improvised with these sounds.

3) I improvised with the melody itself and asked Dr Hall to introduce the multiphonics at moments he would think pertinent.

4) I performed an improvisation with elements in items 1) and 2) above, interspersed by Dr Hall.

On Nadaswaram:

5) a) I improvised with the melody that Dr Hall began to bend and distort.

b) Next, I improvised with this for a second improvisation that elongated, distilled, and distorted the sounds further. Here, I incorporated singing and playing that produced multiphonics.

6) I improvised on the oboe against item a) above to amalgamate oboe and nadaswaram.

7) I improvised on the nadaswaram against the oboe multiphonics of item 2) above. At pertinent moments, Dr Hall interjected the oboe melody of item 1).

This process was about initiating a response to the distorted sounds with improvisations. The ear was led by these sounds, alongside a deconstruction of the original melody.

I took this process one step further by breaking down the sounds yet again via electronic distortions into smaller and more intense variations of themselves. The nature of the thick nadaswaram double reed that vibrates as the air passes through it and into the instrument automatically makes abundant overtones and partials that have a force of their own. I wanted to exploit this and

create sounds that could be used in a live performance. In a fourth session, I met with my next collaborator in this process, James Dooley (Lecturer in Music Technology, RBC). Together, we made a series of sounds that could be called upon in performance as a backdrop to the live nadaswaram and oboe. We did this through trial and error, listening to which distortions produced the most interesting effects. We made a CD of these sounds, which is available to accompany the score of the solo version of the open-form composition with improvisation *A Taste of Tamil*. (**Audio Ex.14**)

### **Outcomes**

The music making of the above four sessions has been amalgamated into the resultant compositions, both called *A Taste of Tamil* (scores attached):

- 1) Duet for oboe/nadaswaram and trumpet
- 2) Solo piece for oboe/nadaswaram and live electronics.

I performed the duet version with Percy Pursglove, trumpet and James Dooley, live electronics:

*Emulsion Sinfonietta* (Trish Clowes), Shrewsbury, June 2018 (**Audio Ex. 15**).

I performed the solo version of *A Taste of Tamil* (that I originally called *Nadaswaram Pathways*) four times with James Dooley:

- 1) *Surge Festival* at the MAC Birmingham, April 20, 2018 (**Audio Ex. 16**)
- 2) *The Night of the Unexpected*, RBC, June 2018
- 3) *RBC East Side Jazz Club* as part of a jazz gig 2018
- 4) *RBC The Lab* as part of a Music Technology showcase November 2018 (**Audio Ex.12** in Secondary listening list)

The two scores of *The Taste of Tamil* have their roots in my instrumental and musical research on the nadaswaram. The musical language is the result of the three categories of research mentioned in the introduction to my thesis.

a) *Representations of the oboe*: instrument sonority, history, and theories of playing. In this case, the nadaswaram.

b) *Instrument-led improvisation*: to include characteristics inherent to the oboe. The addition of oboe extended techniques to heighten expression and place the nadaswaram in a contemporary context.

c) *Composition grounded in improvisation*: the interrelated activity between the methods of improvisation in contemporary jazz and the compositions of modern classical music. All three of my collaborators improvised with the sketches that I provided, and these improvisations initiated the compositional ideas.

I have continued to play the nadaswaram in a professional capacity:

- 1) As part of a solo oboe recital at Bath Spa University in November 2018.

I played an improvisation on the nadaswaram with a backdrop of pre-recorded electronic sounds made up for me by James Dooley. (**Audio Ex. 17**). The classical contemporary context of music by Luciano Berio, Elliot Carter, and Bruno Maderna felt like an appropriate setting for this improvisation on an unusual instrument not generally known to the public. I wanted to make two points of reference: a) to display the double-reed relationship to the oboe, linking it to an ancient past and wilder voice, and b) to show that this sound is very much a part of the new oboe sounds of contemporary classical music. The

oboe is often required to sound wilder with the use of extended techniques, and this modern voice could be heard as coming from and relating to an older place. These sounds were previously hidden in Western classical music until the 20<sup>th</sup> century, when the oboe sound began to be unleashed.

2) In an improvisation with jazz colleagues as part of the *Stranger Danger* series of concerts with saxophonists John O’Gallagher and Mike Fletcher from RBC. (**Audio Ex. 18**).

This was a concert of three open-score improvisations (including a piece of mine mentioned in Chapter 4 in the Varèse Case Study). I brought my nadaswaram with me, not knowing whether there would be a moment for it. Happily, a moment arose in a piece by Mike Fletcher. I felt prompted to play it because the music, I thought, demanded it. When I started to play, I took it to its natural place of high-decibel delivery, with inflections of pitch and a type of wailing in the phrasing. Its sound caused much excitement and dominated proceedings for a while, but not too long to outstay its welcome. The collective musical instinct kept the music on track, and I played it for what I judged to be enough of what was needed. This instrument is not known at all in jazz circles, so its appearance took the audience by surprise. The interjection of an ancient double-reed instrument into a jazz setting demonstrated a sound that is old and new together – it has its own sonic identity. Placing it in a contemporary free-spirited improvisation and submerging it with other modern instruments returns it to a relevant musical home, connecting it to the present and keeping it alive. It also redefines the character of the oboe, and within a line-up of jazz instruments, this wild character also has a home.

3) In a series of performance projects with improvisation accompanying Indian storytelling by Dr Vayu Naidu.

These projects covered an extensive collaboration with Dr Vayu Naidu that used improvisation within storytelling of specific Sufic texts of folktales, epics, and histories linking the instrument to its Indian heritage. For a full account of this partnership (which is still ongoing), please refer to a detailed written commentary in the nadaswaram case study Appendix (entitled Vayu Naidu Collaboration) about one of our performances that took place in London in November 2018. This performance was part of a *Festival of the Humanities* in conjunction with SOAS University of London called *Being Human*. It was recorded by West End Media, (**Audio Ex.19**), who used parts of it in a BBC podcast made at BBC Broadcasting House a couple of weeks later. I was interviewed live to talk briefly about the instrument and the logic of my improvised music. (**Audio Ex. 20**).

In March 2023 at the RBC, I was invited to perform an improvisation in a presentation given by Dr Radhika Balakrishnan. Here I demonstrated its sound and spoke about my experience and study of it. (See Figure 24).



**Figure 24. Improvising in the presentation. Photograph taken by the husband of Dr Radhika Balakrishnan.**

My decision to find out about the nadaswaram, as mentioned at the beginning of this chapter, is primarily due to a meeting with Dr Vayu Naidu prior

to my visit to Tamil Nadu. I was performing in a BCMG concert, and my playing, as she said later, communicated a thought to her. I was introduced to her after the concert, and she invited me to collaborate with her in an improvisation project with herself as an improvising storyteller and two Birmingham-based Indian musicians: a tabla player and a singer/dancer. I was asked to play the oboe and invent music with the Indian musicians to accompany Dr Naidu's storytelling. This was my first exposure to a method of music making that, in this instance, was solely improvised around specific ideas.

### **Summary**

Despite the traditions of temple music beginning to wane, I did hear this instrument in two other contexts in Chennai. It accompanied, with a pair of drums, a narrative with dancers and puppets in an open-air concert. Its music (I think improvised possibly from a known song), and the high-pitched inflected sounds suited the gaiety of the scene. The other was in a dance concert, where it provided accompaniment, along with the customary drums, at specific moments. In my searches for other contexts, I found non-Indian instrumentalists who have learnt to play the nadaswaram: the American alto and soprano jazz saxophonist Charlie Mariano (d. 2009), the American composer/player and multi-instrumentalist Vinny Golia, and the German versatile jazz saxophonist, guitarist, and vocalist Roland Schaeffer, who plays the nadaswaram on the title track of his CD *TIRU*. Here, the instrument is played in a jazz/Indian context with a bass guitar, electric piano, and drum kit. Schaeffer sings/speaks an Indian rhythmic cycle to begin and then plays the nadaswaram, which is doubled up as if two instruments are playing, and as it would be in an Indian context. The

instrument's character remains despite the different domain, but the music it plays enables an adjusted perception of it.

The nadaswaram is suited to loud spaces because of its vibrant and powerful sound. It is at home in the temples, open-air and indoor concerts, and wedding celebrations of southern India, as well as in a jazz milieu, where dynamic levels can be extreme (as described in Chapter 4 Varèse Case Study regarding a nadaswaram performance within a jazz improvisation). In my short experience and exposure to it, I have tried to place it in a context where the characteristics that I've found are exploited to their full potential. I have manipulated the sounds, live and recorded, with a trumpet, an oboe, and the use of electronics. I have taken the character of the oboe inherent within the nadaswaram into a contemporary setting, with inventions based on its instrumentality and some of its music.

### **3) Baroque Oboe Case Study**

#### **Introduction**

So far, my research on oboe character has led me to the ancient Greek aulos and an Indian oboe, the nadaswaram. The baroque oboe, in my mind, works as a bridge in this study between the oldest oboe in the world, the aulos, and the centuries-old, but still practised, South Indian oboe, the nadaswaram, thereby bringing us chronologically closer to the modern western oboe of today. The instrumental cultures of ancient Greece and contemporary Southeast India have informed my search for oboe character. The search now continues with the baroque oboe in the western European context of the 17<sup>th</sup> and 18<sup>th</sup> centuries. Despite originating from vastly contrasting backgrounds and traditions, these

three instruments have in common their double reed, which produces a specifically expressive sound that has, in each case, influenced the music they played and the music that was composed for them. In this chapter, as with the other two instrument case studies, my aim was to create music that comes directly from the instrument and its sound character, and from music composed for it. I will present my work here in two phases: Phase 1 shows the process of writing to a commission, and Phase 2 shows further explorations in improvisation.

### **Phase 1**

In this instance, unlike in the previous case studies, the finished product is a composition written for a baroque oboist as the result of a commission that came quite out of the blue. In autumn 2018, the UK musician and artistic director Peter McCarthy asked me to write a piece for his annual festival *Music in the Village* held in the ancient church of St. Mary's in Walthamstow, London. Every year, McCarthy commissions a new work to sit within a baroque programme played by his group of professional musicians on authentic baroque instruments comprising strings, wind, and continuo. The piece was to be ready for the following spring. It felt like the perfect opportunity to couch the commission within my baroque oboe case study. I completed *Ancestral Traces* for baroque oboe, harpsichord, and bass viol in January 2019, and it was given its premier at a public performance on February 21, 2019, played by Gail Hennessy, baroque oboe, Pawel Siwczak, harpsichord, and Peter McCarthy, G violone (large bass viol).

There are two scores. The first was made for the first performance (“original” version score), and the second (the finished score) was made post-performance, containing revisions. These revisions are the result of realizing that certain acoustical and musical changes were necessary to make the music be its true self.<sup>58</sup> (**Audio Ex. 21** for live performance recording).

To begin the process, as with the previous case studies, my findings about the nature of the instrument’s sound and the music written for it influenced the music I was to make. The methods I used included innovating through improvisation, deconstruction, analysis, re-invention, and eventually, composition. I wanted an empirical approach that involved playing an instrument to ensure that I could sense and experience the sound of it directly, so I took up my own baroque oboe that I had acquired when a student. The instrument has a very different technique from the modern oboe, and to play it well requires years of study. Practising with it would suffice for my explorations; however, I realized that performing with this instrument myself would be insufficient and was therefore grateful that Gail Hennessy would be my exponent in the composition.

To start proceedings, I began by thinking about the music that belonged to the instrument and about making connections to the modern oboe repertoire. I wanted to make something new with the old by tracing two divergent

---

<sup>58</sup> For example, at bar 41 I decided to add 19 extra bars to consolidate and strengthen the material because the written repetition didn’t feel directed in phrase. Also, the very end of the piece felt short changed, and I added a further 8 bars to escape the finality of the B-natural in the baroque oboe and bass violone. I felt on listening to the performance that the piece needed to have an unresolved ending, one that didn’t arrive with such finality, but which could feel unfinished and continue onwards. (Revisions as shown in revised score).

instrumental and musical styles from each of these instruments and bring them together. Connecting roots and making relationships between past traditions and contemporary ones, an aim of this research, I believe strengthens musical meaning and makes language more robust and coherent. From Bach to Mozart, Beethoven to Schoenberg, and beyond, music evolves and builds on itself. One of the most extraordinary shifts in thinking about music came from the most influential of 20<sup>th</sup> century composers, Arnold Schoenberg: “By envisioning twelve-tone composition as a new kind of presentation of new kind of musical idea, Schoenberg could see his new method as the logical consequence of past history and the next step in the ongoing tradition of Western music” (Carpenter and Neff, 1995: 14). His quest was to continue the line of tradition into a new language. “It was a search for authenticity by drawing directly from a revered tradition ... [his] progressive attitude was moulded by respect, indeed devotion” (Boulez, 2018: 312–313). My explorations also reflect a reverence for older music through my knowledge of the works and my experience of performing them, and this fuels the drive to find another type of language. The bond to the past gives credence to the new, and I want to find and make historical links to give my resultant music meaning. The improvising process enables me to unify any material within the compositional form, with each part reflecting the whole.

Two famous pieces of oboe music came to mind, pieces that are significant to the core repertoire, one from the 18<sup>th</sup> century and the other from the 20<sup>th</sup> century: one by J. S. Bach and the other by Luciano Berio (d. 2003). From Bach, the oboe obligato famous for its melodic beauty in the *Sinfonia* from the *Easter Oratorio* BWV 249 (first performed in Leipzig in 1725) for oboe and strings, and from Berio the iconic *Sequenza VII* (1969) for solo oboe with drone.

In both instances, a player provided inspiration for the music; the oboist Johann Caspar Gleditsch was Bach's oboist in the orchestra at St Thomas' Leipzig, and the world-famous Swiss oboist Heinz Holliger, commissioner of many new works for the oboe, was the inspiration for Berio.

Both compositions reflect the myriad nature of the double-reed sound. They exploit the type of instrument for which they were written, and the musical language comes from this instrumental stance. Both pieces are extremely familiar to me and are very much part of my musical canon, both in performance and in teaching. They are ingrained in my aural memory, and it felt natural to use them as inspiration for my own *Ancestral Traces*.<sup>59</sup> My intention to make links between the worlds of Bach and Berio, centuries apart in language, and deal with the instrument's inner nature, was to release another dimension in the sensibilities of character. This has led to a composition written by an oboist for a baroque oboist, and the process began with improvisations by me on both the Bach and Berio pieces. I wanted to link the two languages in some way, and with a baroque oboe and a modern one, I improvised my way through certain pathways to invent another language for this piece. Improvisation was the starting point for my creative explorations, followed by composition, which was then interpreted in performance by another oboist.

---

<sup>59</sup> I have performed both pieces; the Berio many times, including once from memory at a concert at the QEH London with Berio in attendance. He stipulated that all sequenzas should be played from memory in this concert.

## Musical Process: Making Crossover Links

*Bach on the modern oboe*

I began with improvisations on the Bach melody (Figure 25) on my modern oboe.

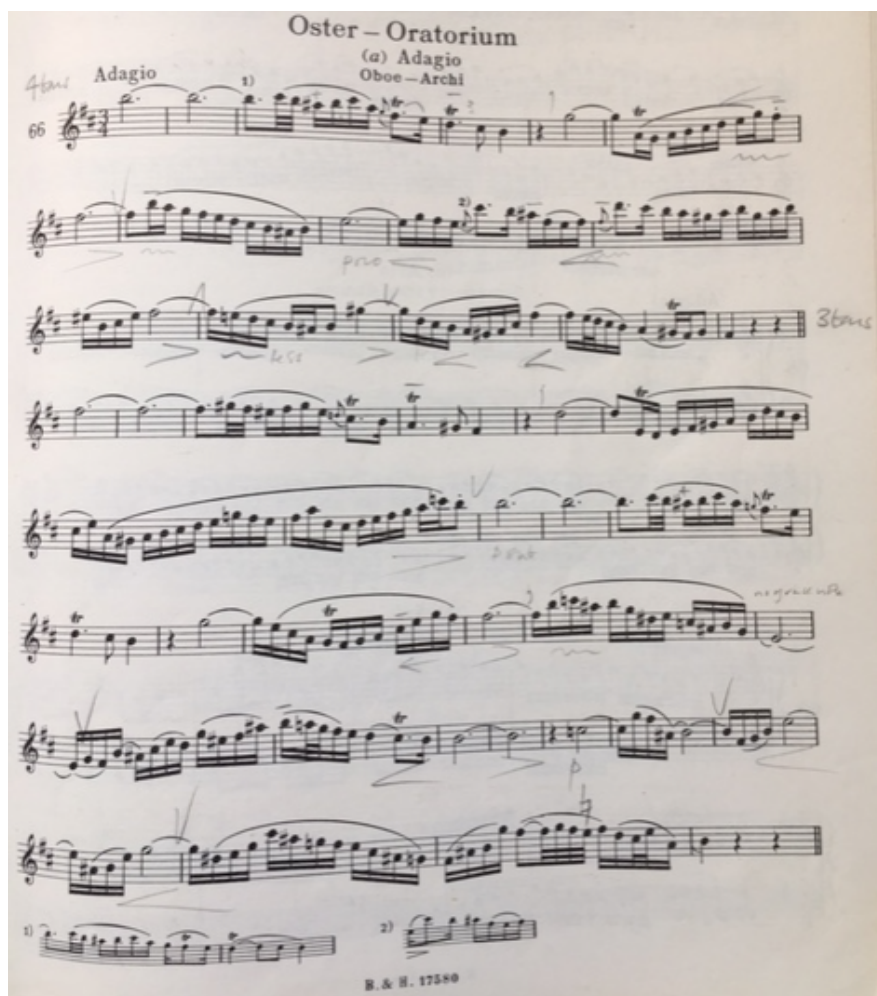


Figure 25 Oboe melody, Adagio, from Bach's *Easter Oratorio* for oboe and strings

I chose the modern oboe because I wanted to shift the technical possibilities away from the baroque to the modern. I am also not proficient enough on the baroque oboe to feel free enough technically to improvise with it. The melody is very familiar to me, and with an analysis of its harmonic contours, I tried various

improvisatory versions of it. I recorded one of these improvisations in my sonic diary and transcribed it (see Figure 26 below). I decided to cut one phrase from the original improvisation at the comma in bar seven. This material then filtered into the composition.

♩ = c.50

*mf molto legato*

*mf*

*poco accel - - - - - rit - - - - -*

*accel - - - - - a tempo*

*ten* *rit - - - - - a tempo* *poco rit - - - - -*

*poco accel a tempo* *tr♯* *tr♯* *tr♭*

Figure 26. Transcription of improvisation on Bach melody.  
(Audio Ex. 22)

*Berio on the baroque oboe*

I explored playing the baroque oboe and decided to find out if I could take it out of its comfort zone into a modern dimension and link the old sounds with the new. With the Berio *Sequenza VII* in my ear, I improvised using extended techniques, including finger colourings (*bisbigliando* or the baroque term *flattement*), which can be used as shades of colour and vibrato, glissandi, and multiphonics (see Figure 27).

FINDINGS on Baroque Oboe (415 pitch)

**A Section**

release multiphonic (loosen embouchure) pulling lips away from reed

drop jaw (chance)

lip gliss

tighten to get rid of mouth

pp  
open lips away from reed  
move reed in mouth

- Experiment with different lip/air movements to find other harmonic notes + timbres
- Explore wide vibratos etc

Figure 27. Baroque oboe multiphonics.

(Audio ex 23)

Applying the modern oboe to Bach and the baroque oboe to Berio enabled me to cross-fertilize instrument type and musical language, a deliberate intention on my part to open up the sound and divert expectations. This explains

the title *Ancestral Traces*, which hints at past styles converging in melodic lines. The G violone and harpsichord are very much supportive agents; the violone's role acting as a drone (a prominent structural idea in Berio's *Sequenza*), and the harpsichord's role acting as a harmonic and rhythmic support to the oboe line (a prominent idea in Bach's string accompaniment in *Sinfonia*. See Figure 28 for the Bach string accompaniment.)

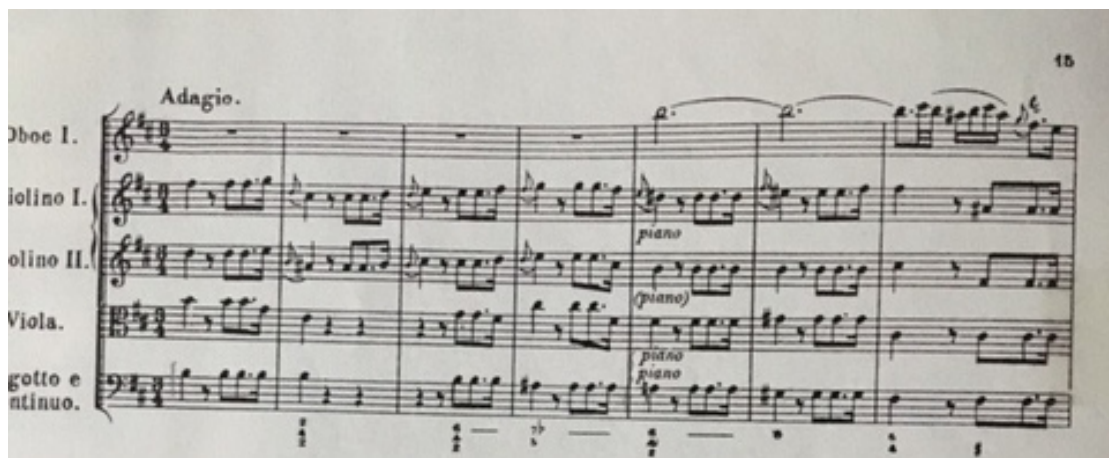


Figure 28. Showing the Bach string accompaniment.

### *Bach explorations*

Having transcribed my improvisation on the Bach melody, I was able to discern a scale within my melodic searching that I decided would become my harmonic root: C, D, E, F-sharp, G, A-sharp, B-natural, and C, occasionally switching to C-sharp (as shown in the top line in Figure 29). This scale has an ending note that could change with each repetition, creating a pull between C and C-sharp. With the A-sharp/B-natural step to C-sharp, there is a hint of D minor, and the rising sequence from F-sharp is a hint of B minor (which is the actual key of the Bach melody). The tritones within the scale open it up harmonically, and the effect of this scale is one that is modal in the Lydian sense, with a diatonic twist of the Bach original. I made transpositions of this scale into

a whole tone scale, and a more chromatic one, and made stacks of 4ths and 5ths that created possibilities for some vertical chord material. The improvisation gave me my harmonic logic see Figure 29 for scales and the vertical chord sequence.

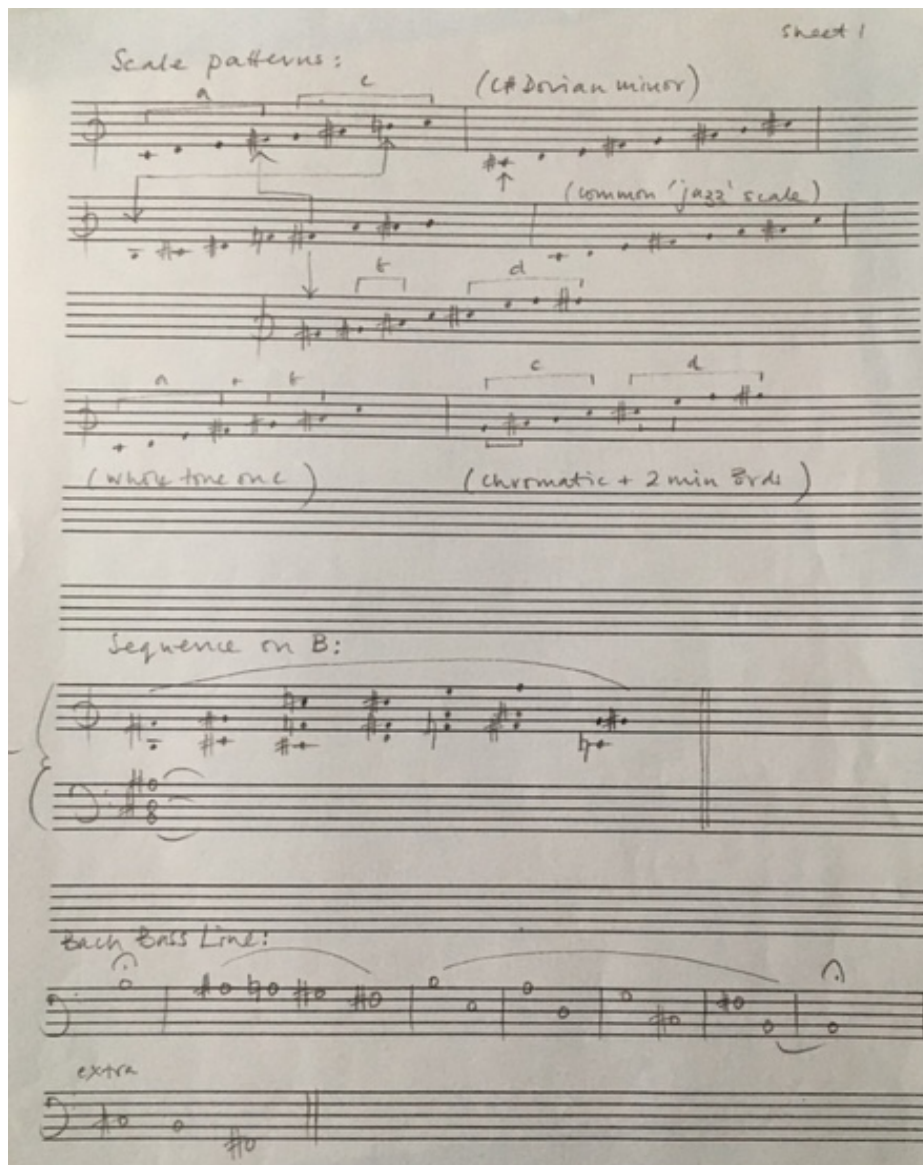


Figure 29. Scale in the top line.

I then extended the improvised melody into a further melody, using Bach-like figurations from the original. The melody retains the two large phrases of the original, beginning on B for the first section (see Figure 30 below) and F-sharp for the second. This melody subsequently became the main melody in the

composition and, after a session with Gail Hennessey, was adapted for the baroque oboe.

## Baroque oboe

Adagio ♩ = c.56

pp

6

11

17

22

27

31

35

Figure 30. First part of Bach-like melody for baroque oboe.

In terms of rhythmic patterning, I took the Bach string accompaniment in 3/4 (which can be both a 6/8 and a 3/4 in feel) and diminished and augmented

its phrasing. I also added or subtracted one quaver (either as a rest or a pitch) to turn it into irregular shapes of 5 or 7 (see Figure 31).

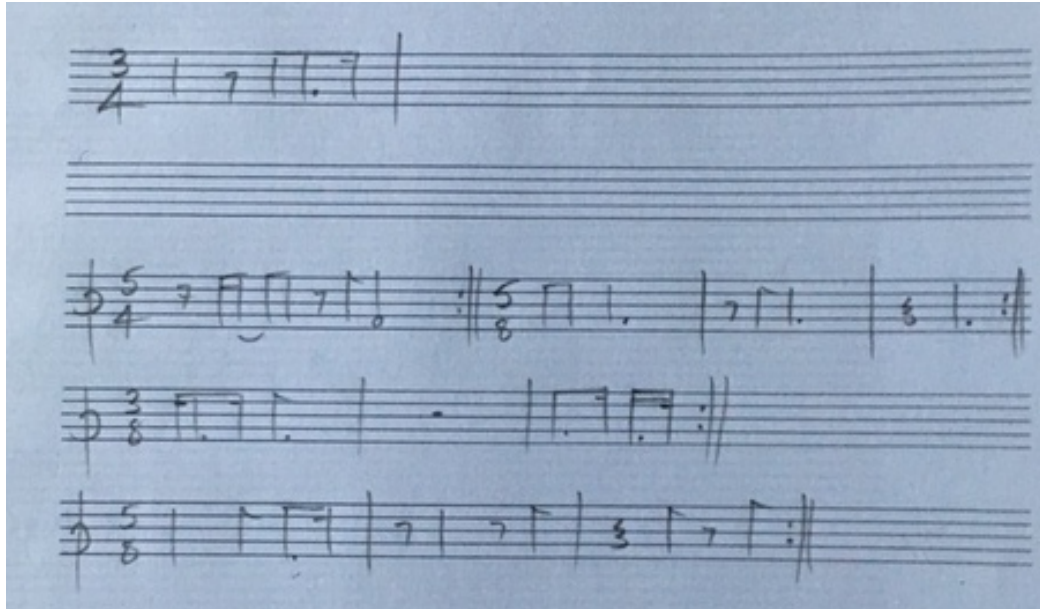


Figure 31. Some rhythmic patterns.

These building blocks informed the structure of the piece, the idea for which is a gradual revealing of traces of a melody, as in a palimpsest. At the end of the piece, I thought it appropriate for the oboist to improvise a little cadenza on the scale above. This not only alludes to the baroque tradition of playing breath-length cadenzas in solo pieces but also brings an opportunity for the player to create an improvisation, as the writer did in composing the piece itself.

### *Berio explorations*

The idea in *Ancestral Traces* of revealing a melody, in this case one by Bach, led me to think about how to link an old and new style, both musically and instrumentally. The melody is revealed via an extended technique process on the baroque oboe, with the use of timbral colourings, multiphonics, and glissandi, techniques that are all pertinent to the Berio (as shown in the baroque oboe

findings sheet, Figure 27). I wanted to explore parameters in which the baroque oboe could take a contemporary stance, try to integrate its past into something new that would be aesthetically pleasing, and pay tribute to another famous oboe piece, Berio's *Sequenza VII*. (See Figure 32)

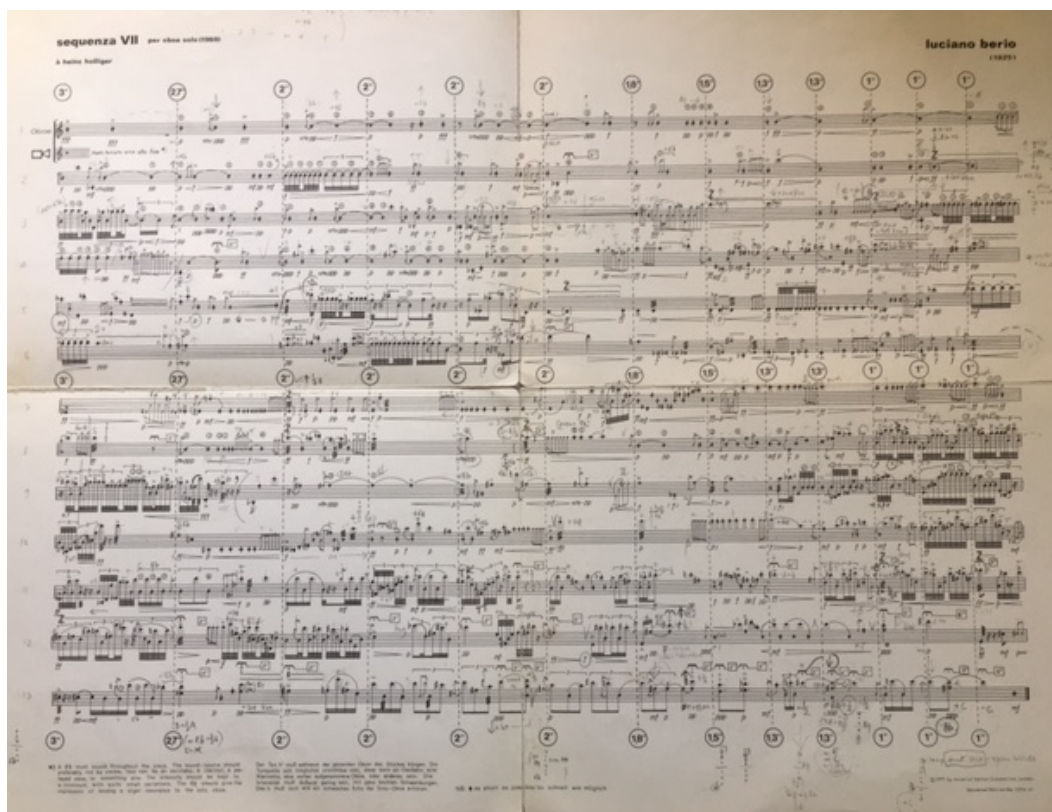


Figure 32. My score of Berio's *Sequenza VII*

As I played and explored this instrument, I discovered that these sounds were indeed possible, and that they had a very beautiful quality. Of course, the baroque oboe was never designed to play like this; however, the practical element of delving into possibility is one of the areas of my research into oboe character. It shows another side: a different perspective to the personality of the oboe. I also wanted to hear what would transpire and whether it would work.

As in Berio's *Sequenza VII*, I decided to find five different colourings for the note B on the baroque oboe. These fingerings are set out in the performance notes in the preface to the score and are written in Figure 33 below.

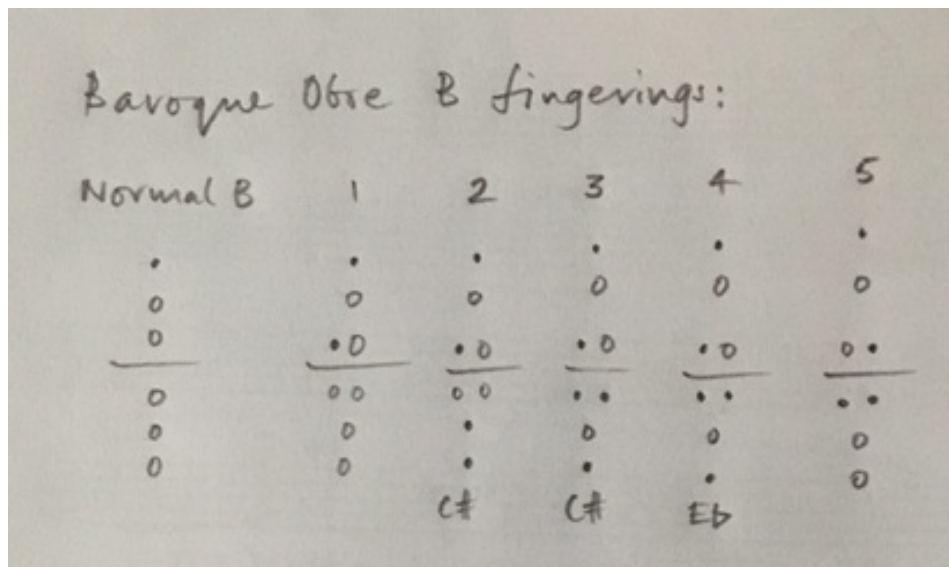


Figure 33. Baroque oboe B fingerings.

I then began to explore the possibility of finding multiphonics that could enhance the note B, e.g., ones that have B as their root or have a strong sense of a B pitch within the multi-phonic sound. I discovered that, as with the modern oboe, a difference in lip and air pressure could change certain pitches and release others. Bar 40 in the score shows this and indicates other notes that are also within the initial scale of the piece. This harmonic shifting allows the ear to adapt to the old instrument, striking a new mode within which the scale of the melody will gradually be revealed (see Figure 34).

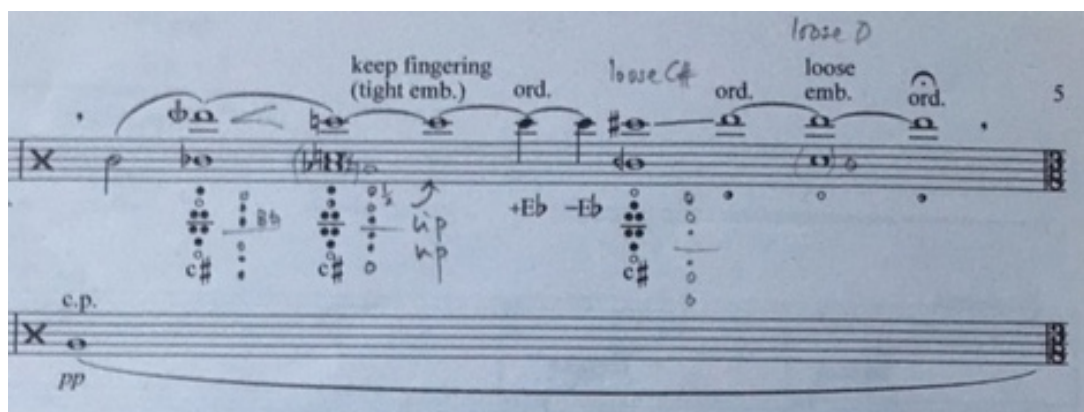


Figure 34. Baroque oboe multiphonics with the note B prominent.

The searching on B that begins the piece, the different fingerings, and the multiphonics become the introduction to the Bach-like melody (also on the pitch B and key of B minor) and, as the searching material unfurls, the melody is gradually awakened. The original Berio *Sequenza VII* also alludes to a melody, but not in the traditional sense; it appears rather as an in-depth splitting of a pitch, in this case B, which reveals a wealth of harmonic possibilities. The splitting of a note, a small unit, an atom, if you like, is a Berio compositional technique that splinters and develops something minute into a universe, a microcosm into a macrocosm. As Griffiths noted, “it displays Berio’s command of hectic activity within closely defined harmonic limits, his obsession with repeated return, redefinition, and re-elaboration. *Sequenza VII*, for example, is a flurry of escapes from, decorations of, and rejoinings to a note sustained throughout the piece as a drone” (Griffiths, 1995: 192–193). His melodic journey starts with the colouring of B, which instigates the accompaniment drone on B (by viola and violin playing alternately) for the entire duration of the piece. The drone draws the oboe back from its harmonic journeying to this central pitch despite massive breaks away into chromatic harmonic gestures with the use of extended techniques. It is a masterpiece of design, both aurally and conceptually.

(**Audio Ex. 24** Bath Spa performance + improvisation on Berio).

Both the Bach and Berio pieces show distinct and contrasting definitions in types of oboe persona. They delve into the instrument's character to reveal a voice of extreme expressivity and grace. The music they wrote not only defines the inner nature of the oboe but speaks through the centuries and remains timeless in its expression. To this day, musicians, whether writers or players, constantly search for ways to communicate the essence of a particular character or style. To make historical links by revering past musicians brings meaning to our own contemporary sensibilities and makes roots with past traditions. This, I believe, enriches our awareness of the essential nature of what music is about and helps us make sense of our modern musical world.

### **Technical Process and Collaboration**

I set up two collaborative sessions with the baroque oboist Gail Hennessy (a happy coincidence that she and I both work at the Royal Birmingham Conservatoire). The first session (November 19, 2018) involved a review of the baroque oboe. I had studied this instrument at postgraduate level at the RCM in 1976 and bought a modern pitched instrument, but decided I couldn't devote my skills to both the baroque and the modern oboe because they require very different techniques. It was a delight, however, to revisit this instrument with Gail, who demonstrated its sound (pitched a semitone lower at A = 435), range, dynamic colours, and articulations. She lent me an instrument at this lower pitch with a reed so I could experiment with it at home. In the second session (November 28, 2018, **Audio Ex. 25**), I presented Gail with some sketches and

demonstrated what I had discovered through my improvisations (as shown above). Having checked various technical and musical issues, I began the composition and completed a draft for delivery to Gail on December 14 for another session in London to check the details.

The tutti rehearsal the following February with the bass viol and harpsichord established areas where dynamic colour, pitch, phrasing, and general character could be consolidated. Notation is never quite clear (as I know from my playing experience) in revealing the exact nature of the musical material and having time to concentrate on these details gave me the opportunity to explain my intentions to the players; this continued in the dress rehearsal. The piece, written for “authentic” baroque instruments as a commission, is an attempt to find a new type of expression. It was performed within the context of an all-baroque programme.

## **Phase 2: Further explorations with improvisation of the musical material within *Ancestral Traces***

The composing and performance of *Ancestral Traces* was the first phase of this project that uses baroque oboe. The commissioned piece, written for and performed by professional colleagues, is very much part of the established process of a composer writing a score for performance. The second phase returns the creative explorations to the composer/player to develop the existing material into further harmonic extensions and to place the music in yet another different context relating to oboe character via improvisation.

I contacted an improvising harpsichordist, David Gordon (recommended to me by RBC colleague Robin Bigwood), to explore methods of improvisation using the Bach harmonic structure as a starting point for further developments. I travelled to David's home in Watford, and we had a two-hour session (March 27, 2019) that I led, using sketches and exercises of harmonic transpositions based on compositional material in *Ancestral Traces* (as shown in Figure 29). I made recordings of each of the following 7 steps. (**Audio Ex. 26**; 7 Tracks).

Step 1: (track 7)

We played through the original Bach, the *Sinfonia* (Adagio) from the *Easter Oratorio* BWV 249. This established the aural harmonic map and the expression of the phrases in the original. Once this was experienced, we repeated the form. I improvised a slightly different melody, and David an accompaniment that kept to the harmonic form of the Bach.

Step 2: (track 3)

It became apparent to me that in order to complement the Bach material with an altogether different musical persona, that of Berio's *Sequenza VII* (as explained in pages 151ff), it would be interesting to improvise over the original Bach accompaniment with the discovered baroque oboe multiphonics and extended techniques (on the modern oboe) and add further musical gestures taken from Berio's *Sequenza VII* that I knew by heart (see Figure 35 for additional multiphonics).

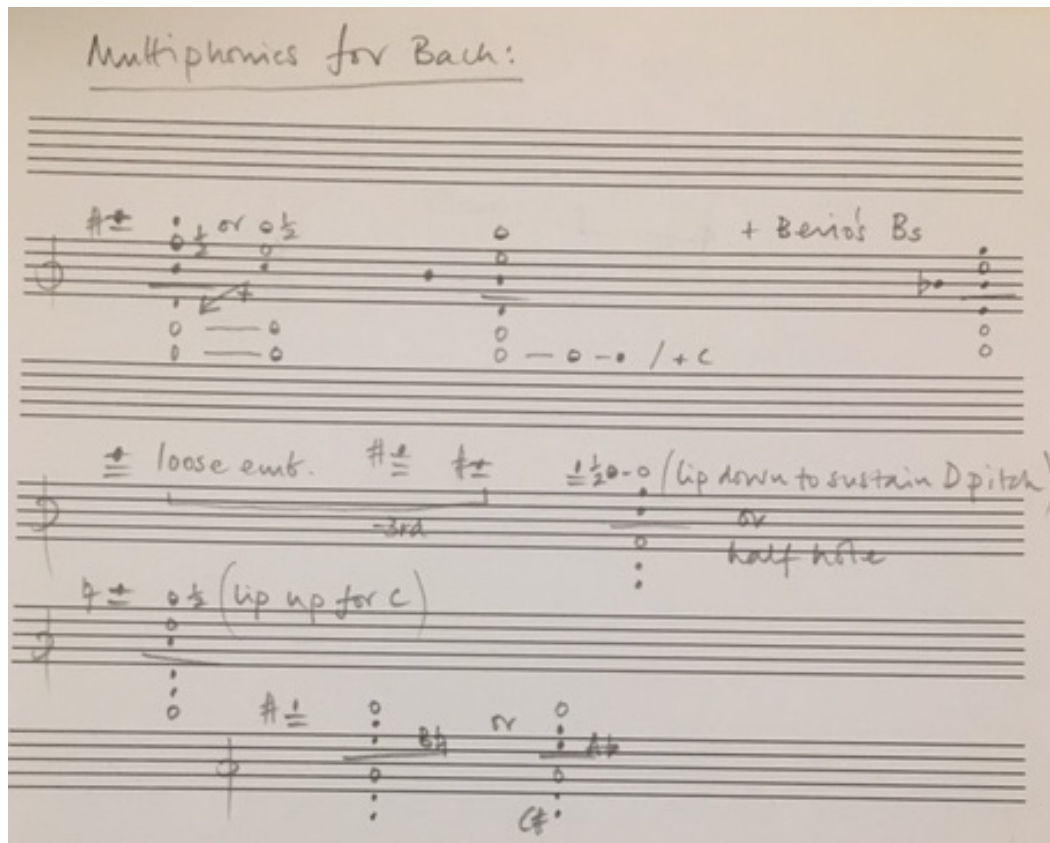


Figure 35. Oboe multiphonics (some taken and extended from those of the baroque oboe).

With the original Bach in my ear, I tried to make pitch links to fit the accompaniment. I hope these connecting threads produce the effect of allowing the ear to be sweetly deceived and hear that the modern sounds are born out of an ancestral tracery. This became Step 2.

### Step 3: (track 1)

The scale patterns in Figure 29 developed from my original improvisation on the Bach melody and became the foundation for transpositions and stacking of scales and intervals in *Ancestral Traces*. If the C-natural becomes a C-sharp, we have a C-sharp Dorian minor mode that equates to the Bach key of B minor. I decided that we should subtly inject the C scale, and its transposition on F-sharp into an improvisation over the Bach original. The F-sharp is significant in two ways: it is the dominant key of B minor and a tritone away from C. This harmonic

relationship makes links to the original but takes it away into new territory. As with the Berio tracings in Step 2, I wanted to try to deliver a little ambiguity by delicately twisting the C-sharp against the C-natural in ways that could be perceived to sound natural harmonically, but still allude to the Bach.

#### Step 4: (track 2)

It felt appropriate to play through *Ancestral Traces* in this format of modern oboe and harpsichord to show David the harmonic relationships and structure of the composition. I asked him to fill out the bass pedal notes (to sustain the harpsichord sound) with improvised gestures using the scales of Step 3 (as in Figure 29) and further transpositions. This process allowed for the development of an aural understanding of the harmonic possibilities so connections could be made to underpin further and future improvisations.

#### Step 5: (track 4)

Having heard the options so far, it was time to open proceedings and create an improvisation using the materials developed through the previous four steps. Added to this is a chord sequence from *Ancestral Traces* with patterns of tri-chords to enable further harmonic openings, if required (see Figure 36).

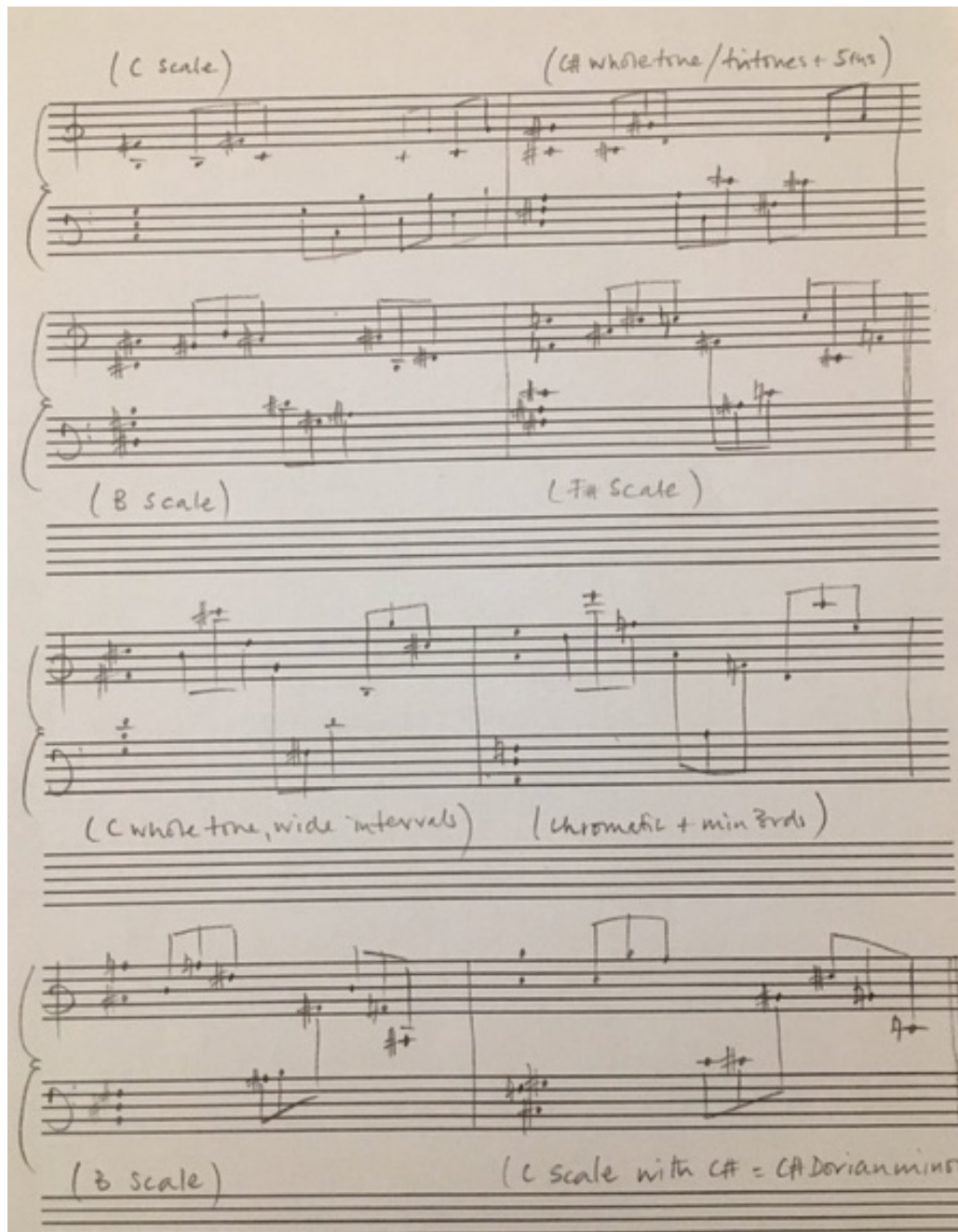


Figure 36. Patterns of tri-chords.

This is the beginning of a much longer process that will need time and repeated improvisations to ensure manipulation, development, and discoveries of what the emerging character of the voice will eventually become.

Step 6: (track 6)

Following Step 5, I decided to create another improvisation with the additional rhythmic elements, as shown in Figure 31, and integrate the harmonic

map, as in Figure 29, to use it as a form that could move freely through the improvisation. We used the material that we generated to signal when to move to the next bar or chord. Again, this is a process that requires many repetitions to find the quality and character of what could work best and become something substantial and meaningful.

#### Step 7: (track 5)

I thought it logical to finish with David improvising around the original Bach oboe melody, adding the scales and harmonic ideas already discussed. This would give him licence to explore ways of weaving through and around the melody to highlight it or deconstruct it in various harmonic directions. As in Steps 5 and 6, this is a complicated exercise that requires deft aural skills and, ultimately, repeated hearing and playing to enable a style to develop into a character of significance.

It needs to be said that David and I had met for the first time in this session, and the chemistry between us was very new. But we discovered we had a lot in common musically speaking, and his professional work in early music ensembles and jazz line-ups opened interesting musical connections. I added to this mix the contemporary classical music angle, which will lend significance to the character of the music in future improvisations. It is a part of this research to investigate specific oboe music of note by composers who understood and acknowledged different types of oboe character. In this instance, Bach and Berio form an axis around and within which I can extrapolate further definitions of character with improvisation and composition. In performance, when the moments become focused in an acoustic reality, further revision can be made to clarify the musical intention.

This procedure, using improvisation and a deep knowledge of the original material to reveal further expression, can take these findings a step further. I would like to replace the harpsichord with a piano, adding bass and possibly percussion. Depending on how this develops, I plan to conduct further studies using live electronics to take the material into other acoustic possibilities. In any event, there is material now to compose another piece with a different and more contemporary line-up and place the Bach in a different context with a modern oboe.

## **Chapter 4: Three Case Studies on Specific Composers:**

### **Introduction**

The above studies are similar in that they are instrument-related, and all the invented music is driven by the character of each of the three instruments. They provide an answer to the first part of my research question: How can the modern oboe re-connect with its past to find a character in its sound that fuses old and new sonorities? All three involve collaboration and improvisation as points of departure. The differences lie in how each of the oboe characters creates the resultant music. In the aulos project, the music is historically speculative (because we have only a vague idea of how these ancient instruments sounded and what they played) and comes directly from the sound of the instrument. In the nadaswaram project, the invented music was spun from an existing contemporary South Indian sound world. In the baroque oboe project, the music comes directly from the most famous music written for it in the past: that of J. S. Bach and Luciano Berio.

The following composer case studies will answer the second part of my research question: What potential does this offer for the development of a new improvisatory and compositional language within a contemporary classical context?

### **1)Varèse Case Study**

This study, as in the following study on Britten, will explore a process of improvisation that takes as its root an original piece of music. Through an investigation and analysis of its harmonic, melodic, and rhythmic features, a

reinvention of the material begins, and a transformation of it into other extensive musical versions takes place. This process opens up a dialogue with music from the oboe's past and reveals ways to unlock types of listening and playing.

Two compositions, or *open scores* is perhaps a better description because they are flexible texts, are the result of extensive improvisations within daily practice, workshops, presentations, and public performances. They are the culmination of a process inherent to this research and are examples of sharing creative methods of practice in performance, composition, and improvisation.

### **Context**

In the early 20<sup>th</sup> century, Varèse instigated a new sound in contemporary music, one that was brash, bold, percussive, and full of extraneous natural and electronic sounds. His music was revolutionary and radical, and it inspired musicians from the world of jazz, in particular Charlie Parker, who asked to have composition lessons with him. Sadly, this meeting never took place – on his return from a tour, Varèse found that Parker had died in the interim (Ross, 2010). I often ponder what might have developed from the meeting of these two great musicians.<sup>60</sup>

---

<sup>60</sup> "In an interview reprinted in Vivian Perlis and Libby Van Cleve's excellent oral history *Composers' Voices from Ives to Ellington*, Varèse had a touching reminiscence of Charlie Parker, who might have become a Varèse pupil if he had lived a little longer:

With jazz, the ones who could have been good become very conventional. I heard the man who was playing—what was his name? He died. He was a god of music in that field. He played a kind of saxophone—Charlie Parker. At that time, he lived in New York. He followed me on the street, and he said he wanted to be with us. The day I left I said, "We'll get together. I'll take you for my pupil." Then I had to catch my boat. It's when I went to Europe for *Déserts*. And Charlie Parker died in '55, in March. Oh, he was so nice, and so modest, and he had such a tone. You could not know if it was an angelic double bass, a saxophone, or a bass clarinet. Then one day I was in that big hall there on 14th Street, the Cooper Union. Somebody said, "I want to meet you." She was the widow of

In 1957, Varèse held a series of improvisation sessions at Greenwich House Music School in downtown New York. He had heard and was fascinated by the progressive approach, the virtuosity, and the liberating instrumental techniques that certain jazz musicians were developing, especially Charles Mingus, Teo Macero, and Art Farmer, three of the ten jazz musicians who were invited to these sessions. Varèse made graphic scores from which directed and free improvisations could develop. Perhaps, to some extent, the resultant music extended already existing ideas that a group like the Jazz Composers Workshop set up by Mingus and Macero in the early 1950s was already exploring, but as Toop noted, “Varèse’s contribution was a multi-directionality of wild expressivity, lines flying and swooping, lunging and growling as if tearing at the edges of all restraint” (Toop, 2016: 52). The interactions between Varèse and the musicians caused something of a sensation, and attracted John Cage, Merce Cunningham, and others to observe the music making from the side lines (Cohen, 2018: 156). There are unanswered questions about whether there was any continuing follow-up dialogue between Varèse and the players, but it is a tantalizing thought to know that these meetings happened at all and that there was an attempt at a crossover music making between avant-garde and contemporary jazz factions. The coming together of these two domains touches exactly the area of my own improvisations; it is a similar quest to push the boundaries of the sounds and techniques of the oboe into a wilder place, a place that comes from its older ancestry into a contemporary style. As an improviser

---

Charlie Parker. She said, “He was always talking about you, so I know all about you.” And that man was a great star. He wanted to study music and thought I had something for him.” (Ross, 2010).

and exponent of contemporary and jazz techniques, my search naturally led me to the music of Varèse.

### **Open Scores**

*Sounding Out Varèse 1 for any mixed ensemble*

*Sounding Out Varèse 2 for a solo instrument*

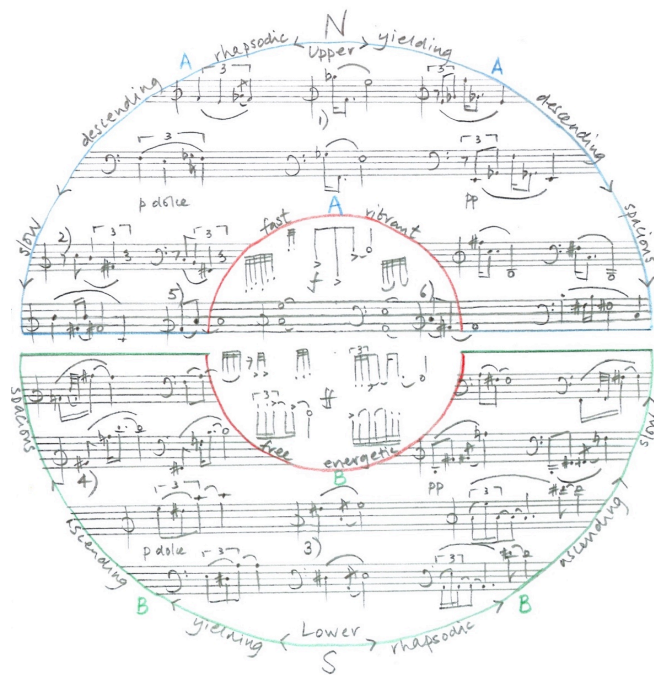
The two pieces, *Sounding Out Varèse 1* and *2*, have evolved from one source of inspiration: the opening oboe melody from *Octandre* (1923) by Edgar Varèse, an octet for flute, oboe, clarinet, bassoon, horn, trumpet, trombone, and double bass. The work is in three movements, and the opening movement begins and ends with an extensive oboe melody (see Figure 39). I have chosen this music because I have performed it many times, I have coached it with students, and I have conducted it in concert. It is a piece that has always held (and remains to hold) a strong impression in my mind. I find it unbearably expressive in places, not just in the melodic contours, but also in the orchestration and the powerful rhythmic textures that surround it. To my mind, it is a music that speaks with a modern voice, a music for our times, and for the future. It struck me as entirely natural, therefore, to think about exploring this melody and taking it somewhere else. This process, as I mentioned earlier, is one of my departures in my research to extend material with improvisational methods that then deliver new ways of listening, interpreting, and making music.

I began by memorizing the melody and analysing its structure and harmony. I began to hear a blues style within it that surprised me. The tempo marking in the octet version is crotchet 63, but the more I played, the more I felt a slower tempo because it revealed a heightened expression, and I could nuance

and bend certain phrases with more inflection. I improvised extensively with it and placed it periodically within my daily practice. I set up a sonic diary and recorded several versions. The more I improvised and invented, the more I experimented with shape, contour, and design. Gradually, I began performing my solo improvisations in workshops and in public concerts (with Trish Clowes' group in Shrewsbury, within an RNCM presentation, and at a Bath solo recital, to name a few).

This experimentation led me towards making a “composed” version for a solo instrument that could be notated in a form that involved improvisation as its main premise. However, the process of laying out a structure that included open improvisatory sections proved difficult. I didn't want to be too prescriptive, yet I wanted to keep the musical essence intact. I developed many versions and tried to keep the visual symbols clear and self-explanatory. The piece even began to take on its own artistic style, and circles and curved lines tended to lead in design; hence, the large circle for the ensemble version, *Sounding Out Varèse* for any mixed ensemble (Figure 37) and the three circles in *Sounding Out Varèse* for a solo instrument (Figure 38).

# Sounding Out Varèse for any mixed ensemble



Treble and Bass Clefs

Instruments in C

Figure 37. *Sounding Out Varèse* for any mixed ensemble (refer to hard copy for clearer detail)

# Sounding Out Varèse a melodic improvisation for a solo instrument (treble clef)

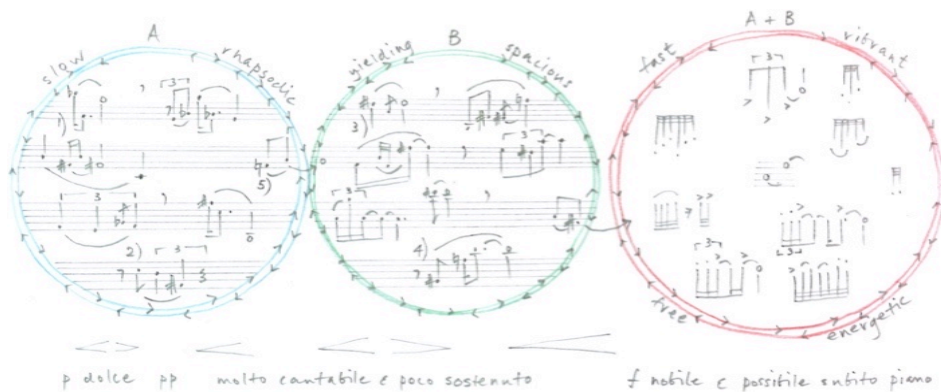


Figure 38. *Sounding Out Varèse* for a solo instrument (refer to hard copy for clearer detail)

The shape of the melody is angular in that the intervals are extended and dissonant, that is, tones and semitones that expand into major 7ths and minor 9ths (Figure 39). The interval of a major third (see bar 5) is used to change feeling and direction, as is the interval of a fifth that opens the following phrase (see bar 6). It begins on a G-flat, and at the end, rises on the penultimate note to the highest G on the oboe, then falls to rest on the beginning pitch, now re-spelt as an F-sharp.



Figure 39. Opening oboe melody from *Octandre* by Varèse (as shown in *Sounding Out Varèse*)

My improvisations had used certain rotations and transpositions of pitches to extend material, so I created a guide, *Pitch Relationships and Transpositions*, as a reference to include in the score (Figure 40). Here, I show examples of material that can be developed from a three-note figure when it is rotated through all its permutations. These rotational arrays came from a tried-and-tested compositional technique used extensively by Stravinsky. In

*Introduction to Post-Tonal Theory* by Joseph N. Straus (2014), a chapter on an analysis of a few bars of *Oedipus Rex* revealed a way of combining opposing harmonic forces by placing the material in a diatonic modal context and breaking expectations with chromatic diminished harmony. This is a harmonic world of ambiguity between the expected and unexpected that relates to an older, familiar compositional diatonic tradition and shifts it into the unfamiliar chromatic serial world of a modern language. This type of language has now moved further on and changed again in many ways, but I found this to be the harmonic territory of the Varèse melody. Its character has a pagan sensuality that is both old and new and is exactly the place that relates to the wilder oboe character that I am searching for in my improvisations.

examples of: PITCH RELATIONSHIPS & TRANSPOSITIONS

Upper semi-circle North A      Lower semi-circle South B

Pitches with stems show connections via major 3rds (descending in A, ascending in B)

Prime:      Rotations:      Prime      Rotations:

1) b. \*      I.      II.      3)      III.      IV.

\* no octave displacement to show clarity

Registers and octave displacements can be changed accordingly

**Figure 40. Pitch Relationships & Transpositions.**

As shown in Figure 40, the Prime rotation at 1) involves the three notes, G-flat-F-E, which are the first notes of the Varèse melody (which has the F down the octave). Each of the next two rotations begins on the second and then third

pitches of the Prime rotation. These simple changes transform the pattern of the sequence and open possibilities to the ear. The second bar of the second line transposes the G-flat down a major third and, in the next bar, down a major third again to D. I use a major third because, to my ears, this interval in the melody opens harmonic possibilities. It also creates an augmented triadic pattern that has an open-ended feel. In the third line, the last pitch of the Prime rotation is transposed down a major third, and again, at the end of this three-pitch pattern, down another major third. There are many ways of developing this idea, for instance, to take four instead of three pitches, or to continue a sequence many times. The interval itself could be changed, one that is inherent to the melody itself, but in any event, this sheet attempts to show how a three-pitch cell can produce an extensive sequence of pitches that relate to each other and to the original melody. This is a necessary skill and procedure for any form of structured improvisation. It enables the player to process a form of harmonic rationale that ties the melodic structures together to make a unified meaning to the music. It creates a cohesive musical logic and a strong definition of what transpires. This is also a way of keeping the harmonic essence of the music intact – that is, keeping an underlying language that is close to the musical character of Varèse.

Attached to the one-page scores is a sheet of *Performance Notes* (see first pages in attached score). This describes the process and structure of each piece and offers suggestions on methods of improvising, particularly geared to non-improvisers. One of the aims of this music is to guide and facilitate classically trained musicians, who by definition are mostly non-improvisers, into an area of structured improvisation. This process is an important educational component

of my research to show that ways of thinking and listening harmonically can influence methods of interpretation in all types of composed music. The following commentaries on the first and second readings of the ensemble piece show the differences between working with professional improvisers and classically trained, non-improvising musicians. I found the writing of the performance notes a difficult exercise in putting down just enough information without, as it were, dictating exact procedures because this would invalidate the process. The point of the one-page open score is to allow the music to be owned by the musicians playing it and for them to find their own journey through it; otherwise, I might as well have composed it, which is not the point at all. The solo and ensemble versions have small differences in process, so the explanatory notes vary slightly.

With the score finished, I needed to find out how and what would transpire when it was presented to various collections of musicians. I will now comment on interpretations of both versions of the piece and determine a) whether the score is understood and b) what music is made. This is an integral part of this research: to share processes and show that the three skills of improvisation, composition, and performance (which are the foundation of my research title) are linked and can be given and communicated to others.

### ***Sounding Out Varèse: (one-page score) for any mixed ensemble***

A first reading:

The first performance took place on November 28, 2018, in the *Stranger Danger* series of jazz performances in Birmingham with John O’Gallagher, leader

of the series, and Mike Fletcher (saxophones), Jonathan Silk (percussion), Chris Mapp (bass), Richard Foot (trombone), and myself (oboe).

We had just over one hour to set up and rehearse. There were three one-page scores written by myself, John, and Mike, and we each had just enough time to give brief explanations of the scores, followed by a few attempts at playing and listening. Questions were fielded, issues clarified, and the concert began.

All the musicians who took part in this performance were experienced improvisers. The piece immediately found its voice, and the score didn't seem to confuse or hinder any experimentation. I continue to be inspired and excited in my collaborations with jazz improvisers by their quick-witted and spontaneous reactions in the music making. There is an unwritten protocol, where the collective instinct leads and defines the process, and where each musician is given the opportunity to express their musical stance on the material. This delivers a powerful form of communication and keeps each musician alert and responsive to any eventuality.

The audience consisted, for the most part, of young people, and some were students from the RBC jazz fraternity. I found this a refreshing reality. The music was eagerly awaited, and there was a feeling of anticipation about how the music was going to develop. There was a sense that the performers needed to deliver what was expected – that is, to generate a musical energy that remained interesting and full of promise. I also felt that there was a feeling of support for what the music might entail and what its voice and meaning might be about. This rapport with an audience that was open and curious was inspiring and offered the opportunity to be daring and experimental. (**Audio Ex. 27**).

A second reading:

A second performance took place privately during the Contemporary Composition and Performance Course, part of the Britten-Pears Young Artist Programme held at Snape Maltings in July 2019. The course involved the coaching of new compositions by student composers and established contemporary chamber repertoire and was led by a small group of professional tutors.

I was the woodwind course tutor, and the woodwind musicians involved in a reading of *Sounding Out Varèse 1* were a quartet of Flute: Svea Guémy, Oboe: Zacharias Wolfe, Clarinet: Emily Wilson, and Bassoon: Edoardo Casali.

In this informal performance at Snape, the musicians were all young professionals who were classically trained and not particularly versed in the skills of improvisation, unlike in the first reading, where all the musicians were jazz improvisers. I wanted to take the opportunity with my piece to explore not only how the young musicians interpreted the written score, but also to find methods to generate the skills needed for improvisation and to inspire them to improvise together.

I began our first session by playing the solo oboe melody that opens *Octandre* by Varèse to show the inspiration behind the piece and to demonstrate the character and flavour of the music. This gave them an understanding of the pitch patterns and showed how this can feed into a style of expression. I showed them and explained the rationale of the *Pitch Relationships and Transpositions* sheet (mentioned above). We also read together the *Performance Notes* for this piece (also mentioned above).

Initially, it became apparent that there was too much to think about regarding pitch relationships. I found this to be an interesting observation. Classical musicians are not necessarily trained or have the opportunity to think in intervallic pitch patterns when improvising, and this was initially a slight burden to them. We narrowed down the options and began improvising with a maximum of two or three short phrases each. We used tones and semitones in step and in major 7ths and flat 9ths (as this is the logic behind the Varèse pitch patterning within the melody). I improvised with them initially to encourage and demonstrate musical communication, for instance, how to give and take a phrase and how to make sequences. I demonstrated ways of thinking about how to expand a melody and use dynamic colour and articulation to enrich the expression. We found together that it is possible to say a lot with very little, and that silence is a powerful ingredient in raising the dramatic tension in any delivery. In addition, the intervallic relationships made the resultant music sound integrated and flowing and gave the improvisations musical meaning and structure.

We had three short sessions that had to fit around the tight scheduling of the course, so our time was limited. However, during the third session, the musicians performed two interpretations of the piece, and they agreed I could record them.

I believe that this experience was rewarding for them. In the short time that we had, I could sense that, despite initial hesitations, the process excited them and gave them confidence. Improvisation can be interpreted as “play what you like”, which, in some instances, can demotivate any sense of purpose. However, in this instance, the need to grapple with a specific format revealed

that this type of improvising delivers music that automatically has its own sonic identity and cohesion. This is because the structure of the piece demands an understanding of the intervallic pitch relationships that form the essence of the musical expression. These limitations offered each one of the players a way into the general texture by asking them to make something specific that could link meaningfully to the texture. This approach also educates the ear in a musical style that belongs to our times, and I'm sure next time they perform or hear Varèse, it will have more significance. This will, I believe, feed into a greater understanding of what a contemporary music could be and how it is performed and communicated. Most importantly, it encouraged the musicians to find their own musical personalities in a creative process that is linked to composing and interpreting.

Take 1: begins with gentle whispering from the flute player

Take 2: slightly more robust and confident

Recorded in the Recital Hall at the Britten-Pears Building in Snape, Suffolk, July 2019. (**Audio Ex.28**).

Comments on the results:

I noticed that the more the musicians played together, the more confident they became, not only in what they invented but also how they reacted to one another. This is a vital acknowledgement that this type of playing – that is, playing by ear and using each musician's instinct to the full – reveals a healthy and productive musical discourse. Each musician began to find how and what to play, and the excitement of this was palpable. This way of working shows that

improvisation is an important element of nurturing musical personality. Their serious approach enlivened every aspect of the improvisation, and in the short time that we had, they produced two committed performances.

The following commentaries are for the solo version.

### ***Sounding Out Varèse: (one-page score) for a solo instrument***

On May 4, 2020, during the national lockdown, an opportunity arose with BCMG to schedule *Sounding Out Varèse* for a solo instrument as an online presentation with performance because they had lost two concerts of Varèse programmes in Birmingham and London. My piece was felt to be an appropriate substitute. The online presentation consisted of an interview about the piece with BCMG's artistic director, Stephan Meier, and myself, followed by my own performance of the work. It can be seen and heard in the separate online file 28 a).

For this performance, I recorded several versions and chose one to submit. I followed my own compositional rules and developed my material daily, re-inventing and re-working the material until I found a sense of expression that communicated the spirit of the piece.

Another opportunity arose on May 25 to give a live online performance of the piece under the London Sinfonietta's Live Lockdown Series *Introduction to Contemporary Instruments*. It can be seen and heard in the separate online file 28 b).

Following my own performance of *Sounding Out Varèse* for a solo instrument, BCMG created an online opportunity for their 2019/20 cohort of NEXT students to participate in their own solo renditions of the piece with an

online performance on May 10. Prior to this, I gave two online presentations on consecutive days, where I discussed and shared the methods and approaches to improvisation and showed how these could be applied to this piece. I gave three individual lessons online for those who wanted further guidance. A few of the young, classically trained musicians had experienced some types of free improvisation, but none of them had experienced it in a style in which the harmonic form had to be adhered to. In the few days that they had, it was not possible for them to grasp the melodic and harmonic parameters via the transpositions of material (shown and mentioned above in the transposition sheet), but they learnt how to rotate motivic cells and develop these into larger melodic lines. Under the circumstances, what was most important was that they found their own versions of the piece, and this highlighted several important issues. They all discovered their own voices and musical personalities. Some were braver than others in their expression, but all of them tried, and this enabled them to cross into a new musical domain.

Their versions of my piece can be seen and heard in the separate online file 28 c).

### **Critical Review and Summary**

The score I developed offered a way into improvisation via a series of choices within fixed harmonic structures that are grounded in a melody by Varèse. The aim was to facilitate an approach to improvising with formats that need to be understood and adhered to before beginning. This approach requires time to digest the melody itself and to deconstruct and develop material with transpositions and rotations until the ear hears the nature of the language. Only

then can these limitations release creativity with a foundation and produce an improvisation that has cohesion and substance. This preparation time is as in-depth as practising an interpretation of a composed score for performance, in that it requires time to understand the nature of the music itself. Similarly, the inspiration of the finished improvised performance also comes from knowing and understanding the nature of the material; the difference, of course, is that it is improvised in real time. For the improvisation to have success, this process has to be the initial step. Once learnt, there remains the possibility of making endless versions that have equal relevance. This freedom through learnt limitations is not new; it remains a constant premise in the improvisations within world folk music and jazz. However, within the culture of classical Western music, it has become less common. This score is an attempt to bring together an analytical and structural approach to improvisation to give musicians the opportunity to discover, particularly classically trained musicians, the power of creating on the move and feeling the energy in communication that it delivers. This, I believe, empowers the musicians to express their individualities and own the music. Certainly, the parameters of this research aim to bring together the skills of improvising, composing, and performing, and this premise is the purpose of both pieces.

## **2)Britten Case Study**

### **Introduction, Historical Context, and Intentions**

This solo case study was undertaken during the period of Covid-19 restrictions from March 2020 onward. These restrictions allowed for a unique opportunity and solitary search in my quest to find another type of double-reed

character, alone, with the oboe, and with the addition of the aulos. All the music making and creation of material stemmed from a thorough scrutiny and investigation of a specific piece of music: the set of miniatures for solo oboe by Benjamin Britten: *Six Metamorphoses after Ovid* Op. 49. The six metamorphic characters are *Pan*, *Phaeton*, *Niobe*, *Bacchus*, *Narcissus*, and *Arethusa*. I have created at least two improvisations on them all, except the first, *Pan*, for which I've made six as a way of highlighting procedure. Collaboration and interaction (one of the core elements of this research) between specific musicians had to be partly suspended; however, despite these restrictions, I was able to collaborate with Dr Simon Hall (RBC Head of Music Technology). In recording all my material, he was able to hear and then decide when, what, and how to introduce certain fragments of material into my further solo improvisations. This collaboration and interaction define the music.

During this time, the gathering of improvisatory material was catalogued into a sonic diary made over several months, which created a mechanism for remembering thought patterns, phrases, and different types of nuances. The process of listening back enabled material to be developed and built upon. A final recording was made at RBC with Dr Simon Hall over two days in November 2020 of performances using different types of structured improvisations. Although bearing constant reference to the harmonic reasoning of each of the forms within *Six Metamorphoses*, all procedures produced contrasting versions of the original music.

Benjamin Britten (1913–1976), overseeing his fourth Aldeburgh Festival in the summer of 1951, decided to include the premiere of his own *Six Metamorphoses after Ovid* Op.49 for solo oboe (first published by Boosey &

Hawkes in 1952). It was written for the oboist Joy Boughton, a star pupil of Léon Goossens at the RCM and daughter of the composer Rutland Boughton. At this time, Britten was busy composing and performing. His engagements included the first performance of his and Imogen Holst's edition of Purcell's *Dido and Aeneas* (Opera in Three Acts, edited by Britten and Holst (1952, rev. 1958–59) Boosey & Hawkes), a complete season of his operas at the Lyric, Hammersmith, in London, and a recital at the Wigmore Hall with the tenor Peter Pears. He was also working on his opera *Billy Budd* Op.50 (first performed in December 1951 at the Royal Opera House). It has been surmised (Caird: 2007, 8–9) that during his visit to Vienna at the beginning of April 1951 for another recital with Peter Pears, Britten most probably carried the Everyman edition of Ovid's works (Golding 1943). He was an avid reader, and during this time he had an appetite for classical mythology, perhaps influenced by his friendship with W. H. Auden, whose own poem, *Musée des Beaux Arts* (Auden, 1940: 746), deals with a sense of "otherness" that separated artists from society. Ovid brings to life the fantastic tales and myths of the ancient world that deal with the transformative meetings of humans with gods, which could possibly have had an emotional as well as an intellectual impact on him. As Hughes (1997: ix) notes, "Above all, Ovid was interested in passion. ... Not just ordinary passion either, but human passion *in extremis* – passion where it combusts, or levitates, or mutates into an experience of the supernatural." Writing a piece for solo oboe with such powerful thoughts in mind was a challenge.

Britten certainly had a track record of writing successfully for the oboe. His *Phantasy Quartet*, Op 2 (1933) won a chamber prize competition at the Royal College of Music while he was a student and was premiered by the greatest

player of the day, Léon Goossens. There followed *Two Insect Pieces* (1935) and the *Temporal Variations* (1936), both for oboe and piano. All these pieces, like the later *Six Metamorphoses*, are beautifully written for the oboe and show an understanding of its character and nature. Perhaps, for the latter piece, the oboe sound can evoke older times of rustic beginnings and passionate declamations. The aulos was certainly an instrument that Ovid would have heard in ancient Rome and beyond, and as my case study of this instrument shows (in Chapter 3), it was the most popular instrument of its day, inspiring music that was frenzied in inspiration and associated with the cults of Dionysus and Cybele (Barker, 1984: 168). It played music for sacrificial offerings and, as Barker notes, was played by the gods: “Apollo was taught to play the aulos by Athena” (Barker, 1984: 220). Its inclusion in this case study seems most apt.

It is tempting, particularly when thinking about the Suffolk landscape, with its reed beds and waterways, that some of the inspiration for *Pan*, who, as Britten writes, “played upon the reed pipe which was Syrinx, his beloved” (all *Six Metamorphoses* have small introductions of text), might have begun while listening to the wind in the Snape reeds. Pan, the god of the woods and fields, chases Syrinx, the chaste and beautiful nymph who cries out to the nymphs of a stream to transform her into marsh reeds to escape him. There are ways of imagining how Pan heard these reed sounds and how he may have made the instrument. The wind whistling in the reeds could have made a “thin plaintive sound” and produced a “sweetness of the music” that beguiled Pan, who began to make an instrument by binding some “reeds of unequal length and fastening them together with wax”. This instrument, the syrinx – the name of his loved one – “preserved the girl’s name” (Innes, 1955: 48). One can understand Britten

choosing the oboe in this context. It's plaintive reedy sound and expressivity are well suited to the drama within this narrative "... like in Ovid's poems, the movements present dramatic scenes in lyrical form, for which purpose the expressive tone, as well as the limited range of the oboe seemed most suitable" (Mitchell and Keller, 1952: 211n). Indeed, the oboe is limited in range, but Britten exploits this by making clear harmonic relationships that each have a specific oboe character, whether it is downward legato slurs (III *Niobe* Bar 1, D-flat major) or long legato lines with trills (VI *Arethusa poco più lento* B-flat major). According to the oboist Sarah Francis (Caird, 2007: 8), Britten asked Joy Boughton what was technically difficult on the oboe, to which she replied an A-sharp to B trill and downward legato slurs; he included both of these technical difficulties.<sup>61</sup> All six pieces are short, and in each, the essence of character is achieved through the development of melodic and rhythmic interplay that reveals a form consisting of two conflicting harmonic elements that merge and metamorphose. "The variety of moods and contrasts of character which Britten obtains in these limiting circumstances is amazing" (Mitchell and Keller, 1952: 211n). In this case study, further oboe character is revealed in my creation on the aulos of a two-part rendition of the original music of *Pan*, plus improvisations of this rendition. This sound links the music to the oldest ancient double-reed voice of Ovid's time and brings this strand together with the modern oboe to create musical interplay with additional timbres and improvisatory reflections around the original music.

---

<sup>61</sup> As a commissioner of new music for my instrument, I have found that composers frequently push the technical boundaries of oboe technique, and it appears that Britten was no exception.

The world premiere of Britten's *Six Metamorphoses* took place in rather unusual circumstances. It was not in the comfort of a concert hall but outside on Thorpeness Meare near Aldeburgh in Suffolk. One of the features of the festival, which was held during the month of June, was an al fresco concert given on the mere. It normally took the form of a choral concert, often including a selection of madrigals, with the singers being accompanied in boats on the mere and the audience seated in other boats around them. Seeking some variation in this scheme, Britten thought an instrumental interlude might be welcomed. And so, it was Joy Boughton who performed the *Six Metamorphoses* "in a punt on the boating lake",<sup>62</sup> an evocative start to one of the oboe's most famous pieces. I can imagine playing the oboe in a punt on the water might have been unnerving, but for Britten it was written by way of relaxation during the creation of *Billy Budd* (Mitchell and Keller, 1952: 211n), and the oboe's sound, one that is so direct and clear, would have carried beautifully across the water on a summer's evening.

In my introduction to this thesis, I mentioned that perceptions of oboe sound often relate to the pastoral, and Britten certainly adheres to accepted ideas of an idyllic pastoral sound, except that he widened its boundaries, affiliating the instrument to an older sonic history of outdoor performance. Here, Britten's oboe sound is woven into a fabric that celebrates its ancestry. By alluding to the distant myths of ancient Greece, the music links the sound of the oboe to its ancient beginnings, where the oldest oboe in the world, the aulos, was the most popular instrument of its day. The aulos' versatile sound could be

---

<sup>62</sup> Special note on the cover of the *Fair Copy* that was the second complete manuscript finished days before the first performance.

played indoors in a solo performance or accompanying a dinner, as well as outdoors, where its sound could carry above the voices of actors or singers in an open-air theatre or as an accompaniment to religious rites or heroic combats or contests. The premiere of the *Six Metamorphoses* in a boat on a lake in the summer of 1951 placed it in a setting that was perfectly natural to its sonic character.

Britten's allusion to a much older sonic world, combined with music that is modern in style, was one of many cogent reasons why I chose this collection of pieces as starting points for improvisation. In addition, they represent an important, unique, and significant addition to the oboe's 20<sup>th</sup>-century repertoire and are well known to oboists, including professionals, amateurs, and students. As examples of solo single-line compositions, they are distinctive and highly original. I have known these pieces for decades as a performer and teacher, and I believed I understood them thoroughly. Therefore, I was excited to discover that my process of making improvisations revealed a significant change in how I understand and interpret them. I have discovered that the process of learning the harmonic makeup of each of these pieces in preparing them for improvisation has made me listen to them differently. This has also made a difference in how I interpret them, because the notes themselves and the intervallic relationships between them require a slightly different slant on articulation and phrasing. In addition, the improvisations revealed endless possibilities and variations, not only of making and inventing music but also of exploring and understanding the compositional processes of the original.

This process has led me to wonder if I can offer something new in pedagogical terms and present a different approach to learning and studying

these pieces. Too often, and certainly when I studied them as a student, the little narrative texts accompanying each title were, and I've noticed remain, the focus for interpreting and understanding the music. The learning is based on a programmatic approach to thinking imaginatively about how Niobe felt as she turned into stone, or Narcissus into a flower, and to feel the emotion in how these transformations can be communicated. These are valid and necessary points to think about; however, an understanding of the harmonic context and the intervallic interactions and relationships within each form is commonly ignored. If we were to add a harmonic understanding to the interpretation, it would, as I have experienced, offer a different awareness of the musical character and its structure. In addition, a teaching method that encourages improvisation and makes personal versions of the harmonic material could not only empower the player with a deeper understanding of the pieces (whether student or professional) but also lend a freer and instinctive approach to interpretation and performance. This, I believe, would boost instrumental and musical confidence, particularly for students but also for professionals. British composer and double bassist Gavin Bryars stated, "Musicians should be given the opportunity to encounter improvisation as a serious musical activity and to develop an informed response to it both practically and intellectually" (Bailey, 1992: 117). This practical and intellectual stance gives musicians added confidence in expressing the music, where they can be free to take it where it needs to go in any given moment, whether in the performance of the original or in an improvisation. This thorough preparation of different parameters, when grounded in analysis and experimentation, supports new musical perspectives that may transpire.

## Preparation and Process

In this section, I will show how the approaches I have mentioned above have influenced my discoveries. It became clear quite early on during the improvisation preparations that there were two angles of approach to creating different versions of the Britten pieces. My work during my jazz master's degree taught me about improvising over and within forms. It followed logically that I should try the same with the *Six Metamorphoses*. The other angle was to approach the original from an entirely different perspective, one that is outside of the form and that alludes to the original from different standpoints. I have called these two approaches *inside the form* (structured and referential) and *outside the form* (partly unstructured and non-referential). By non-referential, I mean the freedom to step aside from the original, to refer to it obliquely in an unobvious tangential way that allows a freedom of imagination to express other forms of musical outcomes.

Structured improvisation is not a new approach. The old tried-and-tested form of theme and variations encourages ever more imaginative leaps away from the original theme while remaining connected to it. For example, in Bach's *Goldberg Variations* BWV 988 or Beethoven's *Diabelli Variations* Op. 120. In standard jazz practice, improvising over 12-bar blues or AABA song forms also encourages continuous invention within a specific harmonic form. Thelonious Monk's or Bill Evans' versions of the popular ballad *Autumn Leaves* by Joseph Kosma (1945), for example, show just how inventive different versions can be. Not only can there be many versions of a theme or a famous jazz standard by a single performer, but any version by different performers will automatically

reflect the style and character of the performer-improviser-composer. This characterization is drawn directly from the musical tastes and aural history of the performer and reflects all the music that the artist has listened to, studied, and performed. In improvisation, this comes to the fore directly and permeates the style.

In the partly<sup>63</sup> unstructured improvisation, the material that has been synthesized and digested provides the opportunity for the improviser to let go freely and accept what and how motifs transpire, and the form could become more fluid and open. In this setting, the sound can become a malleable thing that allows the improviser to feel a way around the essence of the material; the music dictates its own form. There are many complex sources that govern this type of improvisation, including the performer's personality and their musical memory, as well as the imaginative process of preparing a motif for later development, the making of connections and corresponding selections of material, and pacing the flow and direction of the music. All of this allows for the imagination to dictate the form (Bailey, 1992: 111).

In addition, the context of the performance setting and the type of audience can also affect outcomes. A small, intimate space, as opposed to a large one, can alter the response acoustically. An audience that is relaxed and familiar with improvisation may expect a different style in how the music progresses, whereas an audience that is unfamiliar with improvisation may wonder if what

---

<sup>63</sup> I have used the word "partly" with unstructured because, despite the form being freer in spirit, there is still an allusion to the original. This is not in the same category as the jazz genre of free improvisation, which, although based on its own codes and conventions, does not deliberately follow planned harmonic forms.

they are hearing has any purpose or logic. The improviser needs to adjust the musical expectations to suit the situation.

### **Harmonic Thinking and Analysis**

For this process of improvisation, I began by committing the original music entirely to memory.<sup>64</sup> This process enabled my ear to digest all possible angles of inflections, nuances of phrasing, interpretation, and definitions of structure. Next, an in-depth scrutiny of the harmonic structures was essential for two reasons. Firstly, to understand how the form works with it, and secondly, to see how this would feed into the concept of the composition, which, in this case, is one of metamorphosis and transformation.

An analysis of *Pan* (with personal suggestions regarding interpretation)

Form: in three sections A – B – A1/B

The harmonic axis of this movement revolves around a semi-tonal A/A-sharp relationship.

Please refer to Figure 41 below.

Section A (bars 1-5): The first three opening lines most certainly feel and sound in A major, but also have a modal quality that sounds major/minor. So,

---

<sup>64</sup> It is not always necessary to memorize. There are other approaches. The British pianist Matthew Bourne, for example, took a fearless and unpredictable approach to a particular solo performance by learning Coltrane's *Giant Steps* for the first time on stage. (Bath Festival 2002). In his improvisational structure, he included samples from *The Muppet Show* and *The Simpsons* (in the form of grunts of frustration of Homer Simpson when making mistakes), played along with a Jamey Aebersold accompaniment, and repeated patterns and figurations to strengthen his remembering. This was a daring act, but highly entertaining for the audience. [2605021500 - Bath Solo Concert | Matthew Bourne](https://matthewbourne.bandcamp.com/album/2605021500-2605021500-Bath-Solo-Concert-Matthew-Bourne) <https://matthewbourne.bandcamp.com/album/2605021500-2605021500-Bath-Solo-Concert-Matthew-Bourne>

there is already a built-in ambiguity. This section to the middle of the third line is all scalar and moving by step *senza misura*. Indeed, one can imagine it being played on a panpipe, blowing across the holes and moving by step up and down. It is mostly loud and bold in character. The music flows in confidence, despite remaining harmonically static in “A major”. At the ends of each phrase, there are the same symbols for a pause, but they are not necessarily the same length. If these pauses are of varying length and unpredictable in their timing, they offer an opportunity to make the musical flow more flexible and spontaneous (as if improvising), and this strengthens delivery. This allows for the very last pause, the end of this section, to be the longest, preparing the listener for the dramatic entrance of Section B on the repeated A-sharps. Knowing the harmonic implications here, that the A-sharps break the mould completely, gives the player a deeper sensibility of making the articulated A-sharps sound distinctive and contrasted, and even allowing for a certain fluctuation in tempo. These tiny nuances can make enormous differences in how the music is communicated.

Section B (bars 6–8): Here, we have the introduction of an opposite harmony. Although geographically close, aurally, the A-sharp sounds distant and “other”. The dynamic changes abruptly to *pp*, and there is a very different articulated character. A pulling and friction develop with the mode of A (or A major) gradually being supplanted by another mode. A chromatic sense creeps in with C-naturals appearing until we end with a whole-tone harmony beginning on C/D. A terrifying, repeated articulated *ff* A-sharp (which has also been spelt B-flat in this section) is announced. Metamorphosis has occurred. The pause at the end of this section on the fifth line needs to be even longer than the one before Section B, because it could signify the end of the whole piece.

Section A1/B (bars 9 to the end): There is a defiant return, even though brief (with the last and first bars in a sort of reverse order), of the previous Section A music. However, at the *Lento ma subito accel*, the music quickly subsides into slowness that gathers pace, ending defiantly and abruptly on an E/F-sharp trill as if cut off unexpectedly. This music has a slightly new thematic idea with the notes E, D, E, and its rhythm (taken from the very first bar), which is exploited to stretch this motif via an *accelerando* to its limit, or it is a way of liquidating some of the Section A material. As Cook noted, “‘Liquidation’ is a term Schoenberg used, meaning the fragmentation of a thematic idea so it loses its individuality.” (Cook, 1987: 259)

The loss of individuality is pertinent. The music comes to an abrupt halt, giving power to the shock of the next bar: a row of six articulated A-sharps. The pause here needs to be the longest in the piece to keep the tension and prepare for this entry. The articulated A-sharps, a tritone distant from the trilled note, sound surprising, a distant memory that returns to haunt. The transformation that occurred from the harmony in Section B has held its place. The *pp* A-sharps are not a gentle whimpering, but a gentle scornful rebuttal. Giving this character with a *pp* diminuendo is challenging. The last two phrases amalgamate the A-sharp into a scale that uses the highest and lowest Ds in the piece with the three sharps of the key signature. The metamorphosis is complete.

for Joy Baughton

# Six Metamorphoses after Ovid

1951

for Oboe Solo

I. PAN who played upon the reed pipe which was Syrinx, his beloved.

*A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P/Q/R/S/T/U/V/W/X/Y/Z*

*Senza misura (mezzo)*

*pp = app - 38*

*Syrinx was a nymph + transformed to the goddess Pan. She wants a lover & died the water nymph Pan's bride made a haunting sound like Pan's breath blown through reeds.*

*Benjamin Britten, Op. 49*

*Notturno*

*cs vee*

*f*

*mf*

*f*

*pp*

*pp (accel.)*

*mf*

*pp*

*cresc. ed accel.*

*rall. sec.*

*non vib.*

*Lento ma subito accel.*

*pp cresc. (scale as if going up)*

*sempre cresc. ed accel.*

*harmonic Eb*

*staccato*

*staccato*

*pp*

*ff*

*pp*

All rights reserved  
Copyright 1952 by Hawkes & Son (London), Ltd.  
Printed in England  
B. & H. 17963

**Figure 41. *Pan* from Britten's *Six Metamorphoses after Ovid*.**

### *Improvisation Processes on Pan*

With my own structural harmonic analysis internalized, I began to develop three improvisations inside the form and three outside the form. I made a log of specific ideas for each one that I liked, to remember them for later use in the final recording if the occasion arose. All the ideas came through the iterative act of listening and improvising, two skills linked as one.

For each progressive improvisation from 1–3 inside the form, I decided to take the material into extended instrumental technical contours and figurations

within the oboe's character, but keeping to the basic three-tiered form of A-B-A1/B. The first improvisation is straightforward and follows the same harmonic plan, but with greater variation and decoration of the original material. I found that playing non-scalar patterns using wider intervals increased the intensity while staying within the form. In the second, I found pitch bends to morph the scalar original into something, you might say, more rustic and folk-like. I decided to change the B section to the opposite whole tone scale, starting on C-sharp. The mix of bending and a cleanly articulated B section clearly defined the opposite harmonic characters. In the third improvisation, the distance in character is even further removed. I found multiphonics for the A section based on each of the notes in the A major scale/mode. This introduced additional pitches, from within the multiphonics, into the texture that I could exploit. In the B section, I used a diminished scale on C/C-sharp to simultaneously allude to the dichotomy between the two harmonic sections of the original and to extend this improvisation into another harmonic field.

I found the limitations of improvising inside the form difficult to contend with. There were often times when I felt the music wanted to go somewhere else, so I found that I had to remain succinct and careful in keeping the development of the phrasing logical in reference to the original. Each of these three improvisations was, up to a point, prepared in my head before the final recordings. I had a strong sense of what I was aiming for but a vague sense of how it would materialize. I decided to make only two versions of each because, in any improvisation, the improviser makes the music work, and each version has its own validity. I then selected the one that had a strong identity and internal balance, but which also referred imaginatively to the original.

For each of the three improvisations outside the form, I decided to develop three types of approaches and structures:

1) Buoyant mood: a slow, confident approach towards the original music, starting from a distant place and eventually and gradually developing the material to bring the original into focus.

2) Meditative mood: a dislocated music that aims to “find” the original in some format during the middle of the improvisation.

3) Illusory mood: a disconnected, sporadic, and severed music that only alludes to the original in fragmentary form.

I allowed myself a few ideas to kick-start proceedings for each one, all based on empirical evidence. For instance, in the first one, I noted grace notes, augmented 4ths and major 7ths, split registers, humming and playing, inflections, and specific rhythms. In the second one, low register, microtonal trills, double trilling, very high register, and whole-tone hinting. In the third one, I was deliberately scant with ideas because I found this structure liberating and knew I could trust whatever transpired. I decided to begin always in a fast tempo.

All the improvisations were prepared, to a greater or lesser degree. I know I could have elaborated on each process more and more because, in the act of making each version of an improvisation, I found it had its own identity and worth. The infinitesimal decisions about where and how to proceed were limitless. For the other five of the *Six Metamorphoses*, I created two versions of each inside and outside the form and selected one to submit. I also made recordings of all six of the originals. All improvisations in **Audio Ex.29**.

### ***Aulos Improvisations and Process***

The addition of the aulos to this case study was serendipitous. During the COVID-19 lockdown, I continued to learn to play the instrument, which remains new to both the modern world and me. With help from a bi-monthly online support group of international aulos players, numbering at the most about fifteen people (to date), I gradually gained a little more instrumental control. I felt compelled to play it in this case study because of its connection to ancient Rome and the poet Ovid. Ovid lived in Italy from about 43 BC and would have undoubtedly heard these types of instruments, which remained extremely popular from Egyptian times and further back. He would have most likely heard my type of aulos because it is a copy of one from the Greco-Roman period. The serendipity of the aulos' inclusion in this case study was the key in which my aulos sits, one based around the notes of A major. As we know, the first of the *Six Metamorphoses*, *Pan*, uses this key, and it therefore felt right to explore whether I could play Britten's music on my aulos. Having two pipes that I play consecutively meant I could make a counterpoint line to the melody. I discovered that I could fit and make the register work, shifting the melodic line between the two pipes. The main concern was finding a different tonality for the B section. I did this by adjusting my embouchure to make A-sharp by lipping up A-natural and lipping down G-sharp to G-natural. See Figure 42 for my reconstruction of Britten's *Pan* for my Louvre Aulos.

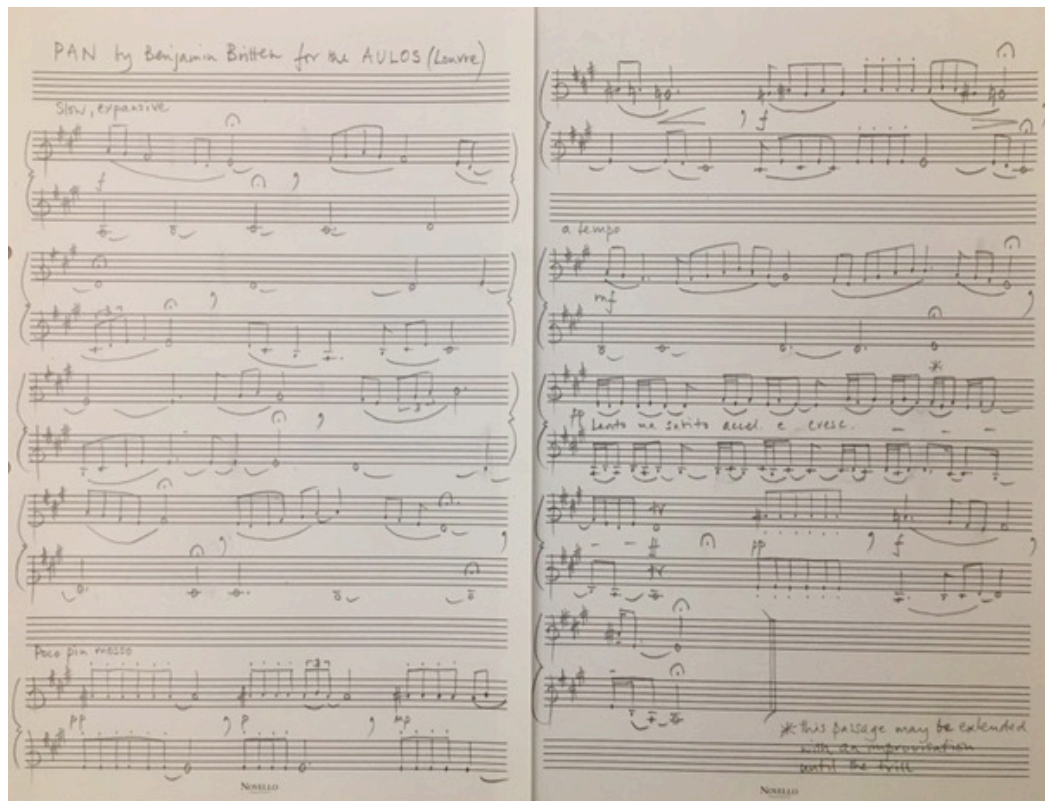


Figure 42. Re-construction of Britten's Pan for Louvre aulos.

My aulos practice was continuous and daily, as much as possible, to understand its nature, how it liked to be blown, how the reeds needed to be played, and to develop some form of finger technique. Again, as with the oboe, I made a sonic diary of improvisatory examples and played against and with them. I kept a log of my findings and referred to them when I needed to. This was the process with it, and the recordings made: (**Audio Ex. 30**, four tracks)

- 1) An improvisation on the aulos against the recorded second improvisation inside the form on the oboe. This included the quartertone oboe pitch bends, a sound that I could link to the aulos sounds, whose pitch and intonation are extremely loose and flexible.
- 2) An improvisation on the aulos against the original *Pan* played on the oboe.

- 3) A rendition of the original *Pan* on the aulos, discovered and learnt with small pitch adjustments to fit the instrument.
- 4) *Pan* on the aulos with an oboe improvisation.

Playing a piece of Britten on an aulos and combining the sound of an oboe with an aulos have never been attempted before. This is a unique sound world. Mixing their sounds together has created another dimension of oboe character, which is one of the central aims of this research. The oboe's extended techniques and pitch bending, mixed in with the aulos sound, which is rich in timbre and flexible in pitch, has produced a music to my ears that is both ancient and contemporary.

### ***Final Improvisations***

At the end of the second day of recording, I decided to create further improvisations by layering the material and improvising again over previously recorded material. To do this, I collaborated with Dr Simon Hall, who chose extracts and developed them to fit into whatever music transpired. I decided on three approaches, each of which, in its own way, had a palimpsest-like quality. The improvising would be in the foreground, while fragments of material and the memory of them would be revealed underneath to create a texture that is flexible: (**Audio Ex. 31**, three tracks).

Track 1) Improvising live over fragments of material from one of the originals fed into my headphones by Dr Hall.

Track 2) Improvising live over a recorded improvisation.

Track 3) Improvising outside the form with Dr Hall reacting to it by feeding me fragments from any of the previous recorded improvisations and distorting extracts.

### **Composition**

The final part of this case study is a composition for solo oboe that is based on all the analytical investigations and improvisatory revelations I discovered in Britten's *Six Metamorphoses*. I decided to explore ideas from the improvisations to trigger the imagination and influence compositional decision-making. In the performance of the improvisations, the harmonic thought processes that were pre-planned (as detailed above) acted as constructs to initiate and charge the drive and spirit of the music in real time. The improvised performances were created without the chance for corrections, in the improvisatory spirit of making the music flow despite any "mishaps" and with "certain frailties left intact – notes that might not sound quite 'right', runs or progressions that get away even from the performer, and the uncertainty of knowing where all of this is going" (Benson, 2003: 134). My aim in the composing, however, with the additional certainty of knowing how the music would and could evolve outside real time, was to capture the essence of the improvisations and sustain the harmonic logic. I transcribed three of the improvisations as starting points and chose those that had balance in form, character, and harmonic coherence. Interestingly, all of them were improvisations outside the form and, although they are less referential to the original, showed autonomy of character.

### ***Compositional Form***

In notating three transcriptions, I began to think about a compositional structure. Bearing in mind the original form of Britten's six short movements, I decided to also make six pieces. I decided to balance the design with three purely composed movements to be placed alongside the three reworked transcriptions. The difference in style between them is distinct, and the composed pieces act as commentaries and, ultimately, as a type of prelude to the reworked transcriptions. The form therefore has six pieces consisting of two collections, each of three: three *Meditations* and three *Responses* (reworked transcriptions).

As I worked on this model, a form transpired:

Meditation I – Response I – Meditation II – Response II – Meditation III –  
Response III

Title: *Six Meditations and Responses after Britten* <sup>65</sup>

The form, I noticed, could also exist in two other formats. Depending on context and programming, a performance could have either the 3 *Meditations* or 3 *Responses* as stand-alone sequences. The difference in character and tempi between the two types is deliberately contrasted, allowing for a separation into three slow and three fast movements. Tempi and characters:

The three *Meditations* each have the tempo marking: ♩ c.46-50 *slow, poised, and poetic*

*Response I*; ♩ c.144 *as fast as possible* *Response II*; ♪ c.104 *noble and spatial* *Response III*; ♪ c. 126 *fast and lively*

---

<sup>65</sup> See hard copy for reference.

Subsequently, I decided to make another movement, an open score in a graphic notation for improvisation that encourages the performer to make their own improvised version of Pan called *Pan – a solo improvisation*.<sup>66</sup> This is in the spirit of the whole working process and is an opportunity to allow further exploration of the material for those who might wish to do so. This open graphic score could act as a separate piece in performance. The score is deliberately minimal in its instructions to initiate a non-prescriptive and imaginative way of thinking. I tried two methods of approach: writing solely word instructions and making a combined visual abstract and graphic image with minimal words. I decided to use the latter because it was less prescriptive. The aim was to make the design and approach inviting, open, accessible, and challenging. As a pedagogical tool, this graphic score inspires further inroads to altering and expanding procedures that encourage the making of many versions, extending the length of each version by developing sections, changing the two harmonies, and exploring contrasting textures, figurations, articulations, and intervallic relationships.

### ***Harmony***

Each of Britten's *Six Metamorphoses* has either a specific axis of semi-tonal, modal, or major/minor juxtaposition that creates harmonic tension: *Pan*; A/A-sharp, *Phaeton*; (a sequence of Dom 7ths from C, E-flat, A, G, with a Dim scale on C/D-flat)<sup>67</sup> C/C-sharp, *Niobe*; also C/C-sharp, *Bacchus*: E/F, *Narcissus*: C

---

<sup>66</sup> See hard copy for reference. RBC jazz student Tom Pountney-Barnes collaborated with me on the graphic design.

<sup>67</sup> I find *Phaeton* harmonically ambiguous. G is a strong pivot note in the sequence of dominant 7ths at the beginning, and C major turns to its relative A minor in the middle

major/C minor, *Arethusa*: D/A-sharp. These pitches presented a seven-note row: A, A-sharp, C, C-sharp, E, F, and D (see Figure 43). I have named the seven Britten notes “insider pitches”).

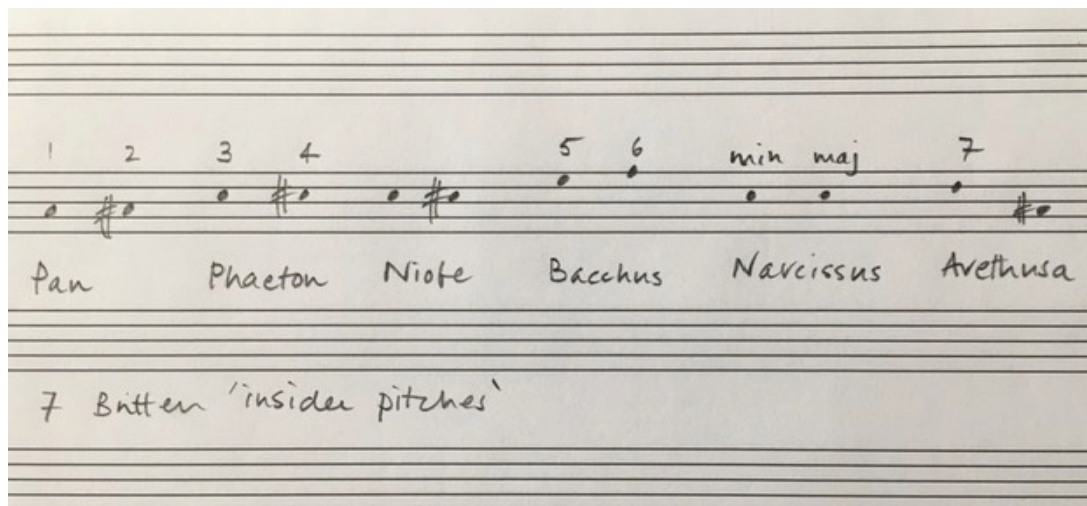


Figure 43. The seven “insider” pitches.

I decided to extend the 7 “insider pitches” by another 5 to make a 12-note row and add the “outsider pitches” of G, G-sharp, B, D-sharp, and F-sharp<sup>68</sup> (see Figure 44 for the non-Britten “outsider pitches”).

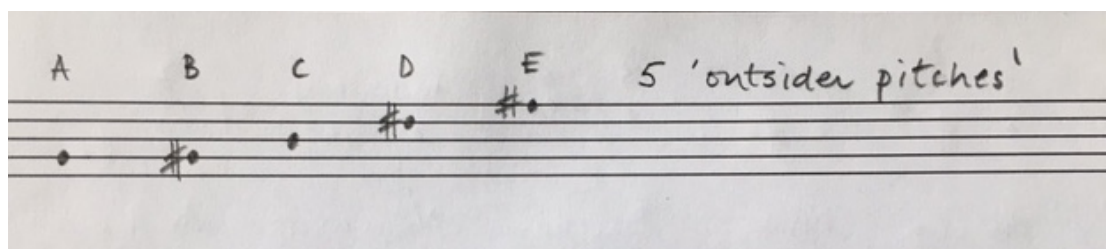


Figure 44. The five non-Britten “outsider” pitches.

section, with F-sharps and B-flats hinting at a quasi G minor. However, the *Agitato* section harbours a diminished scale on C/C-sharp, which strengthens the logic of the dual relationship C/C-sharp for the whole piece (see copy of this movement in Britten Case Study Appendix).

<sup>68</sup> I’ve kept the spelling of accidentals in sharps for clarity.

The combination of these pitches, or rather the juxtaposition of the 7-note row against the 5-note row, delivered a further and natural dialectic approach. I made a melodic contour of the 12-note row that to my ear gave it shape, direction, and coherence (see Figure 45 with the numbered “insider pitches” and lettered “outsider pitches”).

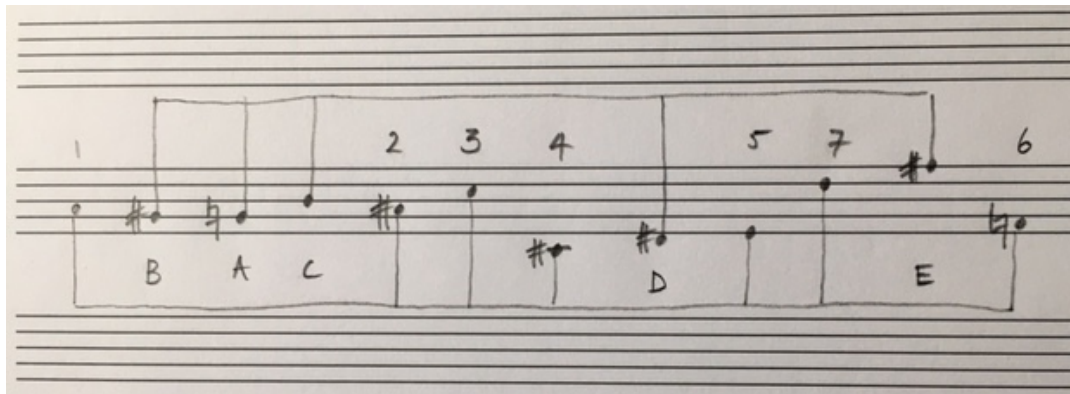


Figure 45. The numbered “insider pitches” and the lettered “outsider pitches”.

The *Meditations* act as miniature narratives that frame the *Responses*. Their character is pensive and gentle, in contrast to the reworked, vivacious transcriptions. I used eight overlapping pitches in the first two *Meditations* and all twelve in the last (see Figure 46).

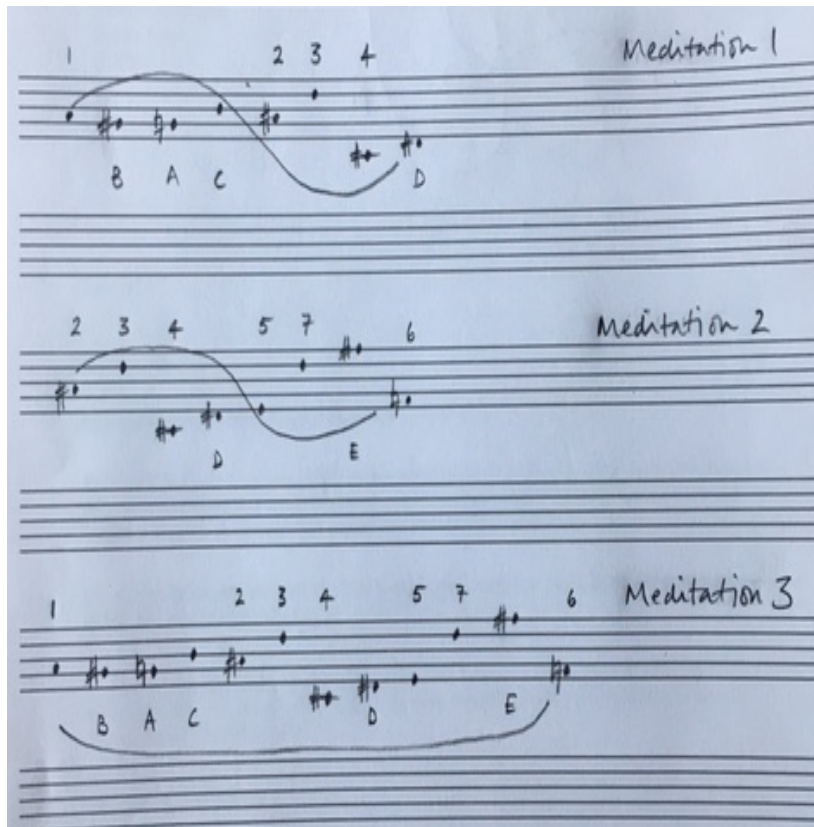


Figure 46. The overlapping pitches of *The Meditations*.

### Transcription to Composition

Transcription is a technique that I developed and learnt during my jazz studies and is now a familiar component of my own creative practice. It has its own unique qualities and criteria. Busoni, the master of transcriptions, states in his essay *Sketch of a New Esthetic of Music* (copyright 1907) that “notation is, in itself, the transcription of an abstract idea. The very intention to write down the idea compels a choice of measure and key. The form and the musical agency, which the composer must decide upon, still more closely define the way and the limits.” (Busoni, 1962: 85). As Busoni states, transcribing an idea takes on the limitations of notation in having to choose a pulse and a key. In his transcriptions of compositions into different settings, as in his transcriptions of Bach for piano (for example, the *Chaconne* from the *Partita No. 2* in D minor for solo violin), he

keeps the spirit and form of the original, even though the version of it is quite different. Transcribing an improvisation is painstaking and more exacting, and I found that the music, in being coerced into the straight jacket of notation, lost a lot of subtle detail. I noticed how the notation altered the feeling of the music, and in reading and playing it back, the energy felt constricted. The act of writing the music down dictated the parameters of the expression and placed the music into a different configuration. The improvisation lost its essence in notation. Therefore, I decided to let go of exacting the improvisation and instead maintain the outlines and substance of its identity to capture the pitch, rhythm, and dynamic relationships, the melodic contours, and articulations. These gestures became starting points that I extended and stretched to direct the material into further dimensions of character according to how the composed material “behaved”. This whole process of transcribing the substance and then composing with it became another type of creative act. The compositional process allowed me more time to ponder and imagine many alternatives to details of, for example, articulation, melodic contour, rhythmic power, and overall fluidity. (**Audio Ex. 32**; an example of reworking an improvisation into a composition relating to Response 1 only).

The extra thinking time one has with composing when making the form and material work together changed the angle of intent. I found that with the stretching out of ideas and having an objective view on the temporality of the material, the nature of the music broadened and condensed. The music revealed itself very slowly as I constantly checked the tiny details, and gradually, the material transformed into another version of the original improvisation, stemming from the same place, but ultimately very different. Nevertheless, I kept

Britten's concept of metamorphosis and retained the contest and interlocking of two harmonic areas. *Responses I* and *III* are frenzied and spirited, with *Response II* more deliberate in its contrasts. All three of them exploit pitch ambiguity so that the shifting harmonies only occasionally settle. They also each end a semitone or tone higher than the start note to emphasize ambiguity (RI: start note E-flat, end note E-natural, RII: start note B-flat, end note B-natural, RIII: start note C-sharp, end note D-sharp). In contrast, the purely composed *Meditations* contain material, with combined pitches taken from the Britten, that is slow, majestic, poised, and with aural space. The overall form, therefore, interlocks contrasts of very slow and very fast.

The next stage, the act of reading and learning the new pieces with notation, placed the music within the activity of interpretation. Learning the "correct" notes made it a very different experience compared to the initial improvisation. It was a case of having to stop reinventing and believe in the written score. The memory of the improvisation gradually metamorphosed, and so the cycle of this music making returned to a familiar place where the notation was the first port of call, and as Busoni noted, "it is for the interpreter to resolve the rigidity of the signs" (Busoni, 1962: 84) and return the music to a fresh and improvisatory state (which is the end game in all interpretations of written scores). Busoni also believed that performing a work is also an act of transcription (Busoni, 1962: 85), because playing it in real time alters the interpretation of the written code, since music depends on inspiration in the moment, so it becomes another version of itself. I look forward to hearing a different oboist interpret and perform these pieces because they will undoubtedly take on a new character with another player.

## Conclusion

This entire process is an adventure of discovering, uncovering, disclosing, extracting, and filtering, and it follows my methodology in this practice-led research in which the governing principles are the making of music and its style, and evaluating each step as I proceed. This has ensured that the process has been constructive and reflective and allowed me to build on what I found each step of the way; it is the mechanism that holds everything together. The British anthropologist Tim Ingold calls it the “*art of inquiry* ... the conduct of thought goes along with, and continually answers to, the fluxes and flows of the material with which we work. Here, every work is an experiment ... in the sense of prising an opening and following where it leads. You try things out and see what happens” (Ingold, 2013: 7–8). It is also the “sense of prising” and trying things out to see what happens that is very much at the heart of my adventure.

The improvisations on Britten’s *Six Metamorphoses after Ovid*, Op. 49 for solo oboe is a collection that uses these pieces as starting points for invention and are reverent to Britten’s compositional ideas. They are approaches to improvisation that provide methods of making and re-making pieces that evolve and transform the original material as a vehicle for invention. The compositional character of these pieces, one of metamorphosis and transformation, is adhered to and remains the primary focus.

This process focuses on two important points:

- 1) It insists that the player analyses, memorizes, and internalizes these pieces in a way that instils a deep understanding of the harmonic, melodic, and

rhythmic structure of these compositions. This influences interpretation and style in a meaningful and musical way.

2) It allows the player to trust the ear and begin to improvise within these structures and deepen awareness of listening, finding an instinctive voice, and giving confidence to artistic decision-making. In terms of teaching, this could mark a radical change in how these pieces are taught.

Composing is the final step in this continuing spiral of making music, a spiral rather than a cycle, because there is no return to the exact same place. Each version rests in a slightly different place from where it began. It begins with preparing and performing an improvisation, recording it, transcribing it, and reworking the material into a fixed composition to be interpreted in performance via interpretation with the feeling of returning the music into sounding improvised.

No performance of a notated piece is ever the same because the music must live in the moment, and that is its ultimate goal. The music, as it moves in real time, dictates how the journey is to proceed, and the player filters the text in the moment to allow this to happen. As Ingold asserted, “This thinking, this imagining, goes on as much in the hands and fingers as in the head” (Ingold, 2013: 128). In addition, Barenboim noted that “the interpretation of a text creates a subtext for itself that develops, substantiates, varies and contrasts the actual text. This subtext ... is itself boundless ... and its richness is determined by the curiosity of the performer” (Barenboim, 2008: 52–53). This also brings together the essence of this research: music making by a performer, improviser, and composer, where the act of playing an oboe influences and brings about a music *of* the oboe. The sensation of the instrument, the vibrations of the reed,

and the physical geography of the wood and the keys instruct and influence in subtle ways and act as a bridge to the imagination.<sup>69</sup>

While listening to the recordings of overlapping aulos and oboe, the words of the British poet, Ted Hughes, echo again in my mind and take on greater resonance: “Above all, Ovid was interested in passion...passion in extremis – passion where it combusts, or levitates, or mutates into an experience of the supernatural.” (Hughes, 1997: ix). The passion he describes in how Ovid portrays the interaction of metamorphosis between humans and gods perhaps also describes the nature of Britten’s music in the combat between two harmonic spheres in each of his six miniatures. To do this with a single instrument is powerful and dramatic. The quality and interaction between opposing types are what I have tried to capture in the character of the improvisations and in my composition. The new oboe music has an underlying sense of flux that connects it to a “passion *in extremis*”, where the music also seems to levitate and mutate into something out of the ordinary. (Hughes, 1997: ix) The sense of abandon and wildness in the *Responses* juxtaposed with the deliberate stillness of the *Meditations* engage a different type of oboe voice in extremis. In the recordings, the unique mingling of the aulos with the oboe and the over-layering of material circling in ever-increasing figurations around a central idea combine the new and the old double-reed sounds and present another perspective on oboe

---

<sup>69</sup> As an archaeologist, Ingold writes tellingly about processes of thinking that chime with these methods of making music. He also quotes the Finnish architect Pallasmaa (from his book *The Thinking Hand: Existential and Embodied Wisdom in Architecture* 2009), whose ideas resound with musical connections: “the thinking process turns into an act of waiting, listening, collaboration and dialogue (in which) one gradually learns the skill of co-operating with one’s own work” (Ingold, 2013: 128) This describes precisely these acts of making music with improvising, performing, and composing.

character. It is a newfound music that, to me, sounds both ancient and modern. In Britten's pieces, the sonic sense is one of the pastoral, which in turn, metamorphose in my improvisations and composition into a contemporary skin that reverberates and connects the old with the new.

During the 2020 lockdown, I found myself grateful to have a process for solo improvising. It sustained me musically and emotionally. There was nobody to play to or with, and so I played alone, and it became an essential and necessary activity. I had the time to work continuously, to develop and evolve the music and found, happily, how the imagination thrived. Traversing each melody into different types of structured improvisation added to a continuing process of re-making and re-inventing that offered surprises regarding musical character. There were moments in improvising that I forgot to record, and later documenting these "good" moments in some form of notation could not ever really recapture how I got there or how it worked out. So, ultimately, I had to trust that whatever transpired I had to make "work" in situ because it is hard to anticipate bringing something back into a later improvisation. It never really sits well; the process is transient, as is the nature of music and its reality. As the improvising British guitarist Derek Bailey says, "Improvisation is best pursued through its practice in music ... and the practice of music is best pursued through improvisation" (Bailey, 1992: 142). Music sustained me, and I realized its power to transcend in all sorts of ways, including in that it became a surprisingly peaceful and happy activity and I found I enjoyed improvising alone. The music making engaged my mind, and daily, I looked forward with curiosity to finding new ideas. The activity never became dull or taxing, because the twists and turns within the inventing were constantly interesting and thought provoking. I was

immersed in the process, felt in touch with myself, and felt a completeness of mind.<sup>70</sup> In the composing, I had time to redress decisions and check the meaning and syntax. Stravinsky wrote about composition as being “the fruit of study, reasoning, and calculation that imply exactly the converse of improvisation” (Stravinsky, 1942: 132). However, in my case, my improvisations were absolutely the results of “the fruit of study and calculation”. They were structured and pre-planned and, in turn, became the roots of my composition. The lines between composer and improviser are blurred, and the two activities are further intertwined and linked in performance. This is the crux of this research.

### **3)Birtwistle, Holt & Sergeant: Collaboration and Creativity**

Commentary on Sir Harrison Birtwistle Collaborations

#### **Introduction**

I had the good fortune of working with Sir Harrison Birtwistle for most of my professional life, first at the National Theatre in the 1980s and then over many years with the London Sinfonietta and Birmingham Contemporary Music Group, taking part in performances of his works and world premieres. During

---

<sup>70</sup> In *The Third Tower, Journeys in Italy* by the Hungarian writer Antal Szerb there is mention of this happy state of being when he finds himself alone looking out at a beautiful view from the third tower high up in San Marino: “I am happy. Happy in the archaic sense of the word, according to which no child can be said to be happy: a replete happiness, containing everything. The Third Tower is mine. Italy is mine, not Mussolini’s. I am mine alone: alone in my self-completeness” (Szerb, 2014: 98). I find this description of his state of being chimes with my own in how I experienced my music-making.

this time, he wrote two works for me: *Pulse Sampler* (1981) and *26 Orpheus Elegies* for oboe, harp, and countertenor (2004). I have performed *Pulse Sampler* many times, premièring it at the 1981 Huddersfield Contemporary Music Festival and thereafter at the Southbank Centre in London and at various national festivals. This piece and *Endless Interrupted Melody* for oboe and piano (written for Nicholas Daniel in 1997) are the two pieces to be discussed here regarding their recent transformations resulting from a new collaboration with Birtwistle involving improvisation.

### **Context**

Over the last decade, Birtwistle and I had conversations about composition, notation, improvisation, and performance. His death in March 2022 has heightened the importance of the work we did together. In addition, our collaborations have also heightened the value of this work in terms of his legacy and my understanding of his music. My musical experience as a classical musician undertaking a master's degree in jazz performance (awarded 2013) deeply affected me and provoked discussions about the very nature of improvisation and its relevance in specific musical contexts. The profound experience for me about it was (and remains) that it unleashed my aural skills into an area of abundant creativity that encompassed the amalgamation of what I now believe to be the three requisite skills of a holistic musician: performing, composing, and improvising.

My training as a classical musician allowed me to attain a high level of instrumental skill and an understanding of aesthetics of style and skills in interpreting the classical repertoire. Although very specific and gratifying, it

lacked the time to explore a more diverse outlet of creativity. It is the case that interpreting musical scores involves imagination and the ability to understand what's behind the notation; interpretation requires an inquisitive and instinctive ear that can allow possibilities of creative interpretation to be explored. It transpired, however, that as much as this skill is fulfilling, it felt limited for me in its overall scope, and additional exploration in making other musical interconnections felt desirable. As a student, composing became an outlet that allowed me to explore another mode of expression, and writing ideas down demanded reflection on language, style, and methods of communication. It is an activity that was self-propelled and remains part of my own need to fulfil my musical life and general vocation. In conjunction with this, my engagement with improvisation has developed gradually, but it is now an essential element of my playing life, not only in how I perform, compose, and teach but also in how I interpret notated music.

Indeed, improvisation now comprises an explicit part of my daily practice in the continuing search to find my own musical voice and link it to a harmonic way of thinking. For many years, it remained a hidden skill that I experienced occasionally in educational workshops, but the exhilaration of it always entranced me. It continues to help me find new sounds and capture other dimensions of character that otherwise might remain lost. This essential exploration of sound via improvisation facilitates what I believe to be an age-old practice that consumes any player who wants to heighten and intensify their musical expression. During my jazz studies, improvisation became an integral part of my music making, in that it opened lines of communication in performance and gave me ideas for compositions. The notation of these pieces,

which included improvisation, introduced questions about interpretation, particularly in how a musician might understand the essence of the notated music and the sections of it that are deliberately designed in an open style, allowing decisions to be made by the performers, separate from any direct instructions by the composer.

Writing down the essential meaning of a musical idea demands clear and practical notational objectives. Within the notations of contemporary classical music, some composers (from the 1960s and onwards to today) found that they needed to readjust standard notation into their own idiosyncratic form to clarify their particular musical language. This is the case, for instance, in the scores of Lutosławski, Stockhausen, and Berio. In the new complexity music of Ferneyhough, the look of it is spectacularly complicated, with units of pulse that can be 6 or 12 (composites of 3 rather than the more standard 8, 4, or 2). Gérard Grisey needed to notate tunings involving sixth tones, similarly shown in the notation of Takemitsu and Hans Abrahamsen, to name a few. The scores look positively beautiful in their appearance, and particularly so because, in most cases, they were handwritten (since no computer program had yet been designed to cope with such complexity of notation). Indeed, the script of a composer's hand has a style that can also affect interpretation, because the character of the calligraphy can give clues to thought processes. Birtwistle often used single stems of demi or semiquavers without the groupings of ligatures. This can be difficult to read quickly, but the inflections, weights, and rhythms show a way of thinking. Moreover, in Oliver Knussen's scores, his tiny, meticulous handwritten markings of details in expression show a concern for controlling the intent and pace of the music. The visual style of this detail rubs off

in how one reads it, and it shows the level of intensity of expression in the thought processes. Perhaps the computer-designed scores of today set using the Sibelius program have ironed out a certain character that loses something in translation. Certainly, the visual variety of so many of these handwritten scores with their notational codes and symbols could be viewed as works of abstract art with each composers' language having its own style of calligraphy. Composers were, to some extent, improvising with notation in order to communicate their music efficiently, and depending on the complexity, this could also occasionally provoke angst in the musicians trying to decipher it. Open-score notation (which includes improvisation) can be just as idiosyncratic in its style in the quest to present the required coherent information.

In my conversations with Birtwistle, we talked about styles of notation and how the nature of improvisation within a composition can occasionally divert the stylistic character in ways that mean the composer loses control of the overall sensibility of their piece. And of course, it matters who is improvising and the methods and types of skills the musicians have. For example, the American jazz improviser/composer Henry Threadgill (b. 1944) composed his *Sixfivetwo* (2018) string quartet for the Kronos Quartet. The score has structures of carefully designed improvisation sections with codes for opening musical processes. The excellent improvisational skills of the Kronos players gave Threadgill licence to exploit their individual expressivity, enabling their musical personalities to direct the music and particularly for it to surprise him with sounds and gestures that he would not have necessarily thought about. The musicians were trusted to direct the music, and the improvisation itself is trusted because "the improvisational component is very important", as

Threadgill said in an interview describing the philosophy that guided his creation of this piece. “Kronos knows it’s important and I know it’s important. It’s a shame that the classical concert world doesn’t understand how important it is ... Everything is about exploration. We get to where we are because of exploration. That’s why improvisation is so important” (Threadgill, 2018). The difference in attitude and outlook is instructive. Threadgill’s need for improvisation comes from his jazz roots, which is a very different stance from Birtwistle, who aimed to capture his feelings of improvisation within the notation of his compositions. The matter that still haunted him after a lifetime of composing but not being a player improviser was that he could never fully notate what he heard. The pitfalls of notation and how to communicate the very essence of a musical idea are still thoughts he grappled with right to the end.

### **Performance and Improvisation**

Birtwistle trained as a clarinettist from 1952 at the Royal Manchester College of Music (now the RNCM) but discarded his instrument for full-time study of composition. However, he remained close to his instrumental roots and understood the skills needed for performance. Reading any notation involves multi-tasking via instrument, ear, style, delivery of communication, and interpretation. Sometimes, the notation can hinder how the music is expressed, compromising the most important musical element: the expression itself. Improvisation can unlock musical essence because its very nature is spontaneous, and it combines the elusive and beguiling qualities of energy and fragility. It can also dispel existing limitations and breathe new life into music, adding a new dimension to its meaning. However, this ultimately depends on a

player's personality, their experience in understanding the aesthetic of the composer's style, and their ability to add something stylistically appropriate and acceptable within the genre. Of course, it must be noted that there are wonderful players who deliver beautifully strong renditions without being skilled improvisers. Improvisation is not necessarily the complete answer; however, Birtwistle continued to ponder it and ask the question, how do you notate this quality? This is the conundrum. In allowing me to experiment with improvisation and introduce other parameters within his frameworks, he trusted me to free up the score as part of an exploratory act of performance practice, safe in the knowledge that it could work to his taste.

In searching for this quality, Birtwistle challenged me to improvise in concert with him. Perhaps this was because of his trust in my understanding of his aesthetics and the norms of his particular style and idiom. On two occasions, we improvised together, with Birtwistle playing the piano. They were short performances of a few minutes each (one at Dartington Hall in 2016 and the other at the Plush Festival in 2017), <sup>71</sup> but both performances encompassed something special and unique in character. We discussed the harmonic parameters and structure beforehand. In both cases, we decided on a series of modes and pentatonic scales, with a choice of routes and ladders leading to alternative modes and scales linked within and around a cycle. A structure was loosely determined based on the movements between the modes. At Dartington Hall, we rehearsed these ideas and discussed the quality of sound and decided that the final structure should be determined in the flow of the performance

---

<sup>71</sup> Unfortunately, I have no recordings of these performances.

itself. In the second performance at the Plush Festival, we had a conversation along the same lines and performed again. In both instances, the excitement of our interaction from the audience was palpable, not least because hearing Birtwistle play was (and remained) a rarity, but especially because there was a sense of a powerful instinct literally “at play”. For me, it showed the audience his respect for my artistic skill and knowledge of his musical aesthetic. Together we delivered something unique.

Each performance conjured up and revealed its own dynamism, and we were able to confront, lead, and relate to the material and bring it to a meaningful musical conclusion together. Birtwistle took risks in both performances via improvisation, a skill that many composers are not prepared to indulge in, let alone show. The classical performer as composer/improviser is a rarity, and Birtwistle, who was once a performer, was now perhaps trying to thread together the lost link of improvising into his creative process. The enjoyment of experiencing the musical instinct in situ is very powerful, and it confirmed a belief in the power of improvisation for Birtwistle. It remains the very essence that he was trying to notate. As one of the UK’s most established composers, his undoubted maturity perhaps gave him the power to relinquish a bit of control and take comfort in sharing this different dimension in his work. His exploratory nature was still very much part of his musical quest to get to the heart of the matter. We continued our conversations about the innate strengths of improvising and how its nature can influence large outcomes through small gestures and details. However, the problem (for any composer) is to set up a language in which there is space for it, not only in the interpretive sense but also in how the musical choices are made and the way the music moves and speaks. I

believe that in relinquishing a small part of his agency, Birtwistle showed his innate musical prowess and determination to keep exploring.

### **Revisions of Old to New**

In the scores of *Pulse Sampler* and *Endless Interrupted Melody*, Birtwistle was revising and searching for a slightly different stance in the musical language by collaborating with an improvising oboist. In hearing the “older” scores, he felt it necessary to change a part of them, not the original concept or structure, but a need to make the pieces “more like themselves”, a phrase that he himself defined in describing this process. This once again demonstrated his need to keep the explorations open, to keep moving forward into new territory, and to find a way of enriching his material further. Perhaps there was unfinished musical business in how an old idea can be re-defined and how to make it stronger or have more meaning. As perceptions shift, so do methods of expression. So, perhaps making a work more like itself was a way of enriching the original idea and giving it deeper relevance to the present. It also follows that in allowing improvisation into the frame of his compositions, he enabled a different parameter to become engaged via a trusted improviser who understood the specific style and aesthetic context. The improvising is not a random act. It is based on knowledge and experience and an in-depth awareness of style. Perhaps the leap into this “unknown” domain was made knowing that it could work out in a positive way with a trusted player for whom he had composed two substantial oboe works.

### ***Pulse Sampler (1981) for oboe and claves***

The concept of this piece, as the title suggests, is around the word *sampler*. It can mean either a test piece of cloth with embroidery that shows different techniques of stitching, or the sampling and mixing of, in this case, pulse. When listening to this piece, one can imagine the weaving of musical lines juxtaposed with interrelated pulses that create tension and release between the oboe and the claves. The claves player samples or improvises using a strict rhythmic cycle in a *mobile*. The structure has 28 periods divided by pauses in which the claves player gives a new pulse to the oboist, who takes the pulse into a specific and characterful melodic phrase. As soon as this happens, the claves player makes an instant metric modulation to a new pulse and once again improvises with the rhythmic mobile. The drama lies in how each pulse is played out between the instruments. Occasionally, the pulses coincide, and this produces lively syncopations. The music has its own notation; there are no bar lines, and there are moments for the oboist to improvise within a fixed sequence of pitches.

#### Steps in the revision process

1) In preparation for a performance at RBC in 2013, Birtwistle asked me to add a very occasional drum or metal percussion instrument to the claves part. He couldn't attend rehearsals, so after a conversation about where and how in the score the new instruments might interact within the music, he left the decision-making to me. He attended the performance (part of a Birtwistle festival at RBC) and enjoyed how the changes enhanced the drama of the music. At this point, he considered adding a cello, but later discarded this.

2) A further performance took place at Milton Court with percussionist Richard Benjafield (with whom I recorded the piece for NMC DO42S, 1997) in London 2017 as part of a Nash Ensemble concert featuring Birtwistle's music, which was recorded for Radio 3. (**Audio Ex. 33**). He asked for an extra rehearsal session to collaborate and clarify the procedure for further ideas. He wanted to change the initial mobile,<sup>72</sup> and, as we explored additional instruments (some of which were agreed to, and others discarded), he settled on a revised pulse mobile and was content with their sounds (Figure 47 below shows the change from the original to the revised version).

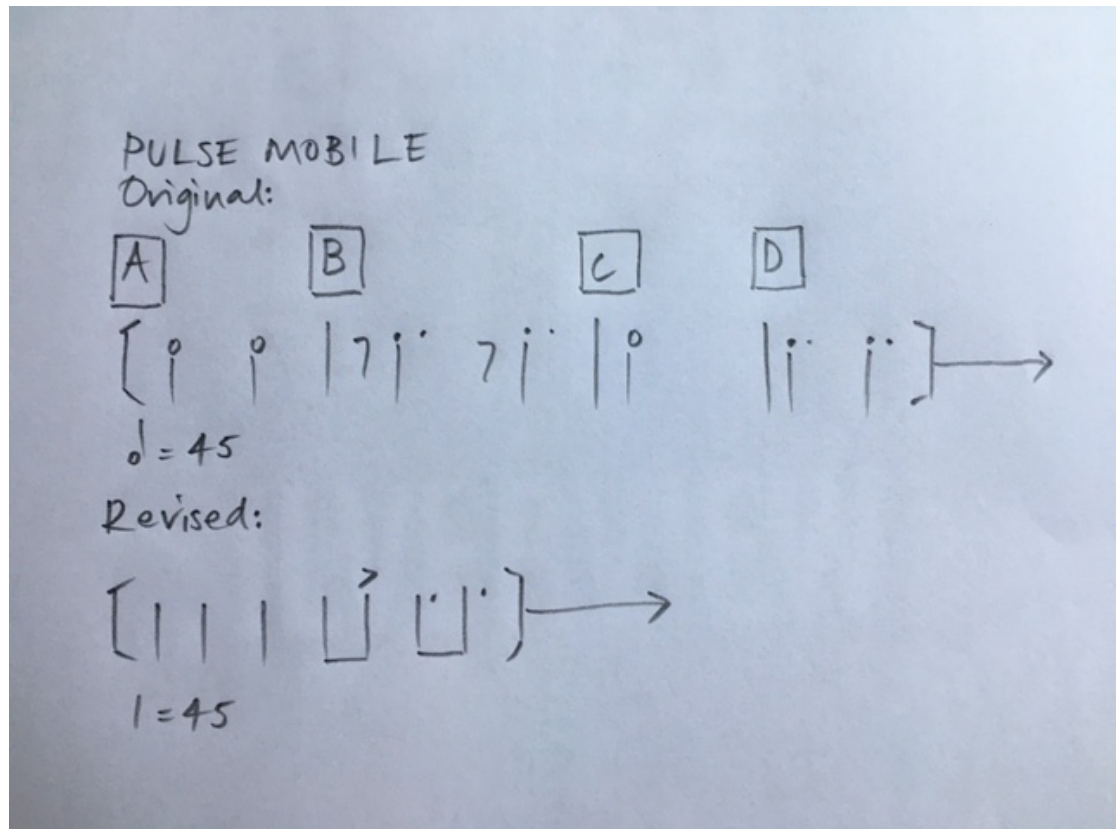


Figure 47. Revision of the percussion pulse mobile at the beginning of *Pulse Sampler*

<sup>72</sup> The instructions for the original pulse mobile are to maintain their four-part A, B, C, D order throughout the piece, continually repeated, with any part repeated any number of times, any part can be missed out except letter A. It must always finish each period of music and the original pulse values fit accordingly with each new unit of tempo.

3) A performance at Kings Place in London with the London Sinfonietta in 2018 heralded another opportunity for revision, and again, Birtwistle asked for an extra session to explore further possibilities, this time with the London Sinfonietta percussionist David Hockings. Other percussion instruments were explored. This time, the oboe part began to change. Birtwistle wanted the opening music (after a long pause on E) to be freer and less rhythmically predictable (see Figure 48). He described and sang what he wanted, and I improvised several versions until the intention felt right, and this became the agreed phrasing and style. In later sections, he also added specific grace notes and small glissandi at specific moments to enhance the expression.

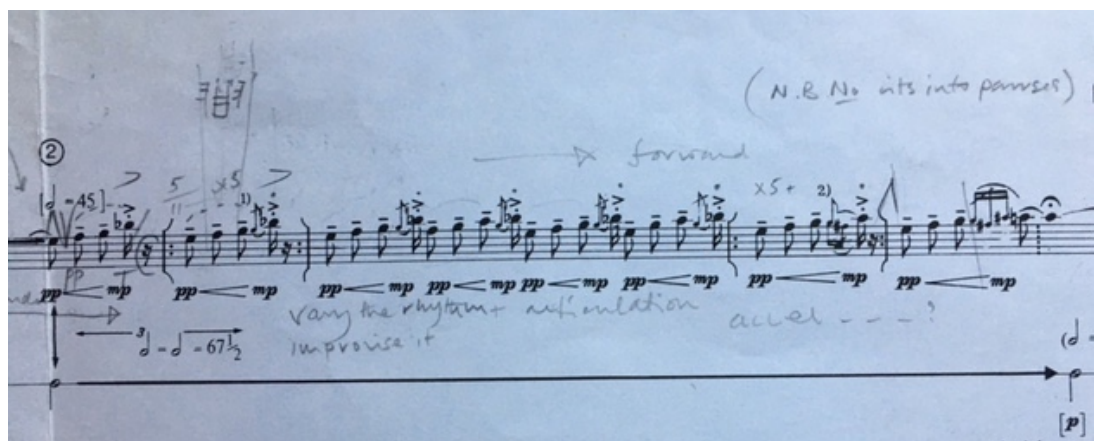


Figure 48. My oboe part with Birtwistle's rhythmic idea top left to be used in the improvisation.

4) A performance at the QEH at London's South Bank Centre in spring 2019 was a moment to distil the previous changes and check on percussion sounds. This version consolidated these changes.

5) A performance at the CBSO Centre in Birmingham 2019 (September) took place as part of a concert celebrating Birtwistle's 85<sup>th</sup> birthday with the BCMG percussionist Julian Warburton, also recorded for Radio 3. A

further session with Birtwistle distilled exact musical moments once again.

**(Audio Ex. 34.)**

### ***Critical Reflection***

*Pulse Sampler* is now a changed piece in that the initial instrumental concept of oboe pitted against a pair of claves, a quite intimate affair, has now emerged as more varied and denser with the addition of cowbells, various high and low woodblocks, cajon, crasher, tablas, temple blocks, and a bass drum. These instruments influence the acoustic balance because the overall effect is more contrasted in louder and softer sections, which intensifies the musical drama between the oboe line and the percussion. It is a different “take” on the original. You could say the concept “is more like itself” (as Birtwistle said he wanted it to be), but you could also say it is a different version of itself. This idea was born out of one of the methodologies of my research: to use improvisation to develop further explorations of an existing idea that can enhance its expression and communication. This art of musical dialogue, with the relationships between the composer, player, and listener, invite us into “a game – the very pleasure of music itself” (Benson, 2003). The game (so apt a word here) is one of the ways improvisation works; it can feel like a game to transform original ideas into a different point of view while retaining its original character. It is also only in real time that the stuff of music itself speaks. This instinctive energy is what all musicians try to capture. For a composer who notates music, this fundamental element of revision via improvisation is a way of reliving, reworking, and reconstructing the original to somehow make it more relevant. For Birtwistle, these revisions were his way as a composer to share the delight of improvisation

with me and to maintain a sense of aliveness in performance. He decided that a new edited and revised version of this piece needed to be made with all the changes corrected and clearly annotated, and suggested I should work in collaboration with him to do this with his publishers.<sup>73</sup>

Lastly, I have performed this piece with several percussionists, and with each one, there is a slightly different take on the material, particularly in how each player improvises. Despite the built-in chance elements within the piece, the responses change and alter depending on how gestures are delivered. It is a piece that gives a sense that it never really “settles” or becomes comfortable despite the same underlying structure. This is exactly the power that the chance elements and their improvisation generate. The many small but meaningful differences in each performance give a feeling of risk, excitement, and a musical freshness that contribute to dramatic communication each time it is performed.

In January 2021, Richard Benjafield and I recorded *Pulse Sampler* as part of a *Nash Ensemble Harrison Birtwistle Chamber Works* CD is BIS-2561 ([www.bis.se](http://www.bis.se)) at Kings Place, London, UK. (**Audio Ex.35**).

### ***Endless Interrupted Melody (1997) for oboe and piano***

In *Endless Interrupted Melody*, there are three different piano accompaniments to be played against one oboe melody. Each instrument has its own slightly different tempo, and there are no notated moments of

---

<sup>73</sup> Sadly, I will now have to do this alone, and the process is adjourned for the time being.

synchronization, thus creating an element of chance in how the instruments interact. The oboe part offers choices for the oboist to start at one of three places, and as the melody proceeds, there are again choices of direction at several signs. This automatically means that the melody will never be the same twice. Each of the three piano accompaniments has a slightly different character, which influences how the oboe melody responds to the endlessly interrupting choices that must be made within the melody. Because the piece has an inbuilt chance element, no two performances are ever quite the same.

### *Process of Revision*

A performance took place at the QEH at London's South Bank Centre in October 2019 as part of a London Sinfonietta concert celebrating Birtwistle's music. Three days before the performance, Birtwistle said he would like to revise the piece by introducing improvisatory ideas and manoeuvres. The day before the concert, we met and discussed ideas (listed below), and I improvised to him with certain motives within the piece. Following this, on the same day, we met the British pianist Andrew Zolinsky, and Birtwistle made one further change to the piano part – a short motif to begin each of the three sections. For the second and third beginnings, the motif became a little longer each time, and Birtwistle wrote the motif into the piano part.

The short time for preparation of these changes added a certain adrenaline and intensified the chance element in the piece. Previously, the oboist could decide which direction to take the melody at certain given points. This time, the decisions were opened further to allow for flights of imaginative fantasy within the strict musical stylistic parameters. This is very similar to

traditional procedures in “jazz” improvisation (I use the word jazz in its loosest sense), where the strict parameters of harmonic form are adhered to as the improvisations are made. This is how I proceeded with my improvisation of this piece in performance. The style of Birtwistle remained intact during my improvisations – I could do this because I have listened to and performed a lot of Birtwistle, so my ear understands the stylistic boundaries. This highlights one of the facets of improvisation in my research. The aural history is part of the personal voice of an improviser, and the context of study influences the music that is made. Birtwistle trusted my ear and allowed me to improvise within his music. To hear the recording of QEH performance on October 15, 2019, please listen to **Audio Ex.36**.

### *Critical Reflection*

It became part of Birtwistle’s working process later in his life to revise some of his music.<sup>74</sup> His experiments in changing some of the parameters seemed to reflect a need to keep the music relevant and alive. The British critic and author Ivan Hewett noted, “Birtwistle wants his performers to feel free to interpret and put their own personality into his music” (Hewett, 2003: 129). With the above pieces Birtwistle gave me licence to be free and to put my personality into his music via improvisation. For this, I feel honoured. It is apparent that the now general complex notations of modern music have shrunk types of free expression. Being able to play freely is unusual. Performers make

---

<sup>74</sup> For example, his *Ritual Fragments* (1990) for the London Sinfonietta was revised and renamed *Cortege* (2007).

judgements about types of attack or lengths of *accelerando*, and these indicators of expression are somehow all that's needed in getting the music across, and they become gestural affects in the music. If it is possible, perhaps future oboists will relish the opportunity to unpick and explore the moments of improvisation Birtwistle encourages. The "endless interrupted" oboe melody has inbuilt interruptions but sustains a lyrical and sensitive nuance in line and contour. Perhaps this freedom within composed structures could mark a performative approach in modern contemporary classical music, where the performer steers the composer's wishes, but at the same time opens inroads into a more personal expression.

### **Holt & Sergeant: Collaborative Ongoing Relationships**

The following is a summary of two ongoing collaborative relationships that, although they pre-date this research, continue to influence my methods of playing and improvising. However, the last piece I discuss by Sergeant is still in progress. It shares a desire to explore as yet uncharted areas of perceptions in oboe sound that reflects aspects of this research.

The British composer Simon Holt (b. 1958) has, over the years, written seven pieces for me, the first being *Banshee* (1994) for oboe and percussion (Holt, 1997). It is an evocation of how an oboe can sound both untamed and tensely serene, two qualities in Simon's music that show powerful extremes of expression that I admire. In a chapter I published on Holt's music (Maxwell, 2017), I discussed our musical relationship and how we collaborate. In essence, we share the desire to find ways to reconfigure different aspects of how the oboe's sound can be perceived. In this chapter, I explore the music from a

player's perspective, showing approaches to technique and interpretation, and show how the music works in performance ... and how the music relates to the growing canon of contemporary music for oboe (Maxwell, 2017: 162). The idea of any form of improvisation was not discussed because, in the early years, it was not such an important aspect of my musical life. I knew that essentially Simon wanted to compose, and improvisation was not an angle he wanted to take, which, of course, I respect. I improvised small ideas for him in our rehearsals, but these were to express a sound and feeling on my part rather than something he could compose into the score. The collaboration is one of composer to player with a deep understanding of intent. The extremes of dynamics and register in his music force me to be versatile in how I can play, and it all adds to a sense of variety and flexibility in technique and in how I improvise today.

In my collaboration with the British composer Matthew Sergeant (b. 1984),<sup>75</sup> who was the Birmingham Contemporary Music Group's Composer in Residence 2008/9, I suggested that we use improvisation as a key compositional element. In the resultant piece, *listening to a still small voice* (2009),<sup>76</sup> for the BCMG ensemble, the programme notes of the score state: "the soloist is asked to improvise her own lines, interacting with the harmonies and textures within that which surrounds her", and in the performance notes of the score, there are instructions for the soloist "detailing what is to be explored in their

---

<sup>75</sup> Dr Matthew Sergeant BMus (Hons) MPhil PhD FHEA  
Senior Lecturer in Composition Bath School of Music and Performing Arts,  
Bath Spa University, [www.matthewsergeant.com](http://www.matthewsergeant.com)

<sup>76</sup> *listening to a still small voice* for improvising treble-clef soloist, trumpet, percussion, piano, violin and violoncello commissioned by SAM/BCMG as part of the 2008-09 apprentice composer-in-residence programme.

improvisation". This opportunity was the beginning of my belief in a form of structured improvisation that includes the memorizing of specific material and its development in improvisation. This poses interesting questions about the nature of a contemporary musical language that uses improvisation as an important tool in communication. This confirmed my belief that this type of music making works as a new form of expression within contemporary music. It breaks down the boundaries between composer-performer-improviser and delivers something fresh, energized, and new. Interestingly, Sergeant states in his performance notes about the improvisations: "Failure to observe these instructions may be considered as comparable to performing incorrect notes in a fully notated work" (Sergeant, 2009: iv). This confirms the idea of structured improvisation, which at its heart is the internalizing of specific material as a means with which to spin a music that has a meaningful harmonic base and functions as a clarification of the form. This structured process has become a necessary part of my identity as a practising musician, and its importance as a tool for a specific type of creativity is shown and explained in the previous case studies.

Our collaboration is continuing, as Matthew is composing a new work for solo oboe that attempts to find another oboe voice, one involving new sounds created with unstable multiphonics. It is called *Study (after Yoshimi Futumara)*, the first draft written in 2022. His general remarks in the performance note articulate what we are both trying to find, which is a sound world where the instrument dictates in textures that are unstable and deliberately unpredictable in the choice of multiphonics that may or may not sound consistent. This inconsistency is part of the piece's aesthetic. The score acts as a set of

instructions to “offer” the oboe, and whatever happens is the “decision” of the instrument itself. (Sergeant, 2022). This stance is new because the instrument, a modern oboe, becomes something primitive and unknown. It takes me back to my explorations with the aulos and the nadaswaram, and that underlying need to uncover other oboe voices. It is a place where the chance element is paramount, and my control of the instrument is given over to indeterminate sounds, not unlike the feeling of improvising with the unexpected. Our first session took place in March 2019, and the project is in progress. In the future, I can imagine it sitting within a context of improvisatory pieces of my own in a programme of contemporary music or free jazz.

## Chapter 5: Final Project: Commentary on *Janus*: <sup>77</sup>

This final section documents the process and contextualization of *Janus*, the title of a piece I completed in August 2022 as a commission from the Birmingham Contemporary Music Group. It represents a culmination of my PhD research involving investigations in perspectives of oboe character. It defines my research, and this commentary will document the conclusive outcomes of this exploration. The piece introduces the two unusual and largely unknown double-reed instruments I explored in earlier chapters: the ancient Greek aulos and the South Indian nadaswaram. It brings together my research strands, connecting the three skills of composing, improvising, and performing, and unites them in one directive role. The performance took place with my collaborative musicians at the RBC Recital Hall on November 19, 2022.<sup>78</sup> (Live recorded performance **Audio Ex. 38**).

### Preparations and Outcomes

Initially, when I was thinking about this piece and wanting it to involve the aulos with ideas of doublings, reflections, pairings, etc., I had a fortuitous experience – I saw the 17<sup>th</sup>-century painting *A Dance to the Music of Time* by Nicholas Poussin at an exhibition in London, and this set off thoughts that began to take hold. (See Figure 49).

---

<sup>77</sup> Please refer to hard copy *Janus* score for reference.

<sup>78</sup> See *Janus* Commentary Appendix BCMG programme note for details.



**Figure 49.** Nicholas Poussin *Dance to the Music of Time* is licensed under CC BY-NC-ND

In it, a two-headed bust of Janus (and a winged old man playing the lyre, representing time itself) observes four figures dancing in a circle: a never-ending cycle, a wheel of fortune or the cycle of the seasons rotating forever. I began to imagine music that repeats around a central axis with four protagonists. The aulos very much belongs to the period of the Roman Janus, so my thoughts started to fit into a scheme. The four protagonists become four composed arches around which and through which improvisations can move. They function as gateways, and the improvisations have harmonic, melodic, and rhythmic links to them. The style and character of the improvisations are dictated and calibrated by these arches, and the overall structure allows space for the improvisations to reflect on the written material.

In the initial stages of all my practice-based explorations, I recorded short improvisations with specific restrictions on, for example, pitch, articulation, and rhythm, to explore ideas. My ear guides my improvisations using the experience

gathered within this research. In this case, the aulos, nadaswaram, and oboe steer my improvisations. Once the ideas take hold and develop substance, the composition process assembles the motivic details and weaves them into a cohesive structure. The compositional process, which leaves time for decision-making, moulds the material into more detail, with layers of counterpoint joining the lines and textures.

*Janus* is scored for oboe (aulos/nadaswaram), aulos 2, B-flat clarinet/bass clarinet, B-flat trumpet, double bass, percussion 1 (vibraphone/kit), percussion 2 (marimba, bass drum, 3 tom toms, wood blocks, splash cymbal), and live electronics. It is primarily conceived with the aulos in mind, but also portrays the nadaswaram, offering them new identities in a contemporary context (more detail to follow on this in the section “concepts and background sonorities”).

During the summer and prior to rehearsals in November 2022, I held a few days of workshops with some of my collaborative musicians to explore specific compositional ideas with improvisation and to rehearse and hear the balance of some written material. In the summer workshops, I also decided to make recordings of free improvisations with aulos, double bass, and percussion. I wanted to find out how to balance and pitch the aulos and consider where I could take it musically, particularly in the ultimate concert in November. The sounds surprised and excited me with their aural novelty, and thankfully, in recording them, we preserved their improvisatory making. My instructions for each improvisation centred on character and mood and remained harmonically within the aulos scale. The instrument became my tool and ally in directing events, and the chemistry between my collaborative musicians was also a defining factor. The music had a strong presence and homogeneity. The aulos is

unfamiliar to the ear in this context, but the resultant music felt new and inspiring. We crafted the musical flow in the moment, and I believe this was possible because of the long-standing collaboration and relationships I have developed with these musicians (who I worked with in my master's degree in jazz performance in 2012/13). Within my compositional methods, it is essential to understand the musical personalities of my collaborators, to generate any effective musical conversation. There is an instinctual understanding about how to proceed, and in these recorded improvisational performances, the music has substance and meaning. They also celebrate the power of a music created in real time. In his book *Improvisation*, Derek Bailey (1992: 142) wrote, "music is fleeting; its reality is its moment of performance". In these recorded performances, the music has its ultimate say, and this strand of improvisation in my research is evidenced. I have decided to add some of these trios to complement the final edited recording of *Janus* for Birmingham Record Company (BRC/NMC *Janus* 2023).

Prior to the first performance, we had two three-hour rehearsals and a dress rehearsal. During the rehearsals, I made a few changes to the score regarding tempo and flow (these are documented in the back of the score) and were made in response to acoustic and musical issues that I wanted to revise – events heard in real time are different to those heard in the imagination.

We recorded the complete piece during the dress rehearsal and the performance. The final edited recording was finished in June 2023 and released by the RBC Birmingham Record Company in September 2023.

## Concepts and Background Sonorities

In *Janus*, both the ancient Greek aulos and the South Indian nadaswaram bring together the double-reed soundscapes of an ancient instrumental music with that of a contemporary one: ancient wisdom meets modern knowhow. Here lies the beginning of an exploration of oboe essence. The piece uses improvisatory and compositional methods that combine, alongside the contemporary sound world of the modern oboe, the music texts and playing histories of these two exotic double-reed instruments. Playing and improvising with these unusual sounds have inspired and led my contemporary ear. All the material for this composition has been generated by my aural investigations, alongside the techniques and musical models I found in each of their case studies. The melodic, harmonic, and rhythmic ideas have been developed by a process of trial and error through improvising.

The concepts behind *Janus*, the two-headed Roman god of transitions, duality, beginnings and endings, stem from the aulos<sup>79</sup>. The idea of “two” and “double” became my starting point, inspiring ideas around doublings, pairings, mirror images (similar and dissimilar), reflections, repetitions (ornamental, regular, and irregular), similar and dissimilar versions, and duets within duets. The instrumentation reflects these doublings through mixes of oboe/aulos, oboe/trumpet, oboe/clarinet, aulos/trumpet, etc. The chosen wind instruments reflect each other, and the double bass, percussion, and electronics are the glue that binds them together.

---

<sup>79</sup> Listed separately on USB stick “BCMG video Janus/aulos explanations” with playing and explanations about the aulos and the concepts behind Janus given by Melinda. Also listed in discography for digital online access.

The electronic sounds underline the harmonic structure over sustained pedal-note combinations. They are generated from recordings I made of specific notes played on the aulos, nadaswaram, and oboe (some of which are note-specific multiphonics and harmonics). This double-reed colour enforces a specific reedy sonic character. The aim of the live electronics in performance is to distort, stretch, and intermingle different colours of double-reed sounds to fit the improvisations at specific points in the score. The pedal notes remain constant.

Aside from the electronics, the rest of the harmonic reasoning derives from the makeup of the double lines that can be made on the aulos and its pitch patterns of major/minor that revolve around ratios of 4ths and 5ths. I have also referenced ancient Greek music theory, which is based on tetrachord relationships. The flexible aulos tuning, which is based on subtle inflections from the way the double reeds vibrate, encourages explorations into microtones.

### **Compositional Structure and Process**

The structure of four composed “arches” are the frames that hold the form together. The improvisations travel through them and highlight specific double-reed character. The basic tempo rotates around crotchet 90, which either slows by half to 45 or doubles to 180. The piece has a central pitch of B-natural, around which the harmony of the arches rotates. Each arch has its own scale, and none use the pitch of F-natural. This is to give it dramatic significance when it does eventually sound. I use pitches that fall outside the scales, or auxiliary notes, to accentuate harmonic contrast. B is a fundamental pitch for the aulos, nadaswaram, and oboe, and the alternation between it and either an F-sharp/F-

natural axis acts as an interval that provokes certain harmonic decisions and outcomes. The F-natural acts as a trigger to signal telling moments in the form (see Figure 50).

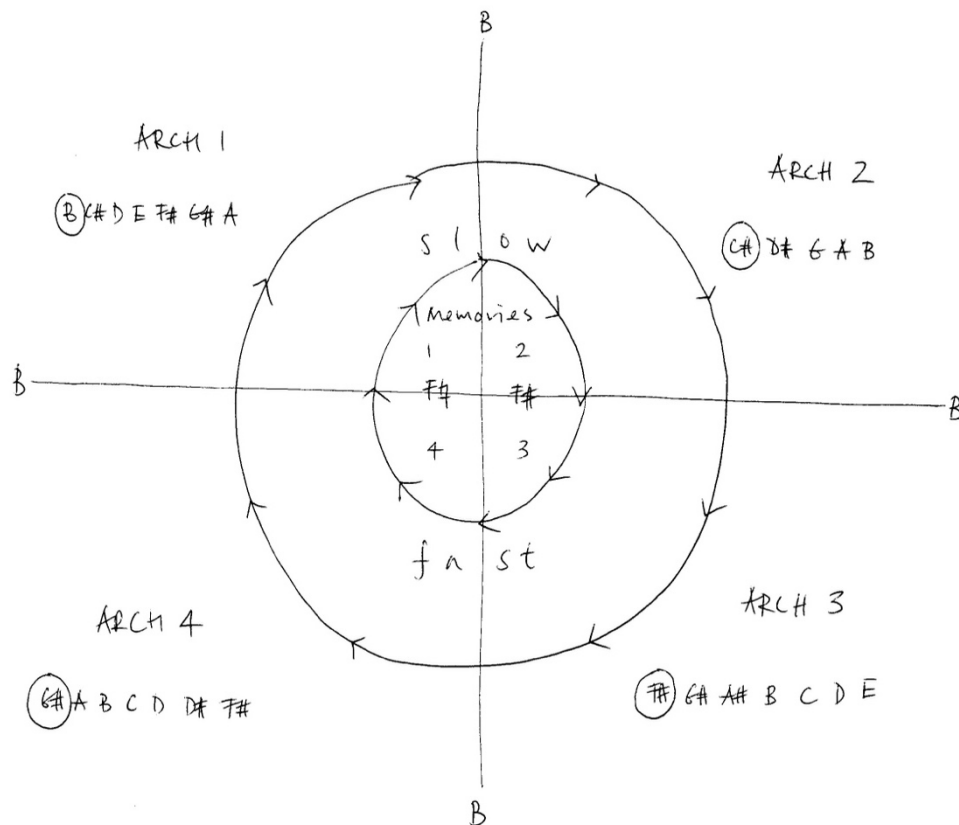


Figure 50. Diagram of Janus' structure.

The piece begins with a slow introduction that presents the aulos in a section that I call the “aulos praeludium”. This is a moment when the player can “test” the instrument, check the acoustic, and start to feel ready to play the opening slow fanfare with trumpet (in score, letter A). The riff in Perc 2 is one of three riffs that permeate in various guises throughout the piece.<sup>80</sup> This one, on

<sup>80</sup> See score page 36 for the three riffs.

bass drum and tom toms, is very slow and sits with the tritone of B/F-natural in the electronics. I wanted to create a mood that was dark and expectant.

The scale for the first arch derives from the natural scale of the aulos, which is based in A major with B as its root: a Dorian scale. The combined sound of the muted trumpet and aulos sets the character of the music. As I mentioned earlier, during the compositional process, I planned workshops (in June and November 2022) with my collaborators to test material with and without improvisation. One workshop involved my collaborator, the trumpeter Percy Pursglove, to seek out how the aulos would respond to playing at A440 and how the instruments would blend in pitch and timbre. The timbral blend balanced well, and the differences in pitch colour produced an unusual sonority. Using some composed material, we explored further through improvisation and found new qualities of sound never heard before. We also explored the high aulos register with unmuted trumpet and I noted these sounds as possibilities for improvisation within the main piece (**Audio Ex. 37**). These sounds are introduced in the sections in the score marked *Improv 1* and *Improv 2*.

After a short pause, I introduce new material in the score at letter B, marked “playful, exuberant”. This is a duet dance for clarinet and vibes at double the tempo of the slow fanfare. The double bass underpins it with an articulated pedal note on B that uses one of the piece’s three riffs. The dance is interrupted by the slow fanfare of the beginning, transformed here by the oboe and unmuted trumpet. The dynamic is also soft and at double the tempo of the dance. I switch the sound of the aulos material into that of the oboe, which makes a connection between the double-reed soundscapes. The dance returns, however, and reaches a climax (in score before letter I, page 9), only to be interrupted again by the

oboe and trumpet fanfare material; however, this time, the dynamic is loud, the register high, and the tempo returning to the original slow fanfare. There is a sense of return to the original material, but a transformation has taken place. This material has become a double of the original aulos fanfare. It is a reflection in a different guise, and this verifies the ideas of doublings that gives credence to the concept of this piece.

Another structural interruption in this section is the vibes entries that reinforce the harmonic backdrop.<sup>81</sup> The last, one bar before letter J, introduces *Improv 3*. This is a composed set of chord changes articulated in a 3/4 and 3/8 rhythmic sequence over which the oboe and trumpet improvise. The bass clarinet changes the sonority and prepares the entry of Aulos 2, which takes place at *Introduction to Arch 2*. Letter J is in a relaxed tempo that establishes a duet between the oboe and trumpet. During the rehearsal process, the musicians decided this moment needed more time, and therefore, a repeat was added.<sup>82</sup> This is an example of collaboration where the composer accepts a communal decision. The score is not a sacrosanct work, but rather a flexible one that initiates acoustic decision-making. This action consolidated my belief in this method of working. The composed score is a vehicle for giving ownership of the music to the musicians. It also confirms their engagement in the process, their level of listening and belief in the music.<sup>83</sup>

---

<sup>81</sup> In the penultimate one (4<sup>th</sup> and 5<sup>th</sup> bars after Letter I), I felt in rehearsal that I needed to add an accumulative double bass rhythmic figure to increase the energy. This is one of the revisions in the score.

<sup>82</sup> This revision is in the score as a repeat between letters J and K.

<sup>83</sup> This tallies with my reworkings of and relationship to the Birtwistle scores, as discussed in the Birtwistle case study.

*Introduction to Arch 2* (page 11), which is marked “solemn, majestic”, is the moment for my aulos collaborator/improviser to be presented. It is called *Improv 4*. One of my aims in this piece is to showcase each of the musicians and give them a moment to present their musical personalities. Here, I created a texture that is based on the fundamental note of this piece, B. It is a 4-bar repeated sequence that is articulated by a syncopated rhythm in the double bass and a slow bass drum pulse. The aulos player shows the bass clarinet when to play, and this marks the end of this repeated sequence. This allows the player to determine the ultimate duration of this sequence and pace the improvisation accordingly. The bass clarinet line is an inbuilt aural signpost that shows the rest of the group the end of this section. No one needs to count any bars, and it gives everyone space to listen. The backdrop pedal-note texture gives scope for the aulos to extend the improvisations without any harmonic restrictions. The aulos can bend notes up or down a semitone, and this can lend a chromatic character to the resultant music, if so desired. A prior workshop session with my collaborator aulos player, Callum Armstrong, established a moment to explain the concept behind *Janus*, and to encourage unorthodox aulos melodies in our improvisations to accentuate a more divergent approach. It is natural to slip into a modal, repetitive, hypnotic type of music, as I found myself doing when improvising with the small number of notes available on the aulos. However, the musical point of *Janus* is to place the aulos in a contemporary context to define another possible angle of double-reed character that reflects on relationships between the past and a new present. I wanted to find a different language to draw on; hence, the unusual scale for *Arch 2*.

Before letter L, *Arch 2* (page 12), which is marked “slow, processional, spacious”, there is a transition moment with a repeated bar introducing a pentatonic scale C-sharp, D-sharp, G, A, and B. The D-sharp and G-natural are break-away notes from the A major aulos tonality. These notes need to be inflected by changing the lip pressure around the reed. These notes are random in pitch because they are not fingered, and therefore are very pitch flexible. This creates a delicate, changeable sound that bends and shifts against a C-sharp pedal in the electronics. The marking for this section describes this characterization: “searching, becoming more edgy”. Here, the two auloi improvise together, and I add a pizzicato double bass to play “like a lyre”. This perhaps alludes to an imagined ancient Greek soundscape.

As we enter *Arch 2* (at letter L), the double bass plays an arco pedal note returning to B. The composed sections show a duet between the clarinet and trumpet that develops from a one-bar into a 3-bar phrase to finish. This duet music alternates with improvised sections for the two auloi (over an articulated ostinato for vibes, marimba, and pizzicato double bass each time) that repeat to allow the auloi space to improvise. The tempo is slow, at quaver 45. The double bass pedal notes change according to the pentatonic scale and remain pizzicato when with the auloi, and arco when with the clarinet and trumpet. The improvising sections indicate a sequence of moods I outline as “still edgy”, “edgy, subsiding”, “becoming relaxed”, and “tranquil”, which bring the auloi back to a restful place. At this point, I take up my oboe to allow a joining together of oboe and aulos to occur, another facet of the sound of double-reed-ness if you like. The scale prescribed for the auloi remains, and at *Improv 5*, marked “Interweaving, complementary” the aulos, joined by the oboe, muted trumpet, and vibes, plays

out to finish and draws this music to a close over a C-sharp pedal. *Arch 2*, therefore, is the context in which the aulos is presented alone, with another aulos, and then joined by the oboe. The music depicts this instrument from all angles.

Before *Arch 3* (page 14), there are three sections of structured improvisations for the ensemble:

*Improv 6* is a moment for phased melody lines.<sup>84</sup> I wanted to open out the music into a loose improvisation where my composed melodies could be extended, ornamented, and cut up into smaller fragments.<sup>85</sup> It needs to be said that in any future *Janus* performances with different musicians the improvisation sections will give an alternative character to the piece even though this is quite a prescribed section. I like to think as the composer of this piece that it can fit the players personalities and the improvisations are vehicles for their specific imaginations. The composition is open to this idea.

*Improv 7* is a duet for the two percussionists. Here they interact using the three riffs<sup>86</sup> that permeate the composed material; the extra instruments of woodblocks and splash cymbal in Perc 2 add other timbres. The double bass joins with an F-natural pedal to interact with the B pedal in the electronics. These sounds have some form of sonic distortion via improvisation with the percussion duet. The sound of the tritone only happens at specific structural points, and this moment is telling, as it prepares for the mid-way moment in the

---

<sup>84</sup> See *Improv 6* in score Appendix, page 32: treble clef melodies and bass clef melodies.

<sup>85</sup> We had a limited amount of time to explore this section fully in rehearsal. This type of prescribed format needs time to judge how textures might interact. The resultant music could become more significant (in the recording, this section is relatively short).

<sup>86</sup> See *Improv 7*, page 36 in score.

piece. The double bass interacts with the live electronics in forms of harmonics and rhythmic figurations. In the live electronics this is the opportunity to bring in other extended sounds to prepare for *Improv 8*, a solo for the electronics.

*Improv 8* is the moment for the live electronics to fully explore the double-reed sounds and make a strong musical statement. I mark it “take over, dominate”. The B pedal disappears and F-natural takes precedence. This pitch is rarely heard in this piece alone since none of the scales of the four arches uses an F-natural. This gives this pitch dramatic power when it does sound. I conceived the structure of the piece as the first two arches being slow and the last two as fast; therefore, the F-natural heralds the end of the first half of the piece, after which the music takes a new direction.

*Arch 3* (page 15) marked “fast, agitato, interrupted” is the liveliest music in the piece. It is a sextet that brings together three formations of duets: oboe/clarinet, trumpet/vibes (in a call-and-response conversation), and a percussion/pizzicato bass duet that hockets combinations of the three riffs. The basic scale is whole tone on F-sharp but with a B on either side of A-sharp and C. The pitches outside this scale: C-sharp, A, G, D-sharp are added in occasionally, but there is no F-natural (for reasons I explained earlier). At letter N (page 16), there is an interruption to a twice as slow tempo using predominantly the notes outside the scale. The dynamic is suddenly soft, and the double bass plays arco to make the music feel heavier. It is, like the interruptions in the first arch, a method I decided would increase the tension. The three duets then continue, but with the material becoming more agitated, only to be interrupted again by a composed solo for drums in Perc 2. This gathers momentum, with the oboe and clarinet articulating a rhythmic figuration against the drums. This accumulation

of energy, under which an F-sharp pedal in the electronics enters very softly with a crescendo, prepares the entry of the nadaswaram at *Improv 9* (page 20), a duet with live electronics with the trumpet joining ad lib.

The nadaswaram has a volatile sound, and its double-reed character is enhanced by this sonic variability. There is a built-in capriciousness because the sound is loud, vibrant, and extremely flexible in pitch, which allows for a bending of pitch that gives expressivity to the phrases. In my case study, I show this characteristic and, having listened to recordings of Indian nadaswaram players and live ones in Chennai, I found a way to portray some of this quality in my improvisation. This moment in the piece gives the instrument a chance to stand out against a backdrop of F-sharp colourings in the live electronics. The preceding scale on F-sharp in *Arch 3* is further explored here, and although (as shown in my case study) the “home” nadaswaram scale is B Phrygian, the flexibility in pitch allows me to inflect both scales. My collaboration with trumpet in my case study led me to introduce it once more with the nadaswaram. These instruments continue in their duet, improvising over a composed six-bar phrase, that is another duet with vibes and double bass. This happens at letter R, and I mark it “slow, sinewy, low, forthright”. The electronics still hold an F-sharp pedal, but it remains as a backdrop only. The trumpet sound complements the richness of the nadaswaram, particularly in its dynamic energy, and is another opportunity to enjoy an improvisation with a colleague whose musicality I wanted to share. This is an important aspect of the piece, which affirms a history of working and playing together with established collaborators that enhances all aspects of improvisation. There is an accepted methodology of instinctual interaction that affects the resultant music, and this reinforces the power of it.

Here is an improvised duet over a composed one, the idea of doubling being the basic concept of this piece, and a celebration of a new double-reed sound in a new context.

The repeated six-bar phrase takes the music into *Improv 10* (page 21), a solitary duet for trumpet and double bass marked “staccato, spiky, disjointed, sparse”. I notated a three-bar rhythmic figuration as a starting point in an open repeat form. The tempo is fast, and the dynamic energy is fortissimo and acts as a transition to *Arch 4*. This is another moment to give two of my collaborators a moment to display their musical chemistries together in improvisation.

*Arch 4* (page 21) marked “ceremonial, stately” begins with a short, composed duet for oboe and trumpet that signals an introduction to the final dance at letter T (page 22). A pedal note on G-sharp shifts upwards (from the previous F-sharp) to introduce a hexatonic scale, mostly in an octatonic format beginning on G-sharp–A, but with a gap where the F-natural would be (a pitch I wanted to avoid, as explained earlier).<sup>87</sup> Instead, the D-sharp moves a minor third up to F-sharp, returning to G-sharp. I found this scale expressive when improvising with it because of the mix of semitone/tone steps and the minor third within the pattern. This duet alludes to the opening slow fanfare by using rhythmic unisons, except the phrases rise instead of fall. And the character has changed. It is not mournful, but rather hints at a more jubilant music to come with a gentle accelerando into the dance.

*Dance* (page 22) is marked “a little faster, poised, controlled vitality”, brings all the instruments together (except the electronics). The oboe and

---

<sup>87</sup> The scale: G-sharp, A, B, C, D, D-sharp, (– F-natural), F-sharp.

trumpet duet continues with repetitive playful articulations, while the clarinet accompanies with the opening fanfare trumpet “theme”. Perc 2 and the double bass hocket together with the specific *Janus* riffs, and Perc 1 accentuates the rhythms and articulations in the duet lines. The material is interrupted (seven bars before letter V page 24) by a slower rhythm. As previously, I use interruptions as a compositional device to increase dramatic tension. The music remains forte, but after three bars of sustained slow chords, a subito pianissimo forces a rallentando and brings events to a halt. The dance immediately begins again, and this time, the clarinet and vibes take over the duet material. Soon, the oboe and trumpet re-enter to join the dance by initially referring to the opening fanfare. Once again, another interruption of the previous slower music occurs and brings the dance to a conclusion. Here, the electronics enter on the home pitch of B, alternating it with F-sharp and F-natural. This moment signals the re-entry of the aulos, which initiates a series of four *Memories* (beginning page 28).

I had two thoughts about how to end *Janus*. I wanted to look backwards through the piece, to review its past and take the music forward at the same time. This ties in with the idea of a two-headed Janus perspective of looking forward and backward. Firstly, to have a tutti free improvisation with one restriction, to use any material from any of the four arches to extend. Secondly, to prescribe a route through each of the four arches in turn and create an order of events. I chose the latter because I wanted to keep a defined structure to the music. These thoughts posed some interesting dilemmas. In a free improvisation, events could develop outside the composition’s intentions, and the overall identity of the piece could be lost. In a structured improvisation, there is the sense that one is inviting the musicians to join a dialogue that lends a balanced

narrative to proceedings. The energy is contained and reflective, and the identity of the piece remains. I decided that each of the memories should allude to events in each arch in turn: Memory 1/Arch 1, Memory 2/Arch 2, etc. To summarize: in *Memory 1*, the bass drum riff and aulos return, and the aulos scale is used to extemporise fragments of material prescribed from the clarinet and vibes duet. In *Memory 2*, both the auloi interact with their scale from *Arch 2* with added chords to fill out the harmonic texture. The mood is “slow, sustained, melodic”. In *Memory 3*, the two percussionists take centre stage to remind us of the “agitato, fast interactions” of *Arch 3*. I have added widely spaced chords for the electronics, and the oboe joins with trumpet, using the prescribed fragments of dotted rhythms. The last, *Memory 4*, the nadaswaram and aulos return, signalling a “resolute, fast tempi” texture. Here, the combination of nadaswaram and aulos have never been heard before. In the performance, the aulos uses the high register to add sonic weight to this unusual combination of double reeds. I join on oboe with bends and multiphonics to heighten the double-reed soundscape. Further prescribed fragments from *Arch 4* are suggested, and an expansive series of chords in the electronics is prescribed to heighten the energy. The electronic sound material available is not only the double-reed pedal-note colourings already mentioned, but recordings of the three riffs on double bass and percussion that I made in the June workshop when I tried out material. These, added to the double-reed sounds included within the chords, give scope in this last memory for the textures to become denser and heighten the drama to bring the music home. The advent of a B pedal in the electronics signals conclusions to be made in the improvisations, and a B unison, the pitch of the double-reed

instruments and home pitch of the piece, is the final say. (Live recorded performance in **Audio Ex.38**).

### **Post-performance Reflection**

*Janus* travels into unknown territory, never heard before in the UK, and is the first piece to combine the oboe with two of its exotic cousins, the ancient Greek aulos and the South Indian nadaswaram. In the composition process, my musical findings focused on these double-reed instruments in combination with my oboe. The musical language that stems from these explorations tries to reflect and uncover a double-reed character and consider what this might constitute. The pitch design of the piece stems from the aural properties of each of these instruments, their playing histories, and my own pragmatic experience of playing and listening to them. These explorations guided my contemporary ear, and my own history and knowledge of contemporary musical styles influenced the composition. *Janus* is an attempt to create a contemporary setting in which these double-reed instruments can be reflected and celebrated, a setting accompanied by additional wind instruments, percussion, double bass, and electronics to explore a past, present, and possible future of this idea of “oboe essence”. Although it employs a rarefied instrumental combination, the piece is also designed to work without the auloi and nadaswaram. It was composed with the aspiration that future oboe players will be able to double on these instruments, and that the aulos, an instrument slowly re-emerging after centuries of silence, will return.

As a composer, improviser, and performer, I try to keep a balance between the form and the materials within it. This gives the ensuing material structure, direction, and purpose. The American composer Earle Brown describes and sums up this method of music making. By asking the musicians to improvise within a form with a repertoire of material, he invites them to join a process and gives them the opportunity to engage with material and have space to do so. It is a cerebral and instinctual act. Improvising within a composed form brings “an added dimension – of aliveness – to a composition and bring(s) the musicians into a greater intensity of working” (Bailey, 1992: 65). It is sharing a conversation about the piece in real time. And as the British guitarist Derek Bailey aptly writes, “Improvisation exists because it meets the creative appetite that is a natural part of being a performing musician and because it invites complete involvement ... in the act of music making” (Bailey, 1992: 142). Performance intensifies this act of complete involvement and brings together all the strands of the musical material into one unified whole. This piece was written with my own community of improvising musicians in mind and for my BCMG player colleagues. It represents a celebration of their personalities in this act of music making. How and what they play affects the outcome of the piece and defines its character as much as my input does in composing it and improvising in it with them. We all own the piece. But ultimately, at the heart of *Janus* is an answer to my research question. It shows, as do each of the case studies in this research, that improvisation in performance, an act of real-time music making, can encourage and inspire ways to be inventive, idiosyncratic, and experimental. It creates interrelationships between composed and improvised sections by investigating the composed material in real-time improvisation. It

combines past aural histories that reflect playing relationships to contemporary ones that include extended techniques and reveals how this interaction can create a new oboe identity and spirit. The material is derived from three different types of oboes whose double-reed character defines the language of the music. It presents a double-reed perspective and invents a new language in sound, combining the three skills of composition, improvisation, and performance into one entity.

## Conclusion

This practice-led research has been one of challenge and experimentation, and my research question<sup>88</sup> has provoked enquiries along a journey that has taken me out of my comfort zone. It has nevertheless challenged my preconceptions about music making that has impacted on how I perform, practice, teach, and ultimately, how I compose. The case study investigations of older instruments and their cultural backgrounds and those involving notated material by 20<sup>th</sup>-century composers who wrote so knowingly for the oboe have made me aware that there are alternative innovative possibilities and opportunities to be found in methods of performing, improvising, and composing. I found that my discoveries required, for example, spontaneous reactions to material, accepting sound as a malleable essence, and allowing tensions and flexibilities to direct the emergent music. The journey in this instinctive aural landscape led and directed me where to go. It continues to be a liberating experience. As Deleuze and Guattari (2004, cited in Ingold, 2013: 452) wrote, “Artisans or practitioners who follow the flow are, in effect, itinerants, wayfarers, whose task is to enter the grain of the world’s becoming and bend it to an evolving purpose. Theirs is an ‘intuition in action’”. The “bending to an evolving purpose” generated different approaches, allowing imagination and musical instinct to influence outcomes. As Taruskin highlighted using a quote from Randolph Coleman of Oberlin College, in elite classical music training,

---

<sup>88</sup> How can the modern oboe re-connect with its past to find a character in its sound that fuses old and new sonorities, and what potential does this offer for the development of a new improvisatory and compositional language within a contemporary classical context?

“repetition, standardisation, virtuosity, accuracy, perfection, and professionalization (with its emphasis on patterns of conformity)” are the terms we abide by (Taruskin, 1995: 170). This research has taken me on an altogether different journey to that of a classically trained musician, one of experimentation and creative exploration.

Ancient past histories and present-day narratives have come together in a quest to create a different kind of music that stems from an oboe perspective. The case studies of older instruments re-examined perceptions of oboe sound that, in my view, have released the beast within – that is, a much-ignored vibrant double-reed quality that is also latent in the modern oboe. Listening and reacting to this sonic liveliness influenced my methods of invention. The concentration in listening deepened, and the intuitive responses to detail directed decision-making. As Pauline Oliveros wrote, “The quality and flexibility of listening skills is the foundation of musicianship. The essence of musicianship is the ability to discern the smallest change in pitch or tempo, and relate that discernment to a field of ongoing sound or musical relationships” (Oliveros, 2010: 33).

In all of this, I discovered one skill that, as a classically trained musician, I have come to realize is an essential ingredient in a musician’s creative inner life. It is improvisation, a skill that nurtures, explores, and supports the imagination. It enables a continuous lifelong development that feeds the understanding of musical patterns, harmonic structures, and angles of approach that can magnify types of expression and communication. It establishes a grounded musical instinct and sensibility and is a powerful link between the skills of performing

and composing. It is a blessed state of being.<sup>89</sup> This research shows different approaches to understanding instrumental working practices, repertoire, performance, and ways to invent through improvisation. I hope it shows that improvisation can be the backbone of all creative explorations that ultimately play out in performing and composing. The idea of “performer as innovator” can begin to take hold when the skill of improvisation has the space to have a permanent presence.

Following on from this is the act of sharing that a composed score can offer. The empirical experience of exploring through improvisation, intuiting ways to link sounds and forms, and having a physical and emotional response to the instruments is fundamental to formalizing these methods into a composed score.<sup>90</sup> “The act of composition is conceived around sound and its human activation in real time” (Palka, 2015: 230). An instructional score, or as I think of it, an open-form score, places improvisation at the heart of the composition, allowing decisions to be made in real time. They are forms of structured improvisation that invite the player to join a process, engage with the material, and have space to explore.<sup>91</sup>

There is an opening here that could generate transformative steps in working practices, particularly in education. The core elements in my research, collaboration, and interaction with improvisation suggest approaches that can

---

<sup>89</sup> As mentioned in my Introduction: “*This is why improvisation – going in an unexpected direction, allowing the fingers, the heart, the brain, the belly, to cooperate in an unpremeditated way – is a very blessed state in the life of a human being, as well as the basis for making music.*” (Barenboim, 2008: 58).

<sup>90</sup> As shown in my composed scores: *Ancestral Traces*, *Aulos Transfer*, *Aulos Awakes*, *Three Meditations and Three Responses*.

<sup>91</sup> As shown in my open scores: *Sounding Out Varèse*, *Pan*, *Sri Vali Deva* and parts of *Janus*.

intensify levels of performing, listening, invention, ownership, and instrumental delivery. During my research, I had opportunities to apply some of these approaches in my work with groups of young woodwind players and oboists in workshops with the NYO, BCMG education, Britten-Pears School for Advanced Musical Studies, and RBC communities, and I noticed how this work can alter perceptions, mostly positively, in engagement, musical inspiration, and confidence. I wonder how it would affect future generations of musicians (in solo and chamber contexts) within the structured educational systems in place, not only in how they deliver the classics but how and what they might present in programming. Would this change the nature of concert giving and inspire and support different ways of listening? Would this engage a wider audience?

Learning to play the oboe and its repertoire to a high level is deeply satisfying. It is a beautiful sound, and the music written for it is compelling. And, of course, my learning in this area is necessary and to be continued. But supposing one combined instrumental training with a creative outlet, where different types of expression could be explored, and, in the oboe's case, other aspects of its sound. Could it offer an alternative projection and a wider creative scope of possibility for any instrument and instrumentalist? In this research, I have tried to locate this position and provide a pathway into a wider musical context where the player's imagination, using improvising and composing, can offer alternative working practices. It is my hope that these procedures could regenerate the perception of what an oboe is and what its new potential could be. There is, I believe, a gap in how we practice and perform that could be filled using forms of improvising and memorizing to bolster creativity. We could make other music with these forms, and each oboist could add something to the oboe's identity that

I believe has a confined image. The necessary learning of technical and mechanical instrumental skills could open out to include a more fluid and stimulating working existence.

This, I hope, is revealed in my research. The first example of this is my Britten case study. This demonstrates how my approaches can generate different insights into interpretation and other musical responses to solo material (improvising inside and outside the harmonic forms and making compositions from these). Britten's *Six Metamorphoses after Ovid* (1951) for solo oboe is core repertoire for oboists, and my interactions with it could instil new ways of learning, studying, and performing it. Would it not be novel for an oboist in a recital programme to improvise with this piece? The audience could have a different aural experience and hear the excitement of inventing in situ and experience a deeper understanding of the original music.<sup>92</sup> Secondly, my Birtwistle case study resulted in a revision of the musical content in two of his oboe pieces. I performed the changes he wanted to explore in both on different occasions, and after each performance, Birtwistle was satisfied that the changes worked musically. Both involved improvisation within a composed form. These revisions are waiting to be added to the published scores. This process keeps a living connection to the making of music and intensifies and strengthens working relationships with composers.

The final work in my research, *Janus*, for an ensemble of eight players, is my largest score, and brings together the threads of my research combining the

---

<sup>92</sup> I did offer this recently to a chamber ensemble I work with in Manchester, but they declined the idea. I will keep pursuing this in other contexts.

three skills of a performing, improvising, and composing oboist. The musical language comes from a double-reed perspective in sounds and playing techniques involving ancient and modern instrumental and theoretical traditions. The instruments that were new to me, the *nadaswaram* and *aulos*, offered unusual sonorities and options of colour and expressivity and an alternative mode of communication in performance. The roots of the musical language in *Janus* stem from these instruments, the techniques and colours of the modern oboe, and my own tastes in compositional style and ability. All the players of the ensemble<sup>93</sup> (who were classically trained, bar two, who were trained in jazz traditions) contributed with their own reactions and playing styles. They know my work and are my collaborating colleagues in this research. The enterprise was a collective experience. I felt that this group of musicians, with all their different motivations, personalities, skills, and personal histories, gave the emergent music a sense of communal sharing that was based on trust and generosity. This cooperation in collaborating and interacting is vital to communication and the act of sharing in performance. The performative experience was risky because I didn't know if the juxtaposition of composed and improvised material would hang together. This was an experiment that was exciting and unknown; however, I believe it forged a positive performative energy that focused the listening, not only for the players, but for the audience as well.

This uncharted territory produced an alternative form of music performance, one carrying risk, involving structured and free improvisation

---

<sup>93</sup> In the performance we gave in November 2022 at the RBC.

within a composed form, in a classical contemporary context, led by a performer, in this case, an oboist. This could be the beginning of a style in contemporary music making that places the player in a defining role, where they determine the creative outcome. It could generate a musical culture that embraces forms of improvisation in performance in order to encourage and increase the quality of listening and responding for everyone, performers and audience alike. Would this revive and revitalize the contemporary in music and bring it closer to people? I ask a similar question in Chapter 1: could we add an element of surprise, of musical intuition, into concert giving, one where the musicians take ownership of their music and communicate it in different formats and where the skill of improvisation leads the narrative? This procedure, added to existing frameworks, could enrich our musical lives and open connections to a vibrant and experimental quality in contemporary music giving.<sup>94</sup>

In the wider sense, this research addresses the anomaly that amalgamating the roles of performer, composer, and improviser can produce positive effects on musical creativity, communication, and fulfilment. Perhaps a return to some form of public performing space where classical musicians can be given the opportunity to create their own music could yield an added excitement and fertile dimension to performance and composition. In the long term and in

---

<sup>94</sup> But there is much resistance. A quote from Mortenson (2020), a classical and jazz pianist, teacher, and composer, highlights this. In an Observer review of 07.06.20: “Bach, Mozart and Beethoven all thrilled audiences with their improvisations. But today’s classical pianists have lost the art, according to a music scholar, who argues that performances suffer because they are so dependent on the printed score”. And in the same article the UK pianist Steven Osborne stated, “when I was at the RNCM, I wanted to put improvisation into one of my programmes. My teacher tried to stop me, saying, ‘They won’t take you seriously’”. Mortenson: “What I really enjoy is the idea that a performance can go anywhere, that’s the ultimate adventure”. Exactly so.

future pedagogical platforms, performers could be encouraged to find out (through training that allows for this exploration in their early and teenage education), what and how they can deliver, and who they are as musicians. This mix of all the musical skills (common to jazz musicians) could open doors for those who wish to engage into a richer and more satisfying inner musical life. I would hope that my work tells an interesting, innovative, and significant story that can contribute to cultivating, supporting, and supplementing the working lives of classical oboists and all instrumentalists for the future.

## Bibliography

- Adorno, T. (1989) On jazz. Translated by J. Owen Daniel. *Discourse*, 12(1), pp. 45-69.
- Alberge, D. (2020) Why today's musicians should follow greats... and improvise. *The Observer*, 07 June. Available at:  
<https://www.theguardian.com/music/2020/jun/06/why-classical-musicians-need-to-learn-how-to-improvise> [Accessed 7 May 2023].
- Auden, W. H. (1940) Musée des Beaux Arts. In C. Ricks, ed., *The Oxford Book of English Verse*. Oxford: Oxford University Press.
- Bailey, D. (1992) *Improvisation: Its nature and practice in music*. London: The British Library National Sound Archive
- Baines, A. (1967) *Woodwind Instruments and their History*. London: Faber and Faber Ltd.
- Balakrishnan, R. (2016) *Influence of Nagaswaram on Karnataka Classical Vocal Music*. Ph.D. Thesis. University of Mysore.
- Barenboim, D. (2008) *Everything is Connected: The power of music*. London: Weidenfeld & Nicholson.
- Barker, A. (1984) *Greek Musical Writings: 1 The musician and his art*. Cambridge: Cambridge University Press.
- Bartolozzi, B. (1982) *New Sounds for Woodwind*. 2<sup>nd</sup> edn. Translated and edited by Reginald Smith Brindle. London: Oxford University Press.
- Benson, B. E. (2003) *The Improvisation of Musical Dialogue: A phenomenology of music*. Cambridge: Cambridge University Press.

- Bentzon, A. F. W. (1969) *The Launeddas: A Sardinian Folk Music Instrument* (Volume Two). Copenhagen: Akademisk Forlag,
- Berliner, P. (1994) *Thinking in Jazz: The infinite art of improvisation*. Chicago: University of Chicago Press.
- Berio, L. (2006) *Remembering the Future*. Cambridge, MA: Harvard University Press.
- Berio, L. (1971) *Sequenza VII for Oboe*. London: Universal Edition.
- Blake, R., Rogers, J., Donaher, P., Hartmann, G. and Fabris, D. (2010). *Primacy of the Ear: Listening memory and development of musical style*. Brookline, MA: Third Stream Associates.
- Borgo, D. (2005) *Sync or Swarm: Improvising music in a complex age*. New York: The Continuum International Publishing Group.
- Boulez, P. (2018) *Music Lessons: The Collège de France Lectures*. London: Faber & Faber.
- Britten, B. (1952) *Six Metamorphoses after Ovid for Solo Oboe, Op 49*. London: Boosey & Hawkes.
- Brown, B. (2016) *Learning to Play the Aulos: Practice Documentation. The Workshop of Dionysus*. Available at: <https://www.doublepipes.info/bb-practice-1/>
- Brown, B. (2017) Delphic Paen by Athenaios Athenaiou. *The Workshop of Dionysus*. Available at: <https://www.doublepipes.info/athenaios-paeon/> [Accessed 8 July 2023].
- Brown, B. (2018) Euterpe 2018 Preparation. *The Workshop of Dionysus*. Available at: <https://www.doublepipes.info/euterpe-2018-preparation/> [Accessed 8 July 2023].

- Brown, B. (2019) *Phragmites australis* vs *Arundo donax*. *The Workshop of Dionysus*. Available at: <https://www.doublepipes.info/phragmites-vs-arundo/> [Accessed 8 July 2023].
- Brown, B., and D'Angour, A. (2019) *Euripides Alcestis for Bradfield*. Available at: [https://figshare.com/articles/dataset/Euripides\\_Alcestis\\_for\\_Bradfield/7770731](https://figshare.com/articles/dataset/Euripides_Alcestis_for_Bradfield/7770731) [Accessed 8 July 2023].
- Busoni, F. (1962) Sketch of a New Aesthetic of Music. In *Three Classics in The Aesthetic of Music*. New York: Dover.
- Cage, J. (1961) *Silence*. Middletown, CT: Wesleyan University Press.
- Caird, G. (2007) Six Metamorphoses after Ovid. In: *Britten: Six Metamorphoses after Ovid. Anatomy of a Masterpiece*. [CD note] George Caird, Joy Boughton, and Nicholas Daniel. (Oboe Classics CC2017).
- Carpenter, P. and Neff, S. (1995) *Arnold Schoenberg: The musical idea and the logic, technique, and art of its presentation*. New York: Columbia University Press.
- Clayton, M. (2000) *Time in Indian Music*. Oxford: Oxford University Press.
- Charlton, D., ed. (2017) *The Music of Simon Holt*. Suffolk, UK: The Boydell Press.
- Cohen, B. (2018) Enigmas of the third space: Mingus and Varèse at Greenwich House 1957. *Journal of the American Musicological Society*, 71(1), pp. 155–211.
- Collinson, F. (1975) *The Bagpipe: The history of a musical instrument*. London: Rout & Kegan Ltd.
- Cook, N. (1987). *A Guide to Musical Analysis*. London: W.W. Norton & Company Ltd.

- Cook, N. (2004). Making music together, or improvisation and its others. *Jazz Research Journal*, 1(1), pp. 5–26. <https://doi.org/10.1558/jazz.v1i1.5>
- Corbett, J. (1994) *Extended Play: Sounding off from John Cage to Dr. Funkenstein*. Durham/London: Duke University Press.
- Dalrymple, W. (2013) *Nine Lives in Search of the Sacred in Modern India*. London: Bloomsbury.
- Davis, Peter G. (1981) Heinz Holliger refutes thesis that the oboe is an ill wind. *The New York Times*, 10 April, p. C3.
- Debussy, C., Busoni, F. and Ives, C. (1962) *Three Classics in the Aesthetic of Music*. New York: Dover Publications.
- Deleuze, G. and Guattari, F. (2004) *A Thousand Plateaus: Capitalism and schizophrenia*. Translated by B. Massumi. London: Continuum.
- Dolan, D. (2005) Back to the future: Towards the revival of extemporization in classical music performance. In: G. Odam and N. Bannan, eds. *The Reflective Conservatoire: Studies in music education*. Aldershot: Ashgate Publishing, pp. 97-136.
- Durant, A. (1989) Improvisation in the political economy of music. In: Christopher Norris, ed. *Music and the Politics of Culture*. New York: St. Martin's Press, pp. 252-282.
- European Music Archaeology Project (2015). *EMAP*. Available at <http://www.emaproject.eu/> [Accessed 19 May 2023].
- Fischlin, D. and Heble, A. (2004) *The Other Side of Nowhere: Jazz, improvisation and communities in dialogue*. Middletown, CT: Wesleyan University Press.
- Goossens, L., and Roxburgh, E. (1977) *Yehudi Menuhin Guides: Oboe*. London: Macdonald and Jane's Publishers Limited.

- Gosvami, O. (1957) *The Story of Indian Music: Its Growth and Synthesis*. Bombay, Calcutta, New Delhi, Madras: Asia Publishing House.
- Govindarajan, V. (2018) Nagaswaram: The instrument that took temple music to its pinnacle is now dying out – in temples. *Scroll.in*, 31 January. Available at: <https://scroll.in/magazine/866206/nagaswaram-the-demise-of-the-great-south-indian-temple-instrument-may-be-near> [Accessed 13 May 2023].
- Griffiths, P. (1995) *Modern Music and After Directions since 1945*. Oxford: Oxford University Press.
- Guilfoyle, R. (2005) *Creative Rhythmic Concepts for Jazz Improvisation*. Dublin: Newpark Music Centre.
- Hagel, S. (2008) Ancient Greek rhythm: The Bellermand exercises. *Quaderni Urbinati Di Cultura Classica*, 88(1), pp. 125–138.
- Hagel, S. (2009) *Ancient Greek Music: A New Technical History*. Cambridge, UK: Cambridge University Press.
- Hagel, S. (2010) Understanding the aulos. Berlin Egyptian Museum 12461/12462. *Studien zur Musikarchäologie*, VII, pp. 67-87.
- Hagel, S. (2014) Better understanding the Louvre aulos. In: R. Eichmann, F. Jianjun and L. C. Koch, eds., Papers from the 8<sup>th</sup> Symposium on Music Archaeology in Suzhou and Beijing, China 2012, *Studien zur Musikarchäologie*, IX, pp. 131-142.
- Harvey, J. (1999) *Music and Inspiration*. London: Faber and Faber Limited.
- Haynes, B. (2001) *The Eloquent Oboe: A history of the hautboy from 1640-1760*. London: Oxford University Press.

Heidegger, M. (1971) *The Origin of the Work of Art in Poetry, Language, Thought*.

Translated by Albert Hofstadter. New York: Harper & Row.

Hewett, I. (2003) *Music: Healing the Rift*. New York, London: Continuum.

Hughes, T. (1997) *Tales from Ovid*. London: Faber & Faber Ltd.

Holliger, H. (1972) *Pro Musica Nova Studien zum Spielen Neuer Musik*. Breitkopf

& Härtel: Wiesbaden, Germany.

Ingold, T. (2013) *Making: Anthropology, Archaeology, Art and Architecture*. Oxon:

Routledge.

Innes, M., trans. (1955) *Ovid Metamorphoses*. London: Penguin.

Komlós, K. (1991). Mozart the fortepianist. In: L. Todd and P. F. Williams, eds.

*Perspectives on Mozart Performance*. Cambridge: Cambridge University

Press, pp. 27-54.

Lacy, S. (2006) *Conversations*. Durham and London: Duke University Press.

Lewis, G. (1996) Improvised Music after 1950: Afrological and Eurological

Perspectives. *Black Music Research Journal*, 16(1), pp 91-122.

Lubet, A. (2010) *Music, Disability & Society*. Philadelphia: Temple University

Press.

Maxwell, M. (2017) Performance and reflections: Holt's music for oboe and cor

anglais. In: D. Charlton, ed. *The Music of Simon Holt*. Suffolk: The Boydell

Press, pp. 161-177.

McGregor, Ronald S. (1993) *The Oxford-Hindi English Dictionary*. Oxford: Oxford

University Press.

Messiaen, O. (1944) *The Technique of my Musical Language*. Paris: Alphonse

Leduc.

- Mitchell, D. and Keller, H. (1952) *Benjamin Britten: A commentary on his works from a group of specialists*. London: Rockliff Publication Corporation Ltd.
- Mitsuyo, T. (2017) Recollecting local narratives for the land ethic. In: J. B. Callicott and J. McRae *Japanese Environmental Philosophy*. Oxford: Oxford University Press, pp. 179-194.
- Mortensen, J. J. (2020) *The Pianist's Guide to Historic Improvisation*. New York: Oxford University Press.
- Morton, B. and Cook, R. (2010) *The Penguin Jazz Guide*. London: Penguin Group.
- Nyman, M. (1974) *Experimental Music: Cage and beyond*. Cambridge: Cambridge University Press.
- Oliveros, P. (2010) Quantum listening: From practice to theory (to practice practice). In: L. Hall, ed. *Sounding the Margins: Collected Writings 1992-2009*. Kingston, NY: Deep Listening Publications, pp. 73-91.
- Palka, A. (2016) Improvisations towards an origin: The steel cello and the bow chime. In: M. Dogantan-Dack, ed. *Artistic Practice as Research in Music*. Routledge: London, pp. 219-236.
- Pitsiokos, C. (2017) Extra-Musical Considerations. In: John Zorn, ed., *Arcana VIII: Musicians on music*. New York: Hips Road.
- Racy, A. J. (2003) *Making Music in the Arab World*. Cambridge: Cambridge University Press.
- Radano, R. (1993) *New Musical Figurations: Anthony Braxton's cultural critique*. Chicago: University of Chicago Press.
- Redgate, C. (2016). Creating new music for a redesigned instrument. In: Mine Doğan-Dack, ed. *Artistic Practice as Research in Music: Theory, criticism,*

- practice. SEMPRES Studies in The Psychology of Music*. London: Routledge, pp. 203-217.
- Robertson, P. (2016) *Soundscapes: A Musician's Journey through Life and Death* London: Faber & Faber.
- Rocconi, E. (2006) Women Players in Ancient Greece 2006. In: E. Hickmann, A. A. Both, R. Eichmann, eds. *Music Archaeology in Contexts. Archaeological Semantics, Historical Implications, Socio-Cultural Connotations, Studien zur Musikarchäologie V*, Orient-Archäologie Band 20, GmbH-Rahden/Westf: Verlag Marie Leidorf.
- Rogers, M. (1975) Preface. In: M. Rogers, ed. *Erik Satie Piano Album*. London: J.B. Cramer & Co. Ltd.
- Ross, A. (2009) *The Rest is Noise: Listening to the twentieth century*. London: Harper Perennial.
- Ross, A. (2010) Varèse does jazz. *The Rest is Noise*. [blog] 20 July. Available at: <https://www.therestisnoise.com/2010/07/var%C3%A8se-does-jazz.html> [Accessed 28 May 2023].
- Rothwell, E. (1977) *The Oboist's Companion*. London: Oxford University Press.
- Said, E. (2006) *On Late Style*. London: Bloomsbury.
- Sambamoorthy, P. (2008) *South Indian Music: Books I-V*. Chennai: The Indian Music Publishing House.
- Sarath, E. (1996) A new look at improvisation. *Journal of Music Theory*, 40(1):138.
- Satie, E. (1976) *Erik Satie Piano Album*. London: J. B. Cramer & Co. Ltd.

- Schick, S. (1994). Developing an interpretive context: Learning Brian Ferneyhough's Bone Alphabet. *Perspectives of New Music*, 32(1), pp. 132-153. Available at: [www.jstor.org/stable/833159](http://www.jstor.org/stable/833159).
- Schuller, G. (1989) *The Swing Era*. New York: Oxford University Press.
- Schutz, A. (1964) Making music together: A study in social relationship. In: Arvid Brodersen, ed. *Alfred Schutz: Collected papers II: Studies in social theory*. The Hague: Nijhoff, pp. 159-178.
- Sergeant, M. (2009) *Listening to a Still Small Voice* [unpublished score].
- Shepherd, N. (1977) *The Living Mountain*. Aberdeen: Aberdeen University Press.
- Shiloah, A. (1995) *Music in the World of Islam*. Detroit: Wayne State University Press.
- Stravinsky, I. (1942) *The Poetics of Music: In the form of six lessons*. Cambridge, MA: Harvard University Press.
- Storr, A. (1997) *Music and the Mind*. London: Harper Collins.
- Straus, J. N. (2014) *Introduction to Post-Tonal Theory*. 3<sup>rd</sup> edn. New York: Pearson.
- Stubbs, D. (2009) *Fear of Music: Why people get Rothko but don't get Stockhausen*. Hants, UK: Zero Books.
- Sundaram, B. M. (2016) *In Conversation: Dr B.M. Sundaram*. Performing Arts in Interview, June. Available at: [www.sahapedia.org/conversation-dr-bm-sundaram](http://www.sahapedia.org/conversation-dr-bm-sundaram) [Accessed 11 July 2023].
- Szerb, A. (2014) *The Third Tower: Journeys in Italy*. Translated by Len Rix. London: Pushkin Press.
- Taruskin, R. (1995) *Text and Act*. Oxford and New York: Oxford University Press.

- The Workshop of Dionysius (2021) *The Workshop of Dionysius*. Available at:  
<https://www.doublepipes.info/> [Accessed 19 May 2023].
- Threadgill, H. (2018) *Sixfivetwo. Kronos Quartet: 50 for the Future*. Available at:  
<https://50ftf.kronosquartet.org/composers/henry-threadgill> [Accessed 7 May 2023].
- Toop, D. (2016) *Into the Maelstrom: Music, improvisation and the dream of freedom*. New York and London: Bloomsbury Academic.
- Touma, H. H. (1996) *The Music of the Arabs*. Portland Oregon: Amadeus Press.
- Van Cleve, L. (2004) *Oboe Unbound: Contemporary techniques*. Maryland USA: Roman & Littlefield Publishers.
- Veale, P. (1994) *The Techniques of Oboe Playing*. Kassel, Germany: Bärenreiter.
- Walser, R. (1993) Out of Notes: Signification, interpretation, and the problem of Miles Davis. *The Musical Quarterly*, 77(2), pp. 343-365.
- Winterson, J. (1977) Afterword. In: N. Shepherd. *The Living Mountain*. Aberdeen: Aberdeen University Press, p. 112.
- Witkin, R. W (1998) *Adorno on Music*. London and New York: Routledge.
- West, M. L. (1992) *Ancient Greek Music*. Oxford: Clarendon Press.

### **Discography**

- Birtwistle, H. (2022) *Chamber Works*. Nash Ensemble. [CD] (BIS-2561 SACD).
- Birtwistle, H. (2009) *Harrison Birtwistle Orpheus Elegies* Melinda Maxwell (oboe) [CD] (OboeClassics CC2020).
- Birtwistle, H. (2019) *Pulse Sampler* In: *Celebrating Sir Harrison Birtwistle at 85*. Melinda Maxwell (oboe) and Julian Warburton (percussion). [BCMG

- archive recording from live public performance] Recorded at CBSO Centre, 22 September 2019.
- Birtwistle, H. (2019) *Interrupted Endless Melody* for oboe and piano. London Sinfonietta. [London Sinfonietta archive recording from live public performance]. Recorded at Queen Elizabeth Hall London.
- Daitz, S. (2015) Ovid Metamorphoses 8-183-235 perf. By Stephen G. Daitz. Available at: <https://soundcloud.com/rhapsodoi/ovid-metamorphoses-8-183-235-perf-by-stephen-g-daitz> [Accessed May 2022].
- Gulshan, K. (2002) presents Nadaswaram Nadaswara Isaitendral (Vol.2) [CD] (SICCD/139)
- Holt, S. (1997) *Birtwistle – Holt - Maxwell* [CD] [NMC D0425] featuring *Banshee* for oboe and percussion (1994).
- Saminathan, N. S. Prof. (2018) *Karnatic Music Learning Series: Playing Nagaswaram* [CD].
- Kasim S. and Babu S. (n.d.) *Kamalambha “Kalaimamani”* [CD] (AlaphanA Records).
- Kasim S. and Babu S. (n.d.) *Bhajagovindam “Kalaimamani”* [CD] (AlaphanA Records).
- Maxwell, M. (2023) *Janus* Birmingham Contemporary Music Group. [CD and digital release] Birmingham Record Company, Royal Birmingham Conservatoire, distributed by NMC [in press].
- Maxwell, M. (2020) *Sounding out Varèse*. [video] BCMG Digital Concert, 4 May. Available at: <https://www.youtube.com/watch?v=qjvcJKvT8XA> [Accessed 12 July 2023].

- Maxwell, M. (2020) *Lockdown Live - Introduction to contemporary oboe*. [video] London Sinfonietta, 25 May. Available at: <https://youtu.be/v-df-hxxU> [Accessed 12 July 2023].
- Maxwell, M. (2020) *Sounding out Varèse 2* [video] BCMG Digital Concert (with NEXT Early Career Musicians) 10 May. Available at: <https://www.youtube.com/watch?v=Kfa6rWjB-vg> [Accessed 12 July 2023].
- Maxwell, M. (2022) *Improvisation, Composing, & the Aulos with Melinda Maxwell* [video] BCMG, 15 Nov. Available at: <https://www.youtube.com/watch?v=3L6BqaprAOg> [Accessed 12 July 2023].
- Thomas, P. (2007) *Bruce's Fingers* Comprovisation Label: BF 66 <https://dymphnaarchive.co.uk>

### **Performances**

- Birtwistle, H. (2017) *Pulse Sampler* for oboe and percussion; Melinda Maxwell, oboe Richard Benjafield, percussion. In: *This is Rattle: Birtwistle*. Nash Ensemble. BBC Radio 3 Milton Concert Hall, London 23 September.
- Maxwell, M. (2018) *Surge Festival*. Birmingham Midlands Arts Centre. 21 April 2018.
- Maxwell, M. (2018) *Solo Improvisation based on Varèse Octandre melody and Nadasawarm Improv*. Melinda Maxwell with Percy Pursglove (trumpet) and James Dooley (live electronics). Emulsion Sinfonietta. Shrewsbury Arts Centre. 16 June.
- Maxwell, M. (2018) Solo Nadaswaram/Oboe performance of *A Taste of Tamil* for

RBC *Night Of the Unexpected*. 25 June.

Maxwell, M. (2018) *Solo Oboe Recital with 3 Improvisations*. Bath Spa University, 14 November.

Maxwell, M. (2018) *Live Nadaswaram/Oboe Improvisation* in the RBC *The Lab* as part of a Music Technology Showcase with James Dooley electronics. 15 November.

Maxwell, M. (2018) *Solo Nadaswaram/Oboe*. N4 Library London. 17 November.

Maxwell, M. (2018) *Nadaswaram/Oboe Stranger Danger Night* with John O'Gallagher. 28 November.

Maxwell, M. (2020) *Aulos live presentation recording of improvisation*. RBC Jazz Research Group. 6 February.

Maxwell, M. (2022) *Janus*. Birmingham Contemporary Music Group, RBC Recital Hall. 19 November.

### **Audio Examples Secondary Listening List**

#### **Aulos Case Study:**

01) Related to Audio Examples 1) and 2) Callum Armstrong & Melinda Maxwell improvising Apr 2019 experimental, early playing, workshop session, plus talking. A collaborative effort with Callum on Elgin aulos and Melinda on Louvre aulos. 12'07"

02) Callum & Melinda Jan 2020 oboe and aulos. Aulos chorale melody material (Fig 15). 4'24"

03) Callum & Melinda Jan 2020 2 auloi. Attempt at 11/8 Dance. 2'39"

04) Five tracks (related to primary listening Audio Ex. 3)

Track 1; improvisation on oboe in preparation for *Aulos Transfer* Nov 2021 6'28"

Track 2; oboe improvisation of *Aulos Transfer* material 4'56"

Track 3; more improvisation of *Aulos Transfer* material 6'14"

Track 4; Cor Anglais improvisation on *Aulos Transfer* material 5'15"

Track 5; oboe improvisation on *Aulos Transfer* material 2'54"

05) (Related to Audio Ex. 9)

Improvisation finding *Aulos Awakes* material 2'42"

Other:

06) improvisation with duduk (single reed pipe) with RBC PG flute student and aulos. April 2019. Improvisation and introduction by Melinda 3'11"

07) Seven tracks of some trio improvisations with aulos, bass, and percussion: June 2022 (4 tracks) and November 2022 (3 tracks)

08) Home video about the aulos for doublepipes community. July 2021 4'19"

+ more data of exploratory improvisations in sonic diary list with material available on request

### **Nadaswaram Case Study:**

09) Six tracks. Nadaswaram multiphonics improvisation. Rough mixes 26 Feb 2018 with Dr Hall

Track 1; 3 oboes improvisation 5'

Track 2; *Sri Vali Deva* nadaswaram with oboe improvisation

Track 3; Multiphonics on nadaswaram and oboe improvisation with multiphonics over it and Dr Hall adding a previous oboe improvisation.

Track 4; Oboe multiphonics improvisation with *Sri Vali Deva* melody

Track 5; Oboe playing *Sri Vali Deva* melody exploration improvisation.

Track 6; Oboe improvisation over the oboe improvisation with multiphonics

10) Solo performance of *A Taste of Tamil* with recorded electronics backing RBC *Night Of the Unexpected* June 2018 7'36"

11) Nadaswaram/oboe/electronics backing track for *A Taste of Tamil* Nov 2018. Starts with rhythmic breathing-overdubs with drones-rhythmic key clicks-multiphonics (almost a piece in itself)

12) Live performance Nadaswaram/Oboe improvisation in the RBC The Lab as part of a music technology showcase with James Dooley live electronics. Nov 2018. 12'

13) Interview with Kasim + playing together. Chennai Jan 7, 2017

+ two exploratory improvisations in sonic diary list with material available on request

End of secondary listening.

\*\*\*\*\*

The following audio examples are available on request:

### **Baroque Oboe Case Study:**

(No secondary listening)

Improvisations in sonic diary list with primary listening audio examples.

**Varèse case Study:**

“Edgar Varese and the Jazzmen” 1957 19 tracks mp3 files with V taking and leading the Sunday jam sessions. (Charlie Mingus bass, Art Farmer trumpet). He sets some graphic scores and some ground rules. A fascinating curiosity.

<https://blog.wfmu.org/freeform/2009/06/edgar-varèse-and-the-jazzmen-mp3s.html>

+ more exploratory improvisations with primary listening audio examples in sonic diary list

**Britten Case Study:**

Improvisations with primary listening audio examples material in sonic diary list

**Birtwistle:**

Oct 14, 2019, recording from mobile. Harry Birtwistle and Melinda Maxwell discussing approaches to improvising with *Endless Interrupted Melody* (oboe and piano) in preparation for live performance at QEH. Melinda plays and demonstrates. Harry demonstrates on clavichord. 21'14" Oct 14, 2019. The sound file suddenly ends and is interrupted. (Mobile link; 'Harry and me discussion EIMelody')

**Janus:**

One tryout of top line of Janus aulos chorale in sonic diary list

## Appendices

### Aulos Case Study Appendix

#### a) Historical instrumental context

The doublepipe was the most popular instrument of the ancient Greek world. According to Baines (1967: 198), it was “the ‘pipe’ of the Bible, the *aulos* of the Greeks and the *tibia* of the Romans”.<sup>95</sup> It has a continuous history that, as Collinson (1975: 25) notes, “stretches across the well-nigh incredible space of nearly five thousand years, from the pipes of Ur to the sound of our own Highland pipes of the present day”.<sup>96</sup> In ancient Egypt, they were played by males and females alike, a practice that continued in ancient Greece and Rome, two civilizations that Collinson marked as “a golden age of the art of piping” (Collinson, 1975: 31). There were many contexts in which auloi were played, including paeans, dirges, sacrifices, marching to battle, rowing, feasting, and dancing (West, 1992: 82), as well as in a host of theatrical dramas.

---

<sup>95</sup> The surviving instruments show an evolution from three holes on one pipe and four holes on the other (Mesopotamian and Egyptian finds); to five finger holes and one bass hole on both pipes, a tone apart (Hellenic finds); to multiple bass holes operated by bronze levers (Hellenistic finds), still with fingerholes a tone apart; to fingerholes a fourth apart (Roman era finds) with or without mechanisms and variable numbers of bass holes that could become fingerholes by closing the holes between the fingers and the reed. Bones with fingerholes are on record in substantial numbers from the palaeolithic Aurignacian and Gravettian periods (42,000 and 27,000 years old) but whether any of these were played double is unknown.

<sup>96</sup> The bagpipe is another cousin of the oboe and its aural and musical history also relate to the double pipes of the aulos. Collinson notes two “associations and resemblances” of the aulos to the bagpipes. The first is the use of the pipes in battle (the pipes inspired warriors to fearlessness) and the second is the solo piping contests of ancient Greece that “could well be described as ‘pìobaireachd (pibroch) competitions’” (Collinson, 1965: 33) such was their prestige, attracting contestants from all corners of the Hellenic world. Barnaby Brown points out four other parallels: a cathartic function, playing laments; an apotropaic function, warding off danger; a public ceremonial function, reinforcing the power and magnificence of rulers; and uplifting spirits on long arduous journeys in galleys and on foot (personal communication, Feb 16, 2022).

## **b) The sound and the music**

The music of the aulos in ancient Greece was, by all accounts, “dramatic and emotional: it was versatile in mood and effect, capable of blaring vigour, plangent lamentation or sensual suggestiveness” (Barker, 1984: 15). According to Plato (c. 428–347 BC), the aulos melodies attributed to Olympus had “the power to possess the hearer with frenzy” and “Longinus’ speaks of the aulos sending the listeners out of their minds and setting their feet tapping to the rhythm. It can also fill the soul with calm if it is played soberly and sweetly. The expert aulete can provide whatever is wanted: he can assuage grief, enhance joy, inflame the lover, exalt the devout” (West, 1992: 106). Aristotle called “the aulos ‘orgiastic’, i.e., conducive to religious frenzy... (together with drums) in connection with Bacchic, Corybantic, and suchlike ecstatic cults” (West, 1992: 105). It could portray moods of grief, joy, exultation, and ecstasy. Its expressive palette was stretched to the point of disrepute. Increasingly attractive to the riff raff, its crowd-pleasing and seductive virtuosi led all kinds of public rituals. Its sound carried and could be heard clearly, for example, at open-air religious festivals and on-board triremes keeping the oarsmen in time and crucially serving as the voice of the commander in battle manoeuvres, such as ramming an enemy ship. It could also sound docile, sweet, and gentle when soft, as Sappho (c. 630–c. 570 BC) describes in one of her poems the “sweet-singing aulos” (Barker, 1984: 48). For the ancient Greeks, “music was a profession and an art”, and the double reed of the aulos gave great flexibility in expressive range.

The aulos led the chorus and accompanied the soloists in theatrical dramas, solo concert performances, and accompanied athletic events and games,

religious festivities, and ritual sacrifices. It accompanied dancing of all sorts, from the dancing of ecstatic cults of Dionysus and Cybele (the mother goddess of Phrygia) to dinner parties and symposiums. But the mere fact that you had to blow an aulos meant you couldn't sing words, and this made it less educational. The ancient Greeks had a fable that the goddess Athena had invented the aulos, but discarded it because it distorted her face when blowing, and the training required did not contribute to her intelligence or wisdom (Barker, 1984: 179).<sup>97</sup> It was thought that the aulos required only a *technical* facility that could equip you in competitive performance, and this was considered quite vulgar. To be an artisan and entertain merely with your instrumental skill for the pleasure of it was considered a depraved activity.

Plato also had a lot to say about the function of music and its moral effect in Greek society. From his *Republic* and from fragments of sources, we can deduce that Plato thought that music had moral power and significance, and different kinds of music, according to their *harmoniai* <sup>98</sup> (the 7 scales and their resultant harmonies and rhythms – more of both below), are, as Barker (1984: 169) notes, “capable of representing different qualities of character, virtues, and vices”. Barker felt that music gave “a special kind of movement in the soul” (1984: 169) and linked character with musical style so that the expression of any given player could reveal an affinity with, and to, a certain mode. How the

---

<sup>97</sup> And to sustain blowing with strength auletes sometimes wore a leather strap called the *phorbeia* that was tied around the cheeks and head to support the cheek muscles while playing, please see Figure 8.

<sup>98</sup> In non-musical contexts *harmoniai* means adapting, adjusting and fitting together, and in music this equates to tuning and a fitting together of pitches to make structures and melodies (Barker, 1984: 64).

musician inflected and intoned could communicate a powerful sense of the soul.<sup>99</sup>

In imagining the level of aulos projection and dynamic, we do know that a single pair of auloi could be heard well when accompanying choirs of 50 voices. The larger auloi, which had deeper, lower sounds, were known as “the *bombyx aulos* ... a deep-toned instrument” (Barker, 1984: 187), and the low note, like the bottom F-sharp below middle C (as on my Louvre Aulos), would be considered the *bombyx* note. As West (1992: 105) wrote, “Aristophanes represents the sound of piping by *mūmū*, *mūmū*, and likens it to the buzzing of wasps. ‘Buzzing’ (*bombos*, *bombyx*) is associated particularly with the lowest notes [of the aulos]”. Interestingly, *bombyx* is also the name of a silkworm moth, so one can imagine all sorts of flutterings, buzzings, and whisperings that might characterize an idea of an aulos sound. Segments of bone look like a silkworm: the “silkworm” is the whole tube, and the “silkworm” is the lowest possible note. A “silkworm” aulos would be made of tibia bones rather than lotos wood or Phragmites. I mentioned earlier a higher register, where the sound screams and screeches, and this was characterized as “squawking like geese” (West, 1992: 105).

---

<sup>99</sup> The Athenian statesman Aristides (530-468 BC) linked characters of notes to a female-male dichotomy, meaning certain notes within a mode or notes within a tetrachord would have a certain female or male quality of expression. There would be some notes that had neither or a mixture of the two. He said there were “notes of four qualities; male, female, and two combined types (one predominantly female the other predominantly male)”. One could “conceive the different *harmoniai* as constructions built out of notes that had been selected on the basis of these qualifications. The moral character of a *harmoniai* would then be the direct result of the ‘maleness’ or ‘femaleness’ or ‘intermediacy’ of its predominant ingredients” (Barker, 1984: 169).

The aulos' versatility of mood provided opportunities for direct musical representation or "mimesis", and there is a piece of music for aulos called *Pythikos nomos* that was described by Pollux<sup>100</sup> that has five parts and is a representation of the battle between Apollo and a monstrous serpent. The playing of it took place at the Pythian Games held in the sixth century BC and was used as the repertoire for the great doublepipers competition. A famous aulos player, Sakadas of Argos, won three contests in 586, 582, and 578 BC (West, 1992: 212). The players had to show their virtuosic instrumental skills and express the sentiments of; fighting and slaying the serpent with "trumpet-like notes and 'tooth action' to represent the shot serpent gnashing its teeth" (West, 1992: 213); being triumphant in the final hymn to celebrate Apollo's victory over the serpent; and playing with joy in a dance of celebration. Sakadas may well have included variations in tempi, timbres, modal contrasts, and rhythmic patterns, using the popular dactylic rhythms of long-short-short that represented the long and short syllables and metres of the ancient Greek language.<sup>101</sup>

The culture of ancient Greece, with its understanding of the importance of music in society, continues to captivate people. The idea that the Pythagorean scale, which contains musical intervals that correspond to the intervals between the orbits of the planets in a "divine dance of numbers" in the "harmony of the

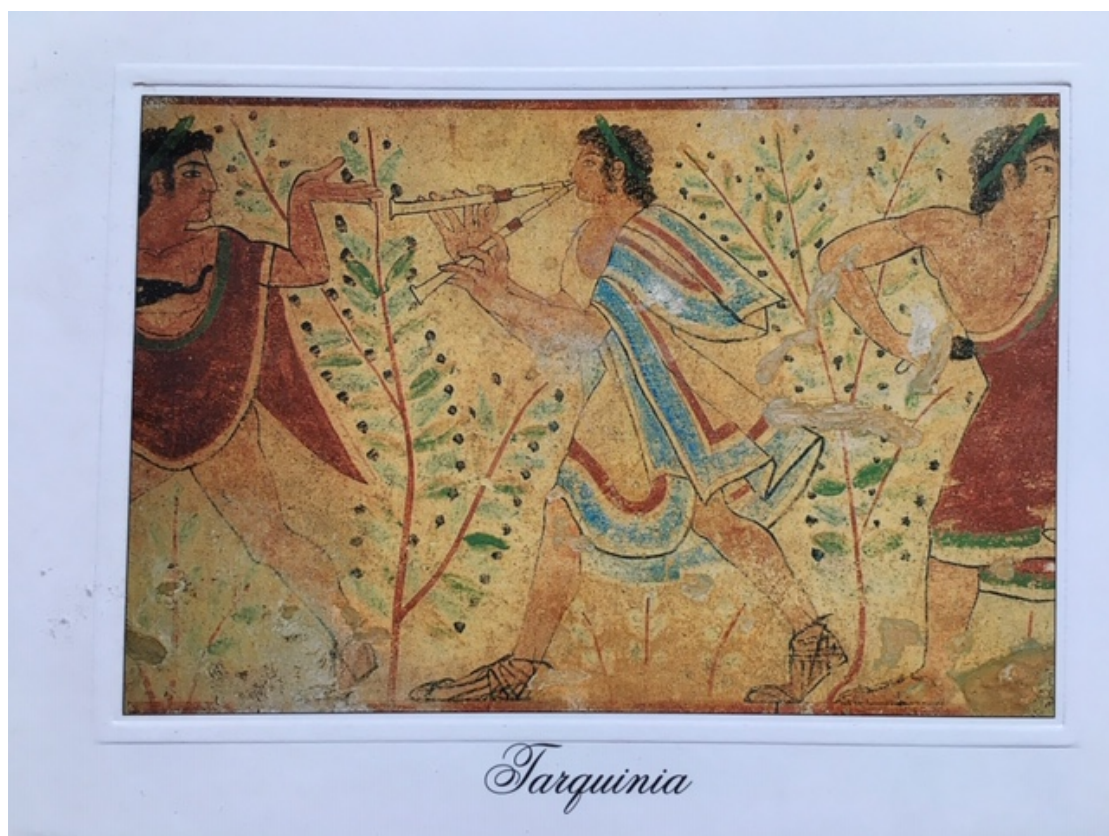
---

<sup>100</sup> Pollux was an author who wrote with some references to music but gave sporadic citation of sources. He was an important compiler of Classical terminology, but was "a dull-witted contemporary and fellow citizen" compared to Athenaeus of Naucratis (AD c.200) who left valuable collections of historical descriptions of social gatherings eg Classical supper parties and symposiums (West, 1992: 4).

<sup>101</sup> According to West, "All verse metre was based on this binary opposition, whether it was spoken verse or sung." (West, 1992: 130)

spheres” is one I think that resonates and connects to the sound of the aulos. It is a sound that feels both known and unknown, a sound that has been awakened and brought back to life after centuries of slumber. It is a sound that has certainly mesmerized me (and my aulos-playing colleagues). The vibrations between the pipes, the fluctuations in pitch, and the intervallic relationships whose tunings sound strange to our equal-temperament ears are perhaps sounds that might uncover a new way of listening and musical understanding.

**c) Further images of auloi**



**Figure 51. Etruscan painting c. 470 BC Tomba dei Leopardi, Tarquinia.**

I visited the necropolis in Tarquinia and saw the beauty of these paintings. Etruscan society interred their dead in large underground chambers stocked with luxury objects, such as furniture and jewellery. The paintings depict

scenes from the lives of chiefs and aristocrats, and here, the aulos is played in a garden accompanied by dancers. (See Figure 51).

Dancing to the sound of an aulos with castanets (see Figure 52) was a common activity, especially at joyous festivities, such as weddings. West described the scene: “Sappho imagines the wedding procession of Hector and Andromache as being surrounded by a happy mixture of pipe, lyre, and castanets” (West, 1992: 123). Dancing and singing in processions, with songs and lyrics by some of the most famous poets of the day, such as Pindar or Bacchylides (b. c. 516 BC), were accompanied by auloi. These processions were part of various public festivals, such as the City Dionysia at Athens and the Daphnephoria at Thebes, and are depicted on archaic vases (West, 1992: 14–15). Pindar, who was a poet and a professional musician, wrote of an imagined society in which “dance-choruses of girls are everywhere, and the assertive voices of lyres and resounding shawms are ever astir” (West, 1992: 13).



Figure 52. Young man piping, courtesan dancing with castanets. Re-figure cup by Epictetus, c. 500 BC British Museum.

#### d) Ancient Greek Music Theory

The old scales codified by *harmonikoi*<sup>102</sup> in the 4<sup>th</sup> century BC and Aristides Quintilianus in the 3<sup>rd</sup> century AD were called *harmoniai* (literally *tunings, attunements*). This word is often translated as *mode*; however, our understanding of modes is very different from how the ancient Greeks understood them. In the fragments of writings on music by the great theoretician Aristoxenus (born c. 375 BC, a pupil of Aristotle), there is valuable information about the competing systems of musical theory that precede Aristoxenus's comprehensive system of pitch and tonal relations that has endured ever since. Until this point, there were instrumental practitioners and teachers who held

---

<sup>102</sup> These "were a number of self-appointed experts on music theory" (West: 1992, 218)

their own theories from their discoveries and inventions, but Aristoxenus was responsible for laying down a first comprehensive plan. He was scathing of previous systems and rationalized them with a brilliance and elegance that rendered his ordering of tonal space the theoretical “truth” that has been believed and taught by musicologists ever since, East and West of Athens. How well it correlates with auletic practice at any point in history is another matter entirely and is a point on which scholars disagree. The heart of the debate is whether to divide the octave into 12 or seven functionally equal divisions, the twelve-tone system being contradicted by the hole boring of elite theatre auloi buried c. 300 BC, a Roman aulos from the 2<sup>nd</sup> century AD (Megara), and every aulos before Aristoxenus. There is no clear support for a 12-tone auletic system before the Louvre and Berlin auloi or the Pompeian pipes (we do not know which are earlier).

The system Aristoxenus developed combines two ideas: that of a regular scale (*systema*) and that of keys (*tónoi*). Of particular importance is the scale being “an abstract set of notes defined within a skeleton of fixed intervals” (Hagel, 2009: 2-3). The fixed intervals are fourths. The *Greater Perfect System* (for a diagram see Figure 53 below) comprises two octaves, with the *mesē*, at the centre. This takes its name from the middle string of harps and lyres that Babylonian and Hellenic cultures located as the starting point for tuning procedures. The early Classical seven-stringed lyre had names for each string that was related to the fingers or relative position of the strings. The “middle” string was named *mesē*, and its importance was both practical and symbolic: it was the reference string from which the other six were tuned, like the oboe A. The seven strings could be divided into two sets of four, sharing the *mesē* string.

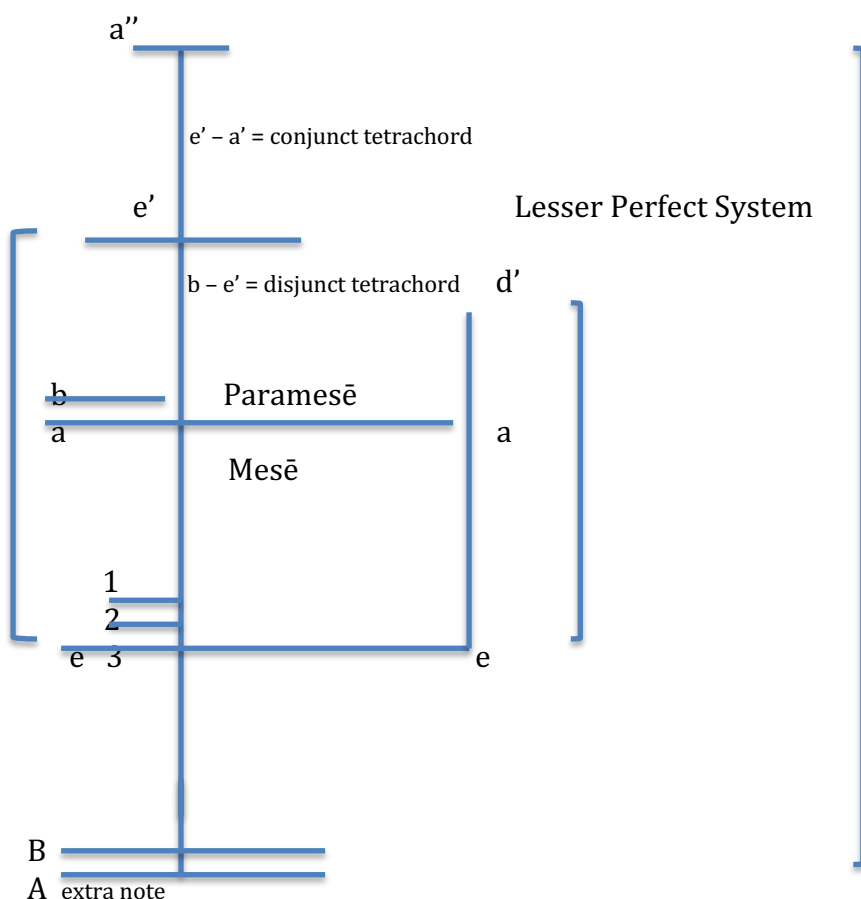
For instance, if A is the mesē, a fourth below gives E, and a fourth above gives the seventh, a D. The double A in the middle creates a conjunct tetrachord. If we extend an octave to the next E above, the mesē steps up to the paramesē, to B, and this is the disjunct tetrachord of B to E. As West noted, “All melodic scales are constructed of tetrachords, which are either conjunct or disjunct, and if disjunct separated by a tone” (West, 1992: 229). The whole scheme was canonical, with the mesē firmly in the middle. This “*systema*, literally ‘constitution’ is the Greek word for any articulated scale or scale-section”. A scale that “comprehended others they called a complete (*teleion*) system...or a perfect system” (West, 1992: 223) or as mentioned, called the Greater Perfect System. There is also the *Lesser Perfect System*, which creates an alternative path and scale that joins at the mesē. The combination of the two was called the Unmodulating System “because with it one could *pretend* [my italics] that music which oscillated between the two alternative paths above Mesē was not really modulating but simply using different parts of a single system” (West, 1992: 223). However, in fact, switching scales to the alternative route at the mesē or changing the scale constitution from a conjunct to a disjunct set of tetrachords, was a way of modulating. The name “unmodulating system” used only one mesē; with two mesē it was “the modulating system”.

There are many ways of bending pitch on an aulos. Its intrinsic pitch elasticity opens up possibilities that are unobtainable on a lyre. This versatility gave the aulos a leading place in music making and in the development of tonal systems on how modes and keys interrelate. As Hagel (2010: 70-71) wrote, “the Louvre aulos relates to the so-called ‘Greater Perfect System of ancient Greek music theory’ because its pitch design reflects this system”. On my Louvre aulos,

with all the holes closed on both pipes, the lowest note is a minor third lower, an F-sharp below middle C, the mesē is the B, and the scale design corresponds to the diagram below in Figure 53.

# Greater Perfect System

(An abstract comprehensive scheme)



- $a$  = Mesē, middle note, tonal centre, but not tonic as we understand it. The mesē served as the tonal centre and stabilized the tuning. When kept "in tune" it prevented ensuing intervallic relationships from becoming dislodged, or "out of tune".
- $b$  = Paramesē.
- Left bracket = central octave,  $e$  to  $e'$  8 note scale.
- Right small bracket (within Lesser Perfect System) =  $e$  to  $d'$ , 7 note scale.
- Right big bracket = 2 octaves.
- In each interval of a 4<sup>th</sup>, the two other notes forming the tetrachord are closely packed at the lower end of the chord. This is the *pyknon*, and the three *genera* 1, 2, and 3 can be one of three types: diatonic (whole tone and semitone), chromatic (semitones), en-harmonic (quartertones).
- The route  $a$  in the Lesser System to  $b$  in the Greater System is an alternative path (not modulating but using a different part of this single system).

### Additional Facts

- The Greeks did not, as a rule, speak of “high” and “low” notes but of “piercing” (oxys) and “heavy” (barys). The word high usually inferred above, and low, below. These descriptions came from the corresponding positioning of strings on the lyre.
  - A note’s name was defined by its position in an intervallic series.
  - Notes did not have a fixed pitch in absolute terms.
  - A singer pitched his mesē to suit his voice’s compass.
  - With the above pitch structure, musicians could extract any regularly formed scale. However, 2-octave melodies did not exist.
- Antiquity left us with more musical theory than it did music.

**Figure 53. Diagram and explanation of The Greater Perfect System**

The two notes in between each fourth, that make up each tetrachord, could be moved and positioned in three ways giving three types of genera: enharmonic, chromatic, or diatonic, and each one had its own specific expressive character. An ascending sequence of a semitone and two whole tones is the diatonic. The other two crowded the two notes at the bottom of the fourth more closely together, the chromatic in semitones and the enharmonic in quartertones. This sequence of notes in any one of these three genera was known as the Dorian scale. (All information gathered from Hagel (2009, 2010, 2014) and West (1992)).

### **e) The Reeds**

Unlike an oboe reed, which is a folded gouged piece of *Arundo donax*, the aulos reed is made from a single tube of *Phragmites australis*, a softer material, that is constricted and tied in the middle then flattened at one end to form the blades (the non-flattened part corresponding to the top of an oboe staple). They are an enormously important part of learning the aulos because the reed determines everything: the quality of sound and the approach of the player,

which are essential to playing with a good intonation. It is a negotiation between embouchure development, reed design, and reed education, with all three interacting and permanently on the move, sometimes in a dance, but more often in a fight, or fraught with despair, reliability being so far elusive. Testing and development is an extremely time-consuming activity, and there are only a handful of makers in the world, the most significant progress to date being made by Robin Howell in Canada. Because the original reeds have all perished, their making is based on conjecture, and the reed structure, substance, and scraping style is an ongoing journey of painstaking trial and error. Prompted by Barnaby Brown, leading aulos reed makers have switched from *Arundo donax* to *Phragmites australis*, which appears to be more compelling from practical and scholarly standpoints. *Phragmites australis*, an invasive species that is widely distributed and highly variable in quality, from a reed-making perspective, is the plant species most easily reconciled with the ancient evidence. Oboe players today (and most other double-reed instruments) use Giant Reed, *Arundo donax*, which is a harder substance. This is the cane everyone was using to make aulos reeds until 2019; however, *Phragmites* is now delivering persuasive results and the differences in sound with the softer material are just being discovered.<sup>103</sup>

The reed is often called the mouthpiece of the instrument. Its quality and the type of cane used to make it represent the player's initial point of contact with the character of the instrument. The reed plant is of special importance, and its growth and habitat determine its quality. The reed-shoot and the music

---

<sup>103</sup> It is a plant that prefers to grow near lakes and rivers, whereas *Arundo* survives in much drier soils and away from water. I believe the water softens the cane and ultimately, the sound.

generated by the blowing of the reed have connotations that reflect and reinforce spontaneity and creative vigour (like the growing reed-shoot), and that is the power of music making with improvisation.<sup>104</sup> Certainly, there was fervour in the improvised aulos music of ancient Greece, and with it a Bacchanalian revelry.<sup>105</sup> The reedy resonance of an aulos in Greco-Roman times would most probably have been a potent sound, and, to improvise with it now on 20<sup>th</sup>-century copies with a Phragmites reed, somehow feels like taking it home to its roots and reed-shoots: the “organic processes of genesis” and “unpredictable spontaneous power” (as quoted in footnote below) of the plant from which the aulos was normally made: not only the reeds, but the pipes themselves. It is only the expensive instruments made from more durable materials that have survived.

#### **f) Initial aulos explorations**

My first forays into learning to play my Louvre aulos took place when I joined a four-day course in Tarquinia in 2018 (with the help of RBC/BCU funds).

---

<sup>104</sup> There is an enchanting description of this idea in early Japanese culture that I feel is relevant because it links thoughts about the making of music. In the Japanese *Kojiki, Records of Ancient Matters* (7<sup>th</sup>/8<sup>th</sup> century AD), the power of natural growth of the reed-shoot represented the wish for continued development of life and culture. The lowlands of Japan’s landscape were covered in wetlands filled with thick Phragmites reeds that were symbolic of the prosperity of the country. The power of nature was exalted. “The Japanese narratives of the emergence of the world ... depict chaotic, complex, and organic processes of genesis. They do not assume creation controlled by a supernatural being but illustrate an unpredictable spontaneous power of nature that continuously generates life” and “the words *ashi* (reeds) and *ashikabi* (reed-shoot) appear repeatedly as an expression of the vital organismic force of deities and the world” (Mitsuyo, 2017: section 10.2) The vigour of the growing reed-shoot was seen as divine and dignified and represented a process of becoming. This I find a beautiful concept. I can imagine the ancient Greeks thinking something similar.

<sup>105</sup> In Japan, the music of the double reed instrument *Hichiriki* is still heard today in Japanese *Gagaku* theatre and has a direct and resonant sound. Additionally, in Korea, the double reed *Piri* also remains popular.

This course, the first of its kind in the world, set up by EMAP,<sup>106</sup> offered invaluable sources of information about the practical study of different types of auloi and theories about the music these instruments might have played. We rehearsed and performed these together. The other 15 participants from Europe and the Americas were also musicians and researchers with varying levels of aulos playing ability.

The course involved:

- Making Ur pipes (earlier, simpler, and smaller auloi) that are low pressure and perfect for learning the art of double breathing. This technique was, and remains, helpful for breathing in longer phrases. It is useful but not essential, and I am learning to do this.
- Making simple versions of auloi reeds. A painstaking process and very much in the early stages of development, but the mouthpiece is the most important part of the instrument to get right. It is necessary to learn the reed-making basics in order to adapt bought ones that are only made by a couple of people in the world and therefore expensive.
- Rehearsing music for the concert on the last day with singing and playing of the auloi. Please see the concert list below.
- Attending talks every day on ancient Greek music theory and historical archaeological findings of instruments.

---

<sup>106</sup> EMAP European Music Archaeology Project, Euterpe 2018: May 3-6 Tarquinia, Italy. The Workshop of Dionysus [www.doublepipes.info/euterpe-2018](http://www.doublepipes.info/euterpe-2018)  
Four-day course directed by Barnaby Brown with Placido Scardina  
[euterpe@emapproject.eu](mailto:euterpe@emapproject.eu) as producer.

- Having lessons in aulos technique: double breathing and finger control exercises.
- Rehearsing and performing an improvisation with Callum Armstrong, a major aulos player.
- Preparing and giving a public interview before the final concert with Sir Harrison Birtwistle discussing his creative use of the Orpheus myth in a piece written for me called *26 Orpheus Elegies* (2003-2004) for oboe, harp, and countertenor.

The interview with Sir Harrison Birtwistle took place in the Biblioteca Comunale in Tarquinia. The conversation between us revealed how he structured his musical ideas around the Orpheus myth. We played some audio tracks from my recording of this work (Birtwistle, 2009) and were able to demonstrate how a piece of contemporary music can make imaginary aural links relevant to an ancient musical past, an idea that obsessed Harry all his life. This stance of making connections between old and new is also pertinent to my research.

The concert music consisted of:

- 1) An anonymous “Bellermand” exercise for the aulos was created into a piece with singing and playing with all the course participants.
- 2) Various solos and duos (one of which is an improvisation with M. Maxwell and C. Armstrong).
- 3) A setting of the Delphic Paean by Athenaios Athenaiou (a liturgical dance summoning Apollo) with all course participants. Composed for

the Athenian Pythaidēs Festival in 138/7 or 128/7 BCE. His paeon to Apollo survives on two marble slabs carved in 128/7 or 106/5 BCE, originally positioned along the Sacred Way of Delphi.

The concert was held at the Sala Consiliare del Palazzo Comunale in Tarquinia at 18.30 on May 6 (Il Workshop di Dionysus; una performance dei partecipanti a Euterpe) 2018.

I am now connected to EMAP and the doublepipes community and continue to demonstrate my findings online to them, and they have asked me to write the occasional blog about my aulos research. I have also made professional contacts, one of whom I have collaborated with in performance for this research. This work is continuing and will be ongoing for the years to come.

#### **g) On Playing the Aulos:**

It is easy to bend pitch with the pressure of the lips or by pulling the reed in or out of the mouth, and playing the intervals in tune can be a very flexible process. All my own aulos playing and listening is led by what I hear in the moment coming from within the instrument, and often the pitch is approximate; I try not to adjust it to equal temperament so that I allow the instrument “to speak for itself”. For ancient Greek players, pitch must most probably have been (and remains for us today) a moveable feast in the sense that it depended on what was to hand in terms of the type and length of aulos and, of course, the reed. There was great variety in its design and in its reed type, and probably also where they played, geographically, and acoustically. It is known that these instruments were transposing and could shift up and down between scales or

modes by blocking and unblocking holes. As I discovered, it is possible to play semitones with adjustments to embouchure and lip bending. Therefore, it seems these instruments were genuinely poly-modal. It was also the case that pitch bending was considered an important tool for adding expression to the music.

#### **h) Public Performances:**

Surge Festival April 2019

Programme note:

Melinda Maxwell and Callum Armstrong form a unique partnership to present music for ancestral and modern reed instruments: the ancient Greek aulos, the modern oboe, and the bagpipes. The music is derived from their experience as improvisers, composers, and performers in the worlds of folk, jazz and contemporary classical music. This partnership presents improvised music with characteristics of both the ancient and modern worlds.

Melinda is in the process within her research studies of searching for various forms of 'oboe character'. She is doing this by investigating ways of making music via instrumental techniques and music both old and new. The sounds of the Indian nadaswaram, the ancient Greek aulos and the western European baroque oboe are cousins of the modern oboe who belong within a wide sonic musical history. This history informs the reinvention of a new music via improvisation, composition, and collaboration.

N.B.: There is no recording of our improvisation in performance, but there are two audio files made in workshops beforehand: Primary listening list **Audio Ex. 02)** 25'58" & Secondary listening list **Audio Ex. 01)** 12'07' min

improvisations with two auloi, aulos and oboe, oboe and bagpipes, aulos and bagpipes.

**i) Performances with Aulos**

- RBC Recital Hall November 2022

Performance of *Janus* with extensive aulos solos and duets (with Callum Armstrong) within the composed score.

- British Double Reed Society May 2023

Performance with an improvisation based on *Aulos Awakes* and a rendition of *Pan for Louvre Aulos* and an explanation of their aulos with a Q+A to finish.

**j) Online performances and demonstrations**

- BCMG Aulos/Janus film:

<https://www.youtube.com/watch?v=3L6BqaprAOg>

**Further Conclusions:**

There have been significant discoveries so far in the international research on the aulos. The [www.doublepipes.info](http://www.doublepipes.info) and all those affiliated with this community are trying to make this instrument a serious contender for future study by professionals and music students worldwide. My involvement with this community will continue, as I have found a creative space in which to pursue my music making with an instrument that has caught my imagination. I will be adding to the discourse online by sharing my aulos music and performing and improvising with it. In autumn 2022, the BCMG commission to compose a piece has improvisation as a key element in which I perform and improvise with my aulos. This performance is recorded and contributes to a CD of new oboe music

by me. The processes described in this case study are a way forward in trying to invent a music that now is unknown but which I hope has relevance to the aulos, oboe, and broader musical community.

## **Nadaswaram Case Study Appendix**

**Interview with Kasim:** Chennai, Tamil Nadu, Southern India Jan 7, 2017

Transcription and summary of interview. The words in italics are my thoughts on what has been said. (Secondary listening list **Audio Ex. 13**).

Kasim presents Melinda with a new nadaswaram. It is two weeks old and made from ebony wood. It is in two pieces. One piece is a long tube and the other is a horn. The long tube is “for the music” and the horn acts as “an amplifier for multiple reflection and volume”. The instrument has the bell because it is played in the temples and the sound must carry. The horn if taken off does not affect the pitch and will sound a little softer. Kasim brought it from the manufacturer. It has been certified as able to cope with the cooler temperatures of the UK.

Most nadaswarams are made from old wood taken from ancient buildings up to 30 years old. The old wood makes the best tone. Cracks can occur in different climates. Kasim usually leaves the instrument out after playing to dry naturally. He has used the same instrument for 30 years. Recently he has been constantly travelling to different climates and has had to get a new one because the old one cracked.

The older nadaswarams were shorter and more limited in range and in what they could play. It was lengthened to make a lower range and to play more softly. The older ancient Greek oboe was called a Nayi and came to Asia with

Alexander (*I assume he means 'the Great'*). There are folk musicians in India now who play a double pipe oboe but according to Kasim the music they make is very limited.

The long tube has 7 finger holes and a further 5 below and these are used for getting rid of excess air. There are two on the right and two on the left. If you close either the R or L upper hole it will stabilize the 4<sup>th</sup> note. You can also close the lower of the two holes.

The hands can be placed in either formation of L or R. This is the same for the old baroque oboes that made two Eb keys for either hand. The nadaswaram has no keys. The fingers are never used to half-hole and therefore semitones occur by blowing different air pressures.

The reeds consist of a copper staple on which is tied a length of thick grass. It is shaved to make it easier to play. All players buy them because it is too time-consuming to make them.

The bass note is D (or D-sharp with a smaller reed). Kasim sings a D (he has perfect pitch) and then plays the D. Kasim's grandfather was a famous nadaswaram player.

(A question about embouchure is not answered)

Kasim selects a tanpura (drone) on D and plays a major scale on D with bends and small glissandi. Pressure of air and facial expression are important factors in playing. In the upper octave the face changes. There is more intensity of sound and more reed has to be placed in the mouth to get the high notes. It is possible to play 'piano' but much harder to control. Less air makes the note softer but will lower the pitch, so more air has to be used to compensate.

The tongue is used to articulate the notes. Sometimes it is not used, and the diaphragm is used instead, or the throat. The articulation is used to stress the beginning and ending of the phrases of the words as most of the music derives from song. The lyrics define the articulation. All compositions have lyrics.

Improvisation has no words and is only permitted in specific places in the piece. The song itself must never get lost so the improvisations must never be too long. They must not 'take advantage' of the song and its purpose is to bring out the essence and beauty of the song. In Karnatic music there are usually about 3 moments (with different tala or rhythm) in which to improvise. The shortest song is 5/7 mins, 10 mins for medium length, and 12/15 mins for an extended song. There are melodic ragas used for improvisations. The melodic scale is called the Karpri scale that means majestic. The second note is a semitone and very expressive. There are also 6 note scales.

(Interruption by hotel staff as instrument too loud).

1<sup>st</sup> two left hand fingers produce an A.

Major scales are with 7 notes. There are also scales of 6 and 5 notes. There are, he says, thousands of scales. Kasim plays a 5-note (pentatonic) scale on D, E, F-sharp, A, B. Each note has inflections and bends up and down in pitch.

*(There follows more playing, please refer to Audio Ex. 13 in Secondary listening list, and a discussion about western music and the use of microtones and quartertones. Interestingly Kasim asked what a chromatic scale is).*

Quartertones are not fixed. They are used as ornamentation to the main note. All nadaswaram music refers to the drone. It is the place of rest and where the music sits. It is home and the root of the music.

Kasim ends by saying the music will not touch your heart if there is no root or resting place for the pitch. Music is not mechanical, and you have to connect with your audience.

CD tracks 3 & 4 with 'call & response' with oboe and nadaswaram

(End of interview)

**Vayu Naidu Collaboration:**

Music and Storytelling: improvisations with oboe/nadaswaram and speaker

Dr. Vayu Naidu; artistic director and storyteller

Melinda Maxwell; musician: composer and player (oboe/nadaswaram)

BEING HUMAN: a Festival of the Humanities in conjunction with SOAS, University of London and Multilingual Locals & Significant Geographies

Performance at N4 Library, London, Saturday 17 November 2018 12-1pm

Dr. Vayu Naidu,

Royal Literary Fund Fellow 2018-2019 UWL [www.vayunaidu.com](http://www.vayunaidu.com)

<https://beinghumanfestival.org/event/no-beginning-no-end/>

[eurolitnetwork.com](http://eurolitnetwork.com)

<https://www.soas.ac.uk/staff/staff108978.php>

Centre for Literary, Cultural and Postcolonial Studies, SOAS-Research Associate;

<http://mulosige.soas.ac.uk/event/storytelling-performance-workshop/>

The following commentary outlines the process of my collaboration with Dr Naidu in our performance of storytelling with music. She and I met four times to establish methods and procedures. She recited four Indian stories to me, some taken from ancient Sufic texts, folktales, histories, epics, and myths. All the stories deal with fantastical events and have their own in-built drama. As I listened to each tale, I began to think about ways of making musical connections via numbers and patterns. This ensured that I had a compositional groundwork for each improvisation. The expression and characterization would develop as I improvised. We found in rehearsal a way to proceed. As she spoke, improvising

different versions of any one of the stories, I improvised exploratory musical ideas. We developed an instinctive understanding about how we could interact. Sometimes she would allow the music to speak on its own to enhance a dramatic moment, or I would play while she spoke to support her words. Both processes allowed us to explore a method of improvising together with confidence. All procedures were noted, and we felt able, in the final performance, to allow our improvisations to go where they needed to go in any given moment.

Musical links to the stories:

1) Snake story:

This folk story comes from the festival of Nag (snake) Panchami (festival) when women give prayers around temples to snakes particularly cobras. The power and intelligence of snakes and reptiles was very much acknowledged particularly in the epic story of *Mahabharata* (one of the two major Sanskrit epics of ancient India). More broadly the story is about protecting, supporting, and celebrating all forms of life because in turn they will support humans. So, the story has seven siblings with the seventh being an outcast and deals with both a female snake and female human giving birth. It deals with transformation and metamorphosis. This prompted me to think about a specific 7-note scale whose pattern is rich in aural opposites. In my jazz studies I was introduced to bi-tonal scales. These scales are rich harmonically and include the interval of a tri-tone and hint at two diatonic major scales. I decided to use the C D E F, F sharp, G sharp, A sharp scale that includes the majors C and F sharp because the timbral colours are very striking on the oboe. I also decided to use a tanpura

(Indian drone) on C at a specifically dramatic point in the tale allowing me to bend the pitch against and with the C drone. In my head the F/F sharp became pivotal notes in my improvisations. Each time I improvised I found the gestural and rhythmic details that could be elaborated upon subsequently. The scale gave me opportunities to, as it were, 'slither' and bend in melodic contours like a snake.

## 2) Wise parrot, Padmavati, story:

Hiramani is the wise Parrot from Muhammad Malik Jiasi's *Padmavati* (a Sufi epic from 1540 C.E). On listening to this story, the landscape took hold in my mind; one of a moonlit lake on a warm Indian night and featuring beautiful female princesses swimming with jewels on their clothes and bodies. My instinct decided on a music that contained an open exotic sound and this led me to use a chromatic scale because I could exploit its modern expressive angularity full of ambiguity and a certain romance. I used multiphonics to enhance the expression and employed certain other extended techniques such as double trills. I made the expression very lyrical and slow in tempo.

## 3) A story of an abduction by a ten-headed god:

In *Ramayana* (the other major ancient Indian Sanskrit epic), Sita the exiled wife of Prince Rama, is abducted by Ravana, the ten-headed emperor of the underworld. His awe-inspiring ten-headed form symbolizes magnificent talents, but he is a character who is fragmented by delusions of what power he thinks he has. It is a story of mystery, darkness, capture and death. The number ten became an obvious point of call and I decided to use two pentatonic scales

that combined make up what's known as the dark mode (an ancient Japanese mode). Ascending E F A B D descending E C B A F (E). I transposed the ascending up a tone starting on F sharp and the descending up a tri-tone starting on a B flat. I chose these transpositions and intervals because harmonically they are distant, and this allowed me to capture the terror in the drama by exploiting this aural difference through my melodies. I decided this was a slow tragic story in contrast to the previous two stories that had slightly faster tempi.

#### 4) The all-powerful Devi, female goddess of light, story:

This story celebrates Devi, the great goddess of existence in the Hindu tradition and mother of the universe who can be portrayed as benign and gentle or the opposite, violent and ferocious as in this tale where she wins the war of all wars. The dramatic violence is extreme and includes a powerful ray of light at a significant point in the story. The tri-tone interval yet again dominated my thinking and led to my decision to use Lydian modes incorporating the two pentatonic scales on C and C sharp. The dramatic moment of light within darkness in the story led me to re-introduce the tanpura drone on C and against this improvise on the C sharp pentatonic scale. This reasoning linked the music and the words together logically in my mind and gave me license to make the music act dramatically. The use of the drone also balanced the whole four-story sequence (as I used it in the first story) and made this story feel like a finale particularly as it is preceded with a slower movement.

Nadaswaram introduction to our performance:

We decided that the sound of my nadaswaram should introduce the four stories as an overture to our performance. Its calls to prayer that I heard on my visit to Chennai felt apposite as an idea to use in this context. I made the character of the music call-like in its sound with gaps and repetitions using similar intervals. We were performing in an open space upstairs. The strong calling sound of the nadaswaram could be heard downstairs and this enticed and invited the audience to join us in preparation for the performance.

#### Summary:

This process shows that the music making and improvisations were firmly embedded in a musical logic that related in particular ways to the stories. The decisions about the use of specific scales and modes came from my own compositional and improvisatory thinking and was defined by my experience as a classical oboist who has commissioned and performed a large quantity of modern and contemporary music. All my improvisations were based on some form of harmonic limitation. This in my opinion was necessary to ensure a certain style and presence in the music. Dr Naidu, I discovered, had similar criteria about setting up parameters to begin her improvisations within storytelling and this led to a process of continual but contrasted repetition in rehearsal in order to find the ultimate strengths of the relationships between the text and the music. The freedom induced by these limitations allowed us to exploit detail and make the inner expressive content meaningful. This has connotations to how Derek Bailey describes the act of improvising, a process that is 'fluid and amorphous – and almost always empirical' and is one 'of perpetual variation and renewal' (P.107 Bailey).

I value the fact that Dr. Naidu originally heard me play the oboe and something about the way I communicated my music must have struck a chord with her. This is vitally important in the sharing and collective creativity that we have found together. There are more projects planned one of which is to explore ancient Greek myths that could involve the ancient Greek aulos, an instrument included in this research. This could give me the opportunity to create a music with this instrument as I did with the nadaswaram and bring it into a modern contemporary context.

Reference:

Bailey, Derek (1992) *Improvisation Its nature and Practice in Music* USA; Da Capo Press

MM January 2019

II. PHAETON who rode upon the chariot of the sun for one day and was hurled into the river Padus by a thunderbolt.

Vivace ritmico  $\text{♩} = 152$

Urgent  $c7$

non staccato

ppp

f

meno A7

dim.

sf

meno p

Agitato

f

T.T.T.

f

sf

ff espress.

ppp (a tempo)

ppp

Copyright 1952 by Hawkes & Son (London), Ltd.

301

## Janus Commentary Appendix

**Figure 55. BCMG Programme for *Janus*, November 2022**

## new music weekend

18 - 20 Nov, Birmingham

<b>Friday 18 Nov</b> Royal Birmingham Conservatoire	NEXT with Thalein Ensemble concert
<b>Saturday 19 Nov</b> Royal Birmingham Conservatoire	BCMG NEXT Concert feat. works of Carter & Lewis
<b>Sunday 19 Nov</b> Royal Birmingham Conservatoire, Recital Hall	Improv Concert with Melinda Maxwell feat. the world premiere of Maxwell's 'Janus'
<b>Sunday 20 Nov 2022</b> The Bradshaw Hall, Royal Birmingham Conservatoire	The American Dream Concert

### Improvisers Group, BCMG Soloists

Melinda Maxwell	oboe, aulos, nadaswaram
Callum Armstrong	aulos
Oliver Janes	clarinets
Percy Pursglove	trumpet
Julian Warburton	percussion
Liam Halloran	percussion
Sebastiano Dessanay	bass
James Dooley	electronics

**Melinda Maxwell** *Janus (2022)* World Premiere, Sound Investment Commission for improvising musicians including the ancient Greek Aulos

## Janus

### Melinda Maxwell

This piece represents a culmination in my PhD research that involves investigations in perspectives of oboe character. Is there a melodic and harmonic language that can be found in the study of oboe ethnomusicology, including the contemporary, to make a music that defines oboe essence? Janus, the two-headed Roman god of transitions, duality, beginnings and endings, is an attempt to find this essence and bring together if you like the double reed soundscapes of an ancient music with that of a contemporary one: ancient wisdom meets modern knowhow. It uses improvisatory and compositional methods discovered in my research that combine, alongside the contemporary sound world of the modern oboe, the music texts and playing histories of two exotic double reed instruments: the ancient Greek aulos and the south Indian nadaswaram. The former is an instrument that has been re-discovered

only in the last couple of decades, whilst the latter is the oldest oboe of the ancient Dravidian culture that is still heard today in Tamil Nadu. These are instruments I am learning to play and their sounds have inspired and led my contemporary ear.

The ideas behind Janus stem originally from the aulos. It is the oldest oboe in the world and consists of two cylindrical pipes, each with a double reed, played simultaneously. The idea of 'two' and 'double' became my starting point with ideas around doublings, pairings, mirror images (similar and dissimilar), reflections, repetitions (ornamental, regular and irregular), similar and dissimilar versions, duets within duets. The instrumentation reflects these doublings with mixes of oboe/aulos, oboe/trumpet, oboe/clarinet, aulos/trumpet etc. The chosen wind instruments reflect each other and the double bass, percussion and electronics are the glue that binds them together. The harmonic reasoning derives from the make up of the double lines one can make on the aulos and its pitch patterns of major/minor that revolve around ratios of 4ths and 5ths. I have also referred to ancient Greek music theory based on tetra-chord relationships. The flexible aulos tuning based on subtle inflections around the way the double reeds vibrate encourages explorations into microtones.

I have composed four 'arches' through and around which improvisations can journey. They act as gateways and frames for the music as it travels back and forth from the past into the future or vice versa. The piece has a central pitch of B natural around which the harmony of the arches rotate. B is a fundamental pitch for the aulos, nadaswaram and oboe. There is alternation between an F sharp/F natural axis that acts as a provocative interval with the B determining certain harmonic decisions and outcomes.

The piece travels into unknown territory, never heard before in the UK. It is the first to combine the oboe with two of its exotic cousins, the ancient Greek aulos and the south Indian nadaswaram, in a composed and improvised structure. The mirroring with the additional instruments gives Janus a setting in which to explore the past, present and possible future of 'oboe essence'.

I would like to thank Stephan Meier for this BCMG commission and his support and belief in the nature of this piece. It has been written with my own community of improvising musicians in mind and for BCMG players. It employs a rarefied instrumental combination but the piece is also designed to work without the aulos and nadaswaram. It was composed with the aspiration that future oboe players will be able to double on these instruments and that the aulos, an instrument slowly re-emerging after centuries of silence, will return. **MM November 9, 2022**

Commissioned by Birmingham Contemporary Music Group with the support of Arts Council England, and the following individuals through BCMG's Sound Investment scheme: Derrick & Catherine Archer, Jean Bacon, John Barnden, Samantha Bird, Paul Bond, Richard Bratby, Christopher Carrier, Penny Collier, Simon Collings, Alan Cook, Mervyn Dawe, Darryl de Prez, Susanna Eastburn, Matthew Harris, Simon Holt, Philip Hunt, Stephen Johnson, Colin & Belinda Matthews, Stephen & Jackie Newbould, Roy Parker, Howard Skempton, Michael & Sandra Squires, Nest Thomas, Terry Thorpe, David Lewis & Gwendolyn Tietze, Stephen Williams.

## Melinda Maxwell

### Composer

Melinda has performed worldwide as soloist in Europe, Japan, Africa, the USA and nationally in the UK. She is also a recitalist, chamber musician, composer, improviser and teacher. She is principal oboist of the Birmingham Contemporary Music Group and has played as guest principal and sub-principal with the London Sinfonietta for over forty years. She has also been guest principal with many ensembles and orchestras including Britten Sinfonia, Garsington Opera and in regular demand in the session TV/Film world not least featuring in all the Inspector Morse series for TV.

Many pieces have been written for her including those by Sir Harrison Birtwistle, Simon Holt, Simon Bainbridge, Nicholas Maw and Howard Skempton. As a composer she has written several works for oboe and also various ensemble pieces for strings. Her septet *Fractures* received its premiere in a performance by the Birmingham Contemporary Music Group in 2016 conducted by the late Oliver Knussen.

She has recorded frequently for the BBC and her own recordings have been critically acclaimed and voted CD of the month in the BBC Music magazine and the Guardian. Her most recent CD *Blue Bamboo*: jazz and other improvisations was released in 2017 by Oboe Classics.

As a teacher she has taught at the Royal Academy of Music, Trinity College of Music, and the Royal Northern College of Music: Head of Woodwind (2002-2003) and Consultant in Woodwind Studies (2003-2018). She is the Oboe Tutor at the National Youth Orchestra, a Visiting Oboe Tutor at the Royal Birmingham Conservatoire and coaches at the Britten-Pears School for Advanced Musical Studies in Snape, Suffolk.

In 2013 she gained an MMus in Jazz Performance at the Royal Birmingham Conservatoire and in 2016 began a PhD in Improvisation, Performance and Composition. Part of her research involves opening up the idea of oboe character and how this might influence a musical language. This has prompted her to learn the south Indian nadaswaram, and the ancient Greek aulos.

### Coming up tomorrow

**The American Dream** Sunday 20 Nov 2022, 5pm  
The Bradshaw Hall, Royal Birmingham Conservatoire

Pre-concert talk, 4pm, The Lab Royal Birmingham Conservatoire  
[www.bcmg.org.uk/the-american-dream](http://www.bcmg.org.uk/the-american-dream)



Birmingham  
Contemporary  
Music Group



## Improv with Melinda Maxwell

new music weekend | 18 - 20 Nov, Birmingham

Saturday 19 November 2022, 7pm



Supported using public funding by  
**ARTS COUNCIL  
ENGLAND**



**ROYAL  
BIRMINGHAM  
CONSERVATOIRE**

## Sonic Diary List of Improvisations (available on request)

### Aulos Case Study:

- 1) Apr 2019 mobile first slow attempt at 'the dance but very slowly' 1'23"
- 2) Jan 2020 mobile Aulos Chorale 1'11"
- 3) Improvisation on *Bellermann* exercise exploring contrary motion 2'45"
- 4) Dance improvisation 1'25"
- 5) Improvisation with grace notes 1'13"
- 6) Three improvisations on Barnaby Brown finger exercises (1'49", 2'26", 2'07")
- 7) Aulos lullaby from mobile 2'35"
- 8) Mar 2020 'aulos improvisation exploring rhythms 1'21' or 'aulos fast rhythmic improv' 1'19" Mar 27
- 9) Aulos in 5/8 and 6/8 improvisation Apr 3, 2020. 1' 51"
- 10) Wild high aulos Jan 2022 3'18"
- 11) Unison beatings improvisation July 2020 3'37"
- 12) Aulos improv over oboe multiphonics 2'39"
- 13) Oct 14, 2020. Aulos improvisation slow pitching 3'53"
- 14) Mar 17, 2021. Oboe improvisation on aulos music 2'25"

- 15) Mar 20, 2021. Aulos improvisation on Barnaby Brown's finger exercise 5'10"
- 16) Jun 11, 2021. Aulos improvisation with fast notes 00.49"
- 17) Jun 11, 2021. Aulos improvisation on a Barnaby Brown finger exercise made into a piece 1'30"
- 18) Jun 11, 2021. Aulos improvisation 1'50"
- 19) Jul 3, 2021. Aulos improvisation 1'54"
- 20) Jul 3, 2021. Aulos improvisation with alternating notes 1'09"
- 21) Aug 20, 2021. Aulos improvisation with contrary motion 1'42"
- 22) Aug 2021 aulos improvisation in 11/8 pattern 1'
- 23) Nov 19, 2021. Cor Anglais improvisation with aulos improv over 5'19"

### **Nadaswaram Case Study:**

- 1) Nov 1, 2018. Claves making Indian riff semiquaver pattern 52"
- 2) Nov 1, 2018. Claves making Indian riff with quaver pattern 39"

### **Baroque Oboe Case Study:**

- a) Improvisation on baroque oboe in F sharp/C scale plus Berio opening. 2'42" Nov 19, 2018
- b) Angular oboe improvisation on my 'baroque scale'. 1'37" Nov 2018
- c) Oboe improvisation on new Bach melody + B minor via C sharp. 3' Feb 12, 2019
- d) Oboe improvisation on Berio/Bach 1'43" May 19, 2019
- e) Oboe improvisation Bach/Berio 1'58" May 25, 2019
- f) Oboe improvisation Bach/Berio 1'51" May 26, 2019

### **Varèse Case Study:**

Beginnings and exploratory, preparatory improvisations

- a) Introduction to all sonic diaries beginning Jul 12, 2018 starting with 1) Varèse improv 2) Oboe improvisation on Nadaswaram *Sri Vali Deva*, 5'50"
- b) Jul 12, 2018. A spoken explanation of approach to pitches in Varèse improvs 32"
- c) Nov 22, 2018. 2'01"
- d) Dec 8, 2019. 4'21"
- e) Dec 9, 2019. 4'55"
- f) Dec 10, 2019. 4'24"
- g) Dec 11, 2019. 4'52"
- h) Apr 10, 2020. 3'35"
- i) Apr 10, 2020. 3'58"
- j) Apr 11, 2020. 4'13"
- k) Apr 12, 2020. 4'45"
- l) Apr 12, 2020. 4'39"
- m) Apr 13, 2020. 4'54"
- n) Apr 13, 2020. 5'15"
- o) Apr 14, 2020. 5'43"
- p) Apr 15, 2020. 5'28"
- q) 5'03" no date

- r) Apr 21, 2020. 5'22"
- s) 5'32"no date

**Britten Case Study:**

Exploratory improvisations on Pan:

- 1) 'Pan on oboe + 4 improvs'
- 2)Jul 21, 2020. 4 tracks of oboe improvs as backing for aulos improvs
- 3)Jul 22, 2020. Oboe improvisation as backing for aulos improv 2'17"
- 4)Aug 28, 2020. Oboe improvisation with multiphonics for aulos improvisation 1'46"
- 5)Aug 28, 2020. Oboe improvisation for aulos improvisation 1'46"
- 6)Nov 15, 2020. Oboe improvisation on *Bacchus* 1'49"
- 7)Nov 15, 2020. Oboe improvisation on *Phaeton* 1'39"

**Janus:**

May 9, 2022. "Top part aulos chorale" 00.44"