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Abstract

In this commentary, I aim to describe, contextualise and analyse my artistic practice, and present a cross-section of compositions and improvisations created between 2014-2017. This includes site-specific compositions I created with installation artist Haroon Mirza, realising the previously lost composition of composer Daphne Oram titled ‘Still Point’, and my live turntable improvisations I create for my NTS Radio shows. I draw attention to my own bespoke techniques and unique methodology within my practice to create new forms of music composition as well as to study perspective both musically and socially. I highlight the important elements of my work including improvisation, untold histories of classical music, collaboration, artistic curation and my own methods of music electronics specifically relating to the turntable. In relation to my turntabling practice, I created my own methods away from any other culture such as hip-hop turntablism, instead focussing on the physicality of sound and the sculpture of the turntable as inspiration for my movement-based techniques. In regards to this, I discuss my strong focus on musicality, away from sound-art. The physicality of sound is also an integral element of my acoustic compositions. In relation to this, I outline the use of innovation in my work including engaging with space and acoustic as a way of creating sonic-sculptures that emphasise the idea of the physicality of sound, which is prevalent in different forms in my acoustic and electronic works. Throughout the commentary I aim to raise questions, and how we as artists have responsibilities to create new forms that are relevant to current social landscapes. Finally, the aim of all the points outlined is to continue to develop my main aim as an artist: The pursuit of truth and understanding on my quest to find “real.”

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Artist Statement

I am an experimental classical composer, researcher and turntablist working closely with the physicality of sound in relation to light, perspective, movement and sculpture. With electronics, I focus on analogue and bespoke electrics that generate 'real' and pure sounds of electricity, over computer products. With acoustic instruments, I am concerned with the interaction of tone, orchestration, texture, movement and space. I also work closely with vinyl records, sampling and turntables. My turntabling practice can be described as a manipulation of pre-recorded analogue sound to create new movements and forms not always apparent in the record being manipulated. I often modify and prepare the turntables using sculptures that utilise the electricity, magnetism and circulation of the turntables to create sounds and shapes. Sampling through turntable manipulation is an important part of my compositional practice as it allows me to give a respectful nod to history. At the same time, the samples within one piece of my music are ever-changing, depending on performance, context, performer or the time in which the piece is being performed. This means the same composition is always moving and evolving with time, place and people, and has a specific connection to particular moments in time or occasions. Therefore, my music engages not only through physical interactions within space, but the linear movement through time.

- From 2013 onwards, I have worked mainly as a collaborative composer, and use either improvisation, explorations in different disciplines, or chance events to create my collaborative teams. Collaborations with people from many different backgrounds and

disciplines helps me to gain new perspectives: The best thing we can do as people is understand perspectives that are different to our own, in order to understand each other and our different societies and cultures. Therefore, a core aim of my work as an Artist is exploring perspective, both sonically through sound-manipulation, as well as culturally and socially, by working on the intersections of disciplines and genres. I work with children and young people in a variety of educational environments, and construct seminars and bespoke projects at universities and music/art colleges. I have also presented at several international conferences ranging from *Children's Musical Worlds*, run by the Society for Music Psychology and Education,¹ to the *Alternative Histories of Electronic Music* at the Science Museum Research Centre.² In addition I am writing a chapter for a book, *Analytical Essays on Music by Women Composers, 1900–1960* (Oxford University Press) about my research on the British composer Daphne Oram, referencing her work *Still Point*. However, my most important research method, which I will refer to later in the commentary, is my frequent presentation and DJ'ing of experimental music on NTS Radio in Dalston.

Having briefly introduced my work, I would now like to discuss my approach to notation and the production of my music. I see notation as an adaptable 'toolkit' that helps me to work in a variety of contexts, and with participants as diverse as a symphony orchestra, a DJ/Producer, an installation artist, non-artist, close friend, stranger, toddler and jazz-musician. I employ a variety of notational modes to achieve the best expression for all involved in the process. This can include a mix of strict notation, graphic scores, gestural turntable notation, learning/feeling through

¹ Institute of Education, University of Reading, 'Children's Musical Worlds,' *Sempre*, (Reading: University of Reading, October 25 2014). http://sempre.org.uk/resources/2014_oct_prog.pdf (Accessed 9 July 2016)

² The Science Museum Dana Research Centre, *Alternative Histories of Electronic Music* (London, April 14–16 2014). <https://ahem2016.files.wordpress.com/2016/02/ahem->

movement, recording/capturing, or it can include deep improvisation, discussion, concepts, spatial diagrams, pictures or online messaging discussions. Utilising a wide variety of methods of communication with those that I work with means that I can work in a variety of settings and contexts. In turn, I can be inclusive with those with whom I choose to collaborate. This diverse approach feeds the music and develops my perspectives as a composer.

My Core Compositional Attributes

In the below, I have organised my compositional practice into core attributes and themes, in order to contextualise my work. This commentary is to be treated as a complementary aspect to my portfolio. The focus of my doctoral research is practical and based in the 'real world'. Within these practical applications and compositions, I explore the following areas:

Social Relationships and Diversity

My music embraces diversity, which positively influences my compositional process and its contexts. Fundamentally, I look at composers who are relevant to me, many of whom are under-represented in mainstream classical literature. My approach also includes working in culturally diverse settings and across disciplines to enrich my work, both in relation to the artists I work with, as well as the audiences it attracts. Interpersonal relationships substantially influence my creative output. All of this enriches, diversifies and nourishes my compositional contributions and allows me to gain the rich perspective I desire.

Collaborative and Project-Based

Most of my work is composed and developed in collaboration with a variety of other people including children, artists, researchers and instrument-makers. I also engage in intangible collaborations with historic composers who are not present to collaborate

directly, and where the onus is on me to define the outcome. In addition to my composition work, I have been involved in organising and curating bespoke artist-led events, which makes sure that the music is presented in an equally artistic context. I spend much of my day-to-day practice working on collaborations to gain new perspectives. Moreover, I like to develop long-term relationships with collaborators, rather than revolving around a single work. I feel an inspiring energy from working with other composers or artists, as I feel that I learn something new about my own creative practice and the world I live in. This includes my partnership with spatial artist Haroon Mirza, who plays a major role in my current work.

Turntabling Practice

Turntable manipulation is a term that describes the use of records and turntables beyond typical DJ'ing practice. In my case, I use turntable manipulation to create electronic music by manipulating recorded sound in performance, often electroacoustically. In composition, I focus on the physicality of sound and the pure sounds of electricity. The use of turntables as a means of producing electronic sound is a fundamental component of my compositions. With the turntables, and other simple analogue instruments, I have developed my own methods of developing electronic music, away from computer software that I feel is often musically and expressively restrictive for my own

practice. I often use modified or prepared turntables that respond to the sculpture and movement of a turntable, as well as manipulating recorded sound with vinyl, using a variety of my own bespoke techniques. Specific techniques will be discussed in some detail in relation to compositional work throughout this commentary.

Historical

My music has a strong historical context, both within the music, the instruments I use, and my influences. For example, my work with electronics is often achieved by manipulating records, which directly reference the work of other artists, past and present, but in a new form and context. I also restore and realise the music of pioneering composers who were somewhat overlooked in their time, such as the work of British composer and inventor Daphne Oram³ as well as my planned collaboration with composer and synth pioneer Eliane Radigue.⁴

³ Daphne Oram (1925–2003) was a British composer, inventor and electronic musician. She created the Oramics machine; a combined synthesizer and sequencer, which used drawn graphics to create and control electronic sound. She was the first composer to be commissioned to provide electronic music for the BBC, producing the soundtrack to the experimental TV drama *Amphitryon 38* in 1957. In 1958 she co-founded the BBC Radiophonic Workshop, becoming its first director, and an indelible influence on the work produced throughout its history. After she left the BBC in 1959, Oram created her own studio at Tower Folly, Kent (one of the earliest electronic music studios in the UK) where she worked for most of her life. Oram's main focus at Tower Folly was the invention of a wholly new form of sound synthesis, entitled 'Oramics'. Not only is this one of the earliest forms of electronic sound synthesis, it is noteworthy for being audiovisual in nature – the composer draws onto a synchronised set of ten 35mm filmstrips which overlay a series of photo-electric cells, generating electrical charges to control amplitude, timbre, frequency and duration. As well as her work on 'Oramics', Oram produced a wide range of vital and exploratory works both live and in the studio, with a diverse output: concert pieces, film soundtracks, advertisements and sound for sculpture. Alongside her studio work, Oram was a researcher with an avid interest in the science and philosophy of sound. She wrote a number of research papers, and gave numerous illustrated lectures at universities, theatres and clubs around the UK. Her book *An Individual Note of Music, Sound and Electronics* (1972) is shortly to be republished by the Daphne Oram Trust, and provides a fascinating insight into her unique and radical perspective on sound. After her death in 2003, composer and electronic musician Hugh Davies inherited her collected works and personal archives. After Davies' death in 2005, the collection moved via the Sonic Arts Network (now Sound and Music) to the Special Collections and Archives at Goldsmiths, University of London, where it is being accessioned and digitised. The Oramics machine was recently purchased by the Science Museum, where it has been on display as the centrepiece in the 'Oramics to Electronica' exhibition. (J. Bulley and S. Feshareki, 2016)

⁴ Julien Becourt, 'Éliane Radigue: The Mysterious Power of The Infinitesimal,' *Red Bull Music Academy Daily*. (2015). <http://daily.redbullmusicacademy.com/specials/2015-eliane-radigue-feature/>. (Accessed June 21 2017.)

Improvisation

Since 2015 I have improvised extensively. I do so both on my own, in pairs and groups, and with close friends and collaborators. I am not concerned about whether my fellow improvisers see themselves as musicians or not, as long as we share a willingness to understand, trust and openness – then it works. I like working with as many different types of artists and people as possible, including bonding with my friends and collaborators through improvisation, from which I often learn new things about myself, and my collaborators; it is a highly enriching and mindful process.

Improvisation allows me to advance my turntabling practice. I am highly influenced by Pauline Oliveros and her ‘deep listening’ techniques, which inspired me to start ‘deep improvisation’ with as many people as possible. I try to do so on a regular, often daily, basis, almost like meditation.⁵

Deep listening – for me – is learning to expand perception of sounds to include the whole space:time continuum of sound, encountering the vastness and complexities as much as possible. Simultaneously, one ought to be able to target a sequence of sounds, perceiving the beginning, middle and end of them as a focus. Such focus and expansion means that one is connected to the whole of the environment, and beyond. My practice is to listen to everything all the time and remind myself when I am not listening. I invite you to take a

⁵ Pauline Oliveros, *Deep Listening* (New York: iUniverse, 2005).

moment now to notice what you are hearing and expand your listening to continually include more.⁶

Ultimately, improvisation allows me to step out of my conscious comfort zone and allows my collaborating improvisers to experiment outside their normal mode of playing. None of the improvisations submitted were prepared or planned beforehand, and are completely free of determined ideas. The only determined idea is my extensive and ever-growing record collection, which provides the vinyl I manipulate.

My improvisations in this submission are performed with:

- artist and instrument-maker Jack Jelfs
- jazz-organist Kit Downes
- installation artist Haroon Mirza
- solo experiments, and live sampling on my NTS Radio show NEW FORMS.

Many of my recent turntable performances have been completely improvisatory, and therefore I see them as live turntable compositions that grow and evolve in the moment and on the spot, thus engaging the listener in the process and journey. I believe that, in the right context and with the right people, improvised performance can take us beyond our control as artists, and have a sincerity and realness that cannot be pre-conceived. When dealing with sounds that respond to movement, moment, space and shape especially, the most significant moments and structures come from choices that have been made in the flow of that occasion. For example, for the improvisation I performed

with Kit Downes live for Radio 3, we didn't talk, plan or prepare anything, nor had we ever played or rehearsed together before, apart from a ten-minute sound-check during the day. Our only boundary was the duration for which we played. Additionally, our improvisation for NTS Radio was a development of the Radio 3 session. Again, we did not plan or prepare anything, to encourage flow and decision-making through essential, core, physical experience. Another notable impact of this improvisation was its context: it was filmed and recorded live for NTS Radio's Facebook page, and this informal context meant it was experienced by a diversity of people from a variety of backgrounds and cultures, as well as internationally.

I also like to use the errors that occur quite naturally in improvisations; it is about seeing what happens out of your control, and then consciously working with that within the moment. For example, during a live turntable improvisation for my NTS Radio show on Eliane Radigue, my hand accidentally touched the turning plate on which the record was spinning and this modulated the music in quite a natural, beautiful way. This has now become an integral technique in my turntabling practice. There's nothing more physical or experiential than a spinning record speeding up or slowing down, moving clockwise or anticlockwise, in various shapes and forms, with this movement affecting the pitch, tempo and aesthetic.

Pieces and Projects Included in this Submission

THE CALLING (2015)

Shiva Feshareki & Haroon Mirza.

Text by Laura Marling

Instrumentation:

Acoustic soprano, prepared turntables, amplified cello, 'UGKI', audience volunteers, lamps, transistor radios, tables, PA system, projector, wooden screen (four by seven feet), LEDs, control box, speaker cone wood, metal stand, light bulb, glass cabinet, cabling, remote control socket, electronics.

Duration:

20mins approx.

Première performance:

23rd July 2015 at Barbican Art Gallery, as part of Station to Station's *An Evening with Shiva Feshareki, Factory Floor and Haroon Mirza*.

Performers:

Sarah-Jane Lewis, Colin Alexander, Jack Jelfs, Haroon Mirza and Shiva Feshareki

This is a spatial installation, not an audio or video art. The audiovisual documentation of the work uses various versions of the same work as well as videos taken by audience members and shared on social networking.

Music example 1: https://youtu.be/kujytJ_VXkA

*Please view the score by following the Dropbox folder link that was shared with you.

VOLCANO DIARIES (2015)

Shiva Feshareki & Haroon Mirza featuring Kit Downes

Instrumentation:

Surround-sound ensemble – E flat, B Flat, bass and contrabass clarinet, soprano, grand organ, video, LEDs and prepared turntables

Duration:

45mins approx.

Première performance:

14th October 2015 at Union Chapel, Islington, as part of my own with Colin Alexander and Haroon Mirza, with thanks to Arts Council England, Fiorucci Art Trust and Frieze.

Performers: Kit Downes, Sarah-Jane Lewis, Max Welford, Kimon Parry, Scott

Lygate, Chris Goodman and Haroon Mirza.

This piece is a spatial, surround-sound installation using the architecture of Union Chapel, Islington:⁷ the live film footage is of the première performance.

Music example 2: <https://youtu.be/6a138jCTK68>

This piece has no visual score, as it was constructed through various forms including conversation and physical experimentation in the space.

Selected Improvisations (2015–17)

NTS: Shiva Feshareki and Kit Downes live from St John at Hackney Church – 10.10.16

This is an experimental performance working with the architecture and acoustics of the St John at Hackney Church. On turntables, I live-sample and manipulate Pauline Oliveros, Daphne Oram, M.E.S.H, Eliane Radigue, and Photek, whilst Kit Downes plays the church organ.

⁷ 'Union Chapel is an architectural treasure that is an award-winning venue, home to a working church, a unique organ and The Margins Project for those homeless and in crisis in London. It is a rich community where people come to revel, to worship, to listen to wonderful music, to volunteer and to find help when they need it most. Over the past 25 years the Chapel has gone from facing demolition to being Grade I listed, and from being virtually abandoned to welcoming tens of thousands of visitors a year. Union Chapel is now a vibrant hub of activity with a huge amount going on. There are six main groups based here all united by a love for this space and our desire to welcome people to it.' Union Chapel, 'About us.' (no date) <http://www.unionchapel.org.uk/about-us/>. (Accessed June 21 2017.)

Music example 3:

<https://www.youtube.com/watch?v=qDE-EmdSRqQ&t=1373s>

NTS: Shiva Feshareki live at UNIQLO TATE LATES 12.02.17

This performance brought experimental turntable manipulation and re-contextualised dance music to the Tanks at the Tate Modern for the Uniqlo Tate Lates, manipulating Eliane Radigue, Daphne Oram, Haroon Mirza, M.E.S.H and Villem & McLeod.

Music example 4 (CDa track 1 of 2):

https://www.youtube.com/watch?v=At3Y93M_HkA

BBC RADIO 3 LIVE FROM HACKNEY ST JOHN – KIT DOWNES AND SHIVA FESHAREKI 03.07.16

In this improvisation, three turntables and church organ are played live for BBC Radio 3's Open Ear concert at St John at Hackney. Warped and manipulated samples include Pauline Oliveros, Daphne Oram, James Tenney, M.E.S.H and Eliane Radigue.

Music example 5 (CDa Track 2 of 2):

<https://soundcloud.com/shivafeshareki/bbc-radio-3-live-hackney-st-john-london-contemporary-orchestra-kit-downes-and-shiva-feshareki>

JACKSHIVAHAROON 27.12.2015

Description: live, improvisatory mix with Haroon Mirza and Jack Jelfs using bespoke electronic instruments that respond to light, video, space, acoustics and magnetism, as well as four Technics turntables and a 909. Sampling Madonna, M.E.S.H, Stravinsky, Daphne Oram and more.

Music example 6 (Cdb Track 1 of 1) :

<https://soundcloud.com/shivafeshareki/jackshivaharoon-analogue-improvisation/s-A78dl>

NTS: Shiva Feshareki Presents *NEW FORMS* – Stravinsky 24.04.17

This is a presentation of my monthly show on NTS, New Forms. Using my bespoke turntabling techniques, I re-imagine music and sounds from any genre live, through warped, vinyl-only turntable manipulation. I have hoped that each special-edition show would be a trip into an alternative perspective to that which already exists: a new form.⁸

Music example 7:

<https://www.nts.live/shows/shiva-feshareki/episodes/shiva-feshareki-21st-april-2017>

⁸ NTS Radio, Shiva Feshareki Presents: New Forms. Website: <https://www.nts.live/shows/shiva-feshareki>.

STILL POINT (1948–49/2016)

Daphne Oram (realised by Shiva Feshareki and James Bulley)

Instrumentation:

Double orchestra, treated instrumental recording (three 78 RPM discs), five microphones, echo and tones controls.

Première performance:

June 24 2016 St John's Smith Square, by Shiva Feshareki and the London Contemporary Orchestra as part of the Southbank Centre's *Deep Minimalism*.

Performers:

Robert Ames, Shiva Feshareki and London Contemporary Orchestra.

Music example 8: <https://youtu.be/B5rzBRx2RmM>

Recorded and mixed by: Simon Hendry for Sound Intermedia

Video by Nicola Sersale at Komeda Films

*Please view the score(s) by following the link to the Dropbox folder that was shared with you.

THE CALLING

THE CALLING (2015)

Shiva Feshareki, Haroon Mirza.

Text by Laura Marling

Instrumentation:

Acoustic soprano, prepared turntables, amplified cello, UGKI, audience volunteers, lamps, transistor radios, tables, PA system, projector, wooden screen (four by seven feet), LEDs, control box, speaker cone wood, metal stand, light bulb, glass cabinet, cabling, remote control socket, electronics.

Duration:

20mins approx.

Première performance:

23rd July 2015 at Barbican Art Gallery, as part of Station to Station's *An Evening with Shiva Feshareki, Factory Floor and Haroon Mirza*.

Performers:

Sarah-Jane Lewis, Colin Alexander, Jack Jelfs, Haroon Mirza and Shiva Feshareki

The Calling is one of many pieces I have developed with my long-term collaborator Haroon Mirza:

Haroon Mirza has won international acclaim for installations that test the interplay and friction between sound and light waves and electric current. He devises kinetic sculptures, performances and immersive installations, such as *The National Apavillion of Then and Now* (2011) – an anechoic chamber with a circle of light that grows brighter in response to increasing drone and completely dark when there is silence. An advocate of interference (in the sense of electroacoustic or radio disruption), he creates situations that purposefully cross wires. He describes his role as a composer manipulating electricity, a live, invisible and volatile phenomenon, to make it dance to a different tune and calling on instruments as varied as household electronics, vinyl and turntables, LEDs, furniture, video footage and existing artworks to behave differently. Processes are left exposed and sounds occupy space in an unruly way, testing codes of conduct and charging the atmosphere. Mirza asks us to reconsider the perceptual distinctions between noise, sound and music, and draws into question the categorisation of cultural forms. ‘All music is organised sound or organised noise,’ he says. ‘So as long as you’re organising acoustic material, it’s just the perception and the context that defines it as music or noise or sound or just a nuisance.’¹⁰

Mirza and I first met when I was invited to perform at an event at his Shoreditch studio back in 2012. At the time I didn’t know it was his studio, and he didn’t know I would

¹⁰ Lisson Gallery (2017) ‘Haroon Mirza | Artists.’ This statement was made in 2013. <http://www.lisongallery.com/artists/haroon-mirza>. (Accessed June 21, 2017.)

be using it. When I was there, I saw that he had some dismantled Technics turntables scattered around, which automatically grabbed my attention. Throughout the day we got talking about how we use turntables away from 'DJ'ing' and more for their instrumental and sculptural qualities: he showed me the handmade records made from card and mirrored glass and I spoke of the turntable manipulation techniques I had been developing. Since then, our working relationship has blossomed and has taken us into areas that we could not have imagined as individuals.

We prepared *The Calling* for a residency at the Barbican Centre that culminated in a concert of our work, and also included a partnership with post-industrial DJs and producers Factory Floor.¹¹ The piece involves acoustic soprano, prepared turntables, amplified cello, 'UGKI', audience volunteers, lamps, transistor radios, tables, PA system, projector, wooden screen (4X7feet), LEDs, control box, speaker cone wood, metal stand, light bulb, glass cabinet, cabling, remote control socket and electronics.

The collaborative process involves a set of exchanges, in the form of materials we have composed, which go back and forth between us. There is very little discussion or dialogue between us during the construction process, as we wanted any artistic choices to derive solely from real, practical experience rather than a verbal dialogue that could overpower the process.

This composition is site-specific. It has been constructed with structural processes and designed especially for the spaces in which it is installed. During the process Mirza gave me both analogue electronic and video material he had devised. The video he

¹¹ 'Factory Floor.' Facebook. <http://factoryfloor.net/>. (Accessed June 21 2017.)

provided was a *Top of the Pops* performance of The Kinks performing their song *Lola*,¹² which he manipulated using a series of 'glitches' to create its own narrative and meaning. I composed the soprano, cello and prepared-turntable material, and added these to the structures he gave me. I also invited the songwriter Laura Marling¹³ to contribute some text to the work for the soprano writing. By chance, her contribution had linked concepts to those of Haroon and I, with no discussion needed to go back and forth. For example, her use of the lyrics "you crawled out of the sea straight into my arms" has a link in concept to Mirza's use of Sirens mythology. The cello writing is a set of gestures presented to the cellist Colin Alexander to explore. By organising the gestures in different orders, a sense of momentum is developed as the sections progress. I then transcribed Mirza's video glitches and sonic elements into notation to create ease in rehearsal processes for the performers. I notated the rhythms and concise timbral qualities of the video glitches and electronic sounds derived from the LEDs. The rhythms were determined by each visual glitch or change of frame, whilst the LEDs had a strong percussive pulse, often with bass frequencies.

On the day of the concert we composed the spatial element of the piece, where we placed the sound-making objects around the space for visual/sculptural, conceptual and acoustic effect, and added volunteer dancers from the audience to perform a trance-like dance in the centre of the space, circling the cellist. In this performance, the video

¹² YouTube (2011): The Kinks perform on Top of the Pops.

<https://www.youtube.com/watch?v=GP0X0CRMZLU>. (Accessed October 6 2017.)

¹³ Laura Marling has released five studio albums, three of which were shortlisted for The Mercury Music Prize. She won Best British Female at the 2011 Brit awards and in 2012 co-produced an immersive theatrical music production with Secret Cinema called *The Grand Eagle Hotel* – which was sold out for a six-week run in conjunction with the release of her fourth record. In 2013 she composed the music for the RSC production of *As You Like It*.

After taking some time to travel alone around America, she has completed her sixth record, due for release in February 2016, entitled *Semper Femina*, concept focus of which is the reversal of the muse and feminine creativity. In the lead up to this release, Laura has been interviewing a selection of female artists and musicians for a podcast series about their experience of working in male-dominated environments and their understanding of feminine creativity. These women include: musician and model Karen Elson, band Haim and Dolly Parton. (Marling, 2016)

element was projected on all four walls, immersing the whole audience in an audiovisual trip. The space can be installed in a completely different way each time it is performed, to ensure it matches the new occasion and that contextual elements of that time and place are taken into account. This is why it is site-specific, as the composition changes are tailored to each site.

During the process of construction, Haroon and I had a set of artistic exchanges in terms of the use of turntables. We weren't originally going to use turntables, but I realised that some of Mirza's handmade objects used in previous pieces would work really well in this piece. I asked him to install his movement and object sensitive sculptures onto the turntables, creating an analogue siren-effect from the electricity of the turntables, which bend and flange as the turntables rotate. As the prepared turntables rotate, the aerial on the sculpture – which is taken from a transistor radio – comes into proximity with a variety of physical objects and this affects the pitch and gestural shapes of the sounds. This means that the time, space and occasion directly affect the sound. An example of this can be found in the proximity of the sculpture to both the audience and the architecture of the space.

Both Haroon and I are concerned with the physicality of sound and the movement-based and very physical processes involved in turntable manipulation. For example, the movement of the records as they spin in a variety of ways is closely connected to how the sound is warped and altered into new forms. In terms of my own turntabling practice, I often make my musical choices dependent on how fast or slow I manually spin the record, and how this choreography and movement directly influences the sound: Everything from the movement or direction that I spin the vinyl to the length of

time it takes for the record to naturally stop spinning affects the music. To capture this physicality of sound, I then live-sample these gestures and loop them, continually evolving the loop into warped and queasy new forms. My turntabling practice in this sense is a very independent practice that did not derive from hip-hop turntablism techniques and its connotations. Neither is it really derived from the same Art culture as artists such as Christian Marclay, Graham Dunning or even Haroon Mirza, where their work is still very much focused on sound, sculpture and concept. My turntabling practice has more of a focus on musicality, which is why you can remove the performance context of it and listen to it on my NTS Radio shows for example, and it still have the impact it deserves. I think musique concrete is the most linked background to my work in this respect, and once I learned about its existence it certainly helped propel my work, especially working on Daphne Oram's *Still Point*, which I will present later in this commentary.

In relation to the focus Haroon and I share in terms of the turntable, the idea of the turning circle plays a major role in our work, and we develop other elements of our work, such as how aspects of the composition are placed, or how the sound moves in a space, based on this idea. This is particularly apparent in our piece *Volcano Diaries*, where the placement and composition of the acoustic instruments mean that the sonics spin around the space they occupy.

Both Haroon Mirza and I share the view that sound is space and space is sound. As for all, sound is both physics and psychology, and if as musicians we engage with this idea, then we can create more meaningful work. For example, James Tenney is a composer who was at the forefront of engaging with these ideas and collaborating with

a variety of scientists: In turn, he played a huge role in groundbreaking moments in history such as introducing computers in music (and computers in art in general). Furthermore, Mirza only works with the pure sounds derived from electricity, untreated by computer products:

I'm interested in sound in space: how sound exists within space, and how you identify sounds with a certain space or a certain point in space. Auditory space is very different to visual space. Visual space is very direct and straight (you can see in front of you, but you can't see behind you); but acoustic space is spherical, and so if you make a sound like this (claps), the sound travels omnidirectionally (in all directions) at the same rate and so it forms a sphere which can go through walls and objects. If you hear a sound from behind a wall, you can still hear it but you can't see what's behind the wall. So, whereas objects sort of get in front of visual space, they don't with acoustic space and I'm interested in how sounds exist within this space. By placing things that generate audio around a space, that automatically creates an immersive environment because sound is all around you rather than just at one point. I don't specifically try and create an immersive space, but it just is immersive from the very nature of it.

Mostly the sounds are created – and this is a basic principal in my work – where I amplify the sound of electricity passing through LED lights or use the interference of electrical items such as light bulbs

(specifically energy-saving light bulbs) with transistor radios. So basically, what you are hearing is actually electricity – the sound of electricity. And then there are also other sounds that are more organic sounds: recorded sounds from video or physical sounds of things striking things.¹⁴

The Calling also included a new bespoke instrument created by Jack Jelfs named 'UGKI'.¹⁵ This instrument uses magnetic fields that change the sonic aesthetic of the strings on the instrument. UGKI adopts the use of electronic circuits to alter the harmonic world of raw timbres. UGKI is introduced into *The Calling* at Section B and sounds like this¹⁶ on its own.

I have tuned the instrument (UGKI) to correspond with the note B, which is the only pitch ever used by Mirza in his LED sculptures, as far as I can tell. I am inspired by the timbral, tonal and harmonic simplicities of Mirza's sounds, in the way that John Cage was inspired by the conceptual minimalities of the work of the artist Rauschenberg.¹⁷ I wanted to utilise the stark contrast in timbres between Mirza's LED contribution and Jelfs' DIY instrument. Together they create a transitional dialogue between sections of the piece, and intend to refresh the listener's aural palette.

¹⁴ Emma Gifford-Mead, 'Well, I Wouldn't Really Call Myself a Sound Artist: An Interview with Haroon Mirza,' (British Council | Visit Visual Arts, 2012). <http://visualarts.britishcouncil.org/collection/artists/mirza-haroon-1977/media/haroon-mirza-interview/initial/a>. (Accessed June 21 2017.)

¹⁵ The name UGKI is a manipulation of the word 'ugly'. We named the instrument UGKI after someone on an internet-dating website called me ugly because I ignored his messages, but instead of saying, 'you're ugly', he said 'your ugki'.

¹⁶ Jack Jelfs, '1234-v1.' SoundCloud. <https://soundcloud.com/jackjelfs/1234-v1>. (Accessed April 19 2017.)

¹⁷ John Cage, *Silence: Lectures and Writings*. London: Marion Boyars, 2015.

'Realness' and the Turntable as an Instrument (Turntablism)

There is an aesthetic quality that I call 'realness'. This isn't an easy word to define; it invokes related ideas such as honesty (emotional and intellectual), courage, lack of ego, lack of artifice, non-prettification, ugliness, physicality, physical matter, non-algorithmic, non-conceptual, chance and experimentation. 'Realness' can be found in much of the work that inspires me, and it is something that I am always striving for in my compositions. In this section, I shall use this idea as a unifying theme to contextualise my work within the wider landscape of music and art.

Much of my music has an intimate connection to the tangible, physical world, and in particular to the 'living' nature of electricity. My collaborator Haroon Mirza has spoken of the appeal of electricity in its 'raw' state:

So the electricity I use to make my work is live, live in the best sense of the word, it's almost as organic as the ocean moving. That liveness is important and people can perceive it even if they don't understand it.²¹

Much of my music also contains turntables as the main electronic component. In *Groove Music: The Art and Culture of the Hip-Hop DJ*, Mark Katz describes my contribution to turntabling, namely in my Turntable Concerto, as a way of establishing

²¹ Haroon Mirza et al *A User's Manual* (Bristol: Spike Island, 2013), p. 13.

the turntables as an instrument.²² The turntable is not showcased as a prominent solo instrument in *The Calling*, however works prior to this, such as my Turntable Concerto, enabled me to pick and choose how to use them from then on. However, the turntables take various forms and guises in my improvisations as well as in the other two pieces in my portfolio, *Volcano Diaries* and Daphne Oram's *Still Point*, both of which I explore in this commentary.

Although the term 'turntablism' is derived from hip-hop DJ'ing, I have discovered that the original turntablist was Daphne Oram, who first showcased the use of turntable manipulation in her 1949 work *Still Point*. Click to learn more and read my interview in the Vinyl Factory publication [here](#).²³

My turntabling practice – which often sees me titled as a turntablist or 'turntable-manipulator' – can be described as the manipulation of pre-recorded sound to create new forms, perspectives, movements and textures not always apparent in the vinyl record being manipulated. Furthermore, 'it's a playful use of turntables that are not constricted by the limits of Deejaying (i.e. beat-matching) which therefore creates spontaneous and new gestural forms, also using simple effects – such as Kaoss pads that distort electronic material via touch – to gain limitless electronic possibilities.'²⁴ Finally, my work with turntables has been described as, 'manipulations [that] illuminate the most incredible textural and harmonic treasures embedded in the corners of the

²² 'Turntable Concertos will probably never become as routine as violin and piano concertos, but the day they are no longer regarded, as novelties will be a milestone in the battle for legitimacy that many DJs still fight.' Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ* (New York: Oxford University Press 2012), p. 23.

²³ Anton Spice, 'The Original Turntablist – Daphne Oram by Shiva Feshareki.' *The Vinyl Factory*. (June 22 2016). <http://thevinylfactory.com/vinyl-factory-releases/shiva-feshareki-daphne-oram-the-original-turntablist/> (Accessed June 21, 2017.)

²⁴ B. Pickett. (2015) Shiva Feshareki 'Deejaying' Description (Accessed: 21 July 2015 via WhatsApp).

music; the sort of details that are otherwise hidden behind the framework of melody and song.²⁵

With my way, the turntable is a performative instrument which is movement-based, which is more like acoustic instruments than computers or digital means. Additionally, analogue electronics are closer to acoustic instruments than digital electronics, as you are working with physical and tactile material, therefore acoustic instruments and turntables can weave together intricately (although it should be noted that analogue technology was also accused of being synthetic and not physical enough, when it first appeared). Nonetheless, what I am critiquing about digital or computerised means is specifically the performance element of it and the button-pressing orientation it has: As someone who has played a lot of musical instruments, I personally cannot get into a very expressive zone by pressing buttons, and looking at the same screen I associate with writing emails, procrastination, facebook and internet shopping. It is a similar issue for me as an audience-member: I find it hard to engage with the music I am experiencing if the electronic artist is performing with a laptop. Thus it is more to do the laptop/computer than analogue vs digital, it is just digital means encourage this more.

The reason I first loved the idea of the turntable is because it is a pure electroacoustic instrument, with a unique interplay between acoustic music on the vinyl being transfigured into a new form via physical and electronic manipulation. With turntables you can also manipulate electronic sounds with other instruments: thus, turntables

²⁵ Jack Chuter (2017), 'Interview: Shiva Feshareki'. *ATTN Magazine*. <https://www.attnmagazine.co.uk/features/11694> (Accessed: 1 June 2018)

create very expressive music through direct physical manipulation of a sound source. An additional benefit of the turntable as an instrument is that you do not need training or tuition. You are working with techniques that are easy to understand, with mechanisms as straightforward as riding a bicycle. Once you understand how the records are transformed through the spinning of the turntable, you can place all your emphasis on purely creative choices, unrestricted by rigid technical considerations. This is the joy and creative freedom that comes with creating your own methods and techniques of music making: it is tailored to you, the way my turntabling is tailored to me in every way.

As well as using their instrumental (gestural and expressive) properties, turntables are also a means of bringing the wider context of music into my compositions, disrupting the instrumental purity with found sounds and fragments of musical history (e.g. accelerated drum and bass beats, Boulez played backwards, quotations from Vaughan Williams). Used in this way, turntables allow me to play with and subvert the wider musical landscape, incorporating and reshaping it to my own ends. When choosing what sounds to work with to create my compositions, I give myself a choice of using my own fresh-cut dub plates of recorded sounds, or choosing records from other artists and genres. The range of music choice can span 1000 years, and even the age of the vinyl disc itself is fascinating to me. I like the history that is apparent behind the crackles of a record pressed in the 1960s, for example, and I work with these crackles and other quirks and inconsistencies.

In terms of choice of genre, Jungle records are great for varying timbral and intricate percussive sounds; Baroque music is great for its angular dynamic levels, and multi-layered rhythmical passages. Additionally, I use minimal techno for achieving a variety

of manual drones and melodies, and sample previous compositions of my own as a means of adding a personal development or historic continuity to my work. Once these samples are chosen – there may perhaps be hundreds of individual samples in a single piece – they are often rendered indistinguishable, through creating a new narrative and perspective from an old meaning. On the other end of the scale, sometimes I will use a 20 second section of vinyl material and manipulate it in a variety of ways for 20 minutes, playing with perspective with this small piece of material. Taking such a small section of material, and manipulating it in a variety of directions is an ultimate act of symbolism which I practice. If one idea can have such limitless sonic directions as I display with my turntabling, then we should remember this in our everyday interactions and dialogues when we communicate, be it with other individuals, or between societies and cultures. The pursuit of truth and understanding takes patience, as perspectives are so broad, almost limitless in direction or stance: Our only hope is a shared understanding that perspective is powerful and vast. By using vinyl and the work of other artists to create new forms, I am making all these social comments and more, but this is for a future discussion away from this commentary.

In my current turntabling practice, there are certain composers and producers that feature the most often, and feel most relevant to me. I have made an on-going commitment to re-use these records over and over again in new ways. This includes records by Eliane Radigue, Pauline Oliveros, Igor Stravinsky, Haroon Mirza, Daphne Oram and avant-techno producer M.E.S.H. You can learn more about my influences [here](#).²⁶

²⁶ [Shiva Feshareki, 'Composer Shiva Feshareki selects her favourite minimalist compositions,' The Wire. https://www.thewire.co.uk/in-writing/the-portal/composer-shiva-feshareki-selects-her-favourite-minimalist-compositions.](https://www.thewire.co.uk/in-writing/the-portal/composer-shiva-feshareki-selects-her-favourite-minimalist-compositions) (Accessed June 21, 2017.)

A constant in my turntabling practice is the use of Jungle records from the 1990s, including the work of Photek. Jungle music can be described as ‘impossibly complex syncopations, hyper-accelerated towards superhuman velocities, and yet still contain an eerily pseudo-human feel. Within this sense-web of polyrhythmic percussion, drum timbres and styles from all different eras cross-pollinate, mutating into a new style of post-human popular music.’²⁷

Conventional musical notation cannot communicate to a performer the techniques required by the music. This has led me to create my own notation for turntabling. For solo turntabling, it is often graphic notation using colours, contours, objects and illustrations to help the turntablist achieve the gestures in the music, and know how to develop the piece. There is more freedom of interpretation in my solo turntabling work, whilst I use conventional notation when working with turntables and mixed ensemble, or create a model of notation that suits the instrument best. The main priority of the notation is to be user-friendly, especially if I am not the turntablist. My conventional turntable notation can be compared to a cross between notating for percussion and piano, whilst my graphic scores are drawn with coloured pens and crayons. Both aim to be as simple and practical as possible. If someone else is playing the scores, or if there is a group of people performing my music, I encourage a great deal of freedom of interpretation, and try to disassemble any hierarchy from the music-making process. I am not precious about how my music is interpreted or altered, and I encourage freedom of creativity in the performers: this has worked for me again and again.

Since 2016 I have come to realise that the learning of my turntable music should be done through physicality and movement. Instead of visual cues, I now learn my music

²⁷ G. St John and S. John, *Global Tribe: Technology, Spirituality and Psytrance*, (Bristol, CT: Equinox Publishing, 2012) p. 7.

through touch, feel and movement, and this way there is no barrier. With visual cues, you have to step outside of the music and therefore learn the music in what might be a less sincere way. In my mind, music notation creates a distance away from sound creation, as you are too focussed on visual cues based on pitch, rhythm, harmony and so on; music is much more than this. I now only learn and feel my turntable performances using movement-based learning, feeling the movement of the spinning discs and how the speed and movement affects the sound.

My turntabling is very hands on. There are very few instances where I let the record play by itself in real-time. Often the records are spun manually and a lot of the sounds are created through simple relationships between the needle and record contact, and how this contact is achieved. A surprisingly endless number of sounds, narratives and musical gestures can be achieved by simply rotating the record backwards and forwards in a variety of ways, and choosing the records to manipulate. This is because there are endless ways to make contact with moving circles of amplified sound, and this is the essence of a turntable. Additionally, I often create my turntabling music with the use of between four and eight turntables (i.e. four to eight rotating circular shapes) to increase the number of records I can manipulate in one go, thus multiplying my creative and spatial options. I've also started using just a single turntable, to see how far I can take it, and this creates a completely different sonic journey and focus.

I would like to see the ever-expanding compositional options of electronic music on computers reined in, and see an expansion of other electronic models, instruments and methodologies away from popular and generic computer software and products. I would especially like to see more direct and performative ways of creating electronics within electroacoustic music as it creates a very different form of plasticity and

expression. Too many technical options can restricts creativity, technical restrictions enhance expression as you have to think creatively about your decisions. In recent years, I have seen a resurgence in analogue methods, which is linked to the comeback in vinyl purchase. One of the reasons analogue is making a comeback is because we crave real, physical, and slower, more essential forms in our fast-paced, virtual worlds.

Having made a personal criticism of specific aesthetics of computer software, there are also considerable positive that of course out-weigh its negatives. Notably, computer electronics allows for 'democracy' in composition. It also means that there is a much broader variety of musical styles to listen to, as people can so easily share their music and ideas online, and there is a larger variety of people who have access to composing and production. My comments can be concluded like this: the development of computer technology has vastly developed society and art in ways we could not previously perceive, but this also leads to complacency or toxicity. If we can just be aware of that at all costs...

VOLCANO DIARIES

VOLCANO DIARIES (2015)

Shiva Feshareki, Haroon Mirza featuring Kit Downes

Instrumentation:

Surround-sound Ensemble – E flat, B Flat, bass and contrabass clarinet,
soprano, grand organ, video, LEDs and prepared turntables

Duration:

45mins approx.

Première performance:

14th October 2015 at Union Chapel, Islington as part of my own curation with
Colin Alexander and Haroon Mirza, with thanks to Arts Council England,
Fiorucci Art Trust and Frieze.

Performers: Kit Downes, Sarah-Jane Lewis, Max Welford, Kimon Parry, Scott
Lygate, Chris Goodman and Haroon Mirza.

In October 2015, I curated a concert at the Union Chapel, Islington, London with my friend and colleague Colin Alexander (composer and cellist) and Haroon Mirza, my artistic collaborator. This is one of many artist-led events I have directed, looking at music programming and events-organisation as part of artistic practice. As artists, we

can look at the organisation and concepts within concerts and events, with a deeper level of artistic meaning, than someone who has a less artistic practice such as a director of a business or arts organisation. In the most conventional sense of the word, curation can simply mean an artist choosing the programming of an event, but in the case of the curation I do, it means looking further into the depth of the concerts such as choosing a location based on how it relates to the music: For example, making choices on location due to its spirit, architecture, history and acoustic. In turn, due to the abstract and innovative ideas of artist-led curated events such as this, we also needed to fundraise, organise and produce the event, as its ideas would not be established or tangible to organisations who usually facilitate events. For example, in 2017 when I curated a cave concert where I premiered acoustic works by Eliane Radigue and Lee Gamble, I chose the cave based on its acoustics and history, but also because Radigue's music is very much to do with depth: The audience have to explore depth by travelling high onto a peak of a cliff via cable car, to then descend deep underground into the cavern. You can read about the project here: <http://www.factmag.com/2017/08/14/eliane-radigue-lee-gamble-cave/>.

The curation that saw the premiere of my composition 'Volcano Diaries,' occurred at Union Chapel. It is in affiliation with the composers' collective 're:sound', as well as Frieze, Arts Council England, Dhaka Art Summit and Fiorucci Art Trust who generously supported our work. The second half of the evening comprised of a new work that I created with Mirza, and which featured jazz-organist, Kit Downes.

The evening can be described as a multi-sensory spectacle, gradually building up to a

large finale spotlighting the iconic organ of Union Chapel.²⁸ The concert starts with a display of lights, installed and scattered in surround-sound throughout the hall, devised by Haroon Mirza. This sets a hypnotic tone, like a visual drone, for the rest of the evening. The first musical performance is a solo soprano, singing from the galleries above. This bleeds into a meditative gamelan exploration from the back of the hall. As the music sweeps through the space and the lights continue to hypnotise, the multi-sensory appetite of the audience is excited and expanded, preparing them for a delicate piece for String Quartet (composed by Colin Alexander) that features the soprano once again.

In contrast, the finale of the concert is a rather bold and lively affair: the light display, by Mirza, starts creating electronic sounds from eight speakers, installed on every side of the octagonal design of the chapel. Once the sounds are heard, the electronics phase themselves into a collaborative piece between Kit Downes, Haroon Mirza and myself, with a surround-sound clarinet quartet on the four corners of the first tier. The piece is centred on the unique and enchanting sounds of the organ interacting with the surround-sound lights and electronics that swarm the space. The organ itself is the most physical instrument of all, rumbling within the architecture of the space it occupies. The piece also involves a quartet of different clarinets that make their own

²⁸ The Organ at Union Chapel was designed and built specially for the size and acoustics of the new Chapel building in 1877 by master organ-builder Henry 'Father' Willis. It is undoubtedly one of the finest in the world. Neither James Cubitt, the architect of the Chapel, nor the Rev Henry Allon, the minister at the time, wanted the congregation to be distracted by the sight of an organ or organist: they wanted the music itself to be the focus during worship. So the organ is deliberately hidden away behind ornate screens under the rose window, which itself actually hints at the organ's importance, with its depiction of eight angels all playing different musical instruments. It is one of just two organs left in the United Kingdom, and the only one in England, with a fully working original hydraulic (water powered) blowing system, which can be used as an alternative to the electric blowers. Union Chapel, 'The Organ Project 2012-15.' <https://www.unionchapel.org.uk/about-us/organ-reframed/the-organ-project-2012-15/>. (Accessed June 21 2017.)

surround-sound organ-effect. Each instrument has been carefully picked to interact closely with the tones and timbres of the organ, as well as adding an extra dimension to the lights and electronic sounds of the installation. This is a marriage of three entities: the jazz-organist, the sound- and noise-artist, and the contemporary classical composer – together we create a work that is a multi-disciplinary art form, catering for many senses of the body: space, movement, sound and light, encased with a video 'in glitch' at centre stage.

Artistically, an event of this magnitude simply would not occur out of this context. Firstly, the integration of gamelan, acoustic music, analogue electronics and visual sculpture – which has all been carefully developed to suit the space of the chapel and the architecture of the organ – is a bespoke artist-led collaboration that is constantly growing. From start to finish, this concert has been carefully constructed to work as an artistic journey, rather than a concert that occurs piece by piece. Additionally, the event is made out of a set of collaborations that we had already started developing in past projects. It is the first time that the three of us have collaborated, and we have committed to working together long term through this event. It was because of this event that Kit and I met and then started to improvise together. Furthermore, this isn't just an artistic development between the artists involved within the concert, but a collaboration between the performers and the diverse audience the event attracted. We hope this development will continue to grow not just between us as artists, but by the way that the different audiences experience the art we have developed together.

The piece is about the movement and sculpting of simple physical sounds, through the orchestration of effects such as sound acceleration and deceleration whilst thinking

carefully about composition as sound travel. I wanted this piece to focus on sounds within movements that help us make sense of the world. For example, the sound of a pitch rising, like the sound of a car accelerating, or sound moving around the space in circular motion, like the motion of a fan. Kit Downes took on the role of organist for the piece, and I gave him much space to improvise and feel the flow of the music. The organ comes in near the end of the piece. Prior to the organ entry, the acoustic material moves around you like space and time, but when the organ enters, I wanted the sound to rumble inside everyone's body, adding a new physical experience to the piece.

In *Volcano Diaries* and my regular improvisations, physical space and everyday physical occurrences alongside the 'real' sounds of electricity are used as important ideas. For example, the electronic sounds you hear as you walk down city streets – police sirens, cars accelerating with their pitch and timbre, slow-moving diesel lorries with their bass tones, the wind, the rain, the echo of someone's clinking stilettos – become part of music that evolves through the composition of the soundscape, and you become more mindful as a person when listening to it. When I finish an improvisation session, I hear the world differently, with a new mindful perspective. These everyday noises are not 'just there' any more, or a nuisance, or a signal, but they sing together in harmony, and the world makes sense. I tried to capture this in *Volcano Diaries* in the hope that the audience who experienced the evening would be left feeling a little differently about the world and our existence, even if it simply meant having more awareness to the sounds on the road outside the concert venue and on their journeys home. In meditation, this is true mindfulness. In conversation this is listening, not just hearing.

I constructed *Volcano Diaries* using several simple ideas. For example, I poured cola into a pint glass, and observed the sounds as the glass was filled with fizzy liquid; I threw a magnet onto my fridge, and observed the physical phenomena that occurred, and translated this into pitch, momentum, volume and movement, through instruments amongst other things. Additionally, I was very much inspired by the circular movements of a spinning disc on a turntable, and translated this into the clockwise and anticlockwise movement of material between the performers scattered around the space. I was also thinking very much about what would happen to a vinyl disc if the spinning slowed down and sped up and how this would affect the sounds, so I sometimes thought about the surround-sound clarinets as a spinning disc. I worked very closely with the performers on these ideas. Some of the piece is notated conventionally, whilst in other sections I utilise diagrams or pictures, and most of the piece was constructed through discussion of ideas. I wanted the performers to use different skillsets and learning approaches that weren't just visual cues, so that different parts of the piece were perceived in different ways by the players, thus allowing them to play with perspective as well as keeping them on their toes with approaches to build momentum. With so many means of documenting and preserving music (outside of notation) now available to the composer, I wanted to experiment in the construction of the piece, and then see how this could be developed in pieces in the future. This informal experimentation proved highly effective, both in the outcome of the piece, and also for future pieces. For example, I learned a lot of personable skills in terms of communication and collaboration which I used later to work with a variety of artists from different scenes and cultures. I also learned a lot about how to effectively score acoustic spatialisation in my compositions, by first testing these ideas informally. For example, I went on to compose complex, spatialised orchestral music. It is an area

that requires a lot of craft and skill, both adding a new dimension to the compositions via spatialisation, but also the scoring and notation of spatial music is a very counter-intuitive craft, that requires full understanding of how sound-movement works as a prerequisite: you cannot experiment with sound-movement whilst also trying to score it, as it is too complicated. This is why informal experimentation is needed first to execute the ideas precisely in the future. *Volcano Diaries* was my experiment for future outcomes I knew would evolve, but I chose not to pre-conceive.

Volcano Diaries was an extremely important composition for me, as the piece took on its own life in a way I could only partially predict. Setting up an environment where one relinquishes control as a composer may seem a risky approach, but like many others before me, including one of my biggest influences, John Cage, the impact can be otherworldly and simply magical. My attitude is like that of Cage, where music is so much more than a composition: a set of sounds that can occur through experience, occasion and moment, and if we try too hard to control them, something could be lost. Cage discovered that chance was as important a force in governing a musical composition as the artist's will.

In this day and age, we can really afford to experiment with methods of classical composition, away from standard notation, and create new crafts for a discipline that prides itself on craft²⁹. Firstly, a piece like this, which is based on movement and sculpture, can't be learned purely through visual notation as the players need to experience the physicality of the object. Notation no longer has the same importance

²⁹ And I really do see Classical Music as a discipline and not a genre. This is why I proudly identify as a classical musician, even though my music falls into so many different areas. It is this craft and the intricacies of my methodology that makes me Classical, not the sound or aesthetic.

for the preservation of the work. Additionally, there is nothing wrong with a piece of music existing just for one moment in time and then disappearing. In retrospect, for an experiment of this nature, I wanted this piece to exist then disappear, but for its significance and impact to grow in other pieces. Furthermore, notations suggests ownership or individualism. We live in a world where there's more of a need to unite – internet social media has created incubators of belief that are separating us, and we need to counteract this through avenues such as Art. Also, the idea of an isolated composer who 'dictates' their music to an ensemble is losing relevance in a world where we are constantly and effortlessly interacting. Becoming less strict in realising your own ideas is not only democratic, but also helps to bring out the best in everyone, and helps us listen to each other. In doing so, we utilise each other's strengths, with an end result that is more understood, meaningful and 'real'. Finally, finding new ways of creating compositions away from standard structures and notations means a more diverse group of people can be composers.

STILL POINT

STILL POINT (1948–49/2016)

Daphne Oram (realised by Shiva Feshareki and James Bulley)

Instrumentation:

Double Orchestra, Treated instrumental recording (three 78 RPM discs), five microphones, echo and tones controls.

Première performance:

June 24 St John's, Smith Square 2016, by Shiva Feshareki and the London Contemporary Orchestra as part of the Southbank Centre's Deep Minimalism.

Performers:

Robert Ames, Shiva Feshareki and London Contemporary Orchestra.

Overview and Introduction

In 1948, whilst working as a radio programme engineer at the BBC and studying composition with the composer Ivor Walsworth, Oram started work on a new and highly innovative piece, entitled *Still Point*. Oram was 24 years of age when she composed the piece, and this would be the last piece she would write for orchestra before devoting her time to bespoke electronic works.

This groundbreaking and, until now, unperformed work is thought to be one of the first examples of an orchestral composition for recorded sound-manipulation, turntabling and live electronics. Had it been performed in 1949, it would have transformed the landscape of electroacoustic music as we know it today.

Among her early instrumental compositions, the unperformed, 30-minute *Still Point* (1950) stands out. In it, the orchestra is combined with pre-recorded instrumental sounds and live treatments – using standard radio equipment of the period. It is almost certainly the earliest composition to specify the real-time electronic transformation of instrumental sounds.³⁰

Prior to our efforts to publicise Oram's work, there was very little published about her, with the obituary above being one of few published references to her work. Hugh Davies died shortly after writing the obituary, and I believe that the mentioning of *Still Point* is more significant than it appears to be at face value. He is using this opportunity to not only present Oram's profound legacy, but also to raise awareness of the work. Davies spent a lot of time helping Oram realise *Still Point* and trying to find a performance opportunity for it, but they never succeeded. This anecdotal mentioning of the work was his way of passing the baton to someone else – people like James and I – to carry on where they had left off. At this point in this commentary, please read the supporting publication in FACT magazine on this project [here](#).³¹

³⁰ Hugh Davies, 'Obituary: Daphne Oram,' *The Guardian*. January 23 2003. Accessed June 21, 2017.
<https://www.theguardian.com/news/2003/jan/24/guardianobituaries.artsobituaries>.

³¹ Tom Howells, 'How Daphne Oram's radical turntable experiments were brought to life after 70 years,' *FACT: Music News, New Music*, July 18, 2016.
<http://www.factmag.com/2016/07/13/daphne-oram-still-point-turntables-orchestra-performance/>. (Accessed June 21 2017.)

How Did the Project Come About?

When I embarked upon doctoral research at the Royal College of Music (RCM), I began to think about my responsibilities as a composer conducting applied research. I started to think about my compositional practice in a broader context, and to look at key historic figures that paved the way for the experimental electroacoustic music I compose. Daphne Oram came to the forefront of my mind as a woman who was partly responsible for the creation of electronica as we know it today, yet whose work was relatively unknown until recent years.

I first met James Bulley – who was my collaborator in the realisation process of *Still Point* – when I visited the Daphne Oram archive at the Special Collections at Goldsmiths, University of London. He is in charge of archiving and organising Oram's work, the majority of it being stored there. My visit was the result of presenting a radio show for NTS Radio³² on the legacy of Oram, and so I needed to become further acquainted with her work. Being an NTS radio DJ has been one of the best research methods for my doctoral work for precisely this type of research contact and presentation. James kindly showed me Oram's tapes, scores and equipment. In some boxes, there were some loose pieces of faint pencil-draft paper that looked extremely interesting to me, as it appeared to be an orchestral score amongst predominantly tapes, audio equipment and letters. James went on to tell me that this was a piece that Oram composed when she was in her early twenties. It was one of her only orchestral pieces

³² NTS Radio (also known as NTS Live) is an online radio station and media platform based in Dalston, London. Founded in April 2011 by Femi Adeyemi (one of the original members of Boiler Room) and with the help of Clair Urbahn, NTS Radio serves the online community with a diverse range of live radio shows, digital media and live music based events. Its tag line 'Don't Assume' sums up its diversity and radical programming.

(although it also included electronics), and had never been performed, with only this rough version in the archive. This immediately grabbed my attention, and after further inspection I saw that there was a handwritten description of the piece on a small piece of paper, which showed that this was a piece for orchestra and live-manipulated electronics using discs and turntables. As a composer who also works as a turntablist (having also written a piece for turntables and orchestra myself), I was stunned to see that the piece was composed in 1949, and used manipulated records with orchestra. This was clearly a visionary piece, yet it had never been realised or performed.

At this point, please read my blog for the London Contemporary Orchestra, which you can find [here](#).³³

This is where the ambitious cellist Oliver Coates comes into the equation: I suggested *Still Point* to him in passing, and explained to him how I wanted to persuade an orchestra to programme it. Little did I know that Oliver Coates was organising a festival of left-field classical music and happened to be in the process of choosing the programme. One thing led to another, and I had found a world première for *Still Point* with the London Contemporary Orchestra as part of Oliver Coates' Deep Minimalism festival. Following this, the Southbank Centre commissioned James and I to restore and realise the piece, which was performed by the London Contemporary Orchestra with myself playing turntables.

³³ AmyDodero, 'A Conversation with Shiva Feshareki,' *London Contemporary Orchestra*, June 3, 2016. <https://www.lcorchestra.co.uk/conversation-shiva-feshareki-still-point/>. (Accessed 21 April 2017.)

The other pieces in the concert include works by John Cage and Pauline Oliveros, who were both revolutionary composers from a similar era, making it a very inspiring programme. Here's a description of the concert from the Southbank Centre website:³⁴

Never before performed, Daphne Oram's groundbreaking work *Still Point* is brought to life by the London Contemporary Orchestra and composer Shiva Feshareki, who performs – on turntables – an electronic manipulation of the recorded orchestra, in duet with the live orchestra. Oram's ambitious work of 1949 predates the work of an entire generation of composers and artists in its radical use of live electronics, including turntable manipulation and sampling with live orchestra.³⁵

What Are the Components of the Piece?

The piece is scored for 'double orchestra', which in this case is a concept, as opposed to pieces like Michael Tippett's *Concerto for Double String Orchestra* (1938–9), which is quite literally that. After studying the materials I had gathered, I took the 'double orchestra' concept to mean an acoustic orchestra, and an orchestra made up of the orchestral material on the 78 RPM discs, the turntables, the microphones and the live-electronic manipulation. The word 'double' also refers to the fact that, in rehearsal, the orchestra is recorded in a 'dry' acoustic, and it is recorded again (or by a second orchestra) in a 'wet' acoustic.

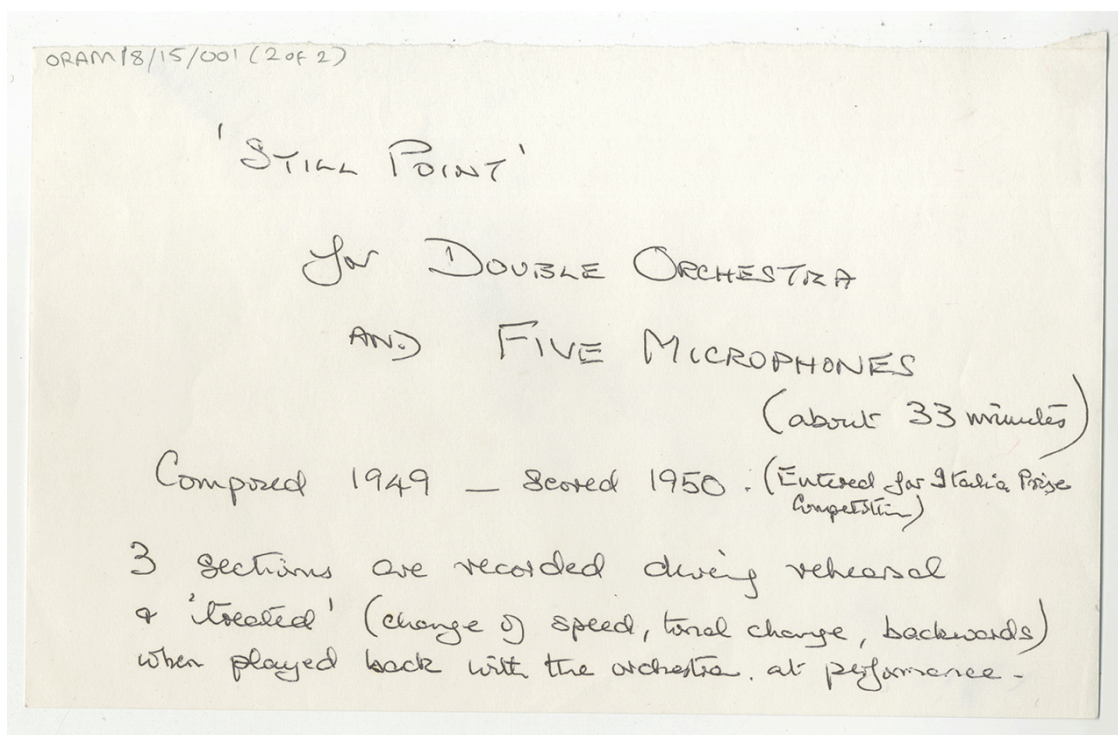
³⁵ 'What's On.' Southbank Centre
<https://web.archive.org/web/20160518052633/https://www.southbankcentre.co.uk/whatson/festivals-series/deep> (Accessed 5 April 2017)

Recordings

The piece requires several sections of the orchestral material to be recorded in rehearsal. Oram asks for some of this material to be recorded in a 'dry' acoustic and some of it to be recorded in a 'wet' acoustic. This material is then cut onto ten-inch 78RPM discs and manipulated live – and thus transfigured – on turntables in performance, alongside the live orchestra. We collaborated with researcher and composer Aleksander Kolkowski and engineer Sean Davies (who worked alongside Oram in the 20th century), who created the discs using period cutting lathes that would have been available to Oram at the time of composition.

Pre-Rehearsal Demonstration Disc Creation

Prior to the real recording process with the orchestra, Aleksander Kolkowski cut demo versions using midi and orchestral libraries to three 78RPM discs for me to practise with in the weeks prior to the rehearsal. Additionally, these 'test' discs were a way for us to understand the process and limitations before the recording sessions with the orchestra.



[Reference number: ORAM/8/15/001

Title: *Still Point* handwritten cover note

Date: 1949

Description: One torn sheet of paper with handwritten title page for *Still Point* performance, written by Daphne Oram]

For performance of this work a large studio is needed in which distant and close microphone technique can be employed. Orchestra A should be in a reverberant acoustic; while Orchestra B is almost enclosed in absorbent screens, thus reducing the reverberation as much as possible without marring the tone quality. (Soft screens with wooden backs should be used between the orchestras.)

The five microphones are so placed to exaggerate this acoustic contrast. A suggested layout is given. Microphones I and II should be high and distant while Microphones IV and V are approximately 12 feet high and hang almost over the front desks. Microphone III is placed very low and is only used for special effects with horn, trombone and xylophone.

Each microphone should have a volume control and should also be connected through an echo chamber and back to an echo volume control. It is suggested that another studio with suitable orchestral acoustic should be employed as the echo chamber.

Included in the score are instructions for mixing the microphones and for the use of echo. The hairpin mark (in green) below the staves indicates increase or decrease in volume of a microphone (which is numbered according to the plan). Likewise a dotted "hairpin" shows increase of echo.

The microphone instructions are only given as an approximate guide. The degree of change needed at any one point will vary according to the type of studio and equipment used.

Play Y - From Fig. 69 - Reverse the turntable motor so that it runs anticlockwise. (Set needle at end of sound). Then play this passage backwards from end to beginning. Use full echo.

Rec. Z - From Fig. 33 - to first note of Fig. 34 (Orchestra A only)

Play Z - At Fig. 33 to 34 play at slower speed 8/8 down (or 5/8)

Play Y & Z together, both pp, from 71 to 72. Adjust speeds, add echo and tone control.

Adjust and delete according to circumstances.

[Title: Typed description sheets for *Still Point* HD Ref copy

Description: Two sheets of A4 paper explaining in detail the performance and composition conditions for Daphne Oram's *Still Point* for Double Orchestra and Five Microphones. Reference copy, probably typed and printed by Hugh Davies.]

Specific fragments, noted as 'dry' in the score were performed by the orchestra and recorded live in a 'dry' acoustic (in this case the RCM recital hall) and are 'live mixed' and cut to disc during the playing using a lathe cutter. The microphones and recording techniques used were as close as possible to those that Oram would have used at the time (i.e. including use of baffles as defined in descriptive text, and using close microphone technique). Recorded sections of the orchestral material were cut onto the 'dry side' of 3 X 9 discs.

Following the 'dry' recording, a similar process was used to define the 'wet' material within the score, and this was recorded in an acoustically 'wet' space (in this case the Great Hall at Goldsmiths). These 'wet' recordings were live-cut to disc as well, with microphone techniques used that were accurate compared to those used by the BBC in Oram's time. Recorded sections of the orchestral material were cut onto the 'wet side' of three 78RPM discs.

Turntable Manipulation of Disc Material

Oram asked for these two recordings to be made in two very different acoustic settings: one 'wet' and one 'dry'. In accordance with this, my cut discs had an acoustic spectrum of 'wet' to 'dry'. Oram also specified the use of echo, to be produced by an echo chamber. Due to practical constraints, we could not use an echo chamber to create a natural acoustic echo; however, we used a Roland Space Echo machine from the 1960s. This is still an analogue and physical echo effect; therefore we did not view this as a compromise. Additionally, using a full room as an echo chamber for an echo effect was the only option for Oram in the 1940s, before analogue echo technology had been

developed. In a way, she had pre-empted the development of this music technology, by demonstrating it in acoustic, physical form.

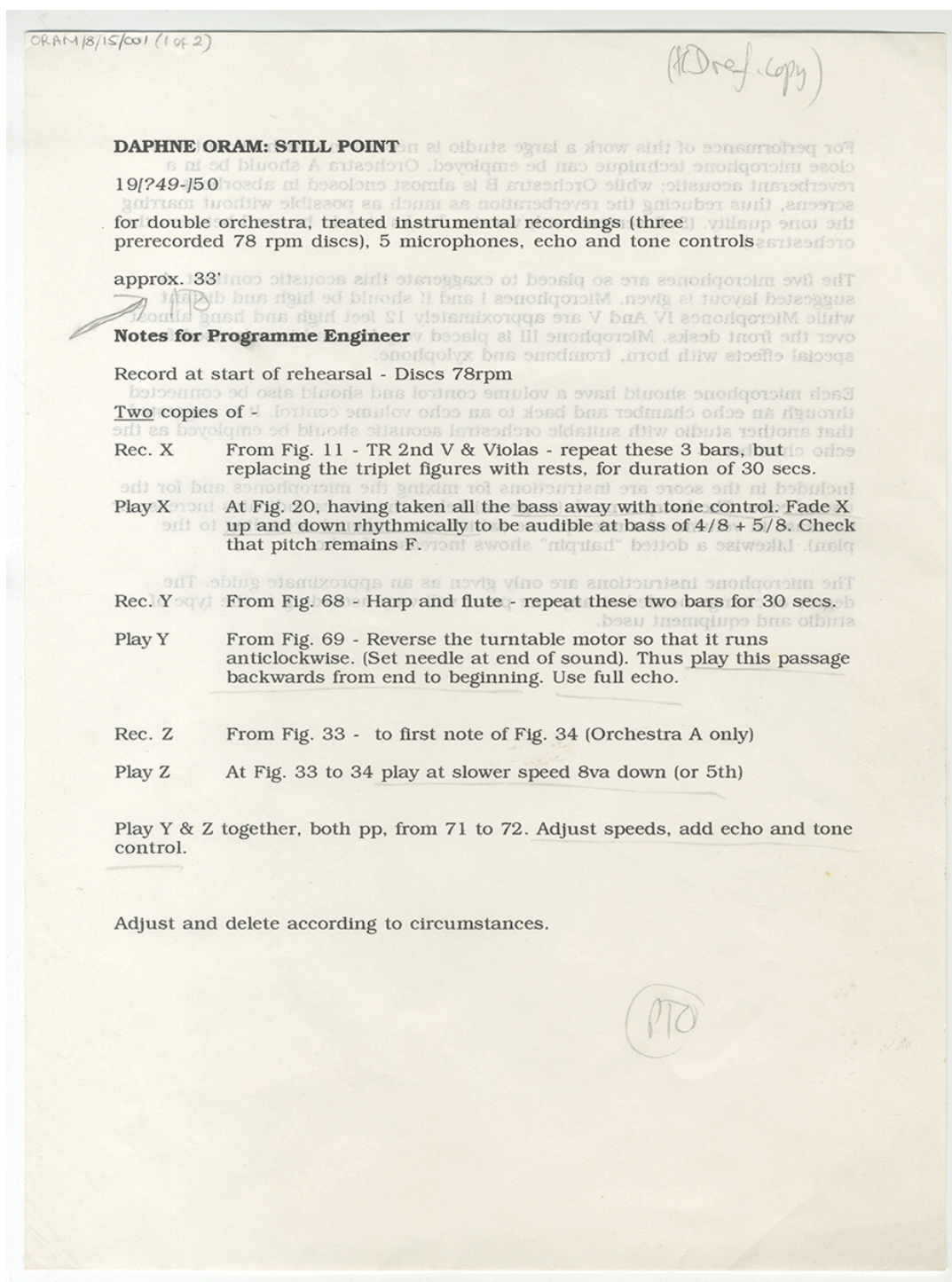
In performance, I manipulated the disc material in duet with the live orchestra, acting as a 'second orchestra'. In doing so, I was making the 'Double Orchestra' that the piece is scored for. I manipulated the sounds using a variety of methods. The turntable manipulation is based on my interpretation of Oram's original ideas and consists of manipulating the 'dry' and 'wet' recordings in the following ways:

- 1) Speed alterations/manipulation, affecting pitch, tone, aesthetic, mood and tempo.
- 2) Looping/sampling: forwards (clockwise) and backwards (anticlockwise), rewinding creating a 'complete' retrograde of real-time material.
- 3) Diminishing/augmenting natural echo, reverb and tone, for example using EQ.
- 4) The employment of mixing techniques between discs and passages, which were manipulated to create new forms.
- 5) Integrating multiple formulations of the methods above for endless options, e.g. slow-motion backwards loop, removing bass frequencies, whilst mixing between the 'dry' and 'wet' recordings/versions of one (or more) excerpts.

Oram states that 'three sections are recorded during rehearsal and "treated" (change of speed, tonal change, backwards) when played back with the orchestra at

performance.'³⁶ Below is a description of the turntable manipulation techniques utilised by Oram. The description is based on the finalised copy of the piece, which has unfortunately been lost (we believe it was lost at some point between Oram's death and Hugh Davies' death). Therefore, we don't know what specific material this relates to, however it does give us an understanding of the type of manipulation she wanted.

³⁶ Reference number: ORAM/8/15/001



[Title: Typed description sheets for *Still Point* HD Ref copy

Description: Two sheets of A4 paper explaining in detail the performance and composition conditions for Daphne Oram's *Still Point* for Double Orchestra and Five Microphones. Reference copy, probably typed and printed by Hugh Davies.]

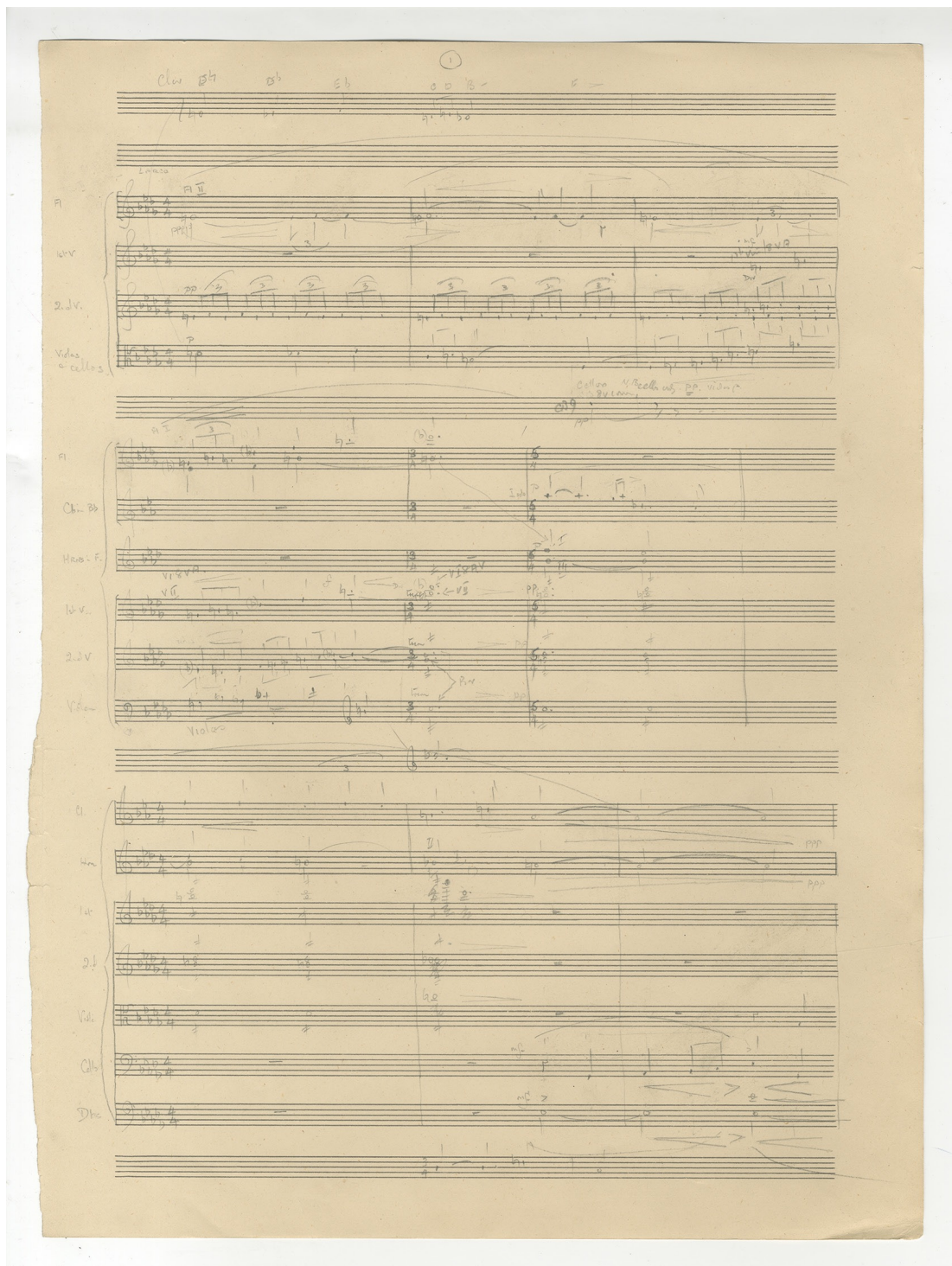
What Has the Realisation Process Consisted Of?

James and I were responsible for different aspects of the realisation process (although we integrated our ideas on all the aspects of the process). Whilst James played a larger role in the recording process, documentation, archiving and liaising with advisors, I played a larger part in terms of the musical elements, the process of orchestration, alongside composing the turntable manipulation using Oram's notes.

James led the first part of the process, which was a search for the finalised copy of the score. We knew that there was a later version of the score than the one we had, because we have a description of the turntable manipulation that corresponds to a score with rehearsal letters, as well as dotted hairpins that show the manipulation technique. The score in our possession did not have any turntable manipulation notation or rehearsal marks, and does not indicate which sections need to be recorded for the discs. Therefore, a search for the final score was conducted that included liaising with the British Library and contacting Hugh Davies' wife Pamela Davies (Hugh Davies held much of Oram's work in his possession, and we have email documentation in which Hugh talks about owning the 'only known copy of *Still Point*'). The full score had also been submitted to the BBC as a possible entry for the inaugural Prix Italia in 1950, therefore a search was made to see if anyone related to the prize had any ideas about the whereabouts of the score. Unfortunately, the conclusion was that the final score had been lost.

Therefore, James and I had to accept that the drafts and descriptions found in the archive were those that would need to be used. We worked with about 100 loose pages

of orchestral score (mostly in short score, but very clear), to study and organise the piece into an order that would make sense from start to finish.



[Reference number: ORAM/8/15/005]

Title: Score drafts for *Still Point*

Description: 54 double-sided pages of manuscript draft in pencil in Daphne Oram's script of the piece *Still Point* (1949–1950). The first section of the material appears to be the final draft of the piece prior to typesetting.]

During this process, James and I came across pages of scores from her earlier orchestral pieces, as well as several different draft versions of the same sections of the piece. It was reassuring to see that the drafts did not show any changes to the material, but were just neatly copied, meaning that Oram had already realised the main content.

The next stage was to orchestrate, transcribe and typeset using a restoration approach, i.e. not introducing any new material. There are sections where the music stops, and I think this provides a beautiful history: we wouldn't want to mask this honesty, or attempt to rework those sections. The realisation process needs to be a complete projection of Daphne Oram and the 65-year journey to this point. James and I agreed that we would introduce turntable material, rather than adding orchestral material into the gaps; apart from some descriptions of the turntable manipulation, there is no specific turntable writing, and this was left to me to complete. The process of composing the turntable part was a profound experience and was the most intriguing journey I have ever taken as a composer.

Many people have asked me how much of the turntable material is my own work, and how much of it is Oram's. The answer is that it is a cryptic amalgamation, and I specifically tried to make it hard to quantify, or differentiate. I consciously shifted my perspective as a composer to a parallel perspective that was unfamiliar to me, that was neither in 1949 nor 2016, but perhaps in an unknown time. Daphne Oram came from a

‘new-age’ background which practiced contact with spirits and other worlds, so I sought to place myself in a temporary psychological state that enabled me to feel a deep instinctual contact with her as I was composing the turntable part using her notes. My whole lifestyle and tastes changed during this period of reflecting on Oram; for example, I started to enjoy single-malt whisky and the music I listened to was completely different to my usual preference. My aim with this complete shift in lifestyle was to create a complete change in perspective from my own world as a composer, and this proved to be the hardest and most crucial challenge of all. This is a similar approach to method acting. I realised that my fantasy was very much in tie with the actual piece and its story: *Still Point* is everything to do with parallels and doubles and constantly moving perceptual experiences.

I had initially intended to create a graphic score when constructing the turntable part. But as my thought processes developed, I realised that this piece needed to be learned, constructed and felt through movement and physical experience. This approach is in keeping with the essence of spinning discs. Further to this, I wanted to encourage future performers to adopt this approach when interpreting the music too. It's about feeling the music with your body movements, not reading it. Through all of my improvisations with different people this year, I have become increasingly confident about feeling the circular movement of the turntables, and making musical choices through this abstract method. This is how I want future turntablists to learn and understand *Still Point*.

Another idea I used when composing the turntable part was the feeling that there were always two bouncing balls being dropped from a height at different times, and

somehow these balls would try to find equilibrium with each other. That was the double story for myself, to motivate me. For example, the 'wet' material disc would start with a slow, forward-spinning motor and get faster, and the 'dry' disc would start with a fast, reversed turntable motor, and become slower, until they met in the middle – a *still point* – and then dissipate again. Fortunately, the descriptions given by Oram of the recorded and manipulated material suggest it is not specific and more about an exploration into the new realms she introduced within the piece. We know that certain sections of the orchestral material need to be recorded in different acoustic conditions, and then slowed down, sped up, looped (acoustically), treated with echo and rewind, most using turntabling techniques, and performed with the original live orchestra. This is already rich, clear and visionary.

As has been mentioned previously, we did not know which sections of the orchestral material Oram wanted to record to disc, so I took the lead in choosing these sections. I then decided which sections were recorded 'wet' and/or 'dry' depending on the mood and sound-worlds of the material, and then discussed these with James using the descriptions we have from her. For example, the *sul ponticello* strings sections, or staccato double reeds, complement a 'dry' acoustic recording, whilst the gushing slurred chromatics in the piccolo, the rich timpani or brazen brass, are suited to the 'wet' acoustic. I also chose some passages to be recorded both 'wet' and 'dry' in order to accentuate the acoustic contrast when manipulated and mixed live in performance.

Composer and researcher Aleks Kokowski was in charge of the disc-cutting part of the recording process, as he works closely with the period equipment we needed to cut the discs directly from live orchestra using a 1950s disc-cutting lathe. Aleks Kokowski is

the artist-in-residence at the Science Museum as well as a leading researcher at the British Museum. He uses intricately specialist and rare recording methods that cut discs in real-time as the orchestra play, without breaking the analogue chain with any digital means. This was the only method that would have been available to Oram in 1949 and it creates a uniquely warm and beautiful sound that adds a 'deepness' and 'realness' to the sound quality. Additionally, the sound quality has the crackles and auditory distance of something old, which was very poignant in performance. Analogue in its purest form is rare in the modern day, however when you are slowing down the speed of a spinning disc to an extreme level, even an untrained ear will be able to hear the difference between analogue and digital. In the case of *Still Point*, we are not simply playing a disc like we would if we were listening to a recording, but are stretching the boundaries of the 'record player' and using it as an instrument to change perspective and meaning. Thus, the analogue sound goes hand-in-hand with this very physical form of electronic manipulation, and this idea is what makes Daphne Oram's work truly visionary for 1949, let alone present day.

Additional components of the process included the organisation of the rehearsals and recording schedules, which James and I chose to undertake rather than leave with the producers of the concert. This decision was taken not only because we both have experience in this, but also because we knew the unique process needed for a successful performance of the piece. We also worked closely with the press team at the Southbank Centre and other journalists to raise the profile of the work. I will talk about the research implications of committing to this later in the commentary.

What Have Been the Challenges?

The initial challenge to overcome was accepting that the final score of the piece had been lost and that we had to base our realisation process on the draft scores. We therefore needed to make a lot of choices and decisions ourselves, with few references to help us. As previously discussed, these challenges were highly enriching.

A significant challenge was deciding whether we should interpret the piece as if we had the technologies from 1949, or whether we should follow the visionary, futuristic concepts of the piece and use modern technologies. For example, do we use original yet slightly restrictive 78RPM discs from the era, or the more malleable twelve-inch records that are more widely used now? If we use 78RPM discs, do we modify my modern turntables, or buy turntables that are compatible with this old-fashioned format? Do we use turntables/discs or digital methods, such as Serato DJ software? For a while our idea was to use modern digital DJ software, so that we could record the passages live in concert and manipulate them immediately. After consulting with people who knew Daphne Oram, we felt that she would want us to embrace modern technology and record live in concert. The plan therefore was to do so, and then feed the recordings to the DJ software for instant manipulation. The orchestra was split in two so that there was a 'dry' live orchestra and a 'wet' live orchestra (with the 'wet' orchestra on stage, and the 'dry' orchestra at the back of the hall).

Ultimately, we decided to stick to using the equipment Oram would have had at the time, as this was more physical and historically accurate. Furthermore, we were unsure that splitting the orchestra into a 'dry' and a 'wet' orchestra at St John's Smith Square

would make any sense, as both orchestras would be sharing the same 'wet' acoustic. The argument for splitting the orchestra into two was that some of the material had a perceived 'wet' or 'dry' feel, and this would add an extra dimension to the 'double' orchestra concept. This resulted in 'dry' and 'wet' recordings of the orchestra being manipulated on the turntables, plus a 'dry' and 'wet' live orchestra. Also, having the two live orchestras would give us a chance to record live in concert, so that everything was happening there and then, rather than being recorded in rehearsal.

With two live orchestras, we would be able to fully realise Oram's concepts for the piece in a way that the technology of the time restricted. In the end we decided to present the world première as close to what could have been performed in 1949; perhaps a second performance of the piece could see the modern rework being executed. Additionally, the sound of 78RPM discs that have been cut using a 1950's lathe is truly unique, beautiful and historically symbolic, and this can be appreciated and experienced by listening to the recording of the performance.

In using period technology, we were faced with challenges, such as needing to record in one take due to it being cut directly to disc, and also because there was limited time and limited blank lacquers to cut onto. This challenge was also a beautiful element, as it added a real spark to the recording process: James would shout 'rolling', Aleks would start the lathe spinning, blank grooves would be cut, followed by Robert giving the upbeat to the orchestra to start playing several seconds later.

Another challenge in the realisation process was finding a suitable 'dry' acoustic for the 'dry' recording. We were initially thinking about asking the Southbank Centre if we

could use one of their smaller cinemas at the BFI as it is extremely dry, with all the carpet and curtains. However, we thought that on balance it would be better to use the small Recital Hall at the RCM, as we could benefit from the assistance of the RCM Studio and engineers, and this would be more of a priority than the extreme 'dry' acoustic. We also thought that perhaps a large church would be effective for an extreme 'wet' acoustic, but using the same logic as above, we chose the spacious Great Hall at Goldsmiths so that we could utilise our specialist resources there.

A further decision that needed to be made was the tempo. There is no indication of tempo markings in the score. Initially, I was feeling the piece at crotchet = 84, however after further thought I realised a concept: the turntables will be spinning at the speed of 78 revolutions per minute, as the piece is scored for 78RPM discs, therefore it felt right to use a tempo marking of crotchet = 78RPM. This tempo makes the material feel slightly under tempo, adding a haunting quality to an already unnerving 'ghostly' sound world. Having said that, Robert Ames (who conducted the concert), played around with the tempo of the music, shifting it back and forth, often at a faster tempo to add much needed movement. This worked very well as a contrast to the recorded disc material, as he conducted the recorded material strictly at 78, so I could create an interplay with the tempo and movement of the discs.

In terms of the orchestration, I felt I had to simply throw myself into the world of Oram by listening to all her music, reading her writings, and learning about her views and attitudes. I then deeply trusted my gut instincts within a creative web in which Oram and I existed. For example, there was a section of flute writing that had static repeated notes, which she had put several annotations over but had not yet completed. I

then realised that perhaps she wanted a circulation of these repeated notes between three flutes, as she had done with other material in the score. I also pictured the spinning turntables at the same speed as these repeated flute notes, as well as the T.S. Eliot quote from his work *Four Quartets* 'at the still point of the turning world' which Oram was reading at the time of composing *Still Point*. Both T.S. Eliot's *Four Quartets* and Oram's *Still Point* are about the experience of constantly changing perceptual webs, therefore indulging in these fantasies gave me the instinct to restore the acoustic material with commitment and confidence.

What is the General Aesthetic of the Piece?

It was an absolute honour to experience history unfold as I worked on this piece. I have learned from Oram that in order to experiment with something brand new and completely unfamiliar, you need familiarity. In this case, I found familiarity in the style of the orchestral material, which is rather romantic and has a tonal centre.

Yet even though this is the case, the orchestral material plays with one's perception of space and time, which is only further accentuated by adding the turntable manipulation, which bends the orchestral material using simple, yet hugely effective methods: slow motion, fast forward, rewind, full echo, 'dry' and suffocated recording versus 'wet' and reverberant recording. The piece is titled *Still Point*, but it is very much about movement: from the turning of the turntables, and the circular records moving at the same speed as the tempo of the piece, to the concepts and aesthetics of the acoustic material. Additionally, this piece was inspired by T.S. Eliot's *Four Quartets*, which you can very much feel in the auditory world Oram conjures:

At the still point of the turning world. Neither flesh nor fleshless;
 Neither from nor towards; at the still point, there the dance is,
 But neither arrest nor movement. And do not call it fixity,
 Where past and future are gathered. Neither movement from nor
 towards,
 Neither ascent nor decline. Except for the point, the still point,
 There would be no dance, and there is only the dance.

I can only say, there we have been: but I cannot say where.
 And I cannot say, how long, for that is to place it in time.
 The inner freedom from the practical desire,
 The release from action and suffering, release from the inner
 And the outer compulsion, yet surrounded
 By a grace of sense, a white light still and moving,
Erhebung without motion, concentration
 Without elimination, both a new world
 And the old made explicit, understood
 In the completion of its partial ecstasy,
 The resolution of its partial horror.
 Yet the enchainment of past and future
 Woven in the weakness of the changing body,
 Protects mankind from heaven and damnation
 Which flesh cannot endure.

Time past and time future
 Allow but a little consciousness.
 To be conscious is not to be in time
 But only in time can the moment in the rose-garden,
 The moment in the arbour where the rain beat,
 The moment in the draughty church at smokefall
 Be remembered; involved with past and future.
 Only through time time is conquered.³⁷

What's more, there is nothing pretentious or needlessly complex about this music. It is strikingly simple yet hugely unique and powerful, and unafraid to acknowledge the sounds and aesthetics of the history before it; this 'realness' makes it approachable and relevant to a broader musical audience.

What environment was Oram Working in, and Who Influenced Her Work at the Time of Writing *Still Point*?

Oram had declined her place to study composition at the RCM and was quoted as saying that she didn't want to become a school teacher or treat her RCM education like a finishing school, which was common for female musicians at the time and for decades afterwards.³⁹ Thus, aged 17, she started working for the BBC as a radio engineer and 'music balancer', only a few years before penning *Still Point*. During this time, she was working mainly at Maida Vale Studios, as well as for the BBC Proms at the Royal Albert Hall during the Second World War. As a young music balancer, her

³⁷ T.S. Eliot 'Burnt Norton,' *Four Quartets*, p. 6.

³⁹ James Bulley (2015).

role was to seamlessly mix and change vinyl recordings of orchestral symphonies during radio performance, as each piece would often be on several sides of records. For the BBC Proms, she would shadow⁴⁰ the live orchestra with pre-recorded concert performances in case there was an air raid or other interruptions, jokingly suggesting it would 'fool the Germans'.⁴¹ Furthermore, she is quoted as saying that the audience at the Royal Albert Hall 'should pay double' because its reverberant acoustic meant you 'heard the music twice'.⁴² Much of this is suggestive of her inspiration for the concepts within *Still Point*.

Balancing is very much akin to focusing a photograph – our subject is an orchestra and our camera is the microphone. We must not allow any part of our subject to be more distant in our reproduction than in the original. Let's take as an example programme a Prom Concert from the Albert Hall. By the way of echo in this hall is notorious – someone has suggested that Albert Hall audiences should pay twice as they hear a double performance of every work.⁴³

In exploring Oram's environment, one can begin to appreciate the influences that inspired her to create such a unique piece. For example, her use of 'wet' and 'dry' recordings of orchestral material is clearly inspired by direct experience, and the acoustic conditions of working in the studios at Maida Vale where the BBC Symphony Orchestra rehearsed. Additionally, her time as a young music balancer gave her the

⁴⁰ Of course, she should not have been 'shadowing' the orchestra, she should have been the composer in the spotlight with the piece such as *Still Point*.

⁴¹ Taken from Oram's letters: Goldsmith's Oram Archive, Special Collection.

⁴² Daphne Oram, Letter to the B.B.C., (Goldsmith's Oram Archive, Special Collection).

⁴³ Daphne Oram, *An Individual Note*, p. 2.

inspiration to construct the concept of a piece for live orchestra and vinyl-manipulated orchestra. Furthermore, the acoustics at the Royal Albert Hall, which caused such reverberation (which she no doubt had to live-mix during recording and performance), gave her the inspiration for the 'double' orchestra concept.⁴⁴ Finally, the piece is scored for five microphones, which was the same setup used by the BBC for recording orchestras, and was devised by Oram and her colleagues. In being both a composer and sound engineer, Oram saw the microphone as an instrument, not just a recording tool. If she had gone down the route of formal composition lessons at the RCM, she would not have had these experiences, which led her to experiment and compose such a singularly unique piece of music.

What are the implications of *Still Point*?

The success of the performance at St John's Smith Square is palpable, and Feshareki and Bulley's achievement is huge, but whether *Still Point* becomes canonical is anyone's guess. The material is certainly there – the duo have been meticulous in their documentation, collating notation, Oram's and Davies' writing and orchestral instruction onto a single score – but it remains singular, without clear successors. The muffled, hypnagogic records of *Indignant Senility* or *The Caretaker* might be the closest in actual sound, but certainly not in spirit. Both have incorporated repurposed and anaesthetised classical passages in their music – Wagner for the former, myriad Romantic piano pieces for the latter

⁴⁴ Daphne Oram, Letter to the B.B.C., (Goldsmith's Oram Archive, Special Collection).

– but these are used for textural and nostalgic effect. Oram's score, on the other hand, was entirely original, and her specific manipulations tied into a loftier artistic ethos.

But the mere recognition of the piece feels just as crucial. Oram must have felt intense frustration in 1949, knowing that she had produced a radical work. It pre-dated both the concrète proto-sampling of Schaeffer and Pierre Henry (of whom Oram was vaguely aware at the time) and the purer electronics of Stockhausen and the Cologne School (of whom she was not) in its use of sampling, recording and electronic manipulation. In Britain, where Benjamin Britten and Vaughan Williams represented the apex of experimentation, Oram's leaps of ambition were especially unprecedented. Even now the idea of it being performed at the Proms seems radical, suggests Bulley.⁴⁵

Still Point shows that turntabling originates in classical music, not primarily in DJ culture. Even the aesthetic of the orchestral material is 'conventional' in that it has a tonal centre rather than being more 'experimental' in musical language. It therefore should not be confused with cross-disciplinary work, such as that of John Cage, that moves towards the realms of Art. In relation to my own turntabling practice, which I have been developing intricately and independently from any known culture, the discovery of *Still Point* means that my own work finally has a context. It almost feels uncannily meant-to-be that I came across this piece, as I am probably the only person that would have the skillset to realise a turntable part in terms of classical composition.

⁴⁵ Tom Howells, 'Daphne Oram's radical turntable experiments', FACT.

Even though *Still Point* is very much a straight classical composition in terms of genre, one notion it generates is that there needs to be more collaborations between sound-engineers and composers within classical composition, something that Oram stated regularly. In a paper written by Oram (circa 1950–1956), concerning new avenues that the BBC might consider in the broadcasting of music, she talks passionately about the different perspectives on sound and music, especially looking at the microphone and recording techniques as compositional tools. Oram's vision is a great example of how having both these perspectives (as an engineer and composer) can add to concepts and expand composition into new realms and dimensions, especially where bending perspective is concerned.

It wasn't just Oram's use of live electronics and turntabling that was radical for 1949, but also her use of space, time and perspective. This makes *Still Point* a truly visionary work. Oram's concept of recording the orchestra at one moment of time, and then manipulating it into a new, transfigured form and perspective in the present moment, was not only the first instance of this sort of composition, but was not developed in experimental classical composition until decades later due to a lack of performance. Additionally, her piece was the first instance of spatialised concert music, in the sense that she asks for recordings to be made in different acoustics ('dry' and 'wet'). Therefore, *Still Point* plays with the idea of the manipulation of past moments in time, in a real-time present moment, and also it looks at manipulating different instances of space.

In terms of turntable manipulation, the compositional implications of simply reversing a turntable motor so that the material is not just a retrograde of notation, but a

retrograde of space, moment in time and sound, goes far beyond any serialist techniques of the time. Taking one time in history and manipulating it with a new perspective at a later date, in duet with the un-manipulated live orchestra, is one of the most profound elements of *Still Point* and completely unheard of for 1949. This is why it is so poignant that the world première of *Still Point* took place so many decades later; it really adds a depth to the existence and story of the piece. Its concept of taking a past moment and placing into a present moment is also its historical story and journey.

As an experimental composer myself (not just in sounds, but methods), one of the key things I have learned from Oram and *Still Point* is that in order to test out something completely unfamiliar, you need a familiar grounding. In this case, the live-electronic turntable manipulation of orchestral material is the unfamiliar, and the orchestral material is the familiar. This is due to the relatively pastiche-like nature of the acoustic material, which provides a basis for the listener to understand the manipulation. This is something I will use in future compositions, and is the basis of my new NTS Radio show NEW FORMS.

In summary, I feel that this project was the way in which I could best create an impact in compositional research, using a practical and applied approach. Restoring a piece of untold history composed by a marginalised and pioneering artist is the best I could do to fulfil my responsibilities as a composer who has the specialist skills to realise this groundbreaking work. If only Stockhausen had known that Daphne Oram was working in a damp room next door when he visited Maida Vale to work with the BBC Symphony Orchestra, and that her work with live electronics predated his. *Still Point* is

a piece that shows the first instance of sampling (it samples itself and presents that material in a new light), DJ techniques, live-electronic manipulation of orchestral material, and 'turntabling'. With a world première performance realised, *Still Point* can finally be established in musical history, with the history of electroacoustic music being considerably broadened and diversified as a result. In turn, this broadens the pathways of the future of electronic music as well as classical music as we know it.

Of course, there are more elements to the realisation process of *Still Point* than working on the materials. As I have mentioned, not only did James and I create the accurate rehearsal and recording processes and venues, but also liaised with Oram specialists and members of the Daphne Oram Trust, to ensure that we had many perspectives on the choices we made. Additionally, our aim was to raise the profile of Daphne Oram, and we feel that we have achieved this substantially. Whilst it is positive that her work has been brought to the attention of a mass public, we have had to be very careful about the truthfulness and accuracy of material that has been published subsequently. The challenge here was that many journalists rely on citing previous research and published materials to create their articles and, with Oram, there is very little (and absolutely no research or press on Oram's early work and concert music). Therefore, James and I created several documents on both Oram and the piece, which we gave to the Southbank Centre's press team to forward to any journalists wanting to write an article. Obviously, we cannot ensure that all press reports are accurate, but we can at least contribute accurate material and original research. We did so by sourcing original material from Oram's friends and colleagues, and the material at the Goldsmith's archive.

Additionally, we decided to work closely with one journalist in particular, Tom Howells, chosen for his exceptional writing and real commitment to this sort of music. In doing so, we ensured that there would be accurate and detailed articles to reference in relation to Oram. Collaboration with the press and journalists is vital, which is why we played an active role in features for Vinyl Factory, FACT magazine, The Wire, Financial Times, BBC Radio 3, 4 and 6 amongst others, to generate information, public impact and awareness around the piece. As James and I are two of the main Oram specialists in terms of her early work, it was an important responsibility to fulfil. It is important for accurate information to be online and in public media, as this is where the masses gain their knowledge and information, not in academic journals and papers. It is similar to the way Hugh Davies mentions *Still Point* quite factually in Oram's obituary in the Guardian, and it is his mention here that played a role in the future discovery and realisation of this piece. Having said that, I have also presented my research at various conferences such as the *Alternative Histories of Electronic Music* at the Science Museum Research Centre. Next year James Bulley and I will be writing a book chapter on *Still Point* for Oxford University Press.

[Important update 31/05/2018 – James Bulley has found the finalized copy of *Still Point*, by coincidence, whilst helping to clear Pamela Davies' home. It has some further ground-breaking ideas in it, and many new developments not apparent in the pencil draft. We will be giving the world premiere of the newly found score at the BBC Proms on 23/07/2018 at the Royal Albert Hall, with rehearsals at Maida Vale studios. This will also be with the London Contemporary Orchestra. This would have been Oram's ideal scenario for the premiere at the time of composition due to her environment at the BBC Proms and Maida Vale playing such a large influence on her ideas. Please refer to future writing and publications for further information.]

My Quest to Find the 'Real'

To conclude both this informal commentary, and my time as a doctoral researcher, I think it is important to emphasise that this was a practice-based doctoral degree, where I set out to reshape, rethink, explore and experiment, within my compositional practice. I believe these practical applications stand alone, and have opened doors for future research, as well as created significant public engagement.

There is space in academia for informality: I fell upon Daphne Oram's *Still Point* very casually. If I had been too theoretical and methodological, I would never have discovered Oram's unperformed work gathering dust on a shelf. It was my DJ'ing for NTS Radio that led me to stumble across this discovery. To conduct experiments in applied art you do not need the formalities you would in a discipline such as theoretical science, as it is restrictive and not always definitive for artistic exploration. This is especially true in a discipline that is about being deeply creative, such as composition. At the same time, we should not be lazy; we should be thinking creatively about what academia is, especially as composers of experimental music. After all, the pursuit of truth and understanding is what being a composer is all about, and this is something we share with researchers of any field.

I have used my skillsets as a composer to make an invaluable contribution to the work of Daphne Oram, and I am now developing this by collaborating with Eliane Radigue. By employing practical and applied approaches to the realisation of the work of these composers, I feel I am researching in a way that may positively influence other

composers. Thinking specifically about the work and practice of Oram, I believe that the practical research I have conducted with James Bulley in realising *Still Point* has started a brand-new area of study. Other researchers can finally reference, site and develop our work and help grow Oram's legacy. More importantly, this is research that has generated public engagement through raising awareness of a groundbreaking work, and Oram's profile. Before this research, there was barely any evidence that the orchestral work of Oram even existed. Interestingly, there had been mentions of her early work in journals, yet no one had thought to find ways to get this incredible music performed. This is a point I would like to stress: emphasis is often too much on theory and formal thesis, with the practical elements neglected. Perhaps if we started thinking more inventively as music researchers in the area of practice, the way a composer writes music, then Oram's *Still Point* would not have been lost for so many decades, and we could have started learning and developing from her work much earlier. Therefore, I call for a redefinition of academic composition, and for the compositional community to think more creatively about what doctoral research means, especially the role and strengths of the practising experimental composer. For example, an experimental composer is more likely to be able to go to the primary source rather than simply references, as we work directly in the field. In the future, I would like to collaborate with a musicologist on research so that we can utilise each other's strengths in creating original research.

Finally, my quest to find the 'real' has been explored extensively in my practical applications. Is it tangible or definable in words, or does it have a magic that only music itself can uncover? Of course, I can state that my quest for realness has seen me look at my practice in terms of its relevance to wider society, or look at composers who

have that inherent 'real' quality, both in their music and through their experiences as people. Or the 'real' could be defined as looking at rewriting history by bringing the work of untold composers of the past into the spotlight, and thus creating a more real representation of past societies and movements. The 'real' can also mean thinking about how music can occupy space and interact with other real phenomena in our physical experiences, such as light, sculpture and movement, or it can mean the use of real, physical and analogue electronic elements in my compositions. Realness also defines how I feel about the many different relationships I have with my fellow collaborators, and what this has taught me about the world in which I exist. But, in the grand scheme of experiencing music, the 'real' cannot be defined, and the realness that a person feels when creating or experiencing music does not need to be quantified or justified. The realness is an indefinable experience, and that is the beauty of music: music transcends logic.

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Archive Material:

With particular thanks to the Daphne Oram Archive, hosted in the Special Collections at Goldsmiths, University of London.

Audio

Reference number: ORAM/11/DO211

Title: *PH3 Rec March 1969 Still Point Placid and Fanfare*

Form: Magnetic Tape

Dimensions: 7"

Length: 25'20"

Papers

Reference number: ORAM/8/15/001

Title: *Still Point handwritten cover note*

Date: 1949

Description: One torn sheet of paper with handwritten title page for *Still Point* performance, written by Daphne Oram

Reference number: ORAM/8/15/002

Title: *Typed description sheets for Still Point HD Ref copy*

Description: Two sheets of A4 paper explaining in detail the performance and composition conditions for Daphne Oram's *Still Point* for Double Orchestra and Five Microphones. Reference copy, probably typed and printed by Hugh Davies.

Reference number: ORAM/8/15/003

Title: *Handwritten cover sheet for Still Point*

Description: One handwritten cover sheet in pencil (on notation paper) by Daphne Oram for *Still Point*

Reference number: ORAM/8/15/004

Title: *Ink written first page of Daphne Oram's Still Point*

Description: Ink written first page of Daphne Oram's *Still Point*. Written in Daphne Oram's hand.

Reference number: ORAM/8/15/005

Title: *Score drafts for Still Point*

Description: 54 double-sided pages of manuscript draft in pencil in Daphne Oram's script of the piece *Still Point* (1949–1950). The first section of the material appears to be the final draft of the piece prior to typesetting.

Reference number: ORAM/3/2/025

Title: The Broadcasting of Music

Date: circa 1950–1956

Description: double-sided page of paper typewritten by Daphne Oram, concerning new avenues that the BBC might consider in the broadcasting of music.

Still Point

Daphne Oram

for double orchestra,
treated instrumental recordings
(three prerecorded 78 rpm discs),
five microphones,
echo and tone controls

33'

(composed 1948–49)

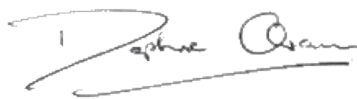
Realised by Shiva Feshareki and James Bulley, 2018

Still Point

for double orchestra, treated instrumental recordings
(three prerecorded 78 rpm discs),
five microphones, echo and tone controls.

by Daphne Oram (composed 1948–49, scored in 1950).

Duration: 33 minutes.

A handwritten signature in dark ink, reading 'Daphne Oram'. The signature is stylized, with a large, sweeping 'D' and a long horizontal line extending from the end of the name.

Premiere performance at the Royal Albert Hall, London.
11pm, Monday July 23rd 2018.

Realised by Shiva Feshareki and James Bulley.
Commissioned by the BBC and the Southbank Centre.

Preface by James Bulley.

Instrumentation

Turntables

3 turntables (capable of playing 78 rpm discs), with pitch, echo and tone controls
3 78 rpm vinyl discs containing prerecorded material
1 RE-201 Space Echo (or similar)

Live Electronics

5 microphones (or groups of microphones)
5 RE-201 Space Echo (or similar)
10-channel mixing desk and speakers

Orchestra A (wet acoustic)

2 flute (db/ picc)
2 oboe
2 b-flat clarinet
bass clarinet
2 bassoon

2 horn
2 trumpet in C
2 trombone
tuba

percussion – vibraphone, triangle, cymbals, gong, xylophone, chinese block, glockenspiel, side drum
timpani
harp

6 violin 1
4 violin 2
4 viola
4 cello
3 double bass

Orchestra B (dry acoustic)

2 flute (db/picc)
2 oboe
2 b-flat clarinet
bass clarinet
2 bassoon

2 horn
2 trumpet in C
2 trombone
tuba

percussion – triangle, cymbals, gong, xylophone, chinese block, glockenspiel, side drum
timpani
harp

5 violin 1
4 violin 2
4 viola
4 cello
4 double bass

History

In 1948, whilst working as a radio programme engineer at the BBC, Daphne Oram began composing a new and highly innovative piece for double orchestra, entitled *Still Point*. Oram was only 23 years old when she wrote *Still Point*, and the piece reflects her earlier experiences working up under the glass dome of the Royal Albert Hall as bombs rained down over London. As a programme engineer during World War Two, she was tasked with both balancing the radio broadcast of live concerts in the hall (including the BBC Proms season), whilst also keeping 78rpm disc recordings cued up ready for broadcast if the hall was evacuated: the music would carry on regardless! These early experiences using turntables and mixing sound in the complex acoustics of the Royal Albert Hall inspired Oram to explore the spatial and acoustic aspects of orchestral composition by harnessing the newfound potential for live manipulation of amplified sound in performance. The final score for *Still Point*, scored in April 1950, details “pre-recordings to be mixed in at varying speeds, backwards & with filterings plus reverberation” and was submitted to the BBC as a potential entry for the inaugural Prix Italia in 1950, only to be turned down on the basis that the work could only be judged as a “straight score” and the adjudicators wouldn’t understand the “acoustic variants and pre-recording techniques” utilised. Brian Hodgson, a colleague at the BBC (and fellow member of the BBC Radiophonic Workshop) later commented to Oram that “if they had understood one feels they would have been even more ‘anti!’”.

Still Point is thought to be the earliest example of a composition specifying real-time electronic transformation of instrumental sounds, and in retrospect can be seen as decades ahead with its explorations of space, time and acoustic architecture. In the work, the double orchestra is ‘acoustically treated,’ creating one ‘dry’ orchestra (using acoustic baffles) and one ‘wet’ orchestra, which are then manipulated live in performance through turntables, amplification and echo effects. *Still Point* was to be the last piece that Oram wrote for orchestra before she co-founded the BBC Radiophonic Workshop in 1958, laying the roots for the new fields of British electronic music that were to come.

Over a four year period, composers Shiva Feshareki and James Bulley have extensively researched within the Daphne Oram Collection and related archives across Britain, in order to realise the world premiere performance of Oram’s final score for *Still Point*. Previously thought lost for over twenty years, Bulley discovered the score in December 2016 amongst the papers of composer Hugh Davies. The 2018 BBC Proms premiere of *Still Point* followed Oram’s exact specification, with the turntable discs having been recorded in Maida Vale’s renowned Studio 1 using a historically accurate live lathe-cutting technique to create the discs (engineered by Aleks Kolkowski). The turntable part for *Still Point* been constructed by Feshareki using Oram’s detailed handwritten instructions found in the archive. At the 2018 BBC Proms performance Feshareki developed these ideas incorporating her own techniques and understanding of Oram’s musical aesthetic.

Daphne Oram

Daphne Oram (1925–2003) was a British composer and co-founder of the BBC Radiophonic Workshop. She invented the *Oramics Machine*; a combined sound synthesiser and sequencer which allowed composers to draw and control electronic sound synthesis. She was the first composer to be commissioned to provide electronic music for the BBC, producing the soundtrack for the television drama *Amphitryon 38* (1957). In 1958 she co-founded the *BBC Radiophonic Workshop*, becoming its first director and an indelible impetus on the work produced throughout its history. Oram left the Workshop in 1959, establishing one of the first independent British electronic music studios, at Tower Folly, Kent, from where she devoted herself to her drawn sound technique *Oramics*. *Oramics* is not only one of the earliest forms of electronic sound synthesis, but is audiovisual – the composer draws on a synchronised set of ten 35mm film strips which overlay photoelectric cells, generating electrical charges to control amplitude, timbre, frequency and duration of sound.

Oram supported her work on *Oramics* through commissions including concert pieces, advertisements, the electronic soundtrack for Jack Clayton's *The Innocents* (1964), the EMI release *Electronic Sound Patterns* (1972), and collaborations with film maker Geoffrey Jones, such as the Oscar nominated British Transport film *Snow* (1963). Alongside her studio work, Oram was a researcher with an avid interest in the science and philosophy of sound. She wrote research papers, gave lectures on electronic music at universities, theatres and festivals, and published a book *An Individual Note, of Music, Sound and Electronics* (1972), which was republished in 2016, giving new generations of composers and electronic musicians access to Oram's unique and radical perspective.

After Oram's death in 2003, her tape collection and papers moved via composer Hugh Davies and the Sonic Arts Network (now Sound and Music) to the Special Collections and Archives at Goldsmiths, University of London, where it is now looked after by the Daphne Oram Trust. The *Oramics Machine* is preserved by the Science Museum, where it has most recently been displayed as centrepiece in an exhibition on the history of British electronic music: *Oramics to Electronica*.

Prerecording

Prior to performance of *Still Point*, the ‘dry’ and ‘wet’ recording scores (included here prior to the performance score) are performed by Orchestra A (wet acoustic) and Orchestra B (dry acoustic) and recorded in a large studio space. In Oram’s original notes, this space was specified as BBC’s Maida Vale Studio 1, and the wet and dry effects were to be created using close and distant microphone techniques, as well as acoustic treatments. It is recommended that at least one full day is allocated for the two recording sessions. In the sessions, each orchestral performance is mixed live, summed to mono, and cut onto disc in real-time using a 78 rpm cutting lathe. Whilst the use of 78 rpm discs is a core defining concept within *Still Point*, reasonable alternatives using digital technologies may be employed. A multi-track recording of the sessions may also be taken as a backup to aid the rehearsal process.

The recorded sections of the wet orchestral material (Orchestra A) should be cut onto Side A of two 78 rpm discs and the recorded sections of the dry orchestral material (Orchestra B) should be cut onto Side A of one 78 rpm disc. It is at the performer’s discretion to record further material to disc during the recording sessions, which may be used by the turntable soloist to extemporise upon the turntable parts composed by Oram. These can therefore be added to Side B of the three discs.

Turntables In Performance

In performance, the prerecorded turntable material is manipulated in duet with the live amplified orchestras, as denoted by boxed sections in the live orchestral score. These notes directly translate Oram's handwritten performance notes, which are included as a facsimile within this preface. Effects (i.e. echo, tone controls, speed control, and reverse) occur within the live performance, and are described in detail. Notations by Feshareki are included within the score, marking sections that allow scope for extemporisation of Oram's turntable part by the soloist.

The different acoustics required to make the recordings on the 78 rpm discs have an acoustic spectrum of wet<--->dry, and as a result, all tone treatment and effects used by the turntablist in performance fall within this spectrum. Within the archival score, Oram defines the use of echo by the turntablist, by way of an echo chamber. Where an echo chamber is not available, an echo machine may be used, and this does not compromise the physical and analogue nature of the recorded material. As an example, within the premiere performance of *Still Point*, a Roland Space Echo RE-201 is employed to allow for echo effects for the turntable. The turntables used by Feshareki at the premiere performance at the Royal Albert Hall were Stanton ST-150 Mk2s (which include reverse and pitch adjustment).

The dry and wet prerecorded material can be manipulated within the following parameters by the turntablist:

1. Speed alterations/manipulation, affecting pitch, tone and tempo.
2. Looping/sampling: forwards (clockwise) and backwards (anticlockwise)
e.g. rewinding and creating a "complete" retrograde of material.
3. Diminishing/augmenting natural echo, reverb and tone.
4. The employment of mixing techniques between discs.
5. Integrating multiple formulations of the methods above for endless options e.g. slow-motion backwards loop, removing bass frequencies, whilst mixing between the "dry" and "wet" recordings/versions of one (or more) excerpts.

Performance statement

“It is a peculiar state of mind, existing between 1949 and 2018, working on a composition that was never realised during its time, and therefore has no lineage or development through history. It is a composition with techniques that would have felt incomprehensible at the time, barely understandable now... To me, *Still Point* is a study that demonstrates electronic synthesis in its physical form. If performed in 1949, it would have predicted the future of music technology demonstrated physically by two orchestras, environmental acoustics, microphone techniques, discs and turntables. It is a work that pre-empted so many groundbreaking ideas in its use of space, acoustic and technology, as well as a form of live electronic manipulation that never really existed in concert music - or even exists now - that is created using discs and turntables. As a composer, I was already in-tune with Oram, as I specialise in orchestral music that engages with space, moment and context. As a turntablist, I felt destined to remain a loner. I was never part of a collective or culture, but working independently developing my own turntabling techniques that felt so much a direct communication of my inner artistic intentions, yet somehow detached from a known path. Therefore, learning of the existence of *Still Point* was a definitive moment for me. I finally found a context, an inspiration for development: a lineage, perhaps... Working on Daphne Oram’s visionary composition made me grow as an Artist in directions I could never have predicted, somehow dancing between my own practice and Oram’s practice, trying to understand where Oram ends, and I continue. My role as a performer within this composition can only be described as a surreal, intangible collaboration full of mystery, with more questions than answers. It is a collaboration between myself and Daphne Oram, existing at two different points in time, floating indefinitely, in perfect parallels...”

Shiva Feshareki, 2018

Notes for turntablist by Daphne Oram (1950)

Record at start of rehearsal – Discs 78rpm

Two copies of –

Rec. X From Fig. 11 – TR end V & Violas – repeat these 3 bars, but replacing the triplet figures with rests, for duration of 30 secs.

Play X At Fig.20, having taken all the bass away with tone control. Fade X up and down rhythmically to be audible at bass of 4/8 + 5/8. Check that pitch remains F.

Rec. Y From Fig.68 – Harp and flute – repeat these two bars for 30 secs.

Play Y From Fig.69 – Reverse the turntable motor so that it runs anticlockwise. (Set needle at end of sound). Thus play this passage backwards from end to beginning. Use full echo.

Rec. Z From Fig.33 – to first note of Fig. 34 (Orchestra A only)

Play Z At Fig. 33 to 34 play at slower speed 8va down (or 5th)

Play Y & Z together, both pp, from 71 to 72. Adjust speeds, add echo and tone control.

Adjust and delete according to circumstances.

Notes for Programme Engineer

Record at start of rehearsal — Discs 78rpm

Two copies of —

Rec (X) From Fig 11 — Tr 2nd V + Vocals — repeat these 3 bars, but replacing the triplet figures with rests, for duration of 30 secs

Play (X) At Fig 20, having taken all the bass away with tone control. Fade (X) up and down rhythmically to be audible at bars of $\frac{1}{4}$ + $\frac{5}{8}$ Check that pitch remains F

Rec (Y) From Fig 68 — Harp and flute — repeat these two bars for 30 secs

Play (Y) From Fig 69 — Reverse the turntable motor so that it runs anticlockwise. (Set needle at end of sound) Then play this passage backwards from end to beginning. Use full echo.

Rec (Z) From Fig 33 — to first note of Fig 34 (Orchestra A only)

Play (Z) At Fig 33 — to 34 Play at slower speed 8va down (or 5th)

Play (Y) + (Z) Together, both pp, from (71) to (72). Adjust speeds add echo and tone control.

Adjust & delete according to circumstances.

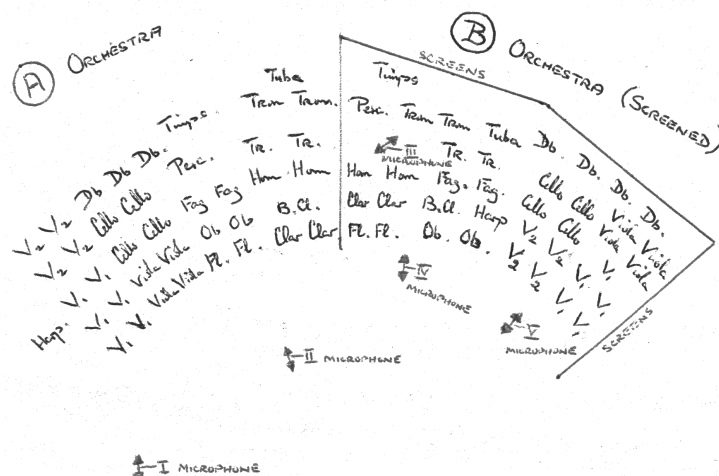
Live electronics in performance

Still Point requires the real-time electronic transformation of both Orchestra A (wet acoustic) and Orchestra B (dry acoustic), utilising amplification and echo. In performance, the double orchestra is ‘acoustically treated,’ creating one ‘dry’ orchestra (using acoustic baffles) and one ‘wet’ orchestra, which are then manipulated live through microphones, amplification, echo effects and speakers. Notations for live electronics are included in Oram’s score, with dotted hairpins denoting echo, and solid hairpins amplification volume for five microphones. In an interview with Daphne Oram later on in her life, the composer Hugh Davies noted the following regarding the microphones in the live electronics part for the piece:

“Microphones I and II should be high and distant while Microphones IV and V are approximately 12 feet high and hang almost over the front desks. Microphone III is placed very low and is only used for special effects with horn, trombone and xylophone.”
(Davies, c.1998, personal note)

Whilst it is recommended that the five microphones are placed accordant to Oram’s diagram and specification (included below), in order to accurately amplify and manipulate the live orchestral sounds in varied and challenging acoustics such as the Royal Albert Hall, it may be necessary to explore different microphone techniques and positioning based on Oram’s original ideas. Oram herself recognised this, as Davies notes:

“The microphone instructions are only given as an approximate guide. The degree of change needed at any one point will vary according to the type of studio and equipment used.”
(Davies, c.1998, personal note)



Digital facsimile of orchestra and live electronics arrangement for *Still Point*
Courtesy of the Daphne Oram Trust and the Hugh Davies Trust

For performance of this work a large studio is needed in which distant and close microphone technique can be employed. Orchestra A should be in a reverberant acoustic; while Orchestra B is almost enclosed in absorbent screens, thus reducing the reverberation as much as possible without marring the tone quality. (Soft screens with wooden backs should be used between the orchestras.)

The five microphones are so placed to exaggerate this acoustic contrast. A suggested layout is given. Microphones I and II should be high and distant while Microphones IV and V are approximately 12 feet high and hang almost over the front desks. Microphone III is placed very low and is only used for special effects with horn, trombone and xylophone.

Each microphone should have a volume control and should also be connected through an echo chamber and back to an echo volume control. It is suggested that another studio with suitable orchestral acoustic should be employed as the echo chamber.

Included in the score are instructions for mixing the microphones and for the use of echo. The hairpin mark (in green) below the staves indicates increase or decrease in volume of a microphone (which is numbered according to the plan.) Likewise a dotted "hairpin" shows increase of echo.

The microphone instructions are only given as an approximate guide. The degree of change needed at any one point will vary according to the type of studio and equipment used.

On the Realisation of *Still Point*

The realisation of *Still Point* follows Daphne Oram's existing instructions and score wherever it exists. It has been a painstaking, complex and ultimately hugely rewarding process. With the final complete version of the score found by Bulley in Winter 2016, after having been thought lost for over twenty years, this realisation has only been possible through extensive research, detailed transcriptions and comparisons of draft versions of the score, and through consultation with numerous specialists and researchers.

This realisation of *Still Point* has been transcribed, recorded and performed as closely as possible to how we imagine it might have occurred if Oram had been afforded the opportunity in 1950. The core concepts underlying the work have been adhered to as closely as possible. Undoubtedly, future interpretations will require different technologies and recording techniques based on the acoustic spaces and equipment available. We hope that our realisation of *Still Point* reflects Oram's ambitious intentions for the work.

James Bulley

London, July 2018

With thanks to:

London Contemporary Orchestra, The Daphne Oram Trust, Aleks Kolkowski, Sean Davies, Southbank Centre, BBC, St. John's Smith Square, the Royal Albert Hall, Oliver Coates, Robert Ames, Jason Noghani, Jo Langton, John Lely, Sherry Ostapovitch, Mick Grierson, Goldsmiths Special Collections, Goldsmiths Electronic Music Studios, Royal College of Music, Stephen Harrington, Tom Richards, Greg White, Alys Jones, Simon Hendry, Robert Winter and Daisy Chute.

I.

A [Flutes] *Lento* [♩ = circa 42]

B [Horns (in F)] *Lento* [♩ = circa 42]

Mics. 1 2 3 4 5

A [Flutes] 1st Violins 2nd Violins

B [Horns] *Poco Più Mosso* (♩ = 50)

A [Flutes] 1st Violins 2nd Violins

B [Horns] Violins Cellos Dbs. *Poco Più Mosso* (♩ = 50)

marcato *marcato* *marcato*

2 3

The Calling

For Soprano, Amplified Cello, Video, UGKI, LEDs,
Prepared Turntables, Lamps, Transistor Radio, Control Box, Light bulb, Glass Cabinet,
Wooden Speaker Cone, and Table

Section 1

Shiva Feshareki & Haroon Mirza

Section 1

Intro

Video + LEDs

Excerpt of 'Lola' by The Kinks from Top of the Pops

white noise

Soprano Solo

Violoncello

UGKI & Prepared Turntables

$\text{♩} = 76$

0:28

$\times 2$

Video + LEDs

Video + LEDs

S. Solo

$\text{♩} = 76$

NB - each box is a gesture. Within each repeat section, use these freely, and repeat in any order. Modulate gestures to taste. Using them at different points in the bar is encouraged. Silences between gestures is also encouraged, gradually closing the silences as each section progresses.

Vc.

UGKI & TTs

0:47

Video + LEDs

Video + LEDs

S. Solo

GESTURE SET 1

Vc.

pizz

φ

fff

'twangy'

thick, and
OTT wide vib

3

UGKI & TTs

10

Video + LEDs

Video + LEDs

S. Solo

Vc.

sfz

gliss.

gliss.

UGKI & TTs

12 x 4 2:03

Video + LEDs

Video + LEDs

S. Solo

Vc. GESTURE SET 2(+1)

UGKI & TTs

arco

sfz *sfz* *sfz*

14 x 7 3:09

Video + LEDs

Video + LEDs

S. Solo

Vc. GESTURE SET 3(+2,1)

UGKI & TTs

Heel of bow, harsh timbre, over harmony

sfz *sfz* *ff*

17 x 2 3:29

Video + LEDs

Video + LEDs

S. Solo

Vc.

UGKI & TTs

GESTURE SET 4(+3,2,1)

fff

8va *gliss.* *mp* *sul pont.*

20 x 8

Video + LEDs

Video + LEDs

S. Solo

Vc.

UGKI & TTs

(8) *gliss.* *tr*

fff

22 4:45 x 6

Video + LEDs

Video + LEDs

S. Solo

GESTURE SET 5
pizz. (written pitch)

Vc.

f

Sul C

UGKI & TTs

23 5:03 x 9

Video + LEDs

Video + LEDs

S. Solo

Harmonic glisses -- resonant. This can go beyond the finger board, and the glisses should be irregular and different lengths. However: The rhythms should be regular.

(pizz)

Vc.

mp

Turntables set to different speeds eg 33 1/3 or 45. Change positioning of aerial often, to adjust pitch and contours.

UGKI & TTs

Switch-on UGKI around the 5th repeat - change its harmonics using the pedal

Section 2

24 [TACET]

Video + LEDs

Video + LEDs

Each bar is approximately 2-3 minutes long - follow cello-pedal chord change for next bar.
Give plenty of space and silence before and after each recitative. Use silences between phrases.

meno mosso -- slow, free-tempo and with rubato: **Recitative 1**

f

S. Solo

You crawled, out the of sea. You crawled, out of the se a. The sea, se - a, -The sea,

Each bar is approximately 2-3 minutes long.

Give plenty of space and silence before and after each bar. Use silences between phrases. Change the pedal of 'UGKI' when 'UGKI' needs a chord change.

GESTURE SET 6

Arco (Sul C - beyond fingerboard)

Vc.

p *meno mosso -- slow, free and meditative*

UGKI & TTs

Ped.

25

Video + LEDs

Video + LEDs

S. Solo

Se a, se - a You crawled, out the sea. You crawled, out the sea.

(Sul C) pizz.

Vc.

f

3

arco (Sul C) gliss.

p

UGKI & TTs

*

26

Video + LEDs

Video + LEDs

Recitative 2

S. Solo

You crawled, out of the sea. You crawled, out of the sea - a. You crawled, out of the sea - a,

GESTURE SET 7

Vc.

(Sul D) pizz. 3 *f*

arco (Sul D) gliss. *p*

UGKI & TTs

Ped.

27

Video + LEDs

Video + LEDs

S. Solo

Sea! You crawled, out of the, out of the! You crawled out of the sea - a, Sea_ a, Sea!

Vc.

pizz. (Sul D - beyond fingerboard)

meno mosso -- slow, free and meditative

p

UGKI & TTs

28 $\text{♩}=40$ - real time

Video + LEDs

Video + LEDs

S. Solo

ff *mp* With Cello *mp* Sea! Straight in to my arms

$\text{♩}=40$ - real time
Follow SOPRANO
(from b 29-39)

Vc. *arco* *mp* rich and legato

UGKI & TTs

Ped. *

31

Video + LEDs

Video + LEDs

S. Solo

mf *mf* Straight in to my arms Straight in to my arms

Vc. *p* *ff* *mf*

UGKI & TTs

36

Video + LEDs

Video + LEDs

S. Solo

ff *mf* *ff*

Sea Straight in to my arms

Vc.

UGKI & TTs

p *ff* *sfz mf* *sfz mf* *sfz mf* *f*

40

Video + LEDs

Video + LEDs

S. Solo

GESTURE SET 8
(Sul A - beyond fingerboard)

Arco

meno mosso -- slow, free and meditative

p

UGKI & TTs

Red. *

41

Video + LEDs

Video + LEDs

S. Solo

(Sul D) pizz. *f*

arco (Sul D) gliss. *p*

Vc.

UGKI & TTs

42

Video + LEDs

Video + LEDs

S. Solo

pluck 'UGKI'

Vc.

UGKI & TTs

Ped.

*

Section 3

6:11 6:19

43

Video + LEDs

Video + LEDs

S. Solo

Vc.

UGKI & TTs

♩=76

♩=76

6:38

48

Video + LEDs

Video + LEDs

S. Solo

GESTURE SET 1

Vc.

UGKI & TTs

pizz

fff

'twangy'

52

Video + LEDs

Video + LEDs

S. Solo

ff

La La La La!

Vc.

thick, and OTT wide vib

sfz

UGKI & TTs

55

Video + LEDs

Video + LEDs

S. Solo

La La La La!

Vc.

UGKI & TTs

59

Video + LEDs

Video + LEDs

S. Solo

La - - La La La! La La La La La!

Vc.

UGKI & TTs

STOP UGKI

7:16

62

Video + LEDs

Video + LEDs

S. Solo

La La La La! La La La! La La! Out of the Sea!

GESTURE SETS 2, 3, 4 AND NEW GESTURE 9

Vc.

arco

fff 6

UGKI & TTs

65

Video + LEDs

Video + LEDs

S. Solo

Out of the! Out of the Se - a!

Vc.

UGKI & TTs

69

Video + LEDs

Video + LEDs

S. Solo

Vc.

UGKI & TTs

Lo la la la lo Lo la la la lo Lo la la la lo

La La La La! La - La La La!

73

Video + LEDs

Video + LEDs

S. Solo

Vc.

UGKI & TTs

Lo la la la lo Lo la la la lo Lo la la la lo

La La La! La La! Out of the! Out of the!

76

Video + LEDs

Video + LEDs

S. Solo

La La La La! La La La! La La!

Vc.

UGKI & TTs

79

Video + LEDs

Video + LEDs

S. Solo

Out of the se a! Out of the se

Vc.

UGKI & TTs

83

Video + LEDs

Video + LEDs

S. Solo

a! La La La! La La! La La La La! The

Vc.

UGKI & TTs

87

Video + LEDs

Video + LEDs

S. Solo

The -

Vc.

UGKI & TTs

8:51

92

Video + LEDs

Video + LEDs

S. Solo

Sea! La La La!

Vc.

UGKI & TTs

x 3

9:21

x 2

Video + LEDs

Video + LEDs

S. Solo

Vc.

UGKI & TTs



FADES OUT

x 2x 5

Video + LEDs

Video + LEDs

S. Solo

Vc.

UGKI & TTs

