



**ACADEMY OF MUSIC AND DRAMA**

# **Creating a Context for Listening**

The Choreography of Sound

Casey Moir

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**Independent Project (Degree Project), 30 HEC, Master of Fine Arts in Experimental  
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Author: Casey Moir

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Supervisor: Dr. Joel Eriksson

Examiner: Dr. Per-Anders Nilsson

## **ABSTRACT**

Key words: listening to space, shaping space, mapping space, active listening, encouraging interaction, composing situation and sounds, spatialising performances, designing proximities and trajectories, composing movement and momentum, alternate performance spaces, changing the expectations of room, visualising sound in space, engaging spatial awareness, changing performance conditions, changing listening perspective, omnidirectional composition, experimental music composition, choreographing sound

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My thesis is an investigation into an omnidirectional approach to composition of experimental music. This involves considering the conditions of performance as compositional aspects, in addition to composing sounds. Thus, room, space, spatialisation, movement (choreography) and one's immersion in sound, are examined as compositional parameters in the creation of both artistic works and context. This approach explores the possible artistic applications of trajectories, placement, direction, and the momentum of sounds, objects, and bodies in space and performance. The effect these have on perception, and experience is examined. Instrumental in setting sound in motion (beyond that of the natural motion of a soundwave that is in essence always moving through time and space), are the tools choreography and movement. Reliant on live interaction, they seek to create an interdependent connection between sound and body, body and space, and vice versa. This investigation also takes a closer look at listening practices, questioning how and why we/I listen, and how listening affects my compositional choices and the creative possibilities throughout. Overall, the process attempts to create an interconnected interplay between all things – sound, space, movement, visual stimulus, and situation – questioning the effect these have on composition and performance.

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# Introduction

To better navigate this as a reader, I begin here by explaining the structure of the thesis. Firstly, I introduce myself, my background and my point of departure entering this investigation. I present my purpose and aims along with my investigative questions and method pertaining to creating a context for listening and the choreography of sound. This is followed by a section explaining omnidirectionality and how I understand and use it, as well as a presentation of some pivotal experiences that have awakened in me a curiosity to know more about applying this approach in my music.

I then proceed to question the concept of the performance space and common concert formats. I talk of the live experience and ways I am approaching it. I introduce and define important terms such as space, room and spatialisation, and how I use them in this context.

I go on to explain key aspects, such as the phrase the choreography of sound, as well as the agency of movement and the role listening has in my artistic practice. I look at types of listening and begin to discuss my own listening practice.

All the initial sections are provided in preparation for the following presentations of the compositions I composed as a major part of this investigation. They act as points of reference in the detailed accounts I give of each piece, including reflections and analyses of artistic choices and my compositional process. These accounts present the differing approach each piece takes to tackling the creation of omnidirectional compositions and the choreography of sound. They explain how each work looks at spatialisation and the artistic application of trajectories, proximities, directions, perception, and the placement of sounding objects, instruments, and bodies; how room and space can be used and shaped; how the creation of situation is investigated by examining and applying possible aural, visual, and visceral stimulus as well as digital and physical movement in composition and performance.

I conclude by summarising the process and results, and with thoughts on how to proceed in the future.

## Background

I am an improvising musician and composer of experimental music. The instrument of the human voice has always fascinated me with its multifaceted vocabulary of sounds. It has a range that spans from language and phonetics to grizzles, grunts, gurgles, tongue-clicks, shrieks, screams, rumbles, mumbles, whisperings, oscillations, glissandi and more. I have intimate knowledge of the voice as a vocal-artist, improviser, and composer. I have given much time and many years to exploring and discovering it. I understand it on a physical, emotional, personal, and professional level. I know its capabilities and limitations. For this reason, the instrument of the voice is frequently featured in my work.

I also have an insatiable curiosity for sounds, more specifically unconventional sounds. I have a repertoire on the voice using extended techniques, utilising the voice as an instrument of sound, rather than exclusively as a vessel for more conventional singing. This attraction stops not at the voice and its capabilities. It extends to finding textures, in combining and layering sounds and to the exploration and inclusion of objects in my work (percussion objects, found objects, everyday objects etc.). I find great pleasure in interacting with them, especially those not initially intended for musical purpose, and through curious investigation, finding artistic potential in the sounds they can produce.

The voice that is part of the physical fabric of my body, is intrinsically entwined with my inner voice. My voice, as a whole, encompasses both of these. It is the internalisation of sound, thoughts, reflections and of self. It is expression. It moves when I move. It feels when I feel. It knows when I know. My voice, together with my genuine curiosity for sounds, make up a large part of my musical identity. They are an important point of departure for me in creative venture.

As an improviser and composer, I am organising sounds in space and time. My task is to find and choose sounds, and to either place them in or create for them a meaningful context in which to sound. This involves considering and constructing the how, what and when of sound. Done not in isolation but in relation to what sounds before and what is to come after. This process is centred around the act of listening; how I listen as a composer, as an improviser, as a performer and as a listener.

This ever-evolving continuous act of listening has kindled in me a curiosity for the spatial nature of sound. We live, after all, in an omnidirectional reality, with sounds surrounding us in all directions. This has caused me to ponder ways in which to adopt a spatial approach in music and understand how this affects composition and the choices I make. It has made me question the presentation of live music and encouraged me to search for alternate compositional possibilities relating to performance format. It has formed in me a desire to create an experience that embraces not only the *what*, *when*, and *how*, but also the *where* in music.

## **Purpose and Aims of this Thesis**

I believe that music is more than the combination of sounds set in motion and brought into being. A musical work is more than an object to be listened to. I view music as the act of sounding artistic curiosities, taking inner creative imaginations, and making them audible in new (outer) artistic contexts. Music is also spatial. It is an experience that can engage us on a sensory level.

My purpose with this thesis is to use an omnidirectional approach to musical performance to discover ways it can be practically and artistically applied in composition. I aim to explore how this approach affects the perception of sound in performance. I also use this approach with the aim of exploring the idea of creating a context for listening. This includes a practical investigation into space, movement, placement, and direction of sounds, as tools that shape and guide compositional choices, as well as the performance and listening experience of a piece.

My purpose is also to explore the role of listening in my artistic practice. This involves examining how I listen throughout the creative process, as composer, performer, and listener. This with the aim of creating and facilitating listening experiences that extend compositional considerations to include the conditions of a performance, in addition to the sounding content.

As I initiate this process, I come believing that movement and sound are intrinsically connected. To this effect, I see potential in investigating choreography as a compositional tool. My aim is to explore choreography to better understand the artistic and practical implications made available by it in the spatialisation of sound in time and space.

## Investigative Questions

Aiding my investigations are the following questions:

1. What creative possibilities are made available to composition by the inclusion of the conditions of performance?
2. In what ways can I apply an omnidirectional approach to sound in my music and how do they affect the experience of sound?
3. What role does listening play in my artistic practice and how does it affect my compositional practice, choices, and aesthetics?

## Method

To conduct my investigations, I will primarily be delving into my own artistic practice. This involves mapping my process of an omnidirectional approach to music, in composition, analysis, and reflection.

I understand listening as an essential and fundamental part of my artistic practice. Using listening as method, I am examining existing listening practices and types of listening. I am also putting my own listening under a microscope to better understand the role it plays in my artistic practice and the effect my own listening and reasons for listening have on my artistic choices and preferences.

When creating an omnidirectional context for the listening experience, spatiality, and the mapping of sound in space become integral to the process. To this effect, I am using choreography as method – a means to plan and direct the placement, direction, momentum, and path of sounds in room and space. I am also interested in discovering how choreography can be applied to the whole, affecting not only the sounds but the feel, atmosphere, and visual perception of a live listening experience.

In addition, I am researching literature and discussing theories about listening, space and spatiality, to see how these relate and can be applied in my music. I am also inviting musicians and audience members to reflect on their experiences of my compositions to gain insight beyond my own preferences, idiosyncrasies and understandings pertaining to the listening and performative experience.

# Omnidirectional Reality

Omnidirectional: “being in or involving all directions”.<sup>1</sup>

I am intrigued by the omnidirectionality of life’s sounding environment. In the everyday, sounds surround us. They embrace, shape, and engage with us from all sides and directions, as they layer themselves into the soundscapes of life.

We perceive sound spatially. The listening ear is trained to decipher the where of sound; if sounds are heard behind us, in front of us, above, below, besides, to the left or right of us and so on. This training enables us to approximate the distance to or between sound-sources, registering them as close or distant. It can detect trajectory (from where sound is coming from), determining the approach and departure of sound when sound-sources are mobile. We can essentially detect a sound-source that is on-route from somewhere to somewhere else and possibly even hazard a guess as to the speed in which it is travelling. Sounds can also help us to identify place – where we are. How sound reflects off surfaces can give us an understanding about the size or even the architectural or acoustical properties of a place. Quite simply, sound can tell us a lot about our surroundings.

The term ‘omnidirectional’ refers to how signals are received or sent in all directions. It is more commonly used in telecommunications and for describing a microphone polar pattern. My use of the term in this thesis pertains to creating sounding situations that explore all directions in performance. It is about designing composition to send sounds into a space and enabling listening to receive (experience) these from any and all directions.

## A Growing Interest in Omnidirectionality

My interest in the omnidirectionality of sound is something that has evolved over time. Below, I pinpoint a few pivotal moments in this process that have led me to initiate this investigation. These have stirred me into action, encouraging my development, curiosity, and discovery of the artistic possibilities of an omnidirectional approach to sound in my music.

When I was temporarily living in Australia 2012, I was involved in the experimental music scene there as an improvising performer. Dale Gorfinkel, a local musician and improviser, invited me to a soundwalk he was organizing through some local bushlands, in a suburb of the city of Melbourne. It marked my introduction to the soundwalk practice.<sup>2</sup> Added to the soundwalk-format (walking and actively listening to the surrounding soundscape) were three sounding interventions, placed at different locations along the route. Each of these involved local improvising musicians and one of them even a dancer; all of which were interacting and creating real-time interplay with the sounding environment.

This format opened my listening to a conscious awareness of the soundscape I was in and contributing to with every step, crack of a twig underfoot, rustling of leaves I disturbed etc. I could hear the rumble of distant traffic floating on the breeze telling me that although surrounded by nature, I was in a well populated area. I was made aware of nearby birdcalls of birds hidden in the heights of the tall

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<sup>1</sup> *The Merriam-Webster Dictionary*, “omnidirectional,” accessed January 10, 2022, <https://www.merriam-webster.com/dictionary/omnidirectional>

<sup>2</sup> A soundwalk is an active listening exercise done while walking. It purposes listening attention to the sounding environment. For more information I recommend visiting the website of Hildegard Westerkamp, a known practitioner in this field: <https://www.hildegardwesterkamp.ca/sound/installations/Nada/soundwalk/>



eucalyptus trees; the sounds of other human voices somewhere not seen, nearby yet distant; the slow gurgle from the river that wound its way through this bushland, yet out of my line of sight. The live performances added to the existing soundscapes, creating new complexities and layers. The soundscape was embracing me from all directions with fluctuating depth and precision.

Two years later in 2014, I was in Sydney at the Now Now Festival: a festival of spontaneous music and more.<sup>3</sup> One of the festival's performances was with the local Splinter Orchestra.<sup>4</sup> The many members of the ensemble were spread out in the warehouse venue, interspersed amongst the audience. As chairs were scarce, most people were sitting or lying on the concrete floor, while others stood near the bar or around the perimeter by the walls. There was no stage and therefore no clear direction of where to look. The ensemble then proceeded to initiate soundings at the back of the room which progressively made their way to the front over a duration of what could have been 30-40mins or even an hour. I don't remember exactly. I was so caught up in the sensation of the experience.

The performance was like one slow wave of sound moving precariously, thoughtfully, yet purposefully through the space. Only a hand-full of ensemble members were ever sounding simultaneously at any given time. Each individual musician joined when the wave reached them at their fixed position in the room. They then stopped when they felt the wave pass onwards. There was no score, no notation to follow. It was an act of collective listening and improvisation. It was remarkable!

In 2019, Mexican composer Israel Martinez invited me to perform in his piece *Love and Rage* at the CTM festival in Berlin. As he describes it, the piece is "Aural choreography for an audience temporarily deprived of their sight."<sup>5</sup> Led in one-by-one blindfolded, the audience were seated in an unknown-to-them space. They were then to experience the emerging and changing soundscape created by us, the performers, freely walking in the space spatialising the reading of texts, improvised soundings as well as spontaneously choreographing the movement and direction of the portable speakers playing pre-recorded material. All the while electronic and sampled sounds were spatialised in the loudspeakers of the encircling multichannel system, controlled by the composer himself.

Not all who came were comfortable with this format. Some, in a panic from not visually being able to know and understand the room and situation they found themselves in, removed their blindfolds and proceeded to frantically seek an exit that they didn't know where to find. It was an experience that heighten the senses for all involved – with both positive and negative effects on the individual listening experience. This I found fascinating.

All of these experiences represent differing ways of engaging with the surroundings of a performance that shape the conditions for listening. They each left a lasting impression and imparted on me an inquisitiveness for the context of performance and the role listening has.

## Concert Formats

In the above examples, one thing was consistent – all experiences deviated from the most traditional concert format; a format that separates musicians from the audience, having musicians on a stage and the audience in neat rows all facing the stage. I know most of my experiences of live music have been

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<sup>3</sup> To know more about the festival please visit: <https://thenownow.org/>

<sup>4</sup> Splinter Orchestra describes themselves as a large-scale improvising orchestra, based in Sydney, Australia, active now for over two decades. More info can be found here: <https://www.splinterorchestra.com/about-1>

<sup>5</sup> "Love and rage," accessed November 23, 2020, <http://www.israelm.com/portfolio/love-and-rage/>

presented in this traditional concert format. I believe all of us have had experiences with live music, presented in this way, that have engaged us. They have left us in awe, feeling elated, renewed or even excited. They have in some way made an impression on our listening, on a sensory level, that made for memorable occasions. This is, I believe, because whether consciously or not, the composer has composed music to work hand-in-hand with this format.

Not all composers consider the layout of the room in which their composition will be performed. Nor is room thought of as being a compositional parameter to consider. The traditional concert format is so embedded into the culture of live music that performance venues (concert halls, theatres, jazz-clubs, amphitheatres, opera houses etc.) are designed with this format in mind. Yes, all venues differ in size, acoustics, materials and so on, which all have an effect on the music played within their confines. The monopolization of room layout does not equate to a monopolized sounding result. It does however give composers a fixed format in which to work with and from.

For some, this standardization of format makes for one less element in the music to actively consider and plan for when composing. For others, something to exploit. Regardless, this is a trusted and go-to format for concerts and music venues as well as for composers. It has practical and artistic validity.

Without contesting this validity, I see a need for this format to be revised, altered, and even possibly dismissed altogether in my search for an omnidirectional reality in music. Format designs and, to a degree, stipulates the conditions of musical performance. These are of consequence for the act of composition. How I consider and think about the conditions of performance, affects how I compose. There is potential creative agency to be found in seeking alternative formats to work with. I am of the belief that these offer alternate compositional and sonic possibilities more advantageous in achieving an omnidirectional experience.

## The Live Experience and Approach

Live experiences of music involve being in the atmosphere, feeling the energy of all who are there and participating aurally, visually, and viscerally in the interplay between performers, audience, room, space, and architecture. Even the smell of a venue can add to (or detract from) an experience. This is because the live experience engages on a multi-sensory level, activating the many receptors of our bodies (eyes, ears, skin etc.) that are sensitive to the innumerable vibrations and impressions of situation. Our bodies receptors are active agents in informing us of the outer situation that also help us to connect to our inner perceptual space where meaning is formed. My works have a primary focus on the live experience, in which there are many different possible approaches to this.

I am aware that there is a long tradition of creating spatial works in electroacoustic music (EAM) using multiple loudspeakers to spatialise sound in space.<sup>6</sup> These works build on expert handling of recording and/or electronic equipment (hardware and software) and techniques, pre-recorded and/or electronically generated sounds, as well as loudspeakers (or headphones) to project sound into the space of listening. These all colour and shape the output of sound. In many cases (although not exclusively), these works are pre-recorded, not needing performers to be on-site interacting with room and space.

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<sup>6</sup> Pierre Schaeffer, Karlheinz Stockhausen, Alvin Lucier and John Cage are just some of the many well-known practitioners of electroacoustic music. As an introduction to this genre, I recommend reading the book *In Search of a Concrete Music* by Pierre Schaeffer.

I feel that for my investigation, the electroacoustic experience is not the only approach available, or necessarily the most optimised, to achieve the desired spatialisation and use of room in omnidirectional works. Although I will be adopting some of the techniques of the electroacoustic genre (for instance by exploring composition for multiple loudspeakers), my primary focus is on generating and/or spatialising sounds live in room and space. I am composing works that prioritise live interaction (acoustic and digital), to see how this concept in room effects compositional choices, my artistic process, and the listening experience.

## **Discovering Room and Exploring Space**

The terms room and space are closely tied, even interchangeable at times. There is however a distinction to be made.

When referring to musical performance, I understand room to encompass architecture, structure, and fittings. It is the materials, their arrangement, thickness, combination, placement and so on, creating surfaces, height, depth, reverberation, and reflections. Room forms and effects decay, sustain, clarity, obscurity, ambiguity, directness, warmth, harshness, and the distribution of sound. Room acts as a sort of active container for the sounds being projected into it, transforming them in interaction with them.

Space is room with the inclusion of all that is in it - furnishings, audience, musicians, instruments, objects, sounds seeping in from outside, energy, atmosphere, lighting, movements etc. It also includes the listening space, which extends to the psychological state of listening beings, inclusive of their current emotional state, preferences, and accumulated experiences. Space affects the perception, shape, and motion of sound.

### **The Role of Room**

My preference for an omnidirectional listening in music has led me to look more closely at room as a parameter for musical composition, performance, and experience. Just as with discovering an omnidirectional approach to sounds, my discovery of room is a process unfolding over time. More often than not, I've experience this as a performer and improviser.

In 2013, the Gothenburg Dance Company invited me to participate in Suburbia 37°. Working with the concept of bringing art to the people and in an attempt to make the experience of art more inclusive, it was performed at many locations in the outer suburb of Bergsjön. These included an empty office space, an elevator, a church, an outside basketball court, a shopfront window, inside an apartment and more. Each space was choreographed specifically, with performance events happening simultaneously whilst the audience (max. two at a time) walked through the area from one installation/event to the next on the mapped-out route. Dance, improvised music, and installations were collaborating in new forms outside of the opera house and more traditional concert scenes. Music and performance were, in effect, extracted from the concert hall and dispersed into people's homes, businesses and everyday public spaces. This enabled the simultaneous nature of the many events and allowed for each space to be explored as both a piece of the whole and as individual works with differing creative agency and possibilities.

In 2017 I started the interdisciplinary ensemble CLEC involving 3 improvising musicians and one illustrator/artist. The ensembles main concepts are to use improvisation in the exploration of room and space, and to create a collective artistic language for the sounding and visual mediums. One of our

first concerts was at the venue Sowieso in Berlin.<sup>7</sup> It has two rooms separated by a large open archway. The audience sits in one room, looking through the archway into the other room where musicians perform. Due to the architectural possibilities this venue offers, the decision was made to enhance this separation by erecting a thin wall of almost transparent, plastic sheeting, covering the entire archway. While we three musicians created fluctuating and changing soundscapes, our fourth ensemble member illustrated live onto the plastic sheeting. Soundings were visualised and visualisations were sounded in real-time. The blurred shadows of our bodies behind the sheeting became part of the illustrations. Room was transformed. It was an integrated member of the performance, shaping the possibilities available to us.

In 2018 CLEC performed at The Museum of Drawings in Laholm, Sweden.<sup>8</sup> When we arrived, the technicians had already set up the room as per the traditional concert format. They had also thought to situate each performer in the room by assigning each to a fixed microphone on the stage. I remember that we as an ensemble held a meeting before setting up. We found this format to be rather restrictive for our concept. We needed to discuss how we wanted to work with the room, define our expectations and then see what would be possible to accommodate. The importance of room for enabling interplay and interaction as part of the ensembles concept was made very clear in this instance. It was of paramount importance. It was also at the root of initial misunderstandings between our performance needs and the expectations of the venue.

These are just some of the experiences I've had that have led to me form the view that room is a member of any performing ensemble - an active agent in musical performance. Room has creative agency that impacts compositional choices. Every room offers its own unique possibilities for performance and has compositional value. Using room as a compositional tool means making decisions about the distribution of objects, instruments, and beings in the room, deciding on placement, direction, trajectory, and the momentum of sound. It can also relate to discovering the acoustical properties of a room. How I choose to use room and shape space changes how I perceive sound. As a composer, I want a say in how room is used in performance.

I often compose from the outside in. I find it easier to compose when I know or at least have made decisions about the type of conditions in which I am wanting to create. Just as important is knowing that conditions change and cannot be assured in entirety in performance. I might know the specific room in which a piece is written for and performed in. I might have imagined an ideal or sought-after situation in my mind, based on a general idea about room type, size and/or acoustics. Imagined or actual, it helps me to structure my compositional practice to then be able to fill this structure, idea and/or concept about room, with sounding content. I am aware that this is somewhat backwards in comparison to other more common methods of composition that start with a musical idea, concept, or fragment. Nevertheless, this is how I often operate.

### **Space and Spatialisation**

Pauline Oliveros - musician and composer of experimental and electronic music – said “The effectiveness of any space for musical performance is related to intention, architectural acoustics, and to the listening abilities of composers, performers, audiences, technicians, designers and architects.”<sup>9</sup>

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<sup>7</sup> The full video of this concert can be viewed here: <https://youtu.be/vTX5e4EK-7g>

<sup>8</sup> The full video of this concert can be viewed here: <https://youtu.be/sy2KqyCWMZ8>

<sup>9</sup> Pauline Oliveros, “Improvising with Spaces,” *The Journal of the Acoustical Society of America* 119 (2006): 68, accessed October 1, 2019, doi:10.1121/1.4786316.

For space to be an effective part of my compositional practice, I need to understand my intent with it and explore its creative possibilities. Room will always interact and change sound in performance. Actively thinking about the space I am wanting to create and shape, reveals the creative agency of space for composition. It attunes my listening to the possibilities offered by it. As Oliveros stated, “Listening to space changes space. Changing space changes listening. This phenomenon is termed the listening effect.”<sup>10</sup>

The omnidirectional listening experience I am aiming for, relies on the exploration of sonic possibilities in a spatial context. Spatialisation is a key compositional tool. Composer Åsa Stjerna describes spatialisation as “both the *localization* of sound in space and the *movement* of sound in space”.<sup>11</sup> It is a process involving the positioning and navigation (choreography) of sound in space.

Space and spatialisation are important aspects in the creation of the conditions for a live omnidirectional listening experience.

The placement of sound-sources can work with the architecture and possibilities of a space. Alternatively, they can create a space within in space, changing the existing architectural properties by imposing on and in it, new sounding conditions. This is particularly so in the case when multiple loudspeakers are employed and dispersed in space.

Changes in the position of a sound-source, including the height, placement, and direction of it, can affect the tonal quality of sound and how and from where sound is perceived.

Forms, such as a spiral, diamond, square, circle etc., can be adopted as spatial organisers to map space and decide how room can be used. These can map the route a musician is to take during performance; they can decide the placement of audience chairs; they can instruct where loudspeakers or objects should be positioned and so forth.

Space can also use non-musical elements, such as lighting and props. Lighting can be used to create atmosphere and/or mood, highlighting or hiding elements from visual perception. Lighting can also frame the performance and listening space.

In the many and varied ways I consider space and spatialisation in composition, the goal is the same: establishing an inclusive and immersive relation between sound, listening, and space.

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<sup>10</sup> Oliveros, “Improvising with Spaces,” 69.

<sup>11</sup> Åsa Stjerna, “Before Sound: Transversal Processes in Site-specific Sonic Practice,” (PhD diss., University of Gothenburg, 2018), 63.

# The Choreography of Sound

Choreography is the art or practice of designing sequences of movements of physical bodies (or their depictions) in which motion, form, or both are specified. Choreography may also refer to the design itself.<sup>12</sup>

Choreography is brought into play only when dance's primary function becomes spectacle rather than participatory activity. Choreography, therefore, is the art of combining and extending the basic vocabulary of steps and gestures within a dance genre to create an original work which, at its best, communicates thought and feeling through the structuring of movement in time and space.<sup>13</sup>

Terms, such as choreography, are sometimes heavily connotated to specific art forms (in this case dance). However, many have grown beyond their initial meaning and intended usage and are frequently adopted by and commonly applied in broader and other artistic contexts. Composition, although a term commonly associated with music, is a word used widely in painting, sculpture, poetry etc., to describe the creative process of piecing together and the construction of art.

As choreography is a term more commonly associated with dance, I had a conversation with professional dancer and friend Toby Kassell.<sup>14</sup> I was interested in knowing more about this term and its possible artistic applications and implications. His initial response was that choreography is the organisation of things in space and about creating the conditions for this to be made possible. He talked about how things could be bodies, limbs, lights, objects, colours, placement of performers and audience and so on. He also mentioned that in dance, the word composition is being used more and more frequently, at times replacing the word *choreography*. Terms are no longer exclusive.

The *choreography of sound* is a phrase that relates to the mapping of sound in space. It is about deciding *where* sound will sound. It is more commonly associated with the field of electroacoustic music.<sup>15</sup> In an EAM context, it refers to digital choreography, using hardware and software to manipulate and direct how sound moves in loudspeakers (usually multichannel).

My use of this phrase is extending the context to also include the choreography of physical movement of sound in space. It looks at the body as both a logistical and creative means to spatialise sound in performance.

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<sup>12</sup> *Wikipedia*, s.v. "choreography," accessed April 6, 2020, <https://en.wikipedia.org/wiki/Choreography>  
NB. Although aware that Wikipedia is not a trusted source, this definition is included as it describes the physical movement of bodies without specifically mentioning dance, which is more in tune with my own use of the term.

<sup>13</sup> *The Oxford Companion to Music*, "choreography," accessed April 6, 2020, <https://www-oxfordreference-com.ezproxy.ub.gu.se/view/10.1093/acref/9780199579037.001.0001/acref-9780199579037-e-1379>

<sup>14</sup> Toby Kassell (UK) is a freelance dancer and choreographer based in Gothenburg. He danced many years for the Gothenburg Opera dance company and works regularly in contemporary and experimental projects. I have worked with him in several projects previously and was planning to work more with him in during my master studies. I had thought to workshop the concept and practical applications of choreography and movement in music in a more interdisciplinary way, but global pandemic restrictions made this impossible at the time (2020).

<sup>15</sup> For instance, there is a research study entitled *The choreography of Sound*, conducted at the Institute of Electronic Music and Acoustics in Austria, co-authored by Gerhard Eckel and Ramón González-Arroyo year 2010-2014. More information can be found here: <https://www.researchcatalogue.net/view/64233/64234>

I view choreographing and directing the trajectory and path of sound as a way to dissolve borders between room and space, making the one flow into the other and vice versa. Adopting an omnidirectional approach to music requires the creation of a situation that enables it. It involves understanding and harnessing spatial awareness and perspective to realise the conditions of the performance of a musical work and their interaction with sounding content. Employing choreography as a method encourages the active discovery of sound in space and room, and vice versa.

My utilisation of choreography as a compositional tool also places an importance on the practice of live spatialisation, examining the effect it has on the experience of performance. I am consciously choosing to always use instruments, objects and/or bodies that are on-site performing and navigating the movement of sound in space in one way or another.

## Agency of Movement

Movement can change sonic reality in time and space. Sound cannot exist without time. Sound unfolds in and with time. Sound needs action to come into being. Kinetic movement is instrumental and necessary in the initiation of live sound. A violinist needs to move the arm to draw the bow over the strings. A trumpet player needs to push air into the instrument and regulate it to find the necessary pressure for the pitch intended. How a performer executes an action also decides the dynamics, timbral qualities, length, attack and so on, of the original sound produced. This action shapes and colours that sound. That sound then interacts with the room, space, listeners, and performance.

Movement enables an expansion of the possible sounding space. This is so when sound is no longer fixed to a position in room but is mobile, moving in and around space. This mobilisation can be achieved through digital spatialisation of amplified sound (e.g. using software and loudspeakers), and/or by the physical movement of acoustic sounds, pre-recorded material (in portable speakers), or sounding objects. This means that sounds can be distributed and directed in alternate ways, travelling in time and through space. Movement also impacts the soundwave itself, capable of warping it, altering pitch, and changing timbral qualities. E.g., when a chime is hit and then swung around, the soundwave of the sustained after-ring is directly affected, susceptible to the swinging motion.

Movement has agency. It is both functional (regarding the initiation of sound) and artistic (regarding the shaping and colouring and/or mobilisation of sound). This agency has relevant and useful artistic implication for creating an omnidirectional sounding experience.

Choreography and movement are instrumental tools in setting sound in motion (beyond that of the natural motion of a soundwave that is in essence always moving through time and space). With them, I am seeking a connection of sound with body, body with space, and vice versa. This is even so when I use electronic or pre-recorded material. They are always designed to be reliant on some form of physical movement done live by a performer to initiate and/or spatialise them. Choreographic instruction aims to give performers enough instruction and guidance to understand the motive behind a desired movement to know both when to move and how to do this artistically. This active movement is a necessary and vital artistic agent in the projection and direction of sound, deciding *how* the sound moves in a space, from *where* it spreads, and from *where* it is perceived.

All this ultimately affects how the sounds are then experienced; Are they far away? Are they reflecting off the walls? Are they so close to the ear they fill all resonating cavities? Are they coming from behind? Are they rotating around the listener? Are they directed directly at a listener? and so on. Choreographing the *where* in music creates a shifting and evolving perception of proximity and trajectory affecting both performance and listening.

# An Act of Listening

Listening is a central aspect of my artistic practice. Before anything else, I am a listener. Without listening there is nothing of meaning to compose, nothing of meaning to perform. Yes, sounds will still sound. But it is listening that opens them to finding context beyond being coincidental, accidental, incidental, or merely the result of an action. With listening they become something of value, having merit, context and meaning.

My purpose in this chapter is to investigate, define and better understand the act of listening. To do so I look closer at existing listening practices, common terminology, and different types of listening. I also begin to look at the relevance these have for me as composer and performer and how they shape my artistic choices, aesthetics, and compositional practice.

As points of reference in this discovery of what listening is and what it means to and for me, are the following three statements:

Music is a listening *experience*.

The act of listening is a *spatial* one.

Listening is *choice*.

## Hearing and Listening

Hearing and listening interact symbiotically but as I've come to realise, there's an important fundamental difference in these terms. Sometimes the use of the term 'hearing' is interchangeable or even synonymous with the term 'listening'. For instance, the phrase 'I hear you' when used to voice agreement with what someone is saying, could be rephrased as 'I am listening to you and on reflection, find myself in agreement with you.' This simple three-word-phrase implies more than just the hearing of words being said. It's about engaging with them and understanding their meaning in the context of their circumstance.

Hearing and listening play differing roles in the processing of sound into something perceived. In the TedTalk entitled *The difference between hearing and listening*, Pauline Oliveros explains how it is the ear that hears and the brain that listens. "To hear is the physical means that enables perception. To listen is to give attention to what is perceived both acoustically and psychologically."<sup>16</sup> In other words, hearing is functional. The mechanics of the ear process sound waveforms and then transmit this information to the brain. Listening then goes beyond this functionality, engaging the brain to transform what is heard into understanding.

We do not only hear and listen with ears and our brain. Listening is sensory, invoking immediate involvement and spatial awareness of and through sounds. Vibrations interact with our body's receptors, cavities, fluids, matter, making tactile the experience of sound. The oscillations of low frequencies or the pulsation of a beat can be physically felt in the body. A sound can give us goosebumps making the hairs on our arms stand on end. The experience of sound resonates in our bodies, communicating with and activating sensory recognition and consciousness.

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<sup>16</sup> Oliveros, Pauline. *The difference between hearing and listening* (2015, November), Last accessed April 15, 2020, [Video file]. Retrieved from <https://youtu.be/OHfOuRrJB8>



Sounds are not neutral. As Oliveros stated, “Sounds carry intelligence.”<sup>17</sup> Listening is done in seamless collaboration with our bank of accumulated remembered sound experience. This bank is full of memories, experiences, emotions, associations, history, context, reflections and so on. These are in turn shaped by circumstance, time, space. This gives sound agency. E.g., a particular sound might be intrinsically linked to a specific childhood memory. On hearing that sound, we are transported directly to that memory and can listen (internally) to the remembered experience of it.

How we listen shapes our perception of our sounding environment. In his book *Listen: A History of Our Ears*, philosopher and musicologist Peter Szendy explains hearing as being nonintentional and listening as intentional.<sup>18</sup> And where there is intention, there is choice.

## Types of Listening and Listening Practices

Listening is a multifaceted practice. There are numerous ways in which to listen, just as there are reasons to why we listen. We can listen to learn or understand something. We can listen to define cause, to form meaning or to feel emotion. A type of listening could be educational in purpose or purely done for entertainment. Its aim may be to intimately know a sounds’ inherent qualities or to tether connections that enable us to relate to sound. The list is long and varied. Ultimately, how we choose to listen defines intent and shapes a listeners’ subsequent perception and experience of sound.

I will now lift some modes of listening that I’ve found to be of relevance for my artistic practice.

Oliveros dedicated her artistic practice to *Deep Listening* – a practice centred around the expansion of attention.<sup>19</sup> Within this practice are two main forms of attention, namely *Focal* and *Global*:

Focus [focal] is more like digital, in that focused attention needs to be renewed moment by moment, in order to exclusively follow a stream of some sort.<sup>20</sup>

Global attention is expanding to take in and listen to everything that is around you; inside of you. When we do this, and we can expand almost infinitely to include... everything that is possible to listen to.<sup>21</sup>

In short, it is listening that is both attentive and aware of self, situation, time, and space. It includes both inner and outer listening, capable of being exclusive and inclusive simultaneously. As *Deep Listening* is a life-practice, it is one that requires training and intent. It is a choice.

This type of listening, that can both be focused (narrow) yet widened to encompass all audible sounds at any given moment in time, is one I find relevant to my artistic practice. In my compositional process, I find myself at times enthralled and totally absorbed in the details and nuances of, say, a particular sound or texture. This allows me to discover and explore the complexities, identity, and inherent qualities of the object of my focus. I am also able to zoom out to discover the possibilities of it in a larger context where layering, timings, instrumentation and so forth are all included and considered. This is something I think all composers do. But this zoomed out perspective doesn’t quite

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<sup>17</sup> Pauline Oliveros, *Deep listening: a composer's sound practice*, (Lincoln: iUniverse, 2005), xxv.

<sup>18</sup> Peter Szendy, *Listen: A History of Our Ears*, (New York, Fordham University Press, 2008).

<sup>19</sup> More information about the practice of Deep Listening can be found here:

<https://www.deeplisting.org/>

<sup>20</sup> “Pauline Oliveros on Deep Listening,” *Sound American*, Accessed November 5, 2020.

[http://archive.soundamerican.org/sa\\_archive/sa7/sa7-pauline-oliveros-on-deep-listening.html](http://archive.soundamerican.org/sa_archive/sa7/sa7-pauline-oliveros-on-deep-listening.html)

<sup>21</sup> “Pauline Oliveros on Deep Listening”

equate to having a more global perspective to sounds in the compositional process. It needs to zoom out even further to achieve this.

All sounding events in a live performance situation cannot be planned for or known in advance. Audience sounds are by nature unpredictable, or at the very least, incidental and/or spontaneous. I am however convinced that a possible adapted take on the global listening perspective can open composition up to aspects and elements not always or typically considered otherwise.

This adaption could include compositional considerations for the type or size of room, the placement of audience chairs, musicians and/or sound-sources, how sound is directed in a space, how choreography spatialises sound and how movement consequently changes possible sounding parameters. It is about composing with awareness and consideration for the conditions in which a sound will sound. It is also about creating opportunities, where possible, that enable musicians to interact not only with the sounds themselves but with their own listening in performance (of their surroundings, space, situation, architecture, energies, time etc.). This interaction is instrumental for the art of interpretation. The possibilities offered by adopting this adapted understanding of global attention are central to my compositional practice and investigations into creating a context for a sonorous omnidirectional experience.

Michel Chion – French composer of Electroacoustic music and a theoretician – describes three modes of listening in his article *Audio Vision: Sound on Screen*, namely causal, semantic, and reduced listening.<sup>22</sup> Although not all are of particular relevance for my work, I will elaborate on causal listening and discuss semantic listening a little further.

Casual listening is essentially about localisation aimed at deciphering and accounting for cause. This mode of listening understands the content of sound by knowing what has caused it to come into being. It is a common and sometimes habitual listening state. As a composer, I am often listening for cause. I want to know what can create (cause) a desired sound, texture, or musical instance and how I can capture this in composition and re-create this in performance. But sound is also much more than just cause. It is personal. It is memory. It is sensory. When composing a listening experience, with the aim of also being a listener of the piece, I want to explore not only what is generating sound but how it is made and from where it is perceived.

Causal listening is in a sense a natural part of the compositional process. However, for the listening process it presents a dilemma. We do not only use our ears to localise sound. Although causal listening doesn't per se have to include actually seeing the cause (we can ascertain cause through recalling remembered or previous experience with a particular sound and therefore recognise and know the cause without seeing it), parallels can be drawn between causal and what I call visual listening.

A major part of the live experience is watching sounds unfold in front of you. This is one of the varied reasons I personally prefer listening to music live. You can see (localise) who initiates sound and how it's generated. This can heighten the awareness of sound and its interaction with room, space, time, situation, and self. A lot of the time we listen with our eyes. This said, I agree with Oliveros in her statement that our culture favours the visual over the aural.<sup>23</sup> Visual listening risks hampering the sonic experience. "The ear tells the eye where to look and the eye sometimes silences the ear."<sup>24</sup>

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<sup>22</sup> Michel Chion, *Audio-vision: sound on screen*, (New York: Columbia University Press, 1994); Chion is a composer of sound for film. His theories build on those of Pierre Schaeffer and Concrete Music.

<sup>23</sup> Pauline Oliveros, "Auralizing in the Sonosphere: A Vocabulary for Inner Sound and Sounding," *Journal of Visual Culture* 10 (2011), accessed January 30, 2020, doi: 10.1177/1470412911402881.

<sup>24</sup> Oliveros, "Auralizing in the Sonosphere," 167.

Interestingly enough, this dilemma makes available other possibilities. These make localisation in combination with the *where* of sound interesting aspects to examine and even exploit in composition. Sometimes the listening eye might need to be silenced. This could be done by denying visual stimulus. Sometimes it might need to be stimulated visually in a way that enhances the sonorous. Sometimes the visual and the auditive focus may need to be intentionally separated, creating alternate relations between visual and aural listening perspectives. Challenging visual listening in composition opens the way for a change in the habit of listening. To achieve this, the conditions for listening need to be changed in some way. This can involve something as simple as rearranging the chairs, having no obvious stage, inviting audience members to close their eyes, designing lighting to highlight or even hide things from visual focus etc. I am adopting this approach in my compositions, using such techniques and methods to design new contexts for sounds and listening.

Semantic listening is a listening mode that places importance on what sound conveys, and the effect sound has.<sup>25</sup> It is more about interpretation, seeing sound as a vessel for meaning, where the sound itself is secondary to the effect of it. Although semantic listening is an interesting mode of listening, it is not one I reflect on further in detail. I mention it here as it led my thoughts to the concept of symbolism in music and sounds and to symbolic listening, which is of relevance for my practice.

As a composer, I am at times interested in applying or finding symbolic meaning to sounds that I believe represent a certain mood, topic, concept, atmosphere. These play an important role in the creation process, shaping the content just as much as the structure and form of a piece. I'm not sure that symbolism can be transmitted onto the listener or that such transmission is even necessary. It is, however, something that is useful in constructing context and assigning meaning to the details and overall direction of the creative process of composition.

### **To be a Good or Bad Listener**

Although listening is an imperative component in any musical practice, I find my current interest in the act of listening a little surprising in one way. I've traditionally thought of myself as being a bad listener. I catch myself, and have been caught many a time, being off in thought, distracted, while supposed to be listening attentively. Attentive listening – listening that is focused, engaged, active and aware – is a sort of ideal and sought-after listening state. One rather intriguing notion raised by Szendy is that of a kind of inattentive listening being a necessary condition for active listening.<sup>26</sup> It's a paradox of sorts, giving value to that which is traditionally without value or otherwise viewed as undesirable.

My understanding of inattentive listening is that it's traditionally viewed as being proof of a state of being that is unable to conquer the mind (self) and focus attention on what really matters. In regard to experiencing music, it's either that or it speaks to some form of lacking in the communicated musical content that fails to attract sufficient attention and stimulation from the listener. A fail on behalf of the listener or a fail on behalf of the composer and/or performers. Either way, a fail.

After further reflection, I find the situation to be more nuanced than the above suggests. I believe that all distraction of the mind doesn't necessarily mean that one is a bad listener. It's not possible to listen without wavering in thought, awareness, and attention at some point. A certain wandering of thought in fact enables us to relate to sounds, to tether connections and give an experience meaning and context. To listen actively requires engagement with the sounds and with oneself. Maybe I'm not always the bad listener I've otherwise attributed myself to be.

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<sup>25</sup> Chion, *Audio-vision*.

<sup>26</sup> Szendy, *Listen*

## Listening Perspectives

There is the train depot near where I live. I regularly hear the screeching of trains braking, wafting over the rumble of the nearby causeway. It is a sound synonymous with the area; a sound that for some is surely just a disturbance or just yet another noise in the local soundscape. To me, though, it is an intriguing sound. Their screeching is like that of a string orchestra, at irregular intervals, sending clustered glissandi into the breeze to float and caress the top of the soundscape. It is my listening in these instances that transforms this noise into something I would describe as being quite delicate and intricate. To me it is not an unwanted or disruptive sound. It adds something of value, of interest, some musical quality (at least to me) to the otherwise mundane and nonstop murmuring of the cityscape.

This listening example is taken from an everyday situation, but the principle has application in musical contexts. It exemplifies the choice there is in listening, highlighting how my choice in how I listen affects and shapes my perception of sounds and what value I attribute to them. Being consciously aware in my listening in my artistic practice involves endeavouring to listen with different roles and perspectives. This with the aim of recognising in myself what I am desiring and striving for artistically, and to be able to create and transmit this onwards.

### Listening as Creation

Not all composers or performers believe the listening audience to be a valuable piece of the musical puzzle that is creation. They are an afterthought. There is a classic tale about the jazz pianist and composer Keith Jarrett ceasing to play in the middle of a concert to demand that the person in the audience who coughed leave the hall at once before he would continue to perform. Unknowingly, this audience member had shown disrespect to Mr. Jarrett and to the music by not being able to control his human need to appease his body's compulsion to cough. He had not been able to master his listening and put the music above all else! This story may be just a story (or an elaboration on the truth), but whether true or not, there are plenty of such stories throughout history attesting to cultures of listening that view the audience as being unimportant, inconsequential, and sometimes even as being a nuisance, or a disturbance to the music.

I think most composers in one way or another, want to engage with their listeners. However, I don't believe all composers, or performers for that matter, consider their listener when composing and/or performing. Being of the belief that I am first and foremost a listener, I feel a responsibility to include a listener's perspective in my compositional practice. This responsibility is not about appeasing a listener's expectations, wants and desires. It is rather an invitation to engage them in a collective process of creation and experience.

Marcel Duchamp stated that "It is the viewers who make paintings"<sup>27</sup>. Szendy rephrased this to "*it is listeners who make music*" (authors italics).<sup>28</sup> Both are bold statements questioning the *who* of artistic creation. Stjerna speaks of this dissolution of traditional borders between creator and receiver.<sup>29</sup> It attests to a shift in perspective viewing music and art, not as an object to be listened to or observed, but as the creation of situation. And this situation is not entirely complete without the active engagement of an audience transforming it. The listener becomes, in a sense, a co-creator of a work.

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<sup>27</sup> Szendy, *Listen*, 99.

<sup>28</sup> Szendy, *Listen*, 99.

<sup>29</sup> Stjerna, "Beyond Sound."

Composers design a sounding situation. Performers bring sounds into being and give them context in time and space. Listener's attribute meaning to, create interpretations, and transform the work.

I believe listeners play an important role in the creative process. It is when a piece of music meets a listening being that it can find meaning beyond the intention of the creator. The act of creation thus extends beyond the composer and performers. It allows a work to interact with the conditions of its sounding and all that listening beings bring with them; all of which transforms a work. This act of creation is beyond the control of the composer, just as it should be. As a composer, it is not my role to dictate the terms of the listening experience or interpretation of a piece. It is to provide a context for listening and an occasion for active listening interaction.

### Shared Listening

Szedy mentions a desire in us for others to listen in a specific way, namely as we ourselves listen.<sup>30</sup> He claims that this desire is just as important as the act of listening itself. We harbour within us a shared desire for others to know, understand and hopefully join in our listening. Something happens when we impart and share our listening experience with others. It stimulates engagement and inclusion. Oliveros believed that simultaneously shared experience could even coordinate our brain waves.<sup>31</sup>

Listening is also a social act. In her article *Moving and being moved*, composer Juliana Hodkinson talks of the existence, affect and role of social resonance in sonic performances.<sup>32</sup> She paraphrases philosopher Rainer Mühlhoff, explaining how he “conceives of social resonance as more than just sharing affective experience: he moves ahead to the notion that through social interaction, people together create affective qualities that were not there before the encounter.”<sup>33</sup> Live experiences invite all to participate in the social event of listening. This creates social resonance - an interaction and transformation of art, listening and perception - that all who are there generate, affect and are a party to. It is a very real and tangible happening that ignites associations and relations beyond what is sounding and what is seen. They're sensed. They're felt. They're shared.

As composer and performer, I play an important role in facilitating listening. I desire listeners to know my listening curiosity but more importantly to discover their own, offering them a listening occasion that engages the sensory in the individual experience of the collective whole.

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<sup>30</sup> Szedy, *Listen*

<sup>31</sup> Pauline Oliveros, "Improvisation in the Sonosphere," *Contemporary Music Review* 25 (2006): 482, accessed January 30, 2020, doi:10.1080/07494460600989986

<sup>32</sup> Juliana Hodkinson is a British composer of contemporary music.

<sup>33</sup> Juliana Hodkinson, "Moving and being moved: Affective Resonance at Play in Sonic Performances," in *Performance, Subjectivity and Experimentation*, ed. Catherine Laws. (Leuven: University of Leuven Press), 44.

# Compositions

As a composer and performer, I am intrigued by the pioneer interdisciplinary artist Meredith Monk and how she views each of her works as being its own world having its own needs, laws, and principles that are of consequence to that particular created world. She understands her works not as the answering but as the articulation of a question.<sup>34</sup> Each work has her stripping back to zero, to start fresh and anew. “It is really a process of listening to what something needs. What’s right for it.”<sup>35</sup> The notion of parallel realities, the creation of worlds, of situations in composition and performance, the search for a listening that guides and shapes artistic choices, are ones that I find to be highly relevant for my compositional practice.

Throughout this investigation, I have used composition as my main artistic method. In this chapter, I am presenting several omnidirectional compositions, and am reflecting on and analysing my process, choices, and artistic practice in the creation of these works. This is done in relation to my topic - creating a context for listening and the choreography of sound.

The works I am presenting are as follows:

1. OUTSIDE IN (32mins)  
for 4 voices and effect pedals, and 1 electronics player
2. ROTATIONS AND SLIDES (13mins)  
for 2 snare drums, floor tom, objects, effect pedals, and multichannel amplification
3. CRACKLE CRUNCH CLIMATE (13mins)  
for violin, cello, zither, objects, and room
4. GERTRUDE – THIS HAPPENED (31mins)  
for 5-piece vocal ensemble, objects, props, and room
5. CONCERT WALK (1h 15mins)  
for multiple spaces, many voices, sound and art installations, and numerous acoustic works

Each piece is the construction of an ephemeral and temporal reality that exists both in my listening and imagination as composer, and that finds new context in the time and space of performance.

Each poses its own questions pertaining to the conditions of performance (examining space, room, spatiality, movement, choreography and listening), and the creation of situation (examining sounding content, visual stimuli, objects and extramusical items and aspects).

I have also aimed to tackle omnidirectionality from a different perspective in each piece, trialling differing choreographic methods and ideas to achieve the desired spatialisation of the *where* of sound. These are as follows:

1. Outside In: digital sound choreography, with a focus on hardware (loudspeakers and mixers).

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<sup>34</sup> Bonnie Marranca, *Conversations with Meredith Monk*, (New York, PAJ Publications, 2014)

<sup>35</sup> *Conversations with Meredith Monk*, 60.

2. Rotations and Slides: digital sound choreography, with a focus on combining hardware (loudspeakers, trigger pads, effect pedals) with software (AbletonLive).
3. Crackle Crunch Climate: the physicality of movement and the body, with a focus on practical and logistical aspects of movement.
4. Gertrude – This Happened: the physicality of movement and the body, with a focus on gesture and the visualisation of sound.
5. Concert Walk: the mobilisation of listening, extending the concert experience to include multiple rooms, with a focus on interconnectedness and an interdisciplinary approach to the whole.<sup>36</sup>

I also discuss challenges and the varying means I use in notating and communicating all the compositional aspects - musical content, choreography, spatialisation, situation and space. I am, of course, building on a long existing tradition of musical notation, drawing on both conventional and experimental notational possibilities. I am aware of the existence of labanotation, for notating dance, but do not use or focus on this system. In that I work primarily with musicians, I explore other options that I feel are more compatible with the musical notational system/s musicians are already familiar with and have knowledge in and/or of.



*Picture 1: performance of Gertrude - This Happened, Lindgrensalen, Artisten, 3/12-2021, photo by Kerstin Ehrnlund*

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<sup>36</sup> NB. The Concert Walk differs in form from all other pieces. It presents a collection of works, both pieces and interdisciplinary installations, in several adjoining spaces. It is an attempt to make the concert situation a little more flexible and fluid, designing a listening for all involved that can at times be situated, and at other times ambulant, free to roam and discover a space experientially.

# Outside In

The starting point is space. An imagined space.<sup>37</sup>  
 Esaias Järnegard

*Outside In* is my first composition for multiple loudspeakers.<sup>38</sup> It is written for four voices with effect pedals, one electronics player, and twelve loudspeakers. This piece came to in response to much pondering about how to change the premise of performance and the otherwise habitual act of experiencing music live. I wanted to create a new perceived reality in interaction with an existing environment that was immersive and that explored room as a compositional aspect.

I was keen to see how sounds could interact with space and a listening audience in the absence of an obvious stage. I still wanted performers to be there, on-site, live, sounding in real time, but the idea was to deny listeners the possibility of seeing all performers at once. Instead of being the visual focus, performers were to be situated on the periphery of the performance space, encircling the seated audience. It was from these outside positions that sounds were to be sent into the audience space, where rows of chairs were assembled to all face inwards at the lit-up, yet otherwise empty centre.

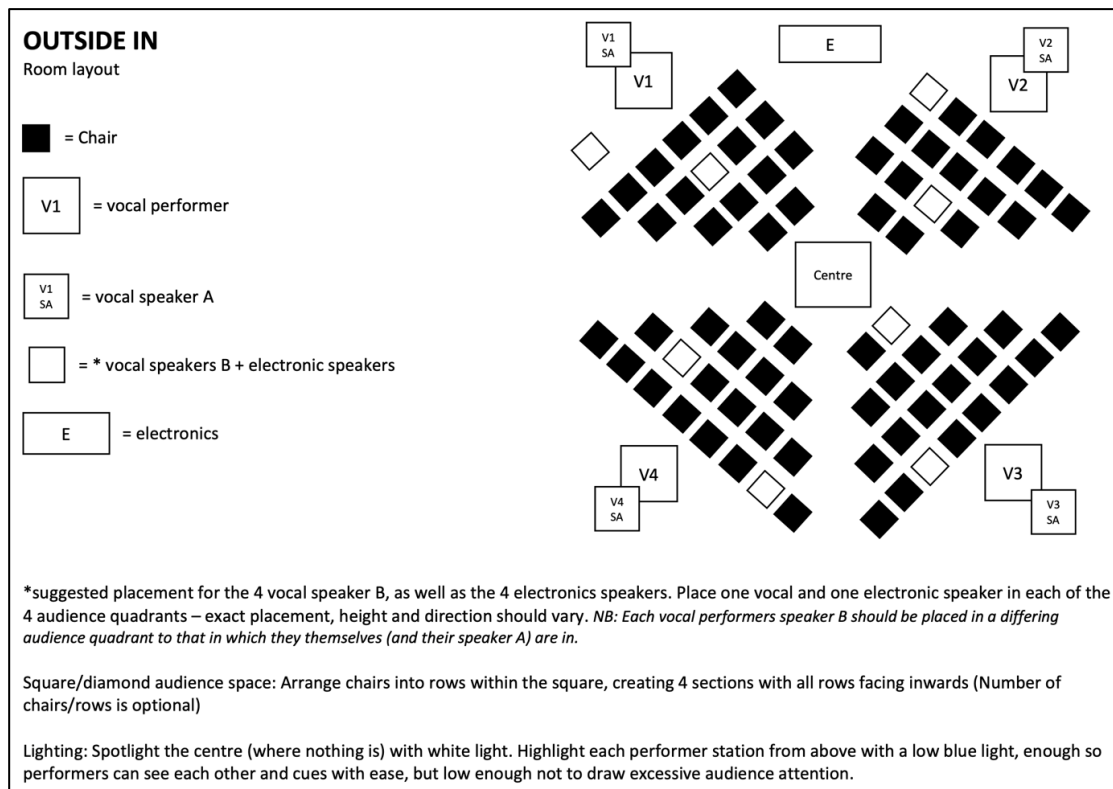


Figure 1: room layout for *Outside In* showing the positioning of performers, audience, and loudspeakers

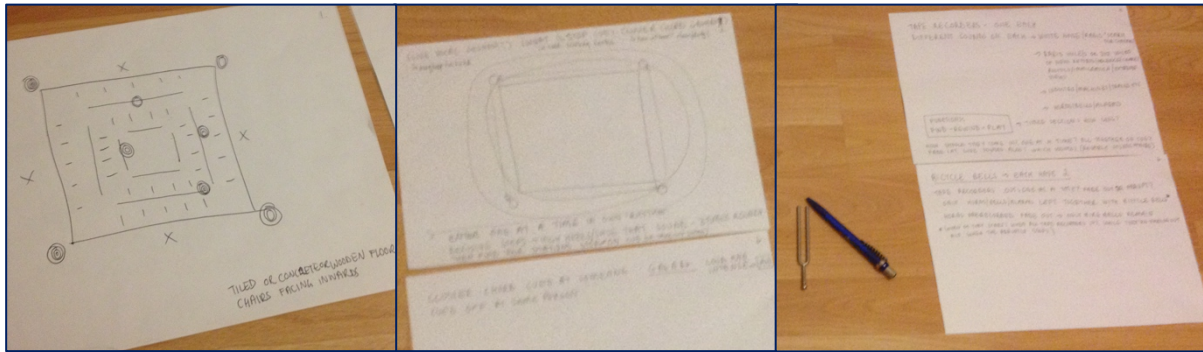
<sup>37</sup> Esaias Järnegard, “Techniques of Ecstasy: A Clearing for Sound” (used as course material in MAS232 Master Seminars FOCUS, Gothenburg University, spring semester 2020), 45. This paper was presented at Järnegard’s 25% progress seminar of his PhD, conducted at the Academy of Music and Drama, January 10, 2020. As it is not peer reviewed, the inclusion of all quotes from this paper appear here with the permission of the author.

<sup>38</sup> For score, see Attachment 1.



## Envisaging Space to Create Sounding Content

It took a long time for me to envisage, and then begin to construct, the sounding content for the structural idea. I had begun to draw sketches and trial how things were to be positioned. I knew from the beginning I wanted to feature voices and challenge myself to compose for multiple loudspeakers, but in my mind's eye I could not see the room. I could not imagine its size, its acoustics, its presence, or ambience. The feeling of room eluded me. Without knowing the desired room I was composing for, I felt I could not fill it with sounds. I had many ideas and thoughts pertaining to possible content, but everything seemed jumbled, fragmented, and lacking direction and coherence.



Picture 2: pictures of original sketches made in initial stages of composing *Outside In*, photos by Casey Moir

Composer Esaias Järnegard talks of “Building an imaginary resonant, relational, embodied space.”<sup>39</sup> This involves memories of real places in combination with imagined or desired ones, with the objective “to focus the ear and the mind to define a point of listening.”<sup>40</sup>

I needed to clearly define my notion of room and space for this piece. It was imperative to enable my listening of and for it. This was vital in gaining a better understanding of the properties, potential and artistic possibilities that room and space made available to composition and creation. Aiding this was the decision to design the piece for an actual performance venue, namely Fylkingen in Stockholm.<sup>41</sup> I needed something tangible, something real to fix my attention on, even if at this point, there was no set date, booking or any arrangements made for the performance of the piece. With newfound awareness and reflection on these aspects, the sounding content became conceivable. It was given direction and a clarity that had previously been obscured and unimaginable.

## Composing for Multiple Loudspeakers

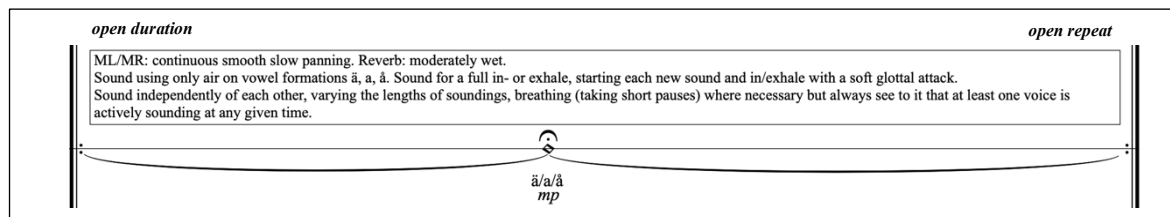
In *Outside In* I wanted to expand my knowledge of hardware and ways to use it in achieving the desired movement of sound in space. Each vocal artist was designated two loudspeakers to control exclusively, while the electronics player was given four. I experimented with placement, dispersing the loudspeakers throughout the room at different heights, positions, and facing different directions. Some were on the floor, some on stands and others hanging from the roof. Their exact positioning for

<sup>39</sup> Järnegard, “Techniques of Ecstasy”, 45.

<sup>40</sup> Järnegard, “Techniques of Ecstasy”, 46.

<sup>41</sup> The piece was premiered at Sound of Stockholm Festival in Fylkingen, 21/11-2019. See Audio 1, to listen to some highlights from the recording of this performance.

the performance was the result of trial-and-error done on-site. In addition, small mixers with pan-knobs were used by all performers to manually manoeuvre the amplified sound throughout the piece.



Example 1: excerpt from Section D of *Outside in*, showing the ML/MR (microphone pan left/right), effect pedal and sound instructions for vocal performers

All this, combined with the audience's placement in the room, was a way to ensure a situation allowing for every listener to experience sounds from differing distances, trajectories and in varying intensities, depending on where they sat. It was an attempt to provide listeners their own unique orientation of and in the collective shared experience.

### Inner Interaction

Without the centralised active stage in which to fix one's gaze upon, listeners were encouraged to look inwards in their listening. The situation created a kind of listening sanctuary in the immersion of sound and space. The sounding content initiating this piece is influenced by the idea of interacting with the 'inner', both in regard to listening and to the physical inner ear.

I have often found pleasure in humming to the sound of mechanical things, like a moving train I'm travelling on. My hum finds the tone of it and matches it, only to slightly bend my pitch in relation to it, creating audible beatings felt in the cavities of my body and even perceptible by others nearby. These minuscule shifts in pitch create a tangible physical sensation within. Sometimes they create differential tones – perceived artificial tones between two pitches being sounded simultaneously – that are felt and heard by the inner ear.<sup>42</sup>

Section A of *Outside In* is a discovery of these effects. It builds on continuous long vocal tones, produced by all four vocal artists, that ever so slowly glide between pitches. They're designed to explore and revel in microtonality and the subsequent and changing beatings that occur as a result. The use of delay pedals prolongs the length of the sounding voice, by capturing and extending sung pitches, allowing performers time to take in new air without their sound disappearing. This is important for the desired continuity. This section is intended to be quite meditative, filling room and interacting with (inner) space.

<sup>42</sup> The Lexico Online dictionary describes differential tones as "A tone sometimes perceived during the simultaneous sounding of two other tones, its frequency being the difference between those of the tones being played." Accessed June 8, 2021, [https://www.lexico.com/definition/differential\\_tone](https://www.lexico.com/definition/differential_tone). I find differential tones to be a fascinating psychoacoustic phenomenon. They can create a physical sensation that can be likened to a buzzing in the ear. Perception is dependent on how the ear is formed, where one is in relation to the tones being sounded and even how the head is angled. A slight turn of the head could emphasize or reduce the perceived effect.

**Outside In**  
Section A

Casey Moir

**No tempo**

Pre-set delay: long tail with short delay start time  
Pre-set reverb: large room or hall, moderately 'wet'  
Both delay and reverb are ON/active from start

Microphone pan: ML

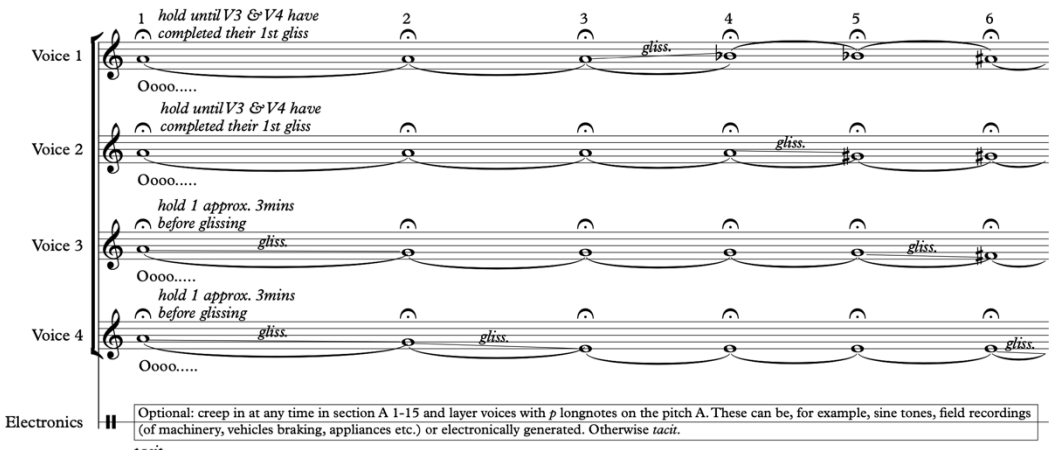
Continuous fluctuation throughout section: *mp* → *p*

**General notes for V1-4 Section A:**

Oooo: soft, rounded and in front of mouth, continuous throughout section

Glissandi: very slow throughout. Their aim is to explore and revel in the microtonal and subsequent beatings that occur.

Delay: functions to extend all long-tones beyond physical breathing capabilities so that sounds are continuous throughout, meaning glissandos can last over several breaths without sounds pausing momentarily while performers takes in new air.



*Example 2: excerpt from Outside In, Section A, showing 6 of 15 slow gliding movements*

## Composing for Voices and Electronics

In addition to voices, I chose to feature electronics in this piece. I found this combination to be an interesting pairing. Electronics are versatile. They're capable of imitating and capturing real-life sounds and of creating soundscapes that merge, warp, create and skew reality. The voice is both universal and individual simultaneously. It is universal in the sense that it is a common and shared human experience. It is individual in that every voice is unique. "The voice has that capacity to delineate energies for which we don't have words."<sup>43</sup> The voice is a direct connection to our core being, our emotions, our inner. I saw an artistic potential in this combination, that would be versatile and create coherent soundscapes.

Using my intimate knowledge of the capabilities of the voice, I composed more detailed ideals for the vocal sounds. These were centralised around the creation of fluctuations (beatings) and the breath. These were designed to interact with the sounds of the electronics playing field recordings and following the sound ideals suggested for them in the score. The instructions to the electronics player were more open in style. They were intended to give the musician more artistic choice and occasion to interact with the vocal sounds and the creation of situation in space. Key words, such as repetitive motifs, mechanical noises, traffic noise, radio static, demonstrations etc., were used to guide content, without controlling it in detail.

<sup>43</sup> Marranta, *Conversations with Meredith Monk*, 57.

Section A	Section C
Play short <i>mf</i> bursts (1-4secs) of traffic, horns, brakes screeching, chatter/crowd noise etc Keep pauses short between bursts. Use quad-speakers as you desire.	Use air sounds, radio static, people talking, panting, whispering, crowds etc. Play bursts of 2-5sec and use space. Alternate between and amount of simultaneously active speakers.
<p><i>approx. 3-5mins</i></p> <p>Scene 1: rustling, crackling, crunching            Scene 2: white noise, radiostatic/tuning, machinery noise and motifs            Scene 3: traffic            Scene 4: crowds, demonstrations, busy cityscapes</p> <p>Stagger entrances of scenes. Scenes are to be interactive with layers being added/subtracted at will. Each scene is to actively sound in one speaker at any given time with one, several or all scenes actively sounding simultaneously. Scenes can sound and move between speakers at will with minimal multiple scene overlap (i.e: one scene moving from a speaker can overlap another that moves to it) OR be assigned to a specific speaker throughout this passage.</p> <p>Fluctuating crescendo: levels are to move both up and down (be staggered) within and between scenes with the overall effect being a crescendo that works towards its climax (<i>ff</i>)</p>	

*Example 3: score excerpts from several sections of Outside in showing various instructions for the electronics player*

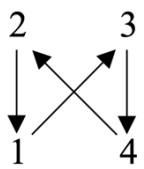
### Spatialisation and Effect Pedals

Another aim was to create shifting environments that flowed from one to the next, that transformed space. Spatialisation and the use of effect pedals were used to achieve this.

The reverb pedals (that each vocal performer has and controls manually) change from wet to dry in different sections. Their usage is designed to change the perception of room, and the perceived intimacy between listeners and sounds. The spatialisation is designed with differing objectives for the different sections. The majority of Section A has sound exclusively being projected via the four hanging speakers (one above each vocal performer). After being lulled into a situated, meditative state, the listener is then introduced to additional sound sources. All loudspeakers become active as sounds are moved (via panning), done at the discretion of performers. This was inspired by the idea of playing with orientation and disorientation, having the acoustic sound source situated while the amplified counterpart is mobile. It was a way to play with the actual *where* of sound (where it is generated) and the perceived *where* (where it is heard).

For example, the sharp panning in Section C is combined with the used of patterns to coordinate simple yet alternating breath sounds between vocal performers. The situated acoustic sound is being moved via amplification, appearing in alternate areas of the space to that of the performer. The reduced (dry) reverb allows for more concise and direct sound. In contrast, Section D uses slow smooth panning as the reverb is once again increased (wet) to embrace the space and the listener.

Diagram of Pattern II



ca. ♩=110

V1	Alternate sharply at will between ML/MR f ha	open repeat	last x only ha	HOLD pause ca.4secs, then cue PATTERN III	tacit
V2	Alternate sharply at will between ML/MR f	open repeat	last x only tsch f	Hold as long as desired	Watch V1 for onwards cue tacit
V3	Alternate sharply at will between ML/MR f ha	open repeat	last x only ha		Watch V1 for onwards cue tacit
V4	Alternate sharply at will between ML/MR f ha	open repeat	last x only ha		Watch V1 for onwards cue tacit
E	Use air sounds, radio static, people talking, panting, whispering, crowds etc. Play bursts of 2-5sec and use space. Alternate between and amount of simultaneously active speakers. mf<->mp throughout open repeat	open repeat	last x only Same as in previous bar but continuous sound (no space), until cued by V2 to cease all sounds abruptly		Watch V1 for onwards cue tacit

Example 4: excerpt from Section C of *Outside In*, showing pattern II for breath sounds

**Responses to Outside In**

I would like to conclude my analysis of *Outside In* by sharing the reflections of one audience member, and one performer, emailed to me after the premiere in November 2019.

Audience member response:

Disconcerting and hypnotising. Fun to be sat in a full 'circle' of audience facing inwards/each other, surrounded by the 5 'equidistant' performers in their respective 'sets/stations' - felt agitated (in a good way) in my seat because I was intrigued which sound was being made by who. Impressed by the tones and sounds they collectively held. Being 'held' was also a feeling I felt - surrounded, safe, yet with unexpected and curious sound-textures interweaving in the surrounding air, made by humans though manipulated by machine, led and 'kept together' by composer/conductor/musician Casey Moir.<sup>44</sup>

Performer response:

There is something special about being on stage and listening. You are both on, yet off. When you write music for orchestra, you learn to try to involve all in the orchestra as much as possible so that they don't get bored. After my experience I think that this is a dull approach. It is a very special experience to be on stage without playing for a longer period of time. As I've always been a part of smaller ensembles or performed solo previously, this has never happened. That alone is something that should be explored more!<sup>45</sup>

<sup>44</sup> This response was emailed to me, per my invitation to respond in written form to the event.

<sup>45</sup> Reflection of performer Kajsa Magnarsson, Electronics. English translation above by me. Original in Swedish: Det är något speciellt med att vara på scen och lyssna. Att man är liksom på fast av. När man skriver musik för orkester får man lära sig att man ska försöka involvera alla i orkestern så ofta som möjligt typ för att de inte ska bli uttråkade. Efter min upplevelse så tycker jag det är ett tråkigt förhållningssätt. Det är en väldigt speciell upplevelse att vara med på scen utan att spela under en längre tid. Eftersom jag alltid varit i små ensembler eller själv har det typ aldrig hänt. Bara det i sig borde utforskas mer!

I find it a little interesting that both responses talk of a feeling of being held. For the audience member, it was a state of being, a feeling created in the room during performance. For the performer, it was being held in active waiting, listening as the other performers built the soundscape in which she was to soon enter and interact with. I see how this reflects my compositional want to embrace room and audience, both in sound and in designing the use of room.

My role as composer is to be sensitive to the needs of the work, finding ways to activate listening and interplay throughout. I did not feel that the electronics needed to always be present. But when they were, their presence was carefully considered. I find it compositionally interesting to use pauses (waiting) and layering in a way that make small nuances and sounds creep in and out, shifting focus and highlighting different details. For instance, when the constant of the voices in the beginning was established, the panning and the entrance of the electronics projecting sound in other previously dormant loudspeakers, became very effectful. The timing of this, and the feeling of the composition breathing with the room and the performance was something I felt made an impression on my listening and my spatial awareness. They were somehow lulled into a feeling of ease and comfort and they were ignited in space and time.

It was also an interesting process to trial the alternate positioning of loudspeakers. Abandoning standard ideas about speaker placement norms, I instead placed focus on an individualised experience dictated by a diversified placement of loudspeakers in the room. I would have really liked to sit in the audience for this piece and experience it several times, each time from a different position in the room. I believe the positioning of all things and the absence of stage kindled a listening curiosity, as acoustic and amplified sounds created an interconnected sonorous web that defined and interacted with space.



*Picture 3: selection of photos from rehearsals and premiere performance of Outside In at Sound of Stockholm Festival, Fylkingen, November 21, 2019; (top left) room set-up and rehearsal, photo by Stellan von Reybekiel; (top middle) Casey Moir during premiere performance, photo by Anna Drvnik; (top right) vocal performer station set-up, photo by Kelsey Cotton; (bottom left) performers Kajsa Magnarsson and Kelsey Cotton during premiere performance, photo by Anna Drvnik; (bottom middle) Lisa Hansson's performer station, photo by Anna Drvnik; (bottom right) performer Linda Olah during premiere performance, photo by Anna Drvnik.*

## Rotations and Slides

[T]he room is not a container or a static stage set, it is experienced differently by different people and changes depending on how time and activities shift.<sup>46</sup>  
Catharina Dryssen

*Rotations and Slides* is written for solo percussion, objects, effect pedals and a multichannel loudspeaker system.<sup>47</sup> I wanted to create a room within a room, using digital spatialisation to map and communicate space through sound. At the same time, I was aiming to create a juxtaposition between the static (the fixed performer) and the mobile (roaming sound). I was also attempting to create an immersive sound experience with limited sound material, working on finding interesting objects, highlighting sound nuances, and exploring how small movements, friction and changing distances between parts, alter and shape the creation and/or perception of sound.<sup>48</sup>

Encirclement, rotation, and all things circular were influential aspects in the designing of the digital spatialisation of sound, just as much as in the deciding of sounding content. Eight loudspeakers were placed to encircle and mark the performance (and listening) space. Objects such as marbles, metal discs and a biscuit tin lid were coupled with a pair of snare drums, a floor tom, and a tabletop to make up the instrumentation. These were then combined with two effect pedals and four spatialisation patches. These were used to alter the sonic qualities of the sounds and work to choreograph the perceived *where* of sound. Questions pertaining to space, directionality and movement were constantly in dialogue with the formation of sounding material throughout the process.



Picture 4: pictures of objects and instruments used in *Rotations and Slides*  
(left) round discs; (middle) instructing how to hold the biscuit tin lid with marble; (right) illuminated snare drum

In this piece, the performer (including instruments and objects) is positioned in the middle of the room with the audience sitting in close proximity to them. Placing the loudspeakers around the periphery of the audience, having the audience sitting inside the performance space, yet all with differing proximities to the individual loudspeakers, was a means to vary the experience of the listener, and vary the prominence of sounds. Depending on where the listener sat, shaped when, how and from where they experienced the sounds of the piece.

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<sup>46</sup> Catharina Dryssen et al., *Sound and Other Spaces*, trans. Joel Speestra (Gothenburg: Bo Ejeby Förlag, 2014), 41.

<sup>47</sup> See Audio 2.

<sup>48</sup> See Attachment 2.

The positioning of the audience is aimed at creating a listening experience more alike to that of the performer. It minimises the distance between listener and performer and embraces them in the same immersive listening space for the duration of the piece.

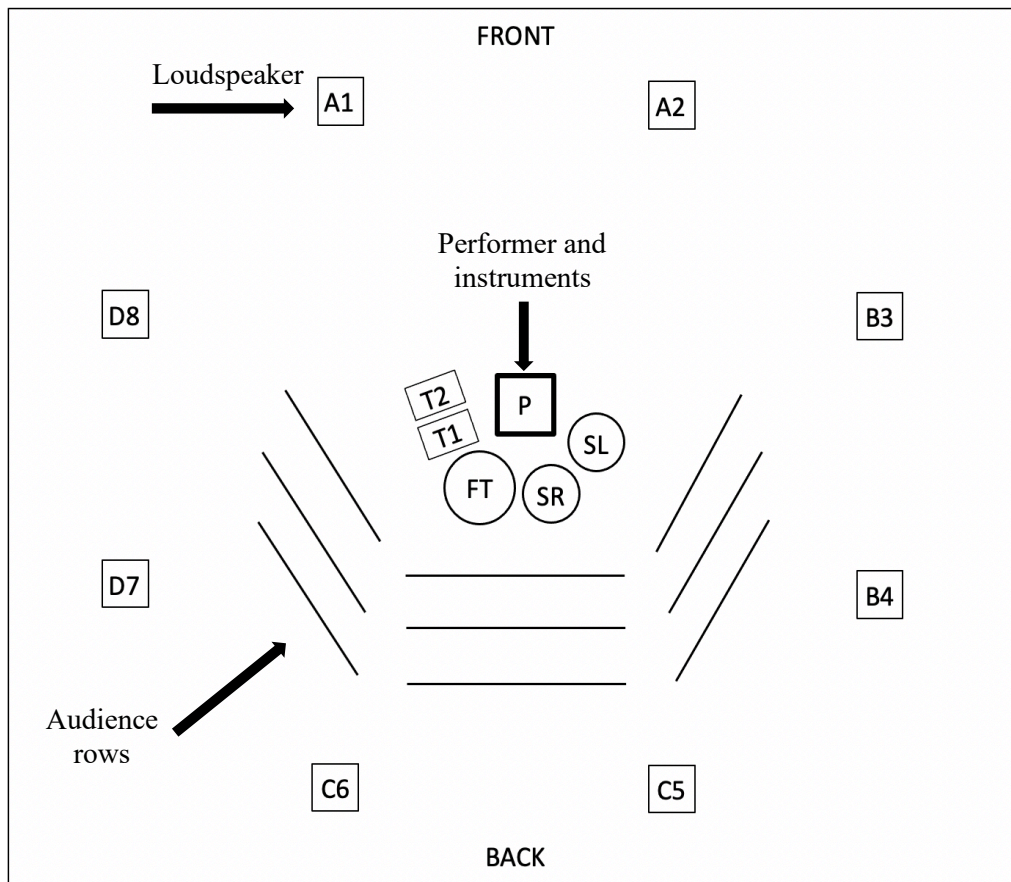


Figure 2: room layout for Rotations and Slides

### Multichannel Amplification and Spatialisation

In her article *Transmitting a listening*, Magda Mayas describes multichannel amplification as expanding the architecture of an instrument, and the changing of the perceivable listening architecture of a space.<sup>49</sup>

I understand this as meaning two things: the first part being that the sound projection of the original sound source (the instrument and sound agent) no longer being limited to its physical position in the room guided by the natural laws of physics. In this case, the amplification acts as an agent in enhancing an instruments size to match that of the amplified space.

The second part relates to how the acoustics of the room are no longer limited to its actual size and form. In effect, amplification (and any effects or EQ-ing of sound) creates a space within a space and alters from where sounds sound, how they sound and how they react with the room. As Mayas

<sup>49</sup> Magda Mayas, “Transmitting a listening,” *Série Diálogos com o Som* 4 (2017).



describes it, “amplification becomes a compositional element, it spatialises the sound and allows for subtler soundscapes to emerge”.<sup>50</sup>

In *Rotations and Slides*, the placement and directionality of amplified sound, in combination with audience positions, the placement of microphones and chosen sounding content, allowed for interesting sonic possibilities, both regarding the instruments and the room itself. The piece is designed to have sounds be generated and then projected back into the amplified space, together with the original sound source.

This design results and plays with a sort of localisation displacement. The generation of sound (originating at the sound source) and the perceived *where* of sound (being projected via the loudspeakers) are no longer unified in and fixed to their position in the room. In essence, the experienced *where* of sound becomes somewhat removed from *where* sound is generated. The placement of the loudspeakers changes the sounding conditions for the space. They also, in effect, extend the acoustic instruments to match the size of the amplified space. This process enables sounds to move and be perceived in alternate ways within the space.



Picture 5: Simon Halvarsson performing *Rotations and Slides* at the Academy of Music and Drama, Gothenburg 14/1-2020, photo by Johan Moir

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<sup>50</sup> Mayas, “Transmitting a listening,” 60.

## Balancing Auditive and Visual Listening

The sound displacement is countered by a fixed and constant visual reference. Illuminating the upper skins of each drum (by way of a blue light placed underneath) was by design a way to hone the listening eye and highlight the visual reference of sounds - the performer and their actions generating sound. All lighting, both centralised at the performer and the lights marking the periphery, were designed to frame the listening space. This was an attempt to create an atmosphere and a larger context for the act of listening and for the sounds themselves.

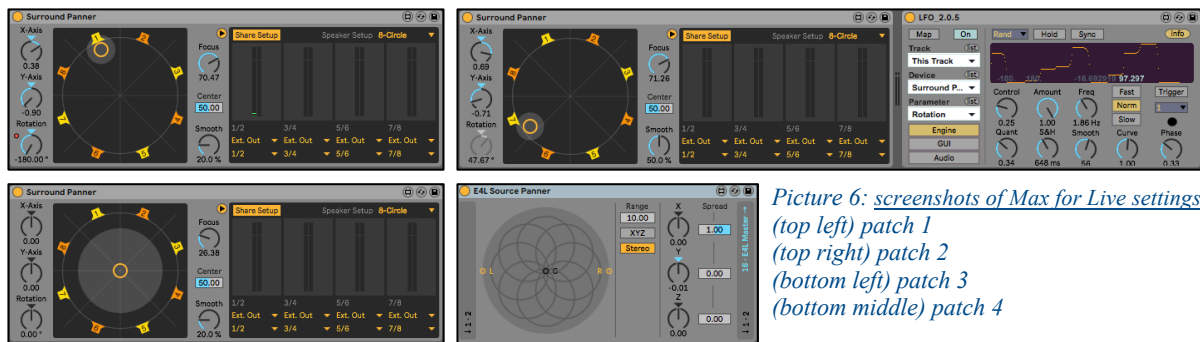
The placement of the performer, instruments, loudspeakers, and lighting design was about finding a balance and mutually supportive relationship between the visual and sonorous experience. It was designing visual stimulus (and even appeasing causal listening), while the listening ear roams with and in the everchanging sonorous experience.

## Spatialisation Patches

Without any prior practical knowledge, I decided to spatialise sound in space using software patches in Max for Ableton Live. The choreography of sound was dictated by four modes of spatialisation, created by software patches. They are controlled by a Bluetooth midi-controller with four stamp-pads, 1 for each patch.

The four spatialisation modes I chose to use are as follows:

1. Circle - starting in one speaker, slowly rotating clockwise from speaker to speaker
2. Random - moving sound quickly and randomly between speakers according to pre-set parameters regarding speed, length, and dispersion of sound in loudspeakers
3. All in - simultaneous and equal sound representation in each of the eight speakers
4. Stereo - splitting the amplified space into left and right with four speakers per side (L/R)



Picture 6: screenshots of Max for Live settings  
(top left) patch 1  
(top right) patch 2  
(bottom left) patch 3  
(bottom middle) patch 4

In addition to these, microphones, an object's and/or instruments distance to each other and to a microphone, coupled with the sound processing done by effect pedals (where indicated in the score), all acted as sound modification agents. These were all conscious choices made in the compositional process.

After initial thoughts to have the acoustic and amplified sounds balanced in the overall sound picture, I decided to instead have the amplified sounds be more prominent in the room. The acoustic sounds were necessary for the creation of sound, but the amplified sound better emphasized the spatialisation and highlighted the effect pedal modification of sound. This was thought to create a more homogenous

sound picture overall. This was not without its challenges though. Having the performer, microphones and instruments inside the encircling loudspeakers meant there was a greater risk of feedback when volumes were raised. This resulted in the amplified volume not quite being able to reach the level I was aiming for.

## Microphones

In this piece, microphones were used not only for amplification purposes. They're also instruments, affecting and shaping sound. They are of artistic importance. For this reason, I will talk a little more about microphones in this section, both in general terms and in specific relation to this piece.

Microphones capture the acoustic sound of their environment, both sounds being generated in close proximity to them and also characteristics of the room they're in. They are instrumental in translating that information into amplified sound. The placement of microphones is important for the resulted transmission of sound.<sup>51</sup>

Microphones not only translate sound, but they also colour it too. They are designed for different purposes, some specifically for voices, for talk-back, for certain instruments with specific registers etc. They can be described as bright, or middy (over emphasizing the middle register) or optimised for bass sounds and so forth. They are also capable of highlighting and emphasizing sounds that the human ear wouldn't otherwise hear or at least wouldn't focus on in the overall sound-picture. As Mayas describes them, "their listening is not filtered with knowledge or emotion."<sup>52</sup>

I wanted to experiment with microphones in *Rotations and Slides*. One sounding material I'd chosen to explore was the sound of the metal biscuit tin lid together with a rotating marble. Despite it appearing to be a rather static sound acoustically, it is rich in overtones that react when combined with a surface. The floor tom in combination with the hanging microphone creates a situation where this seemingly static sound becomes diverse in direct correlation with the changing distance between it, the microphone, and the upper skin of the drum. This change in distance between parts allows for the audible emphasis of different overtones at different instances, dependent on the distance that is. The closer the tin lid and marble gets to the skin or microphone, the more it reflects and reacts with different overtones, highlighting varying and changing aspects of the one sound.

I had also chosen to hang CM3 pen microphones above each drum. They're small, easy to hang and are a little brighter in sound, which I found better highlighted the range of overtones I was wanting to emphasize. Hanging them was also a way to minimise emphasizing the lower tones otherwise created by the floor tom in particular. Even though the CM3 microphones worked nicely, I see a need to find another suitable type of microphone that is a little more directional and less sensitive to feedback. CM3s have quite a wide pick-up pattern. This resulted in some cross-over between sounds sounding on the left and right snare drums, being picked-up by the microphone of the other snare. Had this not been the case, I think the stereo effect would have been a little more defined in the space.

## Overall Reflections

This composition was by design a challenge. Coming from mainly working with acoustic sounds, I have reflected on the potential of software. It offers lots of possibilities for realising an omni-directional experience. I wanted to build on my otherwise fundamental understanding of the basic

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<sup>51</sup> See Attachment 2, page 4, for suggested microphone placement in *Rotations and Slides*.

<sup>52</sup> Mayas, "Transmitting a listening," 58.

principles and possibilities that software and technology offer and add to it with more first-hand experience and knowledge.

*Rotations and Slides* became my introduction to both designing digital spatialisation and using the software Ableton Live. I must admit, the creations of my mind have never been apt at distinguishing existing skill and knowledge from creative possibilities. That distinction was made clearer though in composing this piece. Most of my time was allocated to learning and figuring out the software to make it do what I wanted it to do. Even then, not everything went smoothly. Due to the way the spatialisation patches and their initiation triggers were designed, there was a risk for unwanted double stamping by the performer (pressing the same stamp-pad twice or two stamp-pads simultaneously). This would result in two possible outcomes: one that makes all patches active at once and extreme feedback following shortly thereafter; the other resulting in the wrong spatialisation patch being activated.

With more knowledge and practice, I am sure these issues will be remedied in the future. But alas, this was not fixed before the premiere of the piece. To counter this risk, the performer and I agreed that I would sit at the mixing desk with my laptop, where I had also midi-mapped the patches to specific keys on my computer keyboard, ready to jump in and correct either of these potential issues if necessary. This meant that my experience was one of actively following the score and staring at the laptop screen. I was not able to relax and be immersed in the soundscapes emerging during the performance. My thoughts and focus were needed elsewhere. I was also sitting in the back of the performance space, in line with the speakers, so outside of the immersive listening space.

I consider this piece to be a work-in-progress. Artistically, some ideas have been achieved. I think of the slow revealing of musical content to be like that of peering into a microscope to discover and revel in the immersion and nuances of friction. The combination of objects, movements and sounds together with the effect pedals and spatialisation patches were elements that were thoughtfully tested and considered in the compositional process. The wanted contrast between the fixed and the mobile, the static and non-static, was evident and realised here.

It was interesting to read through the written reflections of the performer Simon Halvarsson. Amongst other things, he lifted some of the difficulties he found with connecting body with hardware; echoed my feeling about volumes levels between acoustic and amplified sound needing to be adjusted; commented on how the spatialisation “became like a duet with myself in different places”<sup>53</sup>; and saw possibilities for future adaptations of the work, suggesting using “multiple sustained acoustics and/or electronics. Like sizzle- cymbals and bowls with coins and then be able to control the start and stop for the sounds. Like layers and transitions.”<sup>54</sup>

But something that has visited and re-visited my thoughts, niggling away throughout the process and after the premiere, questions two interlinked aspects: firstly, the importance of the order of sounding occurrences; and secondly, the level of exactness dictated by the score. Does the piece really have to follow such a rigid linear path, and do the sounds need to come in the order specified?

I think my feeling after the performance was not just one created by the distraction of needing to follow the score and watch the laptop screen. It was one that echoed a feeling of deficiency. I find the concept of the piece to be engaging, the nakedness of the musical content to be artistically exciting and am intrigued by the creation of space and situation through spatialisation, lighting and the placement of objects and bodies. The process from inception to performance has been a valuable one. What I still miss though, is a more dynamic interaction between musician and space, performance, and experience.

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<sup>53</sup> See Appendix 1, performer response to question 2.

<sup>54</sup> See Appendix 1, performer response to question 4.

In my efforts to capture the different elements and control the experiment, I created a sort of containment rather than expansion of space.

Being an improviser myself, I wanted to give the musician some room to improvise in the piece, even if this meant doing so in a rather controlled environment. In composing these freer parts, I wanted to invoke immediate interaction with the space in the moment of performance stemming from the performers' exploration of the outlined sounds that could occur any number of times, in any order and for any duration.<sup>55</sup> The *when* was to be open to creative interpretation. This opened small sections within, allowing the performer to act and react with the reverse effect modification of sound (created via an effect pedal) and with the space itself. In a sense, it was an attempt as a composer to design a possible active listening encounter in performance for the performer in relation to space and interpretation. On reflection, Halvarsson commented how the improvisational parts "created breaks for my brain so I really could focus on listening and not getting fixed on executing tasks correctly."<sup>56</sup>

However, I feel these short passages of improvisation were not enough to fully achieve the interaction I was seeking and am otherwise accustomed to as an improvising musician. If I am to look beyond the premiere performance and to future performances in varying spaces, the piece needs to be made flexible enough to work with the situation that it is presented in, there and then. Although this initial version doesn't yet have this flexibility, it has provided me with an introduction to the creative possibilities made available through software. This is something I look forward to exploring further.

The image shows a handwritten musical score for snare drums. It features a staff with various notes and rests, along with several instruction boxes and effect pedal markings. The score is divided into sections by vertical lines. Key elements include:

- FINAL DISK POSITION:** A box at the top center with two circular icons labeled SL and SR.
- OPEN DURATION:** A box above the first section.
- ALTERNATE BETWEEN & USE:** A large box containing two columns: 'FREELY' and 'SPRINGLY'. Under 'FREELY' are a bell icon and a checkmark. Under 'SPRINGLY' are a wavy line icon and a right-pointing arrow. Below this box are instructions: 'FREELY APPLY ABOVE TO DISKS 1-4 AND BOTH SL & SR SKINS', 'ASSUME ONLY ONE ACOUSTIC SOUND-EVENT AT ANY GIVEN TIME', 'THINK: SPACE AND DENSITY', and 'THINK: REPETITION AND IRREGULARITY'.
- CONTINUAL LEGATO SLIDING:** A box above a section with a wavy line.
- SLOW -mp:** A box above a section with a wavy line.
- Effect Pedals:** Markings for DP (delay pedal), RP (reverb pedal), and FSC (foot switch controller) are placed along the staff.
- Other Markings:** Various symbols like (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15), (16), (17), (18), (19), (20), (21), (22), (23), (24), (25), (26), (27), (28), (29), (30), (31), (32), (33), (34), (35), (36), (37), (38), (39), (40), (41), (42), (43), (44), (45), (46), (47), (48), (49), (50), (51), (52), (53), (54), (55), (56), (57), (58), (59), (60), (61), (62), (63), (64), (65), (66), (67), (68), (69), (70), (71), (72), (73), (74), (75), (76), (77), (78), (79), (80), (81), (82), (83), (84), (85), (86), (87), (88), (89), (90), (91), (92), (93), (94), (95), (96), (97), (98), (99), (100) are scattered throughout the score.

Example 5: excerpt from score (page 16) showing one of the three instruction boxes for the improvisational segments that appear in the piece, as well effect pedal application (DP - delay pedal, RP - reverb pedal, FSC - foot switch controller) and other actions for snare drums with objects

<sup>55</sup> See Audio 3 to listen specifically to how Simon Halvarsson interpreted one of these improvisational segments during the premiere performance 14/1-2020.

<sup>56</sup> See Appendix 1, performer response to question 4.

## Crackle Crunch Climate

[Objects] build a connection between the physical and abstract, thought and feeling, and function as tools to think and create with.<sup>57</sup>  
Maga Mayas

I wrote *Crackle Crunch Climate*<sup>58</sup> for the ensemble Curious Chamber Players<sup>59</sup>. Knowing the experimental nature of this ensemble, I wanted to incorporate and use objects together with a physical exploration of room.

Objects and items not originally intended for musical purposes, are, in a sense, freed from convention – there are no prior playing techniques or sound ideals to consider or adhere to. They offer something inherently unique that can only be known and understood through an active tactile investigation of them. This involves touching, rolling, stretching, rubbing, crumpling, dragging, rotating, throwing, plucking and more, to become intimate with their textures, sonic qualities, possible applications, and limitations. This hands-on process of discovery is one that I feel a close relation to in my artistic practice. It is also a highly relevant one for this piece.

Objects and the sounds they produce are associative, in the sense that they can evoke or trigger a narrative, feeling, thought or emotion.<sup>60</sup> Discovering these is an enjoyable and interesting experiment when workshopping possible content for soundscapes, timbres, textures and sound combinations.

When I started this process, there were two things that influenced the direction and aims of the piece: one was the climate change debate that was raging globally; the other was plastic.

In 2019, climate change was a hot topic for all – believers and denialists alike. It seemed that every newspaper, radio station, tv-channel and social media platform was riddled with the opinions, studies, discussions, discoveries and comments about the severity and truth of the climate situation of today. They exposed the polarisation of the debate and the different understandings of urgency and need for action amongst world leaders, activists, corporations, politicians, scientists, and world citizens.

I also remember reflecting over the amount, range and types of plastic that filled my recycling bin. I wondered over my own relationship to plastic, as well as the role it plays and has played in society and the effect it has on the environment. Plastics directed my thoughts to efforts for recycling and upcycling (taking old objects and transforming them into something new). I was also just fascinated by the variety of sounds different plastics could produce and started speculating over possible artistic application. Plastic triggered in me a narrative that influenced the creation of this piece.

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<sup>57</sup> Mayas, “Transmitting a listening,” 53.

<sup>58</sup> See Attachment 3.

<sup>59</sup> See Video Link 1 for video documentation of the premiere performance

<sup>60</sup> For further reading on objects and the role and use they can have in music, I recommend Magda Mayas article *Transmitting a listening*. It talks of an intimate tactile process of understanding the artistic properties and applications of objects and the implications they have on the bearer/user and the music.



Picture 7: instructional pictures showing the two movements of the hand rubs with plastic, applied in Section 1 - Pass It On

## Sounding Symbolism

The more involved I became in this piece, the more I found myself listening for symbolic meaning. This was an important and influential factor for my compositional choices. This composition required me to search for and reflect on the symbolism of sounds and the role of objects in relation to the topic at hand, to give them new artistic context and meaning in sound. The resulting chosen content of the piece reflects this process.

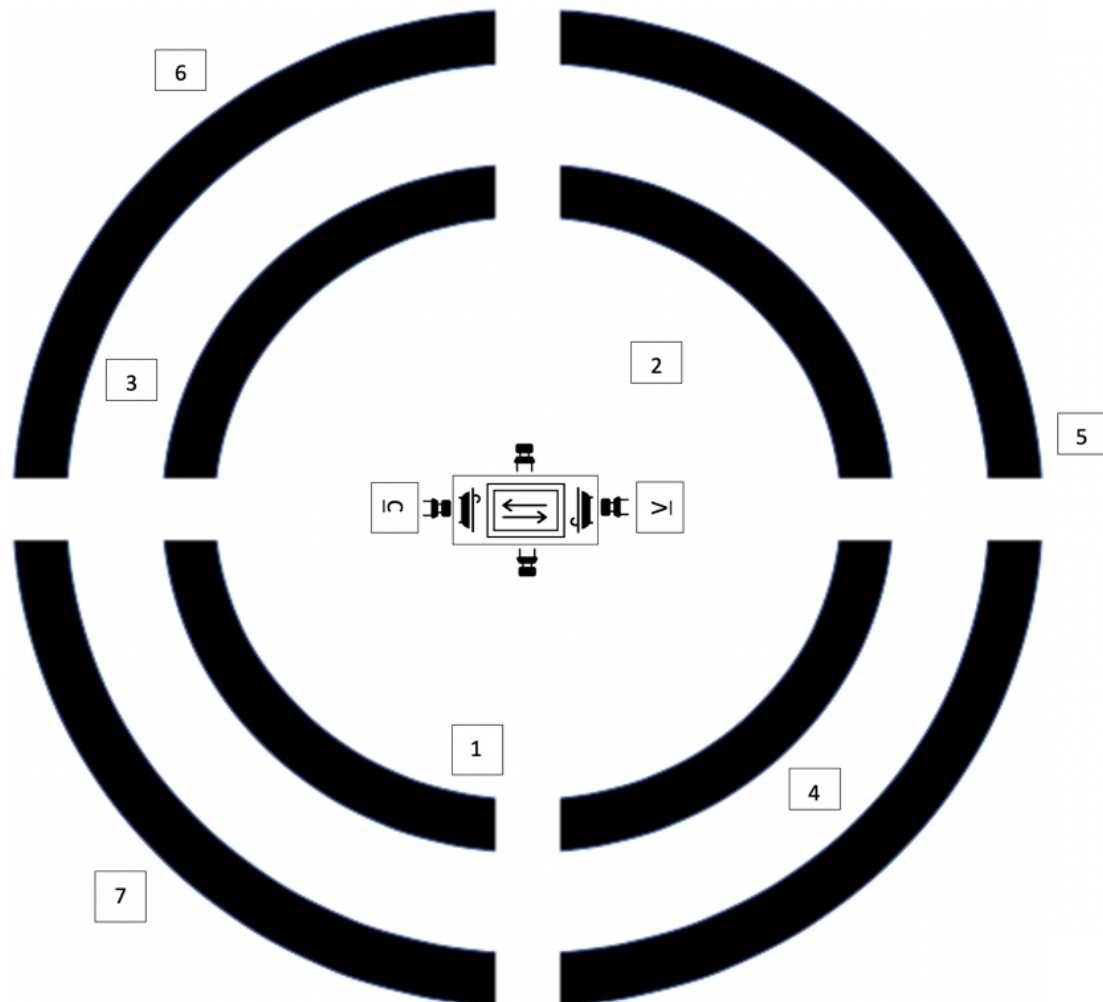
Plastic is used as an instrument of sound and as a connecting factor throughout the piece, played by all performers, sometimes in unison, sometimes independently. For me, the use of plastic in this piece can be likened to that of a double-edged sword. It symbolises our pollution of the environment and our throw-away attitude. It highlights our obsession for buying new instead of replacing or fixing parts. It is iconic of our wasteful culture yet was once considered as being revolutionary. It was cheap, available and versatile. It has played an important role in the advancements of society, production, and industrialism – both good and bad – and highlights the need for sustainable consumption and industry.

**2: SIMULTANEOUS**  
Continuous plastic crackle

(ca.30-45seconds)

Example 6: excerpt from score showing Section 2 - Simultaneous

Using the circle as a spatial organiser, I positioned the audience in circular rows and created paths of trajectory for musicians to take through the audience. The circle here is symbolic of the nature of the climate – how it encircles us, embracing us from all sides, infiltrating our lives. It is symbolic of the shape of the globe and the global implications of climate change. It also is of practical importance for enabling musicians to move between and around audience within the space, without unnecessary obstacles when spatialising sound.



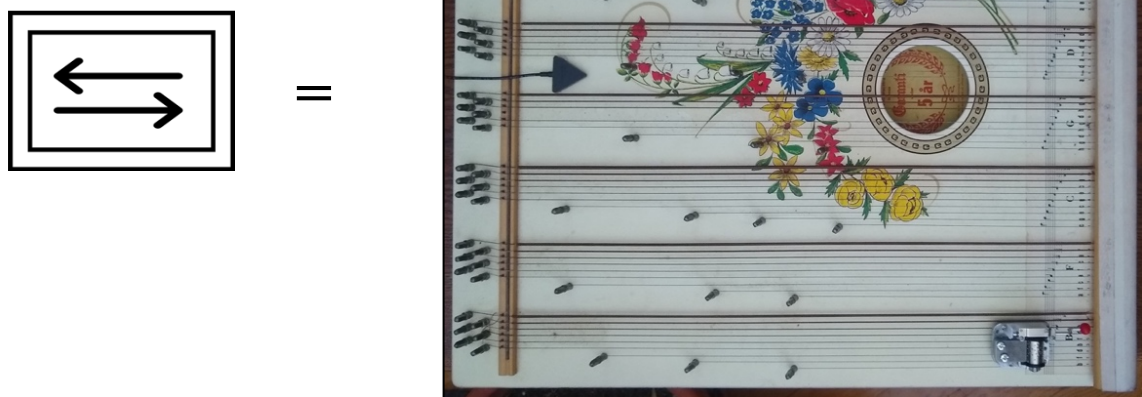
*Figure 3: floor layout showing circular audience rows and starting positions of musicians*

In section 4 of the piece, bottles and glasses (transported around on rolling trolleys), are used as reminders of the positive efforts we are already making, like that of recycling, but also of our wasteful attitude;<sup>61</sup> the radio static signifies our search for truth (or what we're willing to accept as truth) in an information age – a time with an endless flow of opinions, facts and alternate facts, meeting the constant prattle of society's struggle to agree and decide on a course of action.

<sup>61</sup> See Attachment 3, pages 21-22.



In section 5, the sliding of music-box mechanisms over the strings of the zither while their lullabies are continuously cranked (the motion over said strings warping their sounding), was born out of wanting to capture the feeling of imbalance.<sup>62</sup> It was an artistic mirroring of the imbalance in the climate, in the media coverage of the ongoing debate, in the environment, in politics and policy. It was also born out of pondering the precarious nature of the reality we find ourselves in. Further representation of imbalance is also found in the use of chimes being struck and then subsequently swung around, warping the pitch of the sustained decay of the after ring.



Picture 8: (left) symbol for Zither and music boxes in the score; (right) Zither set up with two music box mechanisms

The elephant bells are symbolic of the warning bells sounded by the climate, that are articulated by scientists, activists and politicians speaking out for change and the need for sustainable long-term measures. Bell Transition I in the score is an example of this.<sup>63</sup> Here, every performer sounds their bell from their intentionally dispersed positions in the room, creating a continuous ringing (warning) moving from performer to performer, appearing in all sections of the room (globe).

Symbolism functioned as an instrumental tool in shaping my compositional choices, guiding the direction of the conceptual content. Symbolism permeated my listening and all aspects of the construction of this piece. This type of listening practice is similar to semantic listening but with one little difference.<sup>64</sup> Symbolic meaning on its own isn't enough. Throughout the process, symbolism was being weighed against the aesthetics of sounds. I needed the sounds to also be interesting in themselves, placing the value of sounds and any symbolic meaning they entail on equal footing.

Although I hoped that some of the symbolism (as I understood it) would in some way be transmitted onwards, my expectations were not aimed at listeners knowing or understanding this in detail. As

<sup>62</sup> See Attachment 3, page 25.

<sup>63</sup> See Example 7, p.42.

<sup>64</sup> See p19 for definition of semantic listening.

**3: BELL TRANSITION I**  
 Performer 5 to cue transition

♩ = 50

1 PREPARE FOR NEXT INSTRUCTIONS

2 PREPARE FOR NEXT INSTRUCTIONS

3 PREPARE FOR NEXT INSTRUCTIONS

4 PREPARE

5 PREPARE FOR NEXT INSTRUCTIONS

6 PREPARE

7 PREPARE FOR NEXT INSTRUCTIONS

Example 7: excerpt from score showing Section 3 – Bell Transition I

listening is a subjective act, so too is their listening of the piece and any symbolism it entails. It is shaped by who they are, when they are, and what they know and believe.

“The intention of the listener, and his or her openness to different ways of listening – analytical, immersive, directional, hollistic, (in)attentive, etc. – define their perception of the performance experienced.”<sup>65</sup> It is the responsibility of the listener to choose how they listen. I can only hope that my considerations enable an artistic context for symbolism that extends to listening and the sonic experience of sounds.

### Combining Acoustic Sounds with Fixed-Media

Wanting to combine figurative aspects with actual ones, I designed four fixed-media files for the soundscape. They feature an array of field recordings and are projected into space via small portable Bluetooth-speakers in Section 5.<sup>66</sup> I was aiming for each track to represent its own perspective of the climate change situation. I wanted them to both make sense individually as stand-alone tracks and together as a simultaneous whole. The omnidirectional situation I was constructing was a reflection on the simultaneous nature of the climate change debate, environmental issues and the multitude of differing views, existing in the same time, overlapping each other, all over the globe. The very nature of such interplay was captured in the fluctuating soundscape these tracks created, as they wove their

<sup>65</sup> Mayas, “Transmitting a listening,” 57.

<sup>66</sup> See Attachment 3, pages 24-26.

way through space at the discretion of the performer. This meant details were fluctuating also, sometimes being more discernible and perceivable, and sometimes more diffuse, and distant.

The four themes for these tracks are as follows:

#### Track 1 - Nature vs Industry and Track 3 - Nature vs Commerce

Originally these tracks were thought to include speeches, statements, and quotes from known climate change denialists, showing the opposing side of the debate. I chose however another route fearing that doing so would just offer them a new platform in which to speak. Instead, these tracks both start with the sounds of nature - one with the element of water (by way of a river), and the other with layered birdsong representing wildlife. These are slowly yet inevitably drowned out by the sounds of unsustainable industry in track 1, and unsustainable commerce in track 3. They represent our greed and our complacency. The Bluetooth-speakers projecting these tracks are finally drowned in bowls of water as a symbolic gesture – a subtle yet clear action reflecting the belief that positive intentional action can drown out and stop negative harmful action (or inaction).

#### Track 2 – Climate Change Protests

This audio highlights the global outcry from citizens all over the world, protesting and demanding change. The individual plight in the collective fight.

#### Track 4 - Voices for Change

This audio consists of a collage of speeches by known activists, prominent scientists and researchers, readings of studies regarding the severe ramifications that climate change is having on the environment, as well as recordings of talks, interviews and information aimed at raising public awareness. All of which advocate for the need for action in combatting climate change and environmental issues.

These four tracks took a lot of time to compose. The process involved finding relevant material, constructing, reconstructing, and redesigning them repeatedly. I was constantly calling on my bank of accumulated remembered sound experience. I needed to understand my own listening and associative relation to sounds and to the topic of the piece, listening both globally and focusing on the specifics. I needed to know my intentions with each and all tracks. I wanted them to aid in provoking thought and reflection, without them transforming the piece into merely being an informative, instructional, or educational piece about climate change. It was a challenge to find an artistic balance.

### **Creating the Conditions of Performance**

Mayas stated, “Learning how to listen – to each other, to oneself, to the environment – is what I pursue in a performance.”<sup>67</sup> I would like to add that I seek this in both performance and in composition.

To frame the listening space and create atmosphere, I employed a simple light set-up. It combined predominately green lighting with a warmer yellow glow centred in the middle of the performance space. The choice of colours being symbolic of nature and the sun – a reflection on our dependence on both for our existence.

I also pondered ways to possibly prepare listeners in other ways aside from the composition itself, preceding the performance. I decided on two things.

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<sup>67</sup> Mayas, “Transmitting a listening,” 46.



Picture 9: *Sjöströmsalen* before the performance, at the Academy of Music and Drama, Gothenburg, 30/9-2020, photo taken by Casey Moir from above the starting position of performer 5.

NB: due to pandemic restrictions in place at the time of performance, seating was more distanced than intended

I gave a short oral introduction of the piece right before it began, in which I invited listeners to close their eyes during the performance. The movement of musicians and objects was imperative for creating situation and the spatialisation of sound. The artistic agency of this movement was carefully thought through. I also knew that for me as a listener, such movement could possibly distract listening focus, heeding a need, my inherent need, to localise sound sources and understand their cause. I have always been curious in my listening, being easily led by my eyes. This invitation was a way for me to prepare listeners for the omnidirectional nature of the piece, explaining that sounds would be mobile, and offer them a choice about their listening of the piece in advance.

I also designed the program notes (shown below) to share the concept of the piece, and hopefully spark thought with the questions they posed.

*Casey Moir - Crackle Crunch Climate*  
*A live omnidirectional sound installation.*

*How are we listening to the cries of the climate? To pollution? To the warning signs? To cause and effect? What truths ring true? How do we navigate when information is abounding, opinions many and often conflicting? How do we act? How do we proceed?*  
*This piece is a sounding reflection on the recent and ongoing climate change debate, and the need to listen with intent, with care to the climate.*

I view an invitation to close one's eyes, program notes, lighting and so on, to be important parts of creating context. They help set the scene, and have the potential to effect expectations, experience, and perception, as well as provide a point of departure for listening.

### **Own Reflections, and those of Listeners and Performers**

While sitting in the audience, listening to the performance, I noticed how the many considerations I'd made in the compositional phase and those regarding the conditions of performance, felt as though they greatly aided the creation of a context for listening. My experience of it was one that saw how the movement of sound ignited space and listening, making it tangible and intimate in the moment.

The amplification of the Zither and music-box mechanisms is one aspect still in need of tweaking. The sought-after warping effect from the music-boxes being drawn over the Zither strings and the projection of this in space, was not fully realised in the performance. The volume was too low in general, and the narrow directionality of the two Genelec loudspeakers used meant that audience sitting outside of their path of projection, could not fully comprehend (or even hear) the progression of these warping sounds creeping out and taking over the soundscape. This effect was lost on some, and for others it was obscured.

To broaden my understanding of the listening experience, I invited some members of the audience and the performers to indulge me with their subjective experiences. This was done via written reflection centred around questions I posed via email after the performance.<sup>68</sup>

Some audience members (fellow compositional students) had been present at rehearsals. They already had an introductory understanding of the piece before the actual concert. For others, it was entirely new. In the answers I received, there were those who expressed amazement. Others reflected over the keen pairing of sounds and movements and the effect they had on the experience. Some expressed positive thoughts about the use of room and the mixing of audience and performers. Others talked of their need to watch the sounds unfold, in contrast to others that needed to close their eyes to be fully immersed in the soundscape they were bathing in. One even poetically described the experience as creating two different atmospheres for listening where "opening [the eyes] made it feel like the sunrays shining through the surface and closing the eyes made it feel like you were in deep dark ocean".<sup>69</sup>

The performers brought up other aspects, such as notational issues. In this piece, I chose to rely mostly on diagrams and instructions – lots of instructions!! Too many in relation to the otherwise simple nature of the piece. Their reflections highlighted some questions I find myself in constant dialogue with: How do you notate the use of room, spatialisation, and choreography? How do you choose what type of notation is best suited for a piece like this? These questions are without definite or absolute answers, and this process is under development, evolving with composition, reflection, and experience.<sup>70</sup>

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<sup>68</sup> See Appendix 2.

<sup>69</sup> See Appendix 2, JW answer of Question 4 for audience.

<sup>70</sup> Attachment 3 is the original score that performers received. It is dual in nature having both graphic and instructional versions combined. Since receiving performer feedback, and reflecting over the excessive amount of instruction, I revised the score to be more condensed, and legible. See Attachment 8 to view the revised score.

## Gertrude – This Happened

Language and speech are not just sound in any superficial sense, but they come rather from the body as an extension of bodily expression.<sup>71</sup>  
Anders Hultqvist

In the pieces presented thus far, I've primarily used movement as a means to spatialise sound, rather than as visual stimulus. In *Outside In* I denied the audience the traditional stage, refusing them the vantage point of seeing all performers at once, with performers navigating the movement of sound via hardware (mixers). In *Crackle Crunch Climate* I encouraged listeners to close their eyes for the immersive omnidirectional experience so as not to be distracted by the moving performers, sounds and objects. In *Rotations and Slides* I designed a fixed focal point (via placement and lighting) to highlight the activation of sound while it sonically moved, and mapped space as it was routed through effects and/or software and finally projected through the encircling loudspeakers.

I felt with this next piece, I wanted movement to aspire to a more intrinsically interconnected and interdependent expression. I wanted to investigate further how the sonorous and the visual could be united, fused, becoming one in performance. Words, gesture, objects and extramusical items were all in focus. I was asking myself: How can I embrace movement in sound and sound in movement? How can gesture be explored in space and performance? How can the accentuation of gesture and movement in collaboration with sounding content enhance or influence the listening experience?

Writer Deborah Jowitt poetically expressed how interdisciplinary pioneer, Meredith Monk “expanded our definition of art to take in the entire visible landscape of sound and motion”.<sup>72</sup> I find myself quite intrigued by this description. It was also while reading articles and books about Monk’s work and artistic approach, that the name of influential avant-garde poet and writer Gertrude Stein was brought to my attention. Stein was a writer and poet of experimental, non-linear, cubist-style literature in the early 1900s.

My piece *Gertrude – This Happened* is constructed from the complete texts of Stein’s play *What Happened*. Already after my first reading, I knew I wanted to create a piece with this play at the core and as a point of departure. I found myself enthralled by her collage of words, pieced together not with the purpose of linguistic communication but instead for how they sound together and how they feel when expressed. It is not a complete disassembling of language, void of all grammatical patterns, usage, syntax, and structures. Rather, it sheds language of expected linguistics and takes an alternate approach to the construction and communicative nature of texts. It becomes a play on and with words.

*A regret a single regret makes a door way. What is a door way, a door way is a photograph.*

*What is a photograph a photograph is a sight and a sight is always a sight of something. Very likely there is a photograph that gives color if there is then there is that color that does not change any more than it did when there was much more use for photography.*<sup>73</sup>

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<sup>71</sup> Catharina Dryssen *et al.*, *Other Spaces*, 91.

<sup>72</sup> Deborah Jowitt, *Meredith Monk: Art + Performance*, (New York: PAJ Publications, 2011), 1.

<sup>73</sup> “What Happened”, The Project Gutenberg EBook of Geography and Plays by Gertrude Stein, accessed January 15, 2019, [https://www.gutenberg.org/files/33403/33403-h/33403-h.htm#WHAT\\_HAPPENED](https://www.gutenberg.org/files/33403/33403-h/33403-h.htm#WHAT_HAPPENED)

*What Happened* is a play with no storyline to follow, no characters in which to relate to, no beginning, middle and end. It is an unconventional play. Reading these words aloud in the absence of intended literary narrative, they transformed into rhythmical phonetics, liberated words, echoes of visceral consciousness, primordial calls, memories, and melodies onto themselves. The complete texts offer a narrative that is associative and intuitive, primal, ephemeral yet ancient. Stein's collages required me to work with them in other ways than when linguistic narrative dominates perception and understanding. The resonant innate quality within the words was to be explored. An almost childlike enjoyment was also to be had and revelled in with each enunciated word or phrase.

From larger gestures to smaller sounds and to the embodiment of expression, my piece *Gertrude – This Happened* embraces a rich visible landscape of words, sounds, and movement. It shapes an augmented reality that exists in dialogue with perception and the experiential, with what is past and what is now, what is known and what is unknown, what is seen, what is heard, and what is felt. It shapes its own narrative in time and space, transfusing together the many elements that paint themselves into the fabric of performance.

### **The Image of Sound**

“How do you make an image with the music that doesn't take away from the music?”<sup>74</sup> Monk raises a highly relevant quandary when she posed this question to herself. It is one that provides a difficult artistic challenge. I've always found balancing the visual with the sonorous to be a precarious task. I have been wary of using visual elements (theatrical movement, props, and narrative) that risk detracting from and possibly diluting the sounding experience. I am, after all, a musician and composer of sounds. The sonorous is my primary business. So how does one establish a balance of counterpoint, harmony, and tension in the sounding and the visual for the situation being composed? I think there is truth (and some comfort) to be found in Monk's belief that it is in the process of creation that if one is listening, a piece will begin to reveal its needs and wants and start living as its own world.<sup>75</sup>

Throughout this process my thoughts have returned often to Oliveros' statement about the eye sometimes silencing the listening ear.<sup>76</sup> Thus, stirring the ever-present query of how to design a situation that would have the eye activating the ear (not silencing it), waking it from its subsidiary slumber to hone an integrated watchful listening. I was asking myself about the use and role of movement and gesture, questioning how I was listening, if I was aware of what already existed inherently and what was otherwise necessary for me to articulate and fashion.

Despite my longstanding previous hesitance to theatricality in music, I decided to adopt the use of props and objects that were extramusical.<sup>77</sup> These were to be objects of performance that were not intended to be sonorous or of logistical importance. This was a new approach for me. I decided on using red ribbons, thread and tape, as well as postcards, magnifying glasses, mirrors, an armchair, lots of post-it notes and more. I was wanting to see how far I could take the idea of visual stimulus without tipping the scales in favour of the sometime problematic dominant eye of visual listening.

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<sup>74</sup> Bonnie Marranca, *Conversations with Meredith Monk* (New York: PAJ Publications, 2014), 42.

<sup>75</sup> Marranca, *Conversations with Meredith Monk*.

<sup>76</sup> See earlier section about 'Types of listening and listening practices'.

<sup>77</sup> Extramusical is a term used to describe things such as program notes, lighting, props, objects etc. that are not intended as sounding material and content but that still have importance to a musical piece and/or concept.

It was paramount that visual elements were not to be window dressing, simply being a compliment or accompaniment to the sonorous. I was aiming at an interdependency between elements, pairing them in such a manner that saw them transformed into an inseparable weave. It was about creating, emphasising, and accentuating a collective gestural expression in an attempt to form a holistic relationship embodying all the elements - visual, sonorous, visceral, stationary, and mobile.

### **Working with Texts**

Stein's play *What Happened* is made up of 5 Acts in total. Inspired by the experimental nature of the texts and manner in which they were constructed, I wanted my compositional process to reflect this. I was not wanting to be academical or even intelligent, but rather intuitive, expressive, and playful in my choices. As I was working with text, it was a natural decision to use the voice as the main vessel of expression. I also chose it for several other reasons: it can be moved and move sound physically, physiologically, and psychologically; its mobility makes it easy to position, stage and direct in space; it is sonorously versatile, especially so when utilising the extended techniques featured throughout this piece; and it is an embodied instrument, an intrinsic fabric of the body, able to evoke meaning and reflection beyond linguistics.

I was building the piece passage by passage. The texts have indications such as (One.), (Three.), (The same three.), preceding and marking the plays many sections. Without knowing how Stein intended these to be interpreted, I decided to use these markings to determine how many voices were to be active in a corresponding passage. As the highest indicated is the number five, the piece was written for a five-piece vocal ensemble.

<p><b>ACT ONE</b></p> <p><b>(One.)</b></p> <p>Loud and no cataract. Not any nuisance is depressing.</p> <p><b>(Five.)</b></p> <p>A single sum four and five together and one, not any sun a clear signal and an exchange.</p> <p>Silence is in blessing and chasing and coincidences being ripe. A simple melancholy clearly precious and on the surface and surrounded and mixed strangely. A vegetable window and clearly most clearly an exchange in parts and complete.</p>
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*Example 8: excerpt from Act One of play What Happened, by Gertrude Stein*

### **Recording as a Compositional Tool**

Although composing for an acoustic performance, I was using recording as my main compositional tool and improvisation as my method. I was recording and re-recording my voice doing all manner of readings, sounds, and takes on the written material of the play. I was listening to how my imagination



perceived the texts; how they physically resonated in the cavities of my body as I read them aloud; how they felt in my mouth as the words rolled over my tongue; the associations I made to the words themselves and to the melodies and rhythms they presented when spoken; and the physical gestures my body made in direct interaction with their spoken existence. I was listening aurally, viscerally, and intuitively throughout the compositional process.

Once I had decided which recorded representation I thought best suited a certain text, I continued by recording multiple improvisations of vocal sounds and the sounds of objects I had at home, testing them against the recorded text passages. Recording. Listening. Recording. Listening. Deleting. Recording. Listening. Editing. All done in an effort to find the artistic gestural and somatic embodiment and resonance of the texts.

The collected recordings then became an Audio Draft.<sup>78</sup> This draft was later transcribed by me, resulting in the notated score. The Audio Draft functions as an aural aid for performers (to help them familiarize themselves with the sounds and flow of the piece), used in addition to the written notation.<sup>79</sup> It is however a draft, which is incomplete. Some things have been added later, and others cannot be recorded, such as texts that are mimed.



Picture 10: screenshot of the Logic Pro project created for recording the improvised interpretations of *What Happened*

### Working with Spatiality and Choreography

While working with the texts, I was simultaneously forming ideas about space and the spatiality of sounds in space. I was consciously thinking about how words and sounds move viscerally, pondering

<sup>78</sup> *Audio Draft* is a term I use for the recorded result of the compositional practice that records as a form of aural notation. Instead of beginning with writing the score, I was making it with recordings, sounding it into being.

<sup>79</sup> See Audio 4 to listen to the full Audio Draft.

how this resonant movement could be captured and manifested in the bodies of the performers in space as visible gestures. I wanted the body and extramusical items to expand sound into the physical and visual sphere. Simply put, I was envisaging how sound could look and how it could move in space.

I was thinking about not only shaping actual but also engaging figurative resonance. I wanted the voice, the body, objects and extramusical items to extend resonance into the inner sphere where meaning is created, felt, and known. I was aiming for a dynamic dialogue between word, movement, gesture, and space to emerge, in the hope that artistic interdependency would be established between the visual and the sounding.

At times, the spatial choreography was forged simultaneously with the act of improvising and recording the texts and sounds. In such instances I was able to see in my mind's eye the staging of body, sound, and space together with extramusical items. At other times, it was only after I did separate physical trials of several possible choreographic ideas (to find which one felt right with the recorded sounding material), that the choreography came to.

### **Focal and Global Listening**

I was shifting between a focal and global listening perspective in the compositional process. The focal perspective involved a deepening of my intuitive understanding of the word-sound-gesture pairings. The global perspective was looking at the creation of situation. I was zooming out to overview the whole to see how to utilise space, shape it and direct sound and bodies within it. Just as with the other pieces, I wanted the listening audience and the performers to be engaging in the same space for this creation. I wanted audience members to be situated all over facing different directions while performers roam and map both space and the spatial experience in time and sound.

### **Compositional Approaches and Artistic Choices**

The 5 Acts and even the many sections within each Act take differing approaches to composition. With so many choices and possibilities from the outset, I realised it would be easy to get carried away and add, add, add, add, add. Although trying to push the visual-sound envelope as far as possible, I still wanted contrast, variation, and a coherent balance that I felt made intuitive sense.

I believe this influenced the shaping of how the texts were to be performed: some are sung while others are spoken, whispered, chanted, mimed; some are said in unison, others independently revealed, while some are layered simultaneously; some have a given emotive colour instructing the performer to present them in differing manners, such as contemplative, robotic, or pensive; some are to be swift and fast, while others are to be slow.

The Hocket initiating Act 2 scales the text down to its core - spoken word. It uses the simple prop of cue cards, and spatialises text in space via the disjointed recitation of the Hocket. The Hocket involves three performers starting from different pre-determined positions in the room. Word-by-word they recite the text while each making their own beeline through the room, intersecting each other somewhere near the centre and, without ceasing, continuing on their path at a leisurely pace. The distribution of text amongst performers (every third word) in combination with the 3 trajectories of movement creates a type of shifting weave of prose in space. The text representation is both whole and fragmented at the same time, reliant on the interplay of performers and their momentum in space to be effective.

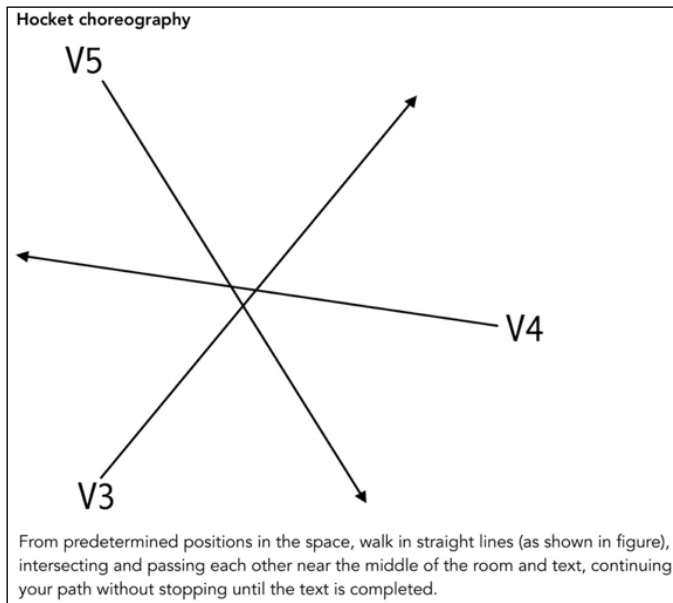
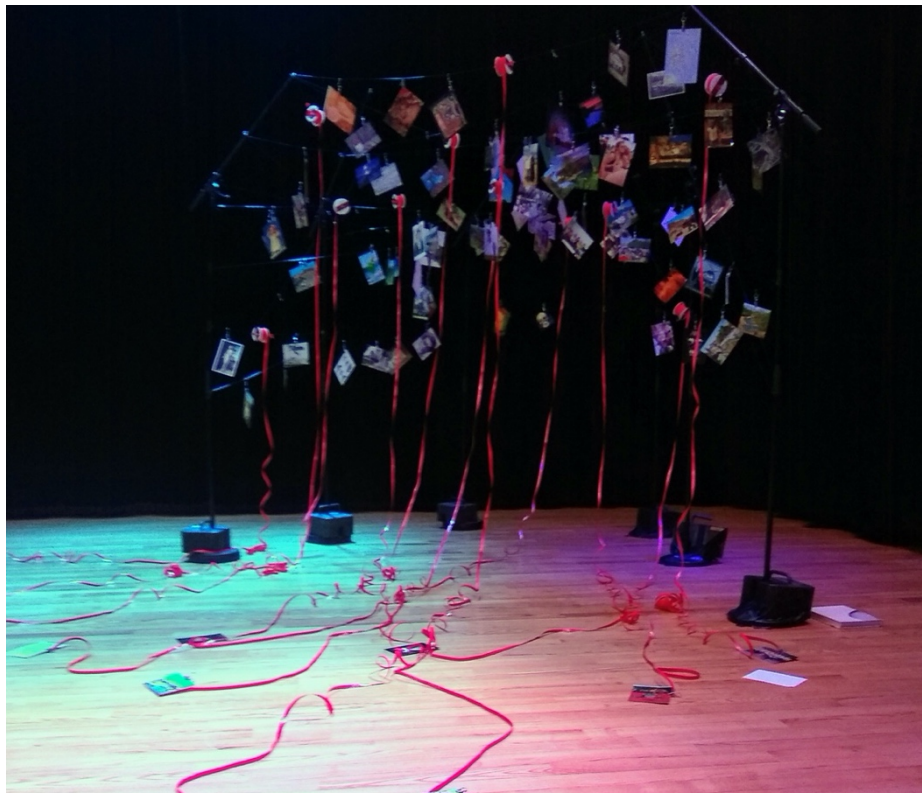


Figure 4: (left) excerpt from performance notes showing the choreography instructions for the Hocket featured in Act 2

Other sections are more reliant on extramusical materials. The Photograph Station in Act 2 uses a structure to erect 100 or so hanging photographs and postcards. In amongst the mass are 11 specifically chosen images hanging via red ribbon with texts handwritten on the backs of each. At a specific point in Act 2, these are collected by performers, with the red ribbons slowly being drawn out from the structure, forming a web in the nearby space as the texts are read individually one after the other.

For me, this whole scene is a representation of the interconnections of the mind, soul, inner and outer voice - a sum of I and we; a criss-cross fragmentation of identity where the past intersects the present impacting what is to be (or not to be). These are threads of thought, reflection, memory, experience, emotion. They are the residue of remembering interlaced in a growing sprawl of entanglement with no clear beginning or end. It is like entering into a collective evocative mind-space.



Picture 11: Photograph Station, taken after the recording session, June 3, 2021, by Casey Moir

Visually, this scene creates quite the impression, while sonically things are rather simple. Heard here is thoughtful spoken word over the continuous low rumble of creaking (made vocally and by Waldteufels) interjected only by the occasional striking and subsequent ringing of individual chimes.

When considering the spatialisation of sound and the framing of space for this piece, I knew I didn't want everything to always be happening everywhere, nor did I want events to happen only in a few areas. I wanted to create a natural flow between the mobile and the stationary and/or situated. The idea of using stations was adopted to centralise specific sections to certain areas in the room. These include the Photograph, Mirror, Fan, Book, and Armchair stations.<sup>80</sup> Each make up their own visual-sound scene. These are offset by other instructions and actions that allow for directed movement through the room or even free movement within the space. All are efforts taken to better disperse activities throughout the performance space, creating the fluctuating proximities and shifting perceptions of the *where* of sound that distinguish the work as being omnidirectional.

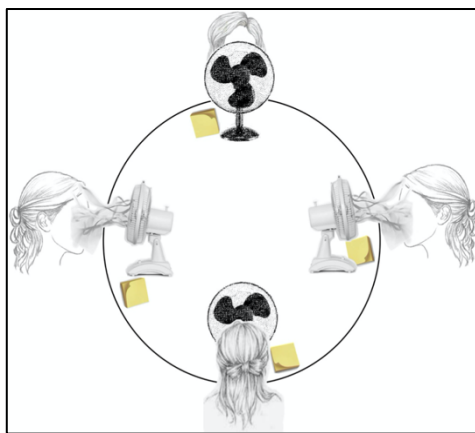


Figure 5: (left) diagram of Fan station set-up and performer positions, Act Three



Picture 12: (right) photograph of Armchair station used in Act Three

With so many different moving parts, it was important to create a form of coherency in the piece that would connect stations and the other activities happening in space. The consistent use of the voice voicing the texts is the most obvious such connection. Click pens are another. They are sounded recurrently to signify the end of an Act and to indicate the need for performers to reposition themselves in preparation for the next Act. They also provide a form of continuity and short vocal reprieves for listeners to rest in before being launched into the coming Act.

I spent much time contemplating how to best interpret Stein's indication of (Four and four more.) in Act 4. She had not written eight. Nor had she written just four either. Acknowledging this would need time to marinate and mature, I started working with the Act Four text, dividing it into two parts. From looking at how Stein had ordered the text on the page, it seemed only natural to have the first four indented passages make up the initial part, and the remaining paragraph make up the final part of the Act.

<sup>80</sup> See Attachment 4, Room and Station set-ups, pages 2-4.

#### ACT FOUR

(Four and four more.)

A birthday, what is a birthday, a birthday is a speech, it is a second time when there is tobacco, it is only one time when there is poison. It is more than one time when the occasion which shows an occasional sharp separation is unanimous.

A blanket, what is a blanket, a blanket is so speedy that heat much heat is hotter and cooler, very much cooler almost more nearly cooler than at any other time often.

A blame what is a blame, a blame is what arises and cautions each one to be calm and an ocean and a masterpiece.

A clever saucer, what is a clever saucer, a clever saucer is very likely practiced and even has toes, it has tiny things to shake and really if it were not for a delicate blue color would there be any reason for every one to differ.

The objection and the perfect central table, the sorrow in borrowing and the hurry in a nervous feeling, the question is it really a plague, is it really an oleander, is it really saffron in color, the surmountable appetite which shows inclination to be warmer, the safety in a match and the safety in a little piece of splinter, the real reason why cocoa is cheaper, the same use for bread as for any breathing that is softer, the lecture and the surrounding large white soft unequal and spread out sale of more and still less is no better, all this makes one regard in a season, one hat in a curtain that in rising higher, one landing and many many more, and many more many more many many more.

*Figure 7: (above) screenshot of complete texts of Act Four, What Happened, by Gertrude Stein*

I improvised four lines of countermelodies for each of the first four indented passages, without deciding a time signature or key etc. I relied heavily on the natural rhythm of speech while applying pitches spontaneously. Passage one for Voice 1 was established first. While listening to the recording of it, I improvised a melody for passage two and so on, until all four layers were in place. The playful nature of these texts influenced the playful character of the countermelodies that arose.

Gertrude - This Happened  
Act Four

Gertrude Stein

Casey Moir

**A**  
(in 4/4)

**ALL**  
1st time only

**ALL**  
2nd time only

$\text{♩} = 100$

*mf* [1st time only] A birth - day what, is a birth - day,  
*mf* [1st time only] A blan - ket,  
*mf* [1st time only] A blame what is  
*mf* [1st time only] A cle - ver sau -

a birth day is a speech, it is the se cond time when there is to - ba - cco -  
 what is a blan - ket, a blan-ket is so...spee dy that heat much  
 a blame, a blame is what a - ri - ses and...  
 cer, what is a cle - ver sau cer, a cle ver sau cer is ve ry like - ly prac - ticed and e ven has toes,

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V1 it is on - ly one time when there is poi - son.  
 V2 heat is hot ter and coo ler, ve - ry much coo-ler al - mo  
 V3 cau - tions each one to be cal - m  
 V4 it has ti - ny things to shake and rea - lly if it were not for a del-i-cate blue

V1 It is more than one time when the oc - ca sion which shows an oc - ca sion al sharp sep ar a tion is un  
 V2 st more near - ly coo - ler than at an - y oth - er time of -  
 V3 and an o - cean and a mas ter.  
 V4 col or would there be an - y rea - son for eve ry - one to dif fer

Example 9: (above) excerpt from score showing countermelodies in the initial part of Act Four

**Choreography**



**Circle Walk:** Positioned around the mirror station, facing inwards and holding hands, proceed to step around it clockwise, one step/beat, using: LFL - T - RFR - T (larger step with left foot to the left (LFL) - together (T) - smaller step right foot right (RFR) - T - LFL - T - RFR - T)



**Inverted Circle Walk (ICW):** Same as above but facing outwards instead of inwards. To intake position, release hands on final beat 4, turn 180° on beat 1 of the repeat, continuing the action now facing outwards.

Note: text is to be mimed, not sounded, during ICW

Figure 8: (above) choreography instructions for initial part of Act Four

This playful characteristic also made me think of children singing a rhyme while holding hands and dancing in a circle. This influenced the choreography of this section, namely the Circle Walk, and the Inverted Circle Walk.

For the final part of Act 4, everything stems from a collective F# and evolves into intricate close harmonies. Moving only by semitones throughout the passage, a slow shifting cluster emerges from the otherwise homogenous sound-picture.

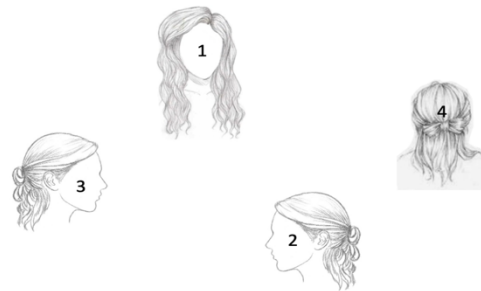
To this sound mass, I had envisaged the choreography of a cluster of bodies, that would allow the prominent harmony (perceived by individual listeners) to shift with the changing direction of performers. Although aiming for interdependency between sound and movement, my original choreographic idea for this passage proved the hardest for performers to execute. Having trialled a weave (on my own) that would have had performers move around, between and past each other, I quickly realised in rehearsals that this slow, seemingly simple sequence, provided a rather complex coordination conundrum when done in conjunction with the clustered harmonies, tempo, sheer amount of (nonsense) text, and the rhythmical unison that was desired.

ner - vous fee - ling, the que - stion is it rea - lly a plague, is it  
 ner - vous fee - ling, the que - stion is it rea - lly a plague, is it  
 ner - vous fee - ling, the que - stion is it rea - lly a plague, is it  
 ner - vous fee - ling, the que - stion is it rea - lly a plague, is it

rea-ly an o - lean-der, is it rea-ly saff-ron in co-lor, the sur-  
 rea-ly an o - lean-der, is it rea-ly saff-ron in co-lor, the sur-  
 rea-ly an o - lean-der, is it rea-ly saff-ron in co-lor, the sur-  
 rea-ly an o - lean-der, is it rea-ly saff-ron in co-lor, the sur-

**Magnifying Rotation**

Starting positions: stand as shown, with equal distance in between each performer, beginning by standing and facing in own direction, each holding a magnifying glass approximately 10cm in front of the mouth:



When performers start to sound the text and pitches of this section, they are to proceed to rotate clockwise on the spot in own individual tempos throughout, keeping things slow and fluid, while minimising the sound from the feet as much as possible.

*Figure 5:(above) choreography instructions for the Magnifying Rotation in Act 4*

*Example 10: (left) excerpt from score of Act Four that is sung while executing Magnifying Rotation choreography*

This was the only time in this piece that I feel I failed at intuitively pairing a specific choreography to sound and text and vice versa. In this case, the initial weave choreography was a construction done after the sounding content had been decided. It was not a simultaneous realising, as with others. Not wanting to lose the desired momentum and everchanging trajectory of sound I'd envisaged, I abandoned the weave idea and settled on what I dubbed the Magnifying Rotation. Instead of intersecting each other, it has performers being situated, rotating on the spot throughout this passage at their own pace.

Now returning to the looming question of how to interpret (Four and four more.). Of many possibilities, I landed in using repetition in combination with the idea of inversion and the visual use of mirrors and later magnifying glasses to establish an artistic representation of this instruction.

Performers begin Act 4 by initially executing the Circle Walk. They're facing inwards, stepping in time, and slowly encircling several mirrors while singing. The mirrors are reflecting their images back out at them and through the cracks and voids, created between their moving bodies, to watching listeners. This section is then repeated with inverted action and sound. The Inverted Circle Walk choreography, with performers now facing outwards, coupled with the miming of the text that just was (the sounding of it now only residue in the memory of listeners), creates an inverted echo (a repetition). It is a metamorphosis of what was, to the residue of what is and what will soon be past.

In the final part of Act 4, magnifying glasses are used to magnify the mouths of performers, creating the illusion of eight mouths - four actual and four (more) superimposed.

## Documentation and Performance

Faced with the reality of social distancing in a global pandemic, *Gertrude – This Happened* was initially performed for the camera only on June 3rd, 2021.<sup>81</sup> This was done using a 360° video recorder. I wanted the whole room to be captured in a way that would show and accentuate the spatialisation of sound in space, re-creating the room for a more interactive type of online viewing experience. The 360° filming technology enables viewers to decide themselves where to focus attention in the recorded room. On a computer or laptop, viewers steer their viewing perspective by dragging their cursor over their screen to change where and what they view. On a mobile device, the viewer physically rotates their phone (and body) to alter their viewing perspective. In both cases, the viewer is placed in the centre of the room (where the camera was positioned) and the illusion of them swivelling in the room to see all parts of the recorded space is created by their own interaction.

On December 3rd, 2021, this piece was finally able to be performed for a live audience. It was the final piece in the Concert Walk I designed for 6 adjoining spaces in the Academy of Music and Drama.<sup>82</sup>

Both performances were performed by the Viva Vocal Ensemble in which I started and am the artistic director for.

## Reflecting on the Process

Composing, rehearsing, and performing in *Gertrude – This Happened* was such a joy. The entire process felt intuitive and instinctive. I found the method of recording to be an effective and interactive tool in the compositional process. It made every sound, every idea, every reading, tangible in the moment and produced something very concrete to build upon.

The process also placed listening at the core. Listening to words, evocations, gesture, and both imagined and actual space shaped the artistic possibilities of the piece from beginning to end. I feel I was able to tap into somatic understanding and both internalise and externalise gesture and visceral meaning in performance. The choices made (regarding sounding content, choreographic material, and scenography) were ones that I felt intrinsically connected the words of the play with my envisaged interdependency between the sounding and the visual, the emotive and embodied, with the actual and tangible. They were, of course, subjective. Had someone else tackled these texts, the result would have differed greatly. Where we are, when we are, and who we are all seep into a piece, colouring and shaping it into being.

I had numerous discussions with my colleagues in Viva Vocal Ensemble about the concept and ideas of this piece throughout rehearsals. I also collected written reflections from them after the performances.<sup>83</sup> Amongst other things, they speak of my sought-after interconnectedness, that it was communicated, understandable and embraced by them. Kelsey Cotton commented on how “the movement is so integral and complementary to the production of sound”.<sup>84</sup> Hannah Tolf wrote that “It felt important to be a part of this” and reflected on the sensation of feeling every word in her body.<sup>85</sup> Kristina Issa (who only performed in the video recording) wrote that “what [she] thought was interesting in this project was working in the space with body and sound. The stage was not relevant,

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<sup>81</sup> See Video Link 2, to view the full 360° video recording.

<sup>82</sup> Links to the documentation from this occasion can be found in the next chapter: *Choreographing and Composing a Multi-Space Concert Walk*.

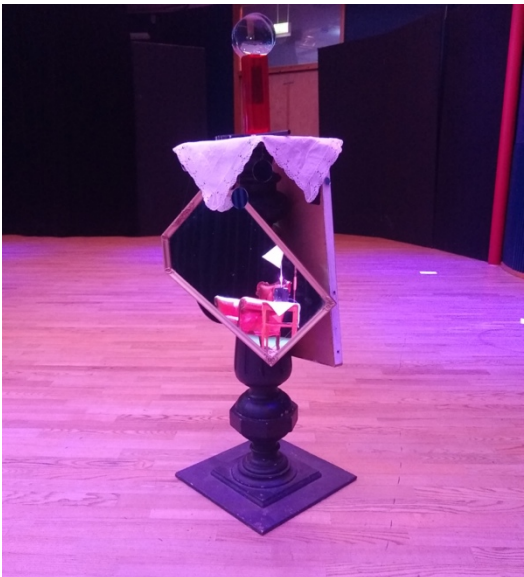
<sup>83</sup> See Appendix 3.

<sup>84</sup> See Appendix 3, written response of Kelsey Cotton.

<sup>85</sup> See Appendix 3, written response of Hannah Tolf.



the space was”, and she continues then to describe how “the voice and the body interacted with space much more” due to this.<sup>86</sup>



*Picture 13: (top left and right) performers Kelsey Cotton, Matilda Andersson, Casey Moir, Hannah Tolf and Kristina Issa, photo by Zimon Holmberg; (bottom left) Mirror Station reflecting the Armchair Station, photo by Casey Moir; (bottom right) both Fan and Photo Station, photo by Casey Moir; All photos taken 3/12-2021, in Lindgrensalen at the Academy of Music and Drama.*

<sup>86</sup> See Appendix 3, written response of Kristina Issa.

## Choreographing and Composing a Multi-Space Concert Walk

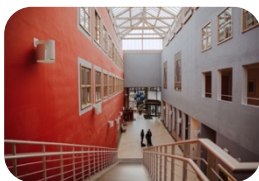
[O]ne of the beauties of live performance is that it ignites a space and time and then disappears.<sup>87</sup>  
Meredith Monk

For the final project, I wanted to design a situation that would mobilise performers and audience alike. To this effect, I decided to create a *Concert Walk* – an ambulatory investigation of omnidirectionality in performance. This concept is centred around a wandering situation allowing all to roam in active interaction with sounds, spaces, time, and each other, involving a series of sounding instances and works that combine live performance with other sound and art installations and instances.

A central ambition of the *Concert Walk* is to extend the *who* of mobility to include the audience. In doing so, it explores the agency of listening by giving listeners more choice in their experience of the events unfolding. I wanted to change the usual premise for concert participation to one requiring the audience to make choices about what direction they're facing, the momentum they have, the path they take through the soundscape, the changes of perception to be made with the turn of a head and so on.

The *Concert Walk* entailed an expansion of the concert format to include several stages, scenes, and rooms, annexing both traditional and non-traditional performance spaces. For this *Concert Walk* six connecting rooms within the Academy of Music and Drama were decided upon. These were consciously chosen due to their interconnected nature, sharing walls and doors, to ensure the continuity of concept and sound, with the one flowing into the next.

The six spaces of the *Concert Walk*<sup>88</sup>



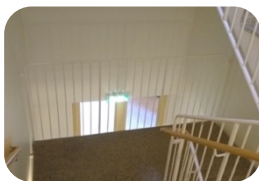
1. Foyer



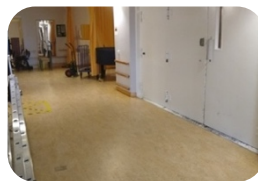
2. Sjöströmsalen



3. Upper Corridor



4. Stairwell



5. Lower Backroom



6. Lindgrensalen

<sup>87</sup> Nick Kaye, *Site-specific Art: Performance, place and documentation* (London: Routledge, 2000), 203.

<sup>88</sup> Picture 1: taken by Nathalie Greppi, 2018, Gothenburg University. "Academy of Music and Drama." Accessed June 7, 2021. <https://www.gu.se/scen-musik/om-oss/kontakt>  
Pictures 2-6 taken by Casey Moir, spring 2021.

While composing the piece *Gertrude – This Happened* I was constantly reflecting on the multifaceted nature of the voice. The voice is a powerful and evocative instrument. It is emotive, primal, and ancient. It is a dialogue between the inner and outer, with identity, self and other. It generates actual, figurative, and social resonance. It is silent. It is loud. It is action. It is felt. It is sensed. It knows our fears and our desires. It has existed since the dawn the time. It has so much to say and has said so much already. These reflections were influential in establishing the connecting thread conceptualising the content of the *Concert Walk* pieces, and the overall theme of *Transforming Space: the evocative power of the voice*.

The transitions from one space to another were also designed with a desire for everything to be performative parts of the whole - from the utterance of the very first word in the *Welcome Speech* in the foyer, to the last pen click of the final piece *Gertrude – This Happened* in Lindgrensalen.

**WELCOME SPEECH**

Hello everybody. I would like to **welcome** you all to today's **concert walk**. My name is Casey Moir and I am **delighted** to share this experience with **you**.

Performing today, we have the **Viva Vocal Ensemble** and **guests**, and visual artist Lena Czerniawska.

For some time now, I have been exploring the **choreography of sound**, discovering how things like **movement**, trajectories, direction, **placement**, and momentum affect **sound**, and our perception of it. I have also been looking at how these can **transform** space.

This **concert walk** will take us through **multiple spaces**, each one presenting a different take on the overall theme: The **evocative power** of the **voice**. Just as important is the **body**, and how it can embody and communicate **gesture**, emotion, and **unspoken** narrative.

Example 11: (left) excerpt from *Welcome Speech* text score

Example 12: (below) *Welcome Speech* instructions and key

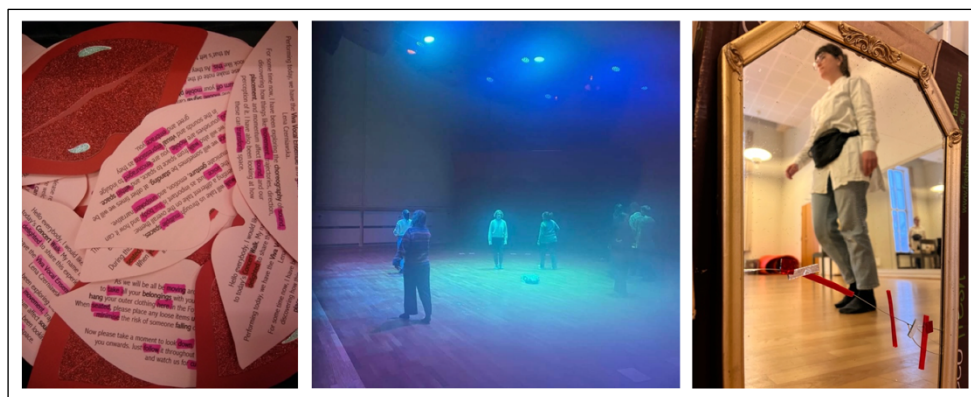
**Instructions:**

- Vocal Ensemble and Guests to stand interspersed amongst the audience
- Main Speaker to stand in front of everyone
- All are to hold a Large Lips postcard with accompanying cue cards (complete text) around 20-30cm out in front of their mouths
- Main Speaker recites entire text
- Vocal ensemble, guests and artist to say aloud their BOLD colour texts (according to the key); this is done where indicated and in unison throughout the speech

**Key**

Black – main speaker only  
 Purple – tutti: vocal ensemble, guests, main speaker  
 Green – those on left half of space and main speaker  
 Orange – those on right half and main speaker  
 Yellow - guests and main speaker  
 Blue – viva vocal ensemble and main speaker

With the *Concert Walk* having both structural form and overall concept, each space was then specifically fashioned to form its own sounding and visual ecology. Each was to present its own angle on the overarching theme. This process involved spending time in each space, testing ideas, deciding on specific sounding content to shape space, composing choreography and scenography by trialling lighting and ways to position or move sounding objects (bodies, portable speakers, and radios) as well as other objects, props, and art in the spaces.



Picture 14: (left) *Welcome Speech* cue cards, photo by Casey Moir; (middle) rehearsal and lighting trial for *Whisperings* in Sjöströmsalen, photo by Lena Czerniawska; (right) rehearsal of *Gertrude – This Happened*, photo by Lena Czerniawska



Picture 15: (left) preparation of Upper Corridor with hanging speakers, photo by Casey Moir; (middle) testing positioning of bodies in stairwell with both hanging and tape art, photo by Lena Czerniawska; (right) preparation of Lower Backroom with hanging art, tape art and hanging radios, photo by Casey Moir

The essential elements (relating to the voice) that I focused and expanded upon, include first impressions, whisperings, the breath and breathing, a descent into the inner voice, the primordial voice, and communication beyond linguistics. The walk was also intended to be an interdisciplinary event. Beyond soundings, are visual elements, such as lights, art, live projections, red tape guiding the audience onwards and more. These are employed to extend soundings and performance into the visual sphere and even scale them to the spaces they are infiltrating and transforming.

### WHISPERINGS

Example 13: (left) the score of Whisperings; (right) photos of the working process to create the collage texts in Whisperings

Invited to participate in this performative venture was the Viva Vocal Ensemble and guests, as well as artist/illustrator Lena Czerniawska.<sup>89</sup> Together I was aiming to engage the senses in this multi-space, multidimensional work.

### A Detailed Description of the Concert Walk

The *Concert Walk* began in the foyer of the Academy of Music and Drama.<sup>90</sup> With all performers and audience intermingled in front of the stairs, we held the *Welcome Speech* for the audience, in which the performers emphasized certain chosen words throughout.<sup>91</sup> The speech, including the dispersion of words throughout the space and performers, combined with the simple choreography of rotating the body 90° at will at any time, spatialised the presentation. It was intended as a sounding first impression, a sounding invitation into the concept of the walk.



Picture 16: (left) tape art in Foyer before the performance, photo by Czerniawska; (middle) Welcome Speech in Foyer during performance 3/12, photo by Linnea Häggkvist; (right) Welcome Speech during dress rehearsal 3/12, photo by Czerniawska

The audience was then ushered into the main concert hall while performers sounded a drone of whispers. Everyone (performers and audience) was led onto the stage in Sjöströmsalen. The piece *Whisperings* was then performed, all the while everyone was encouraged to roam around on stage.<sup>92</sup>

In short, *Whisperings* is an ambulatory piece lifting unspoken dreams, aspirations and wishes that have never been realized.<sup>93</sup> During this open score piece, the basses create the drone of the world around the pitch G, as all other performers sound whispers. These main sounds are then interjected by the sounds of distraction, lies, misbelief, uncertainty, societal noise, and doubt, which are created by the irregularly recurring sounds that individual performers can choose to sound at will. These increase in intensity before the collage texts take over one by one as performers whisper words and phrases into the space and ears of the audience.

<sup>89</sup> Lena Czerniawska (PL) is a freelance artist and illustrator, living in Berlin. We have known each other for years, working together in various projects. Visit her website for more info: <https://lenaczerniawska.weebly.com/>

<sup>90</sup> See Video Link 3 for video highlights from the performance, showing each space, each piece, and the transitions from space to space.

<sup>91</sup> See Attachment 5.

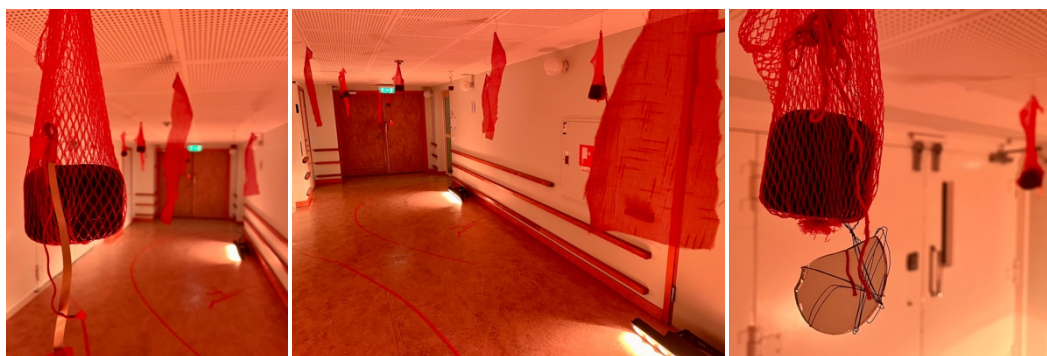
<sup>92</sup> For specific highlights, see Video Link 3, 01.39-05.27.

<sup>93</sup> See Attachment 6.



Picture 17: (above) dress rehearsal and room preparation in Sjöströmsalen on 3/12-2021, photos by Lena Czerniawska

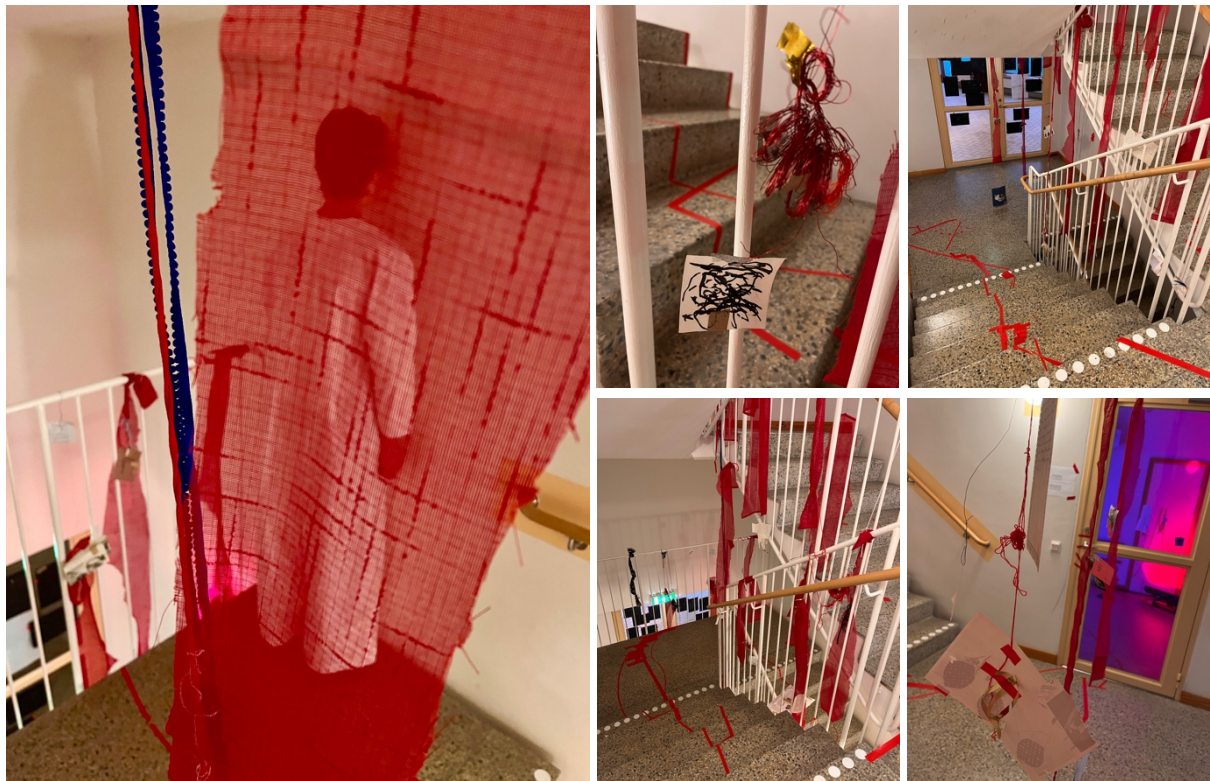
At the conclusion of *Whisperings*, the Viva Vocal Ensemble switched to sounding long, audible inhalations and exhalations. They combined this with using body language to encourage the audience to follow so they could be led up the stairs to the upper corridor. The upper corridor (otherwise used as an emergency exit and to transport instruments around the building via the large elevator) was transformed using lights, tape-art on the floor, simple red cloth hanging from the low roof, and by pre-recorded sounds of the breath being projected via several small hanging speakers. The intent was to create an artistic simulation of being inside of lungs, with the sound of the breath and breathing amplified to the size and scale of the corridor in question.<sup>94</sup>



Picture 18: (above) Upper Corridor before the performance, photos by Lena Czerniawska

<sup>94</sup> See Video Link 3, 06.24-06.48.

The audience was encouraged to walk through this corridor at their own pace before entering the adjoining stairwell. Here, the guest performers were awaiting them, dispersed between that floor and the floor below, facing the walls. The railings and floor of the stairwell were infiltrated with art reflecting the overall theme. Performers sounded *Cascade*, comprising of quiet downward glissandi and audible sighs, that filled the stairwell in real time interaction with the active acoustics of the space.<sup>95</sup> These glissandi were intended to accentuate in sound the audiences' descent to the backroom below. It was also thought of as a figurative descent into the primordial (inner) voice in preparation for the sound installation happening in the lower backroom.



Picture 19: selection from Stairwell before the performance and during the dress rehearsal, photos by Lena Czerniawska

The lower backroom is normally used as a backstage room and for the storage of music stands, chairs, grand pianos and so forth. During the *Concert Walk*, it presented *Primordial Voice*, becoming a sound and art installation that had the audience snaking their way through the space. Pre-recorded materials of primordial vocal representations were projected via small radios that were thoughtfully dispersed in the room.<sup>96</sup> The radios were hung in amongst other hanging art strung between microphone stands, a ladder on the wall and other fixtures in the space. Behind some curtains was the artist Lena Czerniawska, working with overhead projectors projecting live illustrations into the space. Central to the transformation of this space was the artistic representation of the emotive, evocative, ancient, eternal yet ephemeral voice of time.

<sup>95</sup> See Video Link 3, 06.48-07.26.

<sup>96</sup> See Video Link 3, 07.27-08.40.



Picture 20: selection from Lower Backroom before and after the performance, photos by Lena Czerniawska

To finish the concert walk, the audience entered the final concert room – Lindgrensalen – via the performers entrance. Here, the piece *Gertrude – This Happened* unfolded, moving spoken word, vocal explorations, and props in and around space.<sup>97</sup>

Overall, the *Concert Walk* was a performative investigation into the creation of an interdependency between the sonorous and the visual, making an inseparable weave of sound, space, and image.

<sup>97</sup> See Video Link 3, 08.42-through to end.





*Picture 21: room preparations and Viva Vocal Ensemble performance in Lindgrensalen, photos by Lena Czerniawska*

## Reflecting on the Concert Walk

This work was a massive one, that saw me adopt various roles throughout the process, including composer, scenographer, choreographer, producer, and performer. It involved many logistics, performers, rooms, props, objects, ideas, and instances. Up until the very last seconds, before we (the performers) started to descend the stairs into the Foyer, I was running around making the last adjustments, making sure the right doors were open while others were closed, that the sound installations in the alternate spaces were running, double checking that the volumes were set correctly, that the zoom recorder was recording etc. Then I took a deep breath, found my focus, and we were on.

I could feel the excitement of the evening making itself known as my heart beat hard at times making my chest and body physically vibrate. At the same time, I was attentive, aware, and actively seeking engagement with space, performers, sounds and audience. I was both excited and felt calm and composed, taking pleasure in the performance.

As with all things, not everything goes to plan. In the spring semester, I was working with the school's chamber choir in the pieces *Welcome Speech*, *Whisperings*, and *Cascade*. After being postponed (due to pandemic restrictions), it was not until late September that was my new performance date (December 3<sup>rd</sup>) was set. Unfortunately, the Chamber Choir was unable to accommodate this, so I had to put together my own choir comprising of the Viva Vocal Ensemble (who was already performing in the final piece) and guests. Luckily for me, there are many wonderful vocalists in Gothenburg that answered my call for participation. Dancer Toby Kassell also joined the project via this call and was instrumental in coordinating and leading the choreographic movements of the basses in *Whisperings*.

As we were fewer voices and had less time to rehearse than planned, I revised the piece *Whisperings* to suit our number and rehearsal time. Instead of working with separate parts for tenor, alto and soprano, these parts were opened up so that any individual could make any of the optional sounding extras (OSE).<sup>98</sup> We also allocated some OSE's to certain individuals and in rehearsals we devised a system of hand symbols to synchronise certain soundings when these required more than one person to execute. It was composing on the fly, discussing, re-working and trialling alternate ideas and methods on the spot to see what would work in regard to the individual sounds, the overall soundscape, and also visually and practically while walking around.

In an early rehearsal, Kassell lifted a potential dilemma regarding the intended audience interaction in *Whisperings*. Listener immersion was a key compositional and performative element in this piece. I really wanted to create a situation that surrounded listeners from all sides, with sounds, voices and words continuously wandering and fluctuating. I was hoping that the audience would freely roam the stage during the performance, together with performers (I even put a sign near the entrance of the stage for the performance, instructing this). From previous experience with such situations, Kassell pointed out that it was more likely that people would find a spot out-of-the-way and stay there. I reflected that the intaking of this more passive position around the edges could potentially imbalance the sought-after immersion of the piece and could reduce the intended impact. But, at the time, I didn't know how to best approach this, so the dilemma remained an unanswered but likely predicament. And it happened. Although a few audience members roamed, the majority did as Kassell had predicted.

One performer reflected afterwards, "I was thinking more of how to make the audience comfortable and move into the middle of the room, rather than making the composition sound beautiful."<sup>99</sup> The focus for her was shifted to a need to engage them in the action of walking. For me, once in the performative situation, I knew instinctively what to do. I actively wandered closer to the edges and

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<sup>98</sup> See Attachment 7 for the revised *Whisperings* score with handwritten comments, choreographic instructions, and changes.

<sup>99</sup> See Appendix 4, email response of Klara Ahlersten.

audience, seeking them out intentionally. I made eye contact and purposefully aimed my whisperings, soundings, and text to them as individuals. I was listening to space, soundings, and the overall arch of the piece while performing. At one point, I remember staring intently at a man in his late 20's, giving him the word 'privilege' before moving onwards, leaving him with the sensation of that word and all it meant to him. Afterwards he commented that this impacted him, and he asked me if this word choice was intentional. To be honest, it just felt right in the moment.

I know that Kassell, leading the path of the bass group through the space, was also actively working at engaging the audience by keeping their collective trajectory.<sup>100</sup> He was purposefully making the audience move instead of the basses breaking formation to skirt them.

These acts of engagement are a little invasive, even if done slowly with care and thoughtfulness. One guest performer reflected on how "only a few made eye contact with [her] even when [she] tried to make eye contact with them", continuing by speculating how eye contact could be perceived as being a little too uncomfortable for some.<sup>101</sup> I felt though that these actions suited the mood of the piece, which was quite heavy and a little uncomfortable. It was a difficult and delicate task to voice and share the many dreams and aspirations that never came to be. This needed to be conveyed in word, action, body language and atmosphere.

I think that it's important to remember that whatever we do to encourage active interaction, we are always communicating with people, and that we can never force them into an action that they do not feel comfortable doing. The audience may not have wandered around as I'd intended in *Whisperings*, but there were other methods to create engaged interaction. I believe that in daring to engage, we create space for emotion, reflection, and impression that would not have occurred otherwise. As one anonymous audience member wrote in the guest book after the performance, "I was so moved by the first piece... (I) cried and felt so much".<sup>102</sup> We seem to have connected with this person on an emotional level in an impactful way.

One friend and former student of the academy mentioned to me in conversation afterwards that he saw the alternate spaces (corridors and stairwell) in a new light and was surprised by the artistic potential they had. One audience member wrote that he "was reminded of how easily the imagination accepts this possibility that inanimate things like buildings, spaces with walls and doors, can come alive. And it was really fun feeling oneself move downwards [in the stairwell] and to hear confirmation of that at the same time."<sup>103</sup>

Transforming all the spaces really was a collective collaboration. Although I composed all the musical pieces, sound installations and concept, the performers really took to the concept, giving the sounds meaning and spatialising them in space. Artist Lena Czerniawska was also instrumental in connecting the multiple spaces with a sense of continuity and coherence.

When I initially had the idea to construct a concert walk, I knew that it would benefit greatly from adopting an interdisciplinary approach to the whole. The wanted sensory experience and extension of sounds into the visual sphere, needed an expertise that I could envisage but not execute myself. I have previously worked with artist Lena Czerniawska in projects, such as my group CLEC, and know that she has much experience working in contexts that combine experimental sound and live art. She has

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<sup>100</sup> In *Whisperings*, the basses move either as a cluster or as a line throughout, always being in close proximity to each other. This contrasts the movement of everyone else who is free to roam around at their own discretion.

<sup>101</sup> See Appendix 4, guest performer response of Mari Åkerblom.

<sup>102</sup> See Appendix 4, anonymous 1 comment in the guest book.

<sup>103</sup> See Appendix 4, audience response of Nick Wiltshire.

such a formidable way of approaching concept and design, that entwines the sonorous and the visual in moment, situation, and space.

Prior to this performance, we had spoken about the overall concept, viewed all the spaces together (initially online via videos and photos I'd taken, then on-site in the days beforehand), and discussed the intended sounding content of each space. She was then given free rein to characterise and shape the alternate spaces, and the intended organic flow from space to space. All the while working hand-in-hand with the sonorous.

The colour red was fundamental and handled with such precision throughout. She designed all the tape art, tied together the text collages of whisperings with similar illustrations that hung in amongst the texts, decided on the lighting in the alternate spaces. She featured hanging art, attached to railings, the roof, other fixtures, and/or microphone stands linking all things and spaces together. Her aesthetics met with mine to transform space and time in performance.

The *Concert Walk* tied together the many different elements involved in working with an omni-directional approach to music. It encompassed choreographing sound and space in performance, addressing various ways to work with the *where* of sound and the *who* of mobilisation. One guest performer reflected on how “Facing the wall [in *Cascade*] made us performers anonymous objects in the room, a radically different experience than in *Whisperings* where we were interacting directly with the audience. We became part of the installation and a bridge from one room to another.”<sup>104</sup>

The artistic possibilities of various spaces were investigated and resulted in a mobilisation of interplay between sound, body and listening. The *Concert Walk* involved a more interdisciplinary approach to the whole. It managed to expand the context of listening to encompass the inner and outer spheres. It interconnected the differing sonic and visual ecologies characterising each of the spaces that were transformed, giving them new personas, emotive qualities, and intentions.

I was aiming and hoping that the sensual experience would immerse and interact with listeners, provoking thought, and reflection. But I was unsure as to how it would all be received and what it would result in in others. One audience member wrote that although he brought with him “an accumulation of deep scepticism about deconstructive experimentalism and postmodern art in general”, he “left feeling so pleasantly proved wrong about [his] preconceptions”.<sup>105</sup> He described the *Concert Walk* to be “a beautiful sensual experience that drew the mind into its world with an increasing desire to know what was there, and one was rewarded with much to think about and reflect upon”.<sup>106</sup>

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<sup>104</sup> See Appendix 4, written reflection of Hannah Shermis.

<sup>105</sup> See Appendix 4, written reflection of Nick Wiltshire.

<sup>106</sup> *ibid.*

## Overall Reflections

### On-site Experience and the Challenges of Documentation

As with all the omnidirectional pieces I've composed and presented here, they're built around the central structural ideas of a) giving an individual experience of a collective happening, and b) designing a situation that encourages an interconnected interaction between performers, audience, space, time, sounds, and listening. The result is a flux of proximities and trajectories, giving each moving sound, each voice, each instrument, each position, its individuality in the collective and ever-changing soundscape.

Throughout this entire process, I have placed a primary emphasis on the live experience. Being on-site is an integral part of the aesthetics and atmosphere of performance. The omnidirectional approach is one that requires on-site participation to gain a full appreciation for such a work. This presents certain challenges.

In times when audiences have been limited, or non-existent (due to pandemic regulations), documentation has become an important tool in the capturing of my pieces. I've found this to be a difficult task. I have taken photographs to show the space, lighting, placement of objects and so forth. I have recorded all performances with audio and most of them with video also.

*Gertrude – This Happened*, was initially recorded via a GoPro Fusion 360° camera, placed in the centre of the room, with audio being recorded via an ambisonic microphone hanging directly above it. For the *Concert Walk*, two friends were fitted with their own GoPro recorders, one mounted to a head strap, and the other via a chest harness. They bore these throughout the experience, capturing everything from their own positioning and vantage points. These mobile cameras were combined with two fixed cameras, one in each of the main concert halls capturing an overview of each of these spaces. In *Crackle Crunch Climate* two GoPro cameras were placed on the mobile trolleys being transported around the space, as two fixed cameras captured the room from two different angles. All of these were conscious attempts to better capture the room, spatialisation of sound and the progression of the compositions and concept.

Nevertheless, this documentation doesn't, and cannot, precisely translate or fully capture the room. It cannot wholly represent the presence, energy and atmosphere of the moment, the interaction between all present parties, no more than it can truly replicate the spatialisation as experienced on-site.

The role of documentation is to give a glimpse into the whole, a look into the concept, an insight into the performance. But it always falls a little short of actual on-site participatory sensory experience. Documentation is a kind of contorted perception of reality. The perception of *where* gets somewhat lost in the compromised recorded format; the feeling of space is flattened in the frame of video. What is left is a 2D representation of the omnidirectional experience, akin to that of looking at a still photograph of a moving object. The still might give some hint of motion but the moving object in question is perpetually caught mid-motion and sustained there, never returning to what was, never continuing onto what could or would be. Experiencing via documentation also drastically affects the social act of listening. The listener becomes much more isolated and disconnected to the world being built in sound and space.

This said, I feel working with the 360° video documentation has been much more interesting and more successful in capturing the concept of spatialisation in *Gertrude – This Happened*. It encourages the viewer to be interactive in their watching, deciding themselves where and when to change their

viewing perspective.<sup>107</sup> Also, the combination of mobile and fixed cameras succeeded in capturing additional viewing perspectives. The GoPro cameras were especially advantageous in showing the listener and/or performer perspectives in a more fluid and free manner throughout the *Concert Walk*, respectively *Crackle Crunch Climate*.

Despite the challenges and shortcomings of documentation, we live in a digital age that more and more requires one's music and artistic practice to be documented digitally. With the rate of technological advances, we are being led into a field of possibilities that I find rather overwhelming but also a little alluring. I feel the weight of the increasing expectation for artistic vision and quality to be captured and shared with others via documentation. In some ways, documentation is seen as a measure of creative intent and skill. Although documentation is not a specific focus for this investigation, I feel that there is more to discover, understand, and harness here.

### **Flexibility and Versatility within Composition**

Just as situation is versatile, shifting and everchanging by nature, I feel a need for my pieces to incorporate an element of this also. They need to be adaptable to the degree that the creation of situation in interaction with space is made possible. This said, as I take a step back to overview the process of the last couple of years, I am struck by the detailed nature of my work. I am both in awe and a little perplexed by it. The works I have created have been the result of experiments, all looking at room, space and the creation of context and situation in very controlled environments. Coming from the flexibility of free improvisation I find myself knee-deep in the detailed score. On the one hand, they have allowed me to explore, discover and experiment with omnidirectionality in a very concrete manner. On the other, I realise that even if I have designed the desired situation for these specific pieces (or rather the initial performances of them), I feel somewhat removed from my endeavour for flexibility - composing and designing sounding situations that have the freedom to explore the current circumstances, the context that is there and then. And this sense of distance is one I find myself at little at odds with.

Reviewing the works mentioned, I feel that my efforts to mediate details has in some cases resulted in the magic of the moment not fully reaching its full potential. Improvisation, or at the very least the act of giving the performer some form of artistic choice in performance, has at times been replaced with a degree of rigidity correlating to the appropriated precise nature of the scores. Although not applicable to all pieces, I feel it is particularly true for *Rotations and Slides*.

Instead of just providing one coherent score for *Crackle Crunch Climate*, I made a very detailed text score and a graphic score that I combined. My indecision about the best way to notate this piece speaks to the difficulties I've had in relaying my ideas and thoughts via notation. It has been challenging to know how to best notate music when it's not just sounds but also movement, spatialisation, the creation of situation, and the transformation of space that needs to be communicated. Rehearsals of this piece revealed that verbal instruction and body language were a much more efficient means of communication. They alleviated some of the confusion created by the (dual) score. I could discuss, describe, and show spatial instructions with my voice and body. This type of communication created a more direct contact with concept, space, room, sounds, and movements.

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<sup>107</sup> This technology is still quite new and hopefully advances will see the 360° camera image being sharper and more focused at differing distances and be able to better handle shifting lighting conditions (which created focus issues when trialling these for the recording).

Subsequently, the experienced benefit of on-site communication raises questions about the aim of notation. Is my goal as composer to give sufficient instruction so that ensembles can independently perform a piece, thereby removing the need for me to be an active participant in rehearsals? Or do the difficulties that have surfaced reveal a need for me to be on-site, working together with an ensemble, piece and/or space? Even if I have been trying give the pieces a versatility and longevity that does not require my active presence, I may need to accept that it is not the most efficient or even desired working situation for the realisation of these omnidirectional pieces.

There is no one solution to notating and communicating the *what*, *when*, *where* and *how*. I have trialled combining conventional musical notation, instructions, diagrams, graphical elements, audio drafts, instructional videos, and anything else I've deemed suitable to use in the transferral of concept and content into score and performance.<sup>108</sup> I find that this process is still under development. The more I compose, the more I find gaps that need to be filled, mountains of instruction that need to be dismantled and/or rearranged, and the need for diagrams and symbols to be constructed to make instruction accessible.

In a seminar I attended during my master studies, Juliana Hodkinson spoke of a value to be found in the incompleteness of a piece.<sup>109</sup> She spoke of how her pieces evolve over time, revealing other possibilities for the core material. I am of the belief that a piece is never truly finished or final. A notation is a representation of a (musical) design for a specific piece and its situation, construction of space, performance and possibly even for a particular ensemble. But any piece can have multiple versions, that through revision, can be modified to suit the presiding situation and context. The notation provides a form of reliability for material that is, in a sense, unreliable. It is material that can change and should change if found not to work in a specific room, space, context, or performative situation.

I can envisage multiple possible versions for all the works mentioned here. *Rotations and Slides* could be re-worked to an open score format, rather than a linear one. It would maintain the concept of friction, as well as the pairing of sounds, spatialisation and manipulation of sound, without locking them into a specific order or length and/or number of occurrences. The *when* would be made subject and secondary to the *where* and the *how* of sound. The performer would be in possession of more artistic choice, able to make their own line with and through the given material, created in the moment, listening to space and their performance.

Although *Crackle Crunch Climate* was written for a specific ensemble, the ensemble in question has more members than were present for this particular collaboration. The piece could be re-worked for more musicians. It would also be interesting to have it leave the performance hall entirely for an alternate or outdoor area. I wonder then how the sounds would carry? How would the change in location affect and change interaction with the topic of climate change that the piece addresses?

*Outside In* could become an electroacoustic piece, with all the material being pre-recorded and projected into a space filled with multiple hanging speakers. These could play the piece in the chronological order as stated in the score or the sections and sounds could, in turn, be triggered (via sensors) by the roaming of listeners passing underneath the loudspeakers.

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<sup>108</sup> For *Crackle Crunch Climate* I made several short instructional videos for performers showing specific techniques, such as the muffled bell ringing in plastic, how to play the music-boxes on the Zither, how to hold and play the elephant bells, and more. For other pieces I made audio recordings for performers. In *Whisperings* these were in the form of many short recordings of each optional sounding event. For *Gertrude – This Happened* it was in the form of the created Audio Draft.

<sup>109</sup> The seminar with Hodkinson was held via Zoom in February 2021 for HSM master students in composition.

Future adaptations of *Gertrude – This Happened*, could see the 5 Acts become 5 separate short pieces, possible to be performed singularly or in any which order, no longer adhering to the stipulated chronology of 1-2-3-4-5. It would also be interesting to have each of the Acts performed not in the one space but at different venues or locations. This could be done simultaneously (requiring several vocal ensembles) or have the ensemble (and audience) move from one location to another. Modifications would have to be made to the choreography to customise it for the space it is transforming but the possibilities really are endless.

This flexibility I speak of here, is however not apparent in the scores. The scores give the impression of being finite and final. But despite appearances, they are not. They act as a guide for a specific performance setting and situation. The scores represent just one of many possible versions. They are outlines and suggestions of what might be. But there is room for change and for evolution. They just need an openness to the possibility of working the space they find themselves in.

Example 14: selection of notational excerpts from multiple works;  
 (top) *Crackle Crunch Climate*;  
 (middle left) *Outside In*; (middle) *Rotations and Slides*; (middle right) *Gertrude - This Happened*;  
 (bottom left) *Welcome Speech, part 1 of Concert Walk*; (bottom right) *Whisperings, part 2 of Concert Walk*



# Conclusions

To conclude, I return to my investigative questions, summarising how I've tackled these, how they have affected my artistic practice and choices, and I reflect on the overall process.

1. What creative possibilities are made available to composition by the inclusion of the conditions of performance?
2. In what ways can I apply an omnidirectional approach to sound in my music and how do they affect the experience of sound?
3. What role does listening play in my artistic practice and how does it affect my compositional practice, choices and aesthetics?

In response to my first question, I find the expansion of composition to encompass the creation of situation and the conditions of performance has resulted in many varied creative possibilities. It allows for a re-evaluation of the concert format, which in turn opens for room and space to be explored as compositional parameters. It creates an open dialogue between compositional choices and the desired experience of them in relation to space and time. It considers visual stimulus as having performative agency that affects compositional choices. It investigates ways to engage listeners and performers alike in interaction with situation, space, and performance. It opens for an experience that is both inclusive and exclusive, giving intimate immersion on the one hand and at the same time an exclusive vantage point throughout. It actively works toward interconnecting the sonorous with the visual sphere, in an attempt to engage all the senses in the experience. This enables a multifaceted listening practice that reveals possibilities that were not available or even imaginable before.

In response to my second question, my main method of applying this approach relates to designing situation and the spatialisation of sound in space. Choreography has been purposed to imbue space with transformed reality, adjoining space, sound, and movement indelibly in the sensory experience. It involves making conscious decisions about the placement of sound and bodies, directing these in space, knowing which proximities and trajectories are available and desired, what kind of momentum and/or action is to be employed and so on.

Throughout, I investigated both acoustic and digital means to achieve the desired spatialisation. I trialled the use of software and/or hardware and explored the physical movement of bodies and objects in space. I examined shaping the listening space, by placing loudspeakers around or among listeners (as is so in *Rotations and Slides*, resp. *Outside In*) and carefully considering lighting and audience placement. I utilised choreography as a logistical tool to physically move sound in space (in *Crackle Crunch Climate*) and tried to harness its artistic potential in the expansion of the innate gestural expression of sound, bringing it into the visual sphere (in *Gertrude – This Happened* and the various pieces featured in the *Concert Walk*).

The further I've come in this process, the more I feel attuned (and return) to Meredith Monk's belief that every piece or work is a world onto itself. "It is really a process of listening to what something needs. What's right for it."<sup>110</sup>

This brings me to my third investigative question. The role that listening plays has become very clear to me – it is central to the act of creation. Listening activates an awareness of self, other, inner resonances, outer influences, surroundings, knowledge, and understandings. In examining my own listening I've become consciously aware of how and why I am listening. It has aided me in knowing

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<sup>110</sup> *Conversations with Meredith Monk*, 60.

what I am desiring, figuring out what is possible, and how to realise it. This has affected my compositional practice, my artistic choices, and revealed other perspectives and possibilities. Listening has changed me, and in the process, my listening has been changed.

I believe that omnidirectional composition and performance provides occasion for other social and listening dynamics to emerge between all involved. It changes the listening situation. The mere reality of sounds appearing from and moving in any direction is something that either activates and/or distracts our sensibilities. Simply put, sound that is directionally diverse affects how we listen. It changes how, when, and from where we experience it, which changes our perception of it.

In addition to composing situation, this process has been about composing sounds that engage space, performance, and experience. Collecting and reading the reflections of performers and audience has enriched my process. It's revealed the affective and subjective experience of others. It's given me insight into how my many compositional and performative choices throughout have been perceived, received, and transformed in the listening of others.

I have otherwise reflected on how the compositional process is often a solitary one. I can quite easily get lost in it and lose all sense of time. It is also a very hands-on one for me. I like to touch objects, explore them, work closely with performers, be in a space and feel it, test it, know it. While I am quite happy to be at the wheel, steering the overall direction, and being ultimately responsible for a piece or creation, I highly value collaborations and collective practices. A piece takes on its true form when the competences and expertise of others are also employed and given the opportunity to work together. It is in collaboration with others and spaces that ideas and concepts really take on a tangible and actual form. The compositions can grow into something that is no longer a solitary act. They are transformed and they transform.

Working with Lena Czerniawska throughout the *Concert Walk* was an extremely rewarding collaboration. The overall continuity would not have been the same without her efforts and work. The performance of *Outside In* benefitted greatly from having a technician present and working at the rehearsals and performance. The technician was more in-tune with the work and its needs, and I could focus on the performative aspects together with my colleagues. The piece *Rotations and Slides* would have benefitted from an expert constructing the Abelton Live spatialisation patches, to reduce or even eliminate the looming risk of uncontrolled feedback. Although humbled by the visceral impact of the performance of *Crackle Crunch Climate*, I look forward to being able to workshop ideas more hands-on and more focused with ensembles in the initial stages of composition, really ransacking the possibilities each individual performer has to offer.



Picture 22: selection from the *Concert Walk*, all by Lena Czerniawska

## Thoughts for the Future

[W]hat we really do....is constantly redefine that world that's already been defined.<sup>111</sup>  
Jamake Highwater

This research has deepened my understanding of the artistic agency of listening, movement, and space, affecting my artistic practice and work. Although some questions have found answers here, the process has also resulted in additional ones.

I've seen my role as composer (and performer) expand to encompass additional roles, such as choreographer and scenographer. Although not planned, these have become such an integrated part of the compositional process. They pose their own challenges, reveal other artistic perspectives and possibilities for composition, situation, and experience, and are highly relevant for the artistic development of my omnidirectional works.

Out of my attempts to create a more interactive listener experience, I see that the norms of concert participation could be further challenged. Although I believe that the omnidirectional experience is one that can awaken active listening, I wonder how the commonplace passivity of audience participation can be approached to encourage a more interactive interplay between audience, performer, space, sound, and movement in performance. What methods exist and what new ones can be formed in relation to inclusive interactive practices in performative situations?

I find myself intrigued by the notion of incompleteness. I am keen to explore how core material can be reused, reframed, and reshaped, with each new performance giving it new context. I am also keen to see how the concept of flexibility could be further employed and how it affects content, communication, notation, understanding and the embodiment of a piece. I wonder how balance can be established between detail and openness, between precision and choice. How much information is necessary and how much is too much? How can the content of a piece be conveyed to give instruction and guidance while also being malleable to the degree that it understands its current context, and is capable of shaping itself to work with and in it?

I also feel that there is more to be discovered about the extent in which sound can be embodied, how space can be transformed, and the scope of artistic implication that gesture has for composition and performance. I see a potential here to work more closely with practitioners in other fields, such as dance or fine art, in conducting an in-depth examination of these. How would perception, understanding and musical application of such concepts be affected by this interdisciplinary approach? This extends also to terminology and its application. Just as choreography has proven to be a versatile term with applications within musical contexts, it would be interesting to explore the musical potential of other terms normally associated with other artistic fields. This could include terms such as scale, size, residue, angles, dissolution, shading etc. It would be interesting to see how these differing inputs and perspectives would in turn affect my artistic practice, compositional process, spatial awareness, and concept of performance.

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<sup>111</sup> Jamake Highwater, "Meredith Monk in conversation with Jamake Highwater," in *Art Performs Life*, Merce Cunningham et al. (New York: Walker Art Center, 1998), 80.

# Bibliography

- Chion, Michel. *Audio-vision: sound on screen*. New York: Columbia University Press, 1994.
- Cunningham, Merce., Meredith Monk., and Bill T. Jones. *Art Performs Life*. New York: Walker Art Center, 1998.
- Dryssen, Catharina., Anders Hultqvist., Staffan Mossenmark., and Per Sjösten. *Sound and Other Spaces*. Translated by Joel Speestra. Gothenburg: Bo Ejeby Förlag, 2014.
- Goodwin, Noël, and Janet Halfyard. "choreography." In *The Oxford Companion to Music*. Oxford University Press, 2011. Accessed March 10, 2020. <https://www-oxfordreference-com.ezproxy.ub.gu.se/view/10.1093/acref/9780199579037.001.0001/acref-9780199579037-e-1379>
- Hodkinson, Juliana. "Moving and Being Moved: Affective Resonance at Play in Sonic Performances." In *Performance, Subjectivity and Experimentation*, edited by Catherine Laws, 33-51. Leuven: University of Leuven Press, 2020.
- Jowitt, Deborah. *Meredith Monk: Art + Performance*. New York: PAJ Publications, 2011.
- Järnegard, Esaias. "Techniques of Ecstasy: A Clearing for Sound." Course material in MAS232 Master Seminars FOCUS, Gothenburg University, spring semester 2020.
- Marranca, Bonnie. *Conversations with Monk*. New York: PAJ Publications, 2014.
- Mayas, Magda. "Transmitting a listening." *Série Diálogos com o Som* 4 (2017): 45-65.
- Oliveros, Pauline. "Auralizing in the Sonosphere: A Vocabulary for Inner Sound and Sounding." *Journal of Visual Culture* 10 (2011): 162-168. Accessed January 30, 2020. doi: 10.1177/1470412911402881.
- Oliveros, Pauline. *Deep listening: a composer's sound practice*. Lincoln: iUniverse, 2005.
- Oliveros, Pauline. "Improvisation in the Sonosphere." *Contemporary Music Review* 25 (2006): 481-482. Accessed January 30, 2020. doi:10.1080/07494460600989986.
- Oliveros, Pauline. "Improvising with Spaces." *The Journal of the Acoustical Society of America* 119 (2006): 68-72. Accessed October 1, 2019. doi:10.1121/1.4786316.
- Oliveros, Pauline. *The difference between hearing and listening* (2015, November). Accessed April 15, 2020. [Video file]. Retrieved from [https://youtu.be/\\_QHfOuRrJB8](https://youtu.be/_QHfOuRrJB8)
- Stein, Gertrude. *What Happened: A Play in Five Acts*. 1913.
- Stjerna, Åsa. "Before Sound: Transversal Processes in Site-specific Sonic Practice." PhD diss., University of Gothenburg, 2018.
- Szendy, Peter. *Listen: A History of Our Ears*. New York: Fordham University Press, 2008.
- Wikipedia the free encyclopedia online*, s.v. "choreography," accessed April 6, 2020, <https://en.wikipedia.org/wiki/Choreography>

## Submitted Scores

Attachment 1: score of *Outside In* including performance notes.

Attachment 2: score of *Rotations and Slides* including performance notes.

Attachment 3: score of *Crackle Crunch Climate* including performance notes.

Attachment 4: score of *Gertrude – This Happened* including performance notes.

Attachment 5: score of *Welcome Speech*.

Attachment 6: score of *Whisperings* (original) including performance notes and the 10 collage texts.

Attachment 7: revised score of *Whisperings* (only the score).

Attachment 8: revised score of *Crackle Crunch Climate*.

## Submitted Audio

### **Audio 1: Outside In**

Selection of audio excerpts from the premiere at Sound of Stockholm Festival, Fylkingen, November 21, 2019, featuring Casey Moir, Linda Olah, Kelsey Cotton and Lisa Hansson on voice and effect pedals, and Kajsa Magnarsson on Electronics.

### **Audio 2: Rotations and Slides**

Live recording of the premiere, performed at the Academy of Music and Drama, Gothenburg, by Simon Halvarsson, January 14, 2020. Spatialisation (done by automating the panning) was added afterwards by me, the composer, to simulate the spatialisation that was created by the Max for Live patches, which were not recorded live.

### **Audio 3: Snare Improvisation**

Excerpt from the recording of *Rotations and Slides* (Audio 2) that specifically consists of a snare improvisation.

### **Audio 4: Gertrude – This Happened, Audio Draft**

The original Audio Draft I made of the piece, recording my own voice and objects, that serves as an aural aid for performers in learning the piece.

## Video Links

Viewing my omnidirectional works gives a more comprehensive insight into them, than just listening to audio. Therefore, I have listed links below to the video documentation of compositions mentioned in this thesis.

### **Video Link 1: Crackle Crunch Climate**

<https://youtu.be/oBEb25lSnGU>

Video documentation of the premiere performance at the Academy of Music and Drama, Gothenburg, by Curious Chamber Players, September 30<sup>th</sup>, 2020. Recorded by Casey Moir.

### **Video Link 2: Gertrude – This Happened**

<https://youtube.com/playlist?list=PLYF-NRVFtQoFqmi6r030gsxeUzerNLfIP>

360° video recording. Performed by Viva Vocal Ensemble (Casey Moir, Hannah Tolf, Kelsey Cotton, Matilda Andersson and Kristina Issa) for the camera only (no audience) at the Academy of Music and Drama, Gothenburg, June 3<sup>rd</sup>, 2021. Recorded by Zimon Holmberg.

### **Video Link 3: Transforming Space: The Evocative Power of the Voice**

<https://youtube.com/playlist?list=PLYF-NRVFtQoG8uCnlVPJ03NKorLkvqSnI>

A video showing 17mins of highlights from the Concert Walk, performed at the Academy of Music and Drama, Gothenburg, December 3<sup>rd</sup>, 2021. Performers: Viva Vocal Ensemble (Casey Moir, Kelsey Cotton, Matilda Andersson, Klara Ahlersten, Hannah Tolf), guests Maria Palmqvist, Anna Magnusson, Hannah Shermis, Mari Åkerblom, Katarina Karlsson, Ivan Morén, Toby Kassell, Karl Gustaf Ganters and Rikard Wadman, and artist/illustrator Lena Czerniawska.

# Appendix 1-4

## Appendix 1: Rotations and Slides Performer Reflections

Performer: Simon Halvarsson

Questions were posed (16/4-2020) and answered (11/9-2020) via email

### 1. How was your overall experience working with the piece Rotations and Slides?

The piece is well thought through — from the sounds (objects, drums and electronics) and the set up to lights and the placement of the audience (for their listening as well as their proximity).

The idea was clear and well communicated to me as musician, especially verbally thanks to the meetings with Casey and her presence during the rehearsals. The notational was clear but unfortunately reversed. It took some unnecessary thinking process in the beginning to correct everything when playing but I got used to it. The process would have gone smoother if this would have been detected earlier. It was an interesting interpretation with many different tasks for me.

Technical problems with the pedals were taking some focus from the playing/listening — the concern for the pedals to work during the performance. That was a negative feeling that could have affected the performance, however this was something that I disregarded as there was an alternative solution through at the mixer table.

As my body is the instrument, to use other sounding instruments, it is important to me to be properly grounded to the floor when executing small concentrated movements. It has to do with connections in the body and moving efficiently. That was a challenge while shifting weight on the feet and moving between different pedals.

Another experience from the work was to never underappreciate the skill to do monotone and sensitive tasks for a long period of time. The marble in the lid, for example, required a meditative mode and I never realized how to properly play the lid. There was a complex balancing between concentrating on the task but not losing myself into it.

In general, I think everything went fine during the performance. It was a bit of a short focused rehearsal period, too close to the concert. Since the piece required the hall and all the equipment it was not possible to make it in any other way. However, I would have felt more comfortable if I had had more time to practice the piece for a longer period of time.

### 2. How was your experience of the spatialisation of sound in the piece?

I would have preferred a bit more volume from the speakers, matching my own sound making to a better mix in my ears. But there was some feedback issues and I understand that the sound placement was prioritized to suit the audience.

I think the idea to move the sounds in the room is very appealing. It became like a duet with myself in different places. Walking around in a circle in the beginning, at the same time as standing still; jumping around randomly while spinning the disc and preparing for the next tasks. Getting stuck, jumping around and moving at the same time. It enlarges the bodies of sound in the right and left to bring the audience into the drums — as if changing the size and presence of the audience, both for the audience and for me. Shifting between these different sound scenes. In a sense, I wish I only could have listened to the piece.

### **3. Did the amplified sound (including spatialisation and effect pedals) affect your way of interpreting and/or playing the piece at all? How?**

In the first part of the piece I considered the techniques more or less like just an amplifier and I was simply trying to execute the correct movements the right time whilst only registering the sound from the speakers.

In the second part, from the disc spinning on the table, the listening was required throughout the piece but in different ways. For example, when matching tempo in the delay and answering the reverse signals.

I also let the effects influence me figuratively and emotionally. Drawing an imaginative painting in my mind from what I experienced during the performance.

When I am thinking about the piece in retrospect, I realize that it could have been interesting not to listen at the speakers at some points, just to make the dualism clearer.

### **4. Do you have any other reflections after the performance regarding the piece?**

I enjoyed the improvisation parts very much. In one sense it created breaks for my brain so I really could focus on listening and not getting fixed on executing tasks correctly.

It would have been interesting to do the piece longer, maybe to come back to the slowness in the marble part and having a less abrupt end.

It would have been possible to use multiple sustained acoustics and/or electronics. Like sizzle-cymbals and bowls with coins and then be able to control the start and stop for the sounds. Like layers and transitions. The spinning disc was sounding great but was alone and very sensitive. I think it is interesting to let the instrument “play by itself”.

I really like the “circle-idea”. Of course it had to be compromised to fit the concert but I liked the idea with a surrounding audience with surrounding speakers. To do the concept even further the set up could have been arranged as a circle with no front with the performer moving around the instruments.

Maybe the placement of the microphones could have been different? And work more with the resonance in the drums (placement of sound source between microphone and skin).

I would have preferred an easier solution with the pedals to be able to do every switch with one foot and be sure that the pedal detected the impulse (I know there were some technical difficulties though).

It would have been interesting to connect the lights to the sound. Maybe random on/off while random sound?

The randomness would also have been interesting to use in the score to influence the performance.



## Appendix 2: Crackle Crunch Climate Audience and Performer Reflections

All questions were posed and answered via email

### Selected performers - Questions and Answers

#### **1. If any, what expectations did you have before working with this piece? Were these met or did they change?**

Rei Munakata: When we received the score, we expected that it will be a fun piece to work with! And it was! The high level of creativity of the composer was evident from the start and working together with Casey became even more clear and exciting.

We also knew that the rehearsals will be confusing due to the nature of the piece and perhaps the notation of the score. I think we were right...

Anna Christensson: I didn't have so many expectations beforehand. But we got an e-mail from Rei where he wrote cc: "please read everything Casey wrote about her piece so we can start without 1000 questions, because she really thought about everything". So that improved my expectations I guess!

#### **2. What are your thoughts and feelings about working with the pieces sound material (objects, fixed media, portable speakers etc.)?**

RM: We love to work with different objects, instruments, and fixed media such as portable speakers etc. Use of all these tools created a very colourful palette of sound and noise world. Personally, I would have liked to see these objects used with more variations to truly explore the possibilities. For example, the zither was used for such a short time during the piece. The setup of the zither with music boxes itself can be a piece?

AC: I think everything worked out REALLY well. All the sounds were musically interesting, all the speakers etc actually worked and the small parts made sense relating to the overall concept. (This is not very common...)

#### **3. The piece is built around two concepts. One is around the concept of creating and omni-directional live sound installation. The other is the content concept based on creating a sounding reflection about the current climate change debate and situation.**

#### **Were these at all important for you at any time in the process? How? Did these affect the way you played or your understanding of the piece?**

RM: From the logistic complexity, we were occupied with the practical matters and busy learning "what to do". It was important for us to learn about the concept of the piece at the end of the rehearsal process, and this helped us to understand the piece greatly.

AC: Of course they were important. But I like that they were so well built into the piece, so there was no need for the ensemble to be aware of everything beforehand. It all became very obvious once we were up rehearsing on the floor. Generally, I like when it works this way.

#### **4. How was it for you to work in an omnidirectional way, both logistically and artistically?**

RM: It was great! And this feature was the strongest element of the piece. Logistically it was very difficult as there is more to think about than just following a score. I would add that a graphical score based on a timeline would have helped better rather than a score with a lot of verbal explanation. However, Casey's instructions were clear and we believe we have collaborated well together on this aspect.

Artistically, this is a great way to working with a composer. Almost like a theatre rehearsal – we spend a lot of time together and discuss what works and what does not. Going through the process together is a very interesting way to collaborate.

AC: It was interesting. As usual, we should have maybe put some more effort in HOW we walked etc. But I think it became good in the end! We also had enough time to rehearse. I think usually, we would have had one less rehearsal on a program like this one. Some of the other pieces became a bit over-rehearsed. But for your piece it was really nice to go beyond just the logistics and actually have time to listen to each other etc

#### **5. How did the visual and mobile elements (room/lights/movement/placement of audience/musicians etc.) affect your experience of the piece?**

RM: In this piece, the "visual and mobile" aspects of the work were not independent. They were always about the sound. All the movements, how the objects look, and choreographies were serving the sound, and everything was connected to how the music should sound. This enhances the sonic experience even stronger and convincing.

AC: I think as I said before, everything was really thought through and created a very special moment. Nice with mixing the audience and players. The room was of course important. Very nice that we got to do it in a bigger room, but creating a smaller room within it with the lights etc.

#### **6. Do you have any other particular reflections or experience that you would like to share? Maybe a particular moment that caught your attention in one way or another? Or the effect the differing rehearsal and performance rooms had on the sounding content? Or your feeling about the final performance space/room layout and lighting? Other?**

RM: For us, an ensemble who has to rehearse in all sorts of venues that are usually not the same from the concert venue, rehearsing in different rooms is not at all any issue or surprise. We have to use our imagination to aim for the final results in the concert venue. Important is to keep the concentration and focus even the situation or the environment is slightly different.

In the opposite way, I think it was fantastic that we first rehearsed in dryer and smaller room, so we focus on what we need to rehearse on (the logistic and understanding of the details). And finally we come to the concert venue in the dress rehearsal, we fully understand the sonority of the work and get inspired. If we were in the big room from the first rehearsal, we might not keep the sonic inspiration until the concert... You never know.

For us, the highlight of the collaboration is in the dress rehearsal when Casey became so comfortable and finally leading the rehearsal. It was a very good rehearsal, and the best moments are when she was

smiling and making jokes. This makes all of us really happy and we felt that we want to work with her again in the future.

AC: My general experience was very positive and I'm curious to see how your compositions will develop! One thing to think about is maybe the amount of information that every player got. It was a bit overwhelming at first, but maybe it was needed that everybody got so much instructions. It felt like in the end, the actions required from each person were quite simple and "clean". The score looked very difficult once you started to read... But as I said, I'm not sure if it would have been possible to express the information needed in a simpler way.

### **Selected audience members - Questions and Answers**

#### **1. If any, what expectations did you have for the piece Crackle Crunch Climate going into Sjöströmsalen and taking a seat on the stage?**

Carl-Joar Karlsson: The setting seemed cool, because it's unusual to me that the musicians mix with the audience.

Shafeeq Alsadi: When I think back now that it was very refreshing to take part in the show by being with the audience. It felt very vivid, powerful, and moving that sounds, melodies, the movement was happening.

Marcus Lundberg: since I participated in the rehearsals of this piece, my expectations were already set, as I had experienced it before. There was another air in the room, however. Another type of concentration.

Joshua Wat: I knew about the piece before, so I was expecting plastic crunching and radios as well as the walking around of the musicians, so I was expecting a surround-sound ASMR concert. (*clarification: ASMR stands for an auto sensory meridian response. It is a tingling sensation that typically begins on the scalp and moves down the back of the neck and upper spine, in this case triggered by the higher frequencies made from the plastic crunching as well as from close proximity of sounds*)

#### **2. How were you feeling and/or thinking directly after the piece?**

CJK: Happy for knowing and feeling that the climate debate can be seen/heard in this way.

SA: While writing now, I don't actually remember my exact feeling. But I think being amazed by the piece as a genuine artistic creation but at the same time, a little confused emotionally.

ML: there was a calming sensation, in a way. I always feel this calming sensation after "bathing" in a soundscape like this. I was drenched in thought and reflection on many things, mostly the intricacy and relations between sounds, but also performance, listening, and myself.

JW: I was surprised by the musicians merging at the centre and playing acoustic instruments which happened beyond my expectations

**3. Before the piece started, I invited you, the audience, to close your eyes. Did you listen with eyes closed, open or both? How do you think this affected your listening experience?**

CJK: Closed. My other senses were more active and my imagination better this way.

SA: I was trying both. But I was more into wanting to see the performers and observe what is being performed and what tools/instruments/devices are being used. I think this has made it hard for me to put myself fully in the context of what was being played.

ML: I did close my eyes. I always close my eyes, as to not get distracted by the visual elements; the physicality that is sometimes required on stage to get the sound to sound the way you want it to, it almost immediately gets a theatrical connotation, and that, for me, taints the audible experience.

JW: I closed my eyes for the most time which allowed me to enjoy the surround sound more and to guess what was making the sound, but I couldn't help but open my eyes whenever I couldn't guess the sound. It reduced my attention to the sounds somewhat but not destructively so

**4. How do you think the visual and mobile elements (lights/movement/placement of audience/musicians etc.) affected your listening experience? Did they distract and/or detract? Did they add to the piece/atmosphere/feeling/sound? How?**

CJK: The movements were generally awesome, and it made the dynamic much better.

SA: I think there were lots of different elements. That made me curious to keep looking around the place to see what each performer is doing. This distracted me at some point but not much.

ML: like I explained in my previous answer: for me it's often, if not exclusively, a distraction to have things moving on stage, as well as interactions with everyday objects. However, the soundscape that is created by moving through the audience, and the intimacy of each sound in relation to another, is a beautiful thing. I just hope that people close their eyes for this sort of experience. That is just my opinion, though.

JW: In the small moments that I did have my eyes opened, the visuals of the musicians zoning into the centre and then in contrast to the musicians still moving around was beautiful. It was a bit comical when the trolleys started rolling which might not be the desired mood but that couldn't be helped. Keeping the eyes opened or closed made it two different pieces in atmosphere: opening them made it feel like the sunrays shining through the surface and closing the eyes made it feel like you were in deep dark ocean

**5. From where you were seated, what are your thoughts on the directionality, trajectory and distances between the different sounds themselves and between the sounds and you the listener?**

CJK: Some sounds made their way through easier, like plastic bags. Other sounds were a bit quiet if they were on the far side.

ML: it was a nice thing, that each person got their own listening experience depending on where you were situated in the room. I can appreciate this even more having been at the rehearsals and having been situated in different spots in the room every time.

JW: I was sitting quite far from the centre so it made it that the events happening around me were fewer. It meant that I couldn't really connect with what was happening in the opposite side and sometimes even at the centre and it took the walking musicians longer to come to me because of the larger circumference. It made it a more serene listening experience which was a good thing in itself.

**6. Do you have any particular reflections or experience that you would like to share? Maybe a particular moment that caught your attention in one way or another?**

CJK: This piece conveyed the feelings of the climate crisis, and that was pretty astonishing. A great performance.

ML: I was lucky enough to have the speaker that spoke the words "if we kill mother earth what've we got [left]?", just at the moment before everyone shouted "FAIRYTALES". It brought a magical dimension to the experience that I appreciate greatly.

JW: There was rumbling from the trolleys moving around which created a nice bass beat, not sure if that was the desired effect though!

### **Appendix 3: Gertrude – This Happened, Performer Reflections**

Reflections posed and answered via email both after the video recording made 3/6-2021, and the performance with audience 3/12-2021. Instead of posing concrete questions, I decided this time to allow performers to themselves compose their reflections, giving some general prompting towards thinking about the voice, body, choreography and spatialisation of the piece in space.

#### Hannah Tolf, written reflection after the video recording, received 10/6-2021

It felt important to be a part of this. I've longed to work with body, text and sound. For me, Casey's way of working and her piece is in an artistic field that has its own space and is needed for feeling the freedom of cultural expression and impression, free to go wherever you want in body, sound and text to reach your level of communication.

The text we worked with contained so many words and covered many situations in everyday life and special emotional situations in life. It was gently taken care of by Casey, so that I could feel every word in my body. It was lovely to work with voice and body.

It was very fun and intriguing to work with the props, text, concept and choreography in the space. It was a challenging piece and I loved that, it was easy to attach to it because Casey communicated her picture of the piece very clearly and she was always present and focused.

#### Kristina Issa, written reflection after the video recording, received 14/6-2021

Working with this piece was very fulfilling, it was also very good to work with the graphic score that Casey really made clear and had very good directions in. I was very impressed with the material that was presented to us just before the rehearsals. Having good materials to work with from the beginning was really good, and I think necessary. I think I learned a lot about writing down your thoughts when it is abstract sounds and movements, from Casey's score.

The different and various ways of using the text was also interesting. Working with text in many contexts can be very hard and I think that this project really opened up new ways for me to see text in different ways.

I think I am very used to always working with sound and body on a stage, but what I thought was interesting in this project was working in the space with body and sound. The stage was not relevant, the space was. So, I find that the voice and the body interacted with space much more, and also the knowledge that the sound is always moving.

I think working with props can always be a bit scary, because you always need to be aware of it, what it says and how it has meaning in the room. The statement of a prop is not always easy, but when you put it in a concept the statement always changes. I think Casey really did that. The concept was always more important than the props or the choreography, and that is something I really agree with. Working with it was very clear and good directions and that made it easy, and fun. Sometimes I could think that maybe this or that could be one thing too much, but when it got context, it always made sense.

#### Klara Ahlersten, written reflection after the performance 3/12-2021, received 7/12-2021

I was super inspired by the texts, they were so fun to read and sing, I felt like the words fit very nicely in my mouth, maybe because they were written to sound beautiful, not to mean anything. The words came very naturally, almost fell out of my mouth without having to think about it.

All the interactive parts were fun, where we did something in a group, for example standing back to back with Hannah, I felt most comfortable when doing that.

The choreography was fun, completely new for me, maybe because I focused so much on how to move and where in the room I should be, I did not focus as much on what I did with the voice, which was nice, it made it more natural.

Kelsey Cotton, written reflections after the performance 3/12, 2021, received 11/12-2021

From a performer perspective, Casey's approach to developing and notating choreography is incredibly intuitive, and taking part in the choreography always felt incredibly natural and grounded in the layering of vocalised sound and text. It seems impossible to be able to "just" sing one of Casey's pieces, when the movement is so integral and complementary to the production of sound. In this similar vein, I also really enjoyed how Casey engaged with Gertrude Stein's writings (which I had no familiarity with prior to this concert), and her setting and manipulation of this delightfully bizarre Modernist language.

Matilda Andersson, written reflections after the performance 3/12-2021, received 13/12-2021

I am especially grateful for the work-weekend with VIVA vocal ensemble where we got time to both work and to hang out. It was a really good event to get to know each other And I really believe getting to know each other lets us be more comfortable doing the performance together.

I think you have introduced everyone very well to the pieces and made it feel very special and also been great in introducing the pieces and vocal techniques to everyone with a good pedagogy.

In the beginning of rehearsing the Gertrude-work; I thought it was hard to realise both vocals and movements together; when neither of them worked by heart yet. The text needed a lot of focused work at first. But when the texts had landed it felt really good with the movements. And it gave the text and music more weight. The movements helped to make the texts feel even more important. I really liked to work with directions and active actions in combination with a calm presentation. It gave the performance a nice focus. The text and piece felt very real and important.

I really liked the way we used props and how they both helped the performance and also us as performers. It was crucial that we used props for some parts since we didn't have time to learn all texts by heart, and I think we used the texts very well to lift up the performance! I especially like the humour some also brought into the performance as well. I think the mix with humour, depth and art is what made it all very special and also inviting. I think the humorous parts helped to let our guard down and really invited the audience in and to break down the wall that can "appear" when having the aspiration to do something very serious.

The only prop I thought was a bit hard to work with was the radio and mp3-player at the Armchair Station. For me I was worried during the whole scene because everything could go wrong. I feel that because of this, my part was not so well performed there. The movement and actions were a bit lost in technical issues and difficulties.

## Appendix 4: Concert Walk Reflections

Reflections collected via email after the performance 3/12-2021. I allowed performers compose their reflections themselves, giving some general prompting towards thinking about the voice, body, choreography and spatialisation of the piece in space. The audience was also encouraged to leave written comments in the guest book directly after the performance, and some were contacted via email to give longer reflections. Those originally written in Swedish are included below together with an English translation, done by me.

### Klara Ahlersten (performer in Viva Vocal Ensemble), received 7/12-2021

Reflecting on *Whisperings*: I felt like I was not so much myself, more just a cell of a group, that was a nice feeling. The poems really spoke to me, like it was my own diary, which drove me close to tears at some points. When someone reacted to my cues, I felt really happy, like connecting with a person. It was a bit weird to do it with audience, since we had practiced so many times without audience, and it was a completely different thing with other people there. When we were with the audience, I sometimes had some self-doubts. I was less free with my walk (because of natural reasons), and I was thinking more of how to make the audience comfortable and move into the middle of the room, rather than making the composition sound beautiful.

### Agnes Hallberg (audience), received 8/12-2021

Oh what a piece! What an experience - like nothing (or very very few) things I've ever experienced in my life before. At times I was a bit scared (or maybe just very much excited; where do we draw the line?), I was happy (had fun), I thought deep thoughts and I was touched to the core.

Casey has a way of incorporating the spectator/listener in her work without force - it's a gentle invite to take part in your own experience. This type of art is very important in my view, as we are - in our culture - far too passive in our everyday lives.

To me the experimenting with sound as it takes form within a room (which sound always does, one way or the other) is very interesting. It is true that a sound "hits" you differently from different angles, different distances etc. Casey shines a light on this phenomenon and the fact that time and space is one - something that the "regular" sciences (i.e. not art) is just now catching on to. I think great art is the kind that touches you somehow and leaves you asking questions - it opens rather than closes. This criteria is fully met in the concert walk.

### Katarina Karlsson (guest performer), received 10/12-2021

The rehearsals: I am a singer, I completed my dissertation in artistic research 2011 about English C17th lute songs. My method was using my body as an experimental tool, that is, noticing in smallest detail how my body communicated with the songs (music and lyric in combination) while singing it. I am also an actor so working with my body was not new to me, but I have never performed a piece such as yours and never experienced it as part of an audience.

I enjoyed the attention to detail from you in the rehearsals, you are a natural leader and extremely easy to understand. There were no team-building exercises, I still don't know the names of some of the men in the group but what happened during the few rehearsals was that people were enjoying themselves so much that some started working on teambuilding spontaneously; Anna, (whom I supervised some years ago), the man with the blue hair and Toby. I especially remember a moment when the men started enjoying themselves, trying to get things as accurate as possible and taking more responsibility for their performance.



The performance: To whisper for a long time can be straining for the vocal cords. Being older has also given me a frailer voice that I must look after carefully. I solved that by giving the whispers meaning. The words “I have no balcony” fitted into the allowed sounds. I blurred it a bit, because I didn’t want it to be obvious, but that is what I used throughout the first part of the performance. The help it gave me was that I could concentrate on the communicative quality of it and “forget” that it was whisperings.

The contact with the rest of the group in the room was a nice experience. You had encouraged a spatial awareness, knowing where everyone was. I enjoyed that way of making music a lot.

The human waterfall [referring to *Cascade*], that I hadn’t rehearsed so much was a greater experience than I thought. In the Rilke Ensemble, which I have been a part of since 1980, we work a great deal with the spatial qualities of concert halls, churches and so on. We also improvise. Not in this way, though, and seldom while moving.

Being audience: The last part of the concert where I had the opportunity to be part of the audience, was light, humoristic and I loved it. I can’t say I identified words enough to give it a meaning, but to me it was a nice contrast to some super-serious electronic concerts I have attended with men bending and frowning over their laptops. The part I liked the most was the serious sliding in sandals.

Nick Wiltshire (audience), received 10/12-2021

To say that I really enjoyed your piece, along with the rest of the audience, is also to say that I brought to the start of it an accumulation of deep scepticism about deconstructive experimentalism and postmodern art in general; I am a musician, composer, and teacher, myself, and it always seems to me to remorselessly sacrifice content, and quality of aesthetic experience, on the high altar of critical discourse and I have a bearded, bellied, real-ale-drinking, b9th-#11th-b13th-playing, hands-on-physical-passionate, distaste for that, even though I appreciate the intellectual arguments. And your piece was not that – it was a beautiful sensual experience that drew the mind into its world with an increasing desire to know what was there, and one was rewarded with much to think about and reflect upon. I left feeling so pleasantly proved wrong about my preconceptions that I could not shut up about it for two days, as Katarina will confirm.

So here are the three subjects that preoccupied me during the sort of 4 movements – intro, installations one, two, and three – of your composition:

1. Sonic ecology – (!) not sure if that’s actually a thing but maybe it is now. At the end of the introduction in the foyer and as we moved (a little self-consciously perhaps) into the auditorium and immediately into a kind of forest of performers and audience, initially diffusely populated by the merest sounds in an expanse of what was mostly silence, there was time – and I thought you got the pacing of it so right (it takes courage as a composer to ask slowness and patience of one’s audience) – to heighten one’s senses and stretch one’s awareness into the whole room, everything in it, everyone in it, and to experience a kind of “being there” in quite a holistic way. And then the environment seemed to evolve in rather an ecological way; aleatoric interactions between performers grew complexity. And what was interesting to me at this point was your use of the sort of micro-flora and fauna of the sound world - breathing, contact with the ground, movement of bodies. As someone who likes to sleep out alone in the wilderness, I was reminded of that – natural environments at night, in all their incomprehensibly miniscule, but interconnected, interactions, one’s own consciousness part of an ecology of many other conscious beings. The multi-person drone-creature was fun, and reminded me of Theo Jansen’s Strandbeests (autonomously-moving wind-powered “animals”, sculptures, that are able to “live” on beaches by navigating the landscape) in the way they moved through the audience. After a long period in which sonic microbiota slowly evolved, pitch and harmony eventually emerged,

followed by phonemes and then words and then speech, and, by the end of that section, the whole space was very much alive.

2. Animism – as we moved out of the auditorium and through the hallway with its hanging soundsources, and then into the stairwell, I started to think about the ways in which the static objects in an environment, and it applies just as compellingly indoors as it does outdoors, have some kind of personhood – minds, ears, voices, thoughts, feelings, intentions – and I was reminded of how easily the imagination accepts this possibility that inanimate things like buildings, spaces with walls and doors, can come alive. And it was really fun feeling oneself move downwards and to hear confirmation of that at the same time.

3. Info-environmentalism – the last section, with just five performers, got me on to a new set of impressions and I was suddenly reminded of all the pressing issues in the world outside of the music school – climate, viral pandemic, democratic retreat, inequality and capitalism, etc - that your piece was NOT about but could have been in a boringly didactic way and was rather grateful for that. Some aspects of the sound design – the way you combined speech and melody – reminded me of the musical Avant Garde from maybe the 1970s/80s, Berio, Ligeti, etc – but I quickly got involved in the three/four stations, each of which had their own section that presented sort of allegorical enactments of the written-spoken, the microphone-recorded-posted-radio-broadcast-windblown-telecommunicated-digitally-networked, and the visual media (with the idea of magical manipulation and distortion of reality alluded to amusingly by the magnifying glasses) and really enjoyed trying to decode all of that, and to my astonishment, for reasons noted above, found myself enjoying it immensely, but also thinking about how difficult, problematic, it is to understand, to contribute to, to maintain in a sustainable way, the modern information environment; it's in a way both our consciousness and our nemesis.

Katarina later said that you had explained the [1<sup>st</sup>] piece to the performers in terms of dreams, both of the aspirational vision type and the conscious experience of sleep type, and I remembered looking at her white fingernails that I had thought the costumes were ghosts.

I thought the set design had a nice organic feel about it, and was reminded of the tracks on the floor, irregular and un-machine-like, seeing the tracks in the snow both animal and human over the last few days.

#### Mari Åkerblom (guest performer), received 11/12-2021

To be a part of this piece was therapeutic in some strange way. The fact that I was only a tiny part in the machinery made the participation a mix of being relaxed, yet with a sense of trying to focus as much as possible to be in a flow so that my contribution did not ruin the whole by doing something too much or too little. I did my best to tune into the collective organism because that is what I think this was all about. The different voices and bodies and souls weaving this evocative weave that spoke of the human power, sorrows, longing, dreams, fear, thoughts, insecurities, difficulties to connect and so on.

The different parts of the piece were very well made in being both different from each other and still very related. The walk was a powerful idea to make the piece stronger in communicating the transformation of space. The visual art was also a strong ingredient as was the unity made by the white clothes of the participants.

It was a little dry and robotic opening with the welcome speech that was an interesting contrast to the following Whisperings part that was mixing the performers and the audience in a manner that felt very

organic and the perfect mix also in terms of composed/improvised with the optional sound pallet that made the piece limited with certain motifs yet free for the performers to choose in the moment.

The listening here was crucial for me as a performer. I also felt that moving around most of the time was an important part as you get a deeper connection with your own body when you are in motion. And you get connected with all the people in the room even if it is in a subtle way. I noticed that only a few made eye contact with me even when I tried to make eye contact with them. Maybe people wanted to have a little space and felt that eye contact was too uncomfortable.

The last part that we as guest performers participated in was very strong as you didn't see the audience that walked down the stairs behind us where we stood staring into the walls making glissando and sighs. But you really felt the people behind your back and it felt a little creepy in an exciting way not to see them.

I hadn't heard and seen the last piece in this concert walk and I was blown away by the enigmatic power of it. It was so strong in presence by the five members of the vocal ensemble and it was so tight and convincing. The movements, the soundings, the texts, the props all blended together in a terrific way. It is a deeply original piece with an original language and it really transformed both space and me as a participant and I hope also the rest of the audience.

Kelsey Cotton (performer in VVE), received 11/12-2021

It is always a joy to get to work with Casey, especially on projects such as this in which the full expressive potential of the voice is utilised. What I especially enjoyed about being involved in the Gertrude quintet—and also experiencing the concert walk at various stages throughout the rehearsal process—was in Casey's thoughtful approach to spatialisation. Her use of the vertical plane—especially in the descending staircase piece—really took full sonic advantage of the possibilities offered by the venue's architecture and its acoustics. Casey's approach to working with sound deeply considers the role of the space as an active participant in shaping vocal trajectory and movement, and it's incredibly inspiring as a performer to get to work on a score where the composer has clearly thought through the intricacies and subtleties of a space's impact and interaction with any sound event that occurs within it.

Maria Palmqvist (guest performer), received 12/12-2021

The piece *Whisperings* allowed for a new way of listening. I became more attentive due to the spatialisation of the sound. I experienced a feeling of being “inside” the piece; like I was being a part of a larger living organism, constantly evolving. I really enjoyed the slow walk while making the sounds, it offered a relaxed feeling of working with the body. By slowly walking or slightly altering the body's direction, the meaning of the sounds also seemed to change. Meeting the sounds of other people, especially if reading text, was powerful and emotional. Hearing fleeting bits of the texts that you then could respond to with your own text, provided depth and multiple layers to the piece. The composition and the spatialisation of the piece allowed for a constant interaction of expressions. The space became a part of the composition, rather than a backdrop to the sounds, in a very effective and thoughtful manner.

Anna Magnusson (guest performer, received 13/12-2021

It was initially uncomfortable for me to work with new sounds. I am always a little frightened when I make sounds and noises that I feel like I can't control. I open my mouth and it is a surprise what is coming out. When that is not the task - to surprise oneself and others- it feels like I am taking a risk. That I might make a fool out of myself. It was also strange for me to use my voice and my body but

not in the way that I normally use them during performing, or anything else for that matter. I usually sing musical theater, opera or visa - music that is telling a straight forwards story with me as the vessel for it. When I am not telling a story it requires a new mindset. To use your body, your voice and yourself but in a somewhat new pattern. To be a part of a space. And to make space a different space by moving around. To make the space the story. It was liberating. To be allowed to use the space without having to be someone else than myself. And also to make all these sounds in all seriousness, that in the world where I spend most of my time would be considered rather odd. To challenge what is normal. To be part of the staircase, to have my face away from the audience was also a very soothing experience. I was not important, I was sharing the task with everyone else and we were doing it together. It felt very pleasant.

To watch the longer peace with VVE was thrilling. I tend to get bored or stressed quite easy but I was interested the whole time. The movement together, the separate movement. The sounds together, the separate sounds. I have never seen anything like this before so I was just so buzzy with grasping the thing. I laughed sometimes and I was just fascinated some of the time. It was just so relaxing to see the confidence in the performers. I loved to be a part of the space where it happened. Not just to sit a bit away from it and watch. But to be in it. All together to be a part of this was an experience for me. A good one.

Hannah Shermis (guest performer), received 13/12-2021

The Whisperings piece really came alive when there was an audience in the room. Having not rehearsed it in the actual space beforehand (other than our run-through earlier that day), it was a mesmerizing experience stepping into the dimly lit hall, feeling your voice carry throughout the room, occupying the same space with people you do not know and being pulled into the experience of an artwork come alive. There was a beautifully focused energy in the room. I, however, found it challenging to space out the audience amongst us performers. They were somewhat shy and interested in the beautiful installation at the perimeter of the performance area, so naturally most of them stayed to the sides of the room.

The corridor glissando became a meditative and hauntingly beautiful soundscape. Facing the wall made us performers anonymous objects in the room, a radically different experience than in Whisperings where we were interacting directly with the audience. We became part of the installation and a bridge from one room to another.

Despite not having read Gertrude Stein's manuscript beforehand, it was clear from the get-go that the performance with VVE must be saturated with references to the text in every elaborate detail: from the choreography to the musical objects used. Having only rehearsed the opening piece I hadn't noticed, until I was watching the entire performance, all the artistic and musical themes found consistently throughout the concert walk, every detail carefully and lovingly weighed and measured. It was like taking a plunge into Casey's extraordinary, unique and fearless musically.

The VVE performance was filled with quirky humour and theatrics, creating a playful atmosphere. All types of everyday objects were transformed into musical instruments and all parts of the room were utilized. The ensemble experimented with the placement of performers, audience members and sound in the room in unexpected and exciting ways, and toyed with the traditional boundaries between performer and audience. We got to experience the voice through different filters and medium: the voice distorted through objects, layers added on-top of the voice, different expressions within voice.

Matilda Andersson (performer VVE), received 13/12-2021

It has been beautiful and powerful to be in this project with all the pieces. I felt very close to everyone

I have worked with and I have really enjoyed the combination of music, sound, space and movements very much and want to do this more! I have felt close to the other vocalists in a short time, and I think the way we worked with the music has made a huge improvement in myself as a musician and person.

The things that have made the most impact on me have been that 1.) Always letting each part have their time and preparation; that we always wait for everyone to be 100% ready and to prepare oneself to give it all, and to know that everyone will also wait for me. To feel secure that we see and feel each other and that no one is left behind. (All this was what waiting for everyone to be ready - meant for me!)

Also 2.) Keeping a focus and direction and always to do it with the whole heart/body/focus. Keeping a direction both in the movements and in the voice; that when deciding to do something, really doing it 100% no matter what. That has also meant a lot for the performance and a lot for me as a performer. I feel that this performance and you leading it all has improved me!

The rehearsing of the pieces has been incredible but also sometimes a heavy work.

I like how well thought of the pieces were. It felt like all the pieces were well cared for and each little part thought through. At the same time as you as a composer and leader did this great work in each part of the pieces, you were also still open minded and let us be part of the creative process and that was also very nice! I also like that we could be open to change some parts that maybe didn't feel comfortable. And I think that is also something that made the pieces feel so good and successful and dynamic. That the pieces were formed for and after the humans behind the performance. Very beautiful.

When rehearsing Whisperings, it felt powerful, not only to the piece but also as a vocalist; that we were able to walk around and it felt really special, intimate and absolutely like we all were owning our sound and words. All through the pieces, I felt very comfortable, and I am sure it has mainly to do with the movements, together with our presence with the music/actions and each other. The movements helped to keep calm and focused, and I felt that they were very natural movements for the voice and also playful!

The only time I felt uncomfortable was when we were engaging with the audience and showing them the way to the next room/part of the performance. It might just be because we didn't rehearse with people and that the movements were new. But I also feel I had a focus in the rest of the performance that this movement I felt "broke the spell" for me when showing the way. I have been thinking of why this is. I think the movement we made, made me feel a bit like a servant, and that movement felt very different from the feeling I had through the rest of the piece/pieces.

Regarding interacting with audience and the space, I thought this was an exciting experience! Just as when doing other art performances, the audience reacts in so many ways! When doing Whisperings, I was experimenting with personal space and direction. Going close to some people, almost touching, and it was interesting to see how different people reacted to our actions. Some of the people standing listening, opened up and made space for me and others to pass through. And some were standing rock steady, refusing to move, almost like testing us. And some brave/comfortable (?) persons kept walking around with us. It was very special!

I am so grateful for all inside and background information we have been getting with for the performances. It was important to know the aspirations and thoughts behind it and you introduced us so well to them. I felt especially that Whisperings was very powerful and touching for me. Both because of the interactions with other vocalists and audience but most for the texts meaning and how

we as the vocalists could fulfil each other's texts and create very touching sentences (and maybe connect the words that were part of the original text).

The piece Whisperings was very fun in how it was rehearsed and performed. I know it was supposed to be bigger and in some ways a bit more controlled and separated with the voices. But the whole piece felt very open, dynamic, and playful. And it was very beautiful to be part of that. Everyone felt important in their voice and decisions of sounds. Equals. And I liked the feeling of how choosing the sounds, felt comfortable.

I kept thinking that this whole masterpiece/s is the perfect piece/s to do as an international project!

It was amazing to engage the new singers in the piece Whisperings in such a short amount of time and really engage them to do something very special and beautiful with a convincing performance and sounds. I am also impressed that everyone managed to do the sounds even though that way of singing might have been new for some.

Elsbeth Berg (audience), received 13/12-2021

I really liked the time in Sjöströmssalen with you all winding around and the bass group moving like a lost planet among the stars. Also the transition in the stairwell with the descending sound. The staging of Steins texts in Lindgrensalen. I loved the magnifying glass. The vocal arrangement in the waltz. The living radio station. Clicking pens.

Linnea Häggkvist (audience), received via Messenger 13/12-2021

I became much more aware of all the sounds in the room as I didn't have control over where they came from.

Lena Czerniawska (artist), received 14/12-2021

The first thing that comes to my mind about our collaboration is that I feel very energized and inspired by all your ideas, your energy that you were sharing while working and the whole observation of the creative and creation process. There was also a lot of bravery in putting and joining your ideas to create the composition. I was imagining it as giving the best of you in this project. According to working in different spaces I could feel how strong each room is giving as a different challenge and perspective. I hope this diversity and being very consequent at the same time, was also visible for the audience. I think it was like going for a walk through your imagination with an invitation to complement it with my spatial drawings.

### **Selected comments from the guest book, 3/12-2021 (with translations)**

Anonymous 1: Jag blev jätteberörd av det första stycket (Whisperings?) Storgrät och kände så mycket. Tack <3 Så precision i allt, en fantastisk upplevelse! Jag hoppas att fler får uppleva detta! Det gjorde verkligen avtryck!

Translation: *I was so moved by the first piece (Whisperings?) [I] Cried and felt so much. Thank you <3 Such precision in everything, a fantastic experience! I hope more people get to experience this! It really made an impression!*

Anonymous 2: it was freaking strange! But in a good way!

Anonymous 3: Dansföreställning, körkonsert och utställning på samma gång. Från abstract > lite mer konkret. 1:a rummet > Tittade runt, vem är besökare och vilka delta i performancet? Övergripande känslan > behagligt. Utforskande och inspirerande för en frijazzfantast. Mysiga ljud! Subtila förändringar i uttryck (ansiktsuttryck/hållning/dans) som gjorde stora förändringar.

*Translation: Dance performance, choir concert and exhibition all at once. From abstract > a little more concrete. 1st room > looked around, who are visitors and who is participating in the performance? Overall feeling > pleasant. Exploratory and inspiring for a free jazz fan. Nice sounds! Subtle changes in expression (facial expressions/posture/dance) that made big differences.*

Ludwig: fantasieggande. personlig. nära jaget. Tolkningar blir våra egna. Mäktigt! ☺ Tack!

*Translation: Stimulating to the imagination. Personal. Close to self (I). The interpretations become our own. Powerful! ☺ Thank you!*

Marianne: Jag befann mig i regnskogens ljudmatta med överraskningar. I rymden med den oändliga vidden. Jag befann mig i själens öken men med hoppet närvarande. Leken som blir allvar, orden som formar en längtan

*Translation: I found myself in the soundscape of the rainforest with surprises. In space with an endless expansiveness. I found myself in the desert of the soul but with hope present. A game that becomes serious, words that form a longing*

Lina: Så genomtänkt, detaljrikt och personligt!

*Translation: So thought through, rich with detail and personal!*

Joshua: Loved the freedom to walk around in a performance space! Great great work!

Elsbeth: Underbart, tiiden, lugnet, energin

*Translation: Wonderful, tiime, calm, energy*