

Music Department

Composition

Serendipitous Intent

Critical Reflection submitted in partial fulfillment of the requirements
for the degree of **B.Mus in Composition**

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Spring, 2022

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Introduction:

The graduation piece Serendipitous Intent for two transducers and metal plates, laptop, 8 speakers and two subwoofers by Ida Nielsen Juhl, builds on principles of empirical.

The performance took place at Post-Húsið in Skeljanes 21, 101 Reykjavik on May 7th, 2022 at 20.00 and had a run-time of ca 40 minutes.

The compositional process was divided in two parts: 1) philosophising on- and creating a process overview of electronic/new media composition (see appendix I), where especially defining the concept, the performance of it, and the process of generating sound material were in focus for this composition, and 2) creating a piece that communicates with an audience regardless of musical background. This resulted in a piece with an alternative stage set-up with no visible performers (this part changed last minute), and a piece with relatively few easily recognisable musical cues. Therefore, figuring out a common sonic- and visual language, semantic meaning and dramaturgical structure was central to the compositional process and defines the task of creating, assembling and performing the piece.

Furthermore, finding a balance between visual elements while leaving space for the sonic part of the composition itself was an interesting internal discussion. As a result, creating visual- and sonic focus points for the audience to orient themselves by throughout the live-performance has been a theme for the composition. Serendipitous Intent has thereby become a piece that strives to create a setting for exploration of sound which mirrors how the piece was created.

1.1 Short process description:

Given the focus on empirical composition, the sound material was created by encouraging unforeseeable outcomes in the recording process.

The idea of using metal plates and transducers emerged early in the process and took over from an idea of making a choir piece that would have focused on conveying semantic significance through vocalised sounds without words. Nonetheless, the compositional task of working with performers demands a different process than what

eventually made sense for this particular project and the performance thereof. Instead, it was decided to build a concept around a solo-performance.

Thoughts of using screens with point-cloud animations¹ was part of the concept development, but eventually it came to seem more like an appendix to a compositional project rather than an element adding something meaningful to the resulting piece. Instead, the metal plate set-up quickly proved to be the better option for the conceptual thoughts of the piece, and left space for improvisation when generating sound material, when organising the piece and performing it.

As the process went on, the idea to have two rows of audience facing each other with the performer in the middle developed. The metal plates were then to flank the ends of the 'isle' so that they'd create a very wide stereo image and sort of embrace the audience. Eventually, the asymmetry, the performer having their back to part of the audience, and the performer as a centre piece for the performance eventually ceased to make sense. Therefore the metal plates became centre pieces for the performance.

Throughout the process of generating sound material for the composition (choosing instruments etc), the constant inner conversation was whether it would create e.g. tone-material, percussive elements, textures, high-end or low-end frequency material.

The first recordings were created by sending different sound materials through the transducers to the metal plates, both textured sounds and sine waves. The resulting recordings were produced by experimenting with which tones and textures translated well onto the plates. Afterwards, a long improvisation on Soma's Lyra 8 synth came to make up textures and motifs. A recording session of the Roland SH101 also resulted in certain usable elements, both percussive and harmonic content.

In order to generate rhythmical material, the organ in Fríkirkjan was recorded for the percussive properties of the motorised pipe valves.

The different recordings were then edited down to shorter elements that could be moved around on a grid in a DAW and processed with e.g time stretching algorithms, copy pasting to create repetitions, different techniques to emphasise rhythmical elements. Certain

¹ A set of data-points in space. A technique often used to replicate footage into digital models.

textural parts of the compositions were generated in Ableton Live using the physical modelling tool Corpus.

This approach to creating material for a composition is as much an improvisational process with unforeseeable outcomes as improvising in front of an audience. The instant playback and editing options that DAW's have made available have opened up for this patch-work puzzle compositional technique that relies heavily on intuition and experimentation. The sounds that were generated for the piece were mostly unrecognisable from objects such as instruments, and therefore call for being put into a context in order to communicate with an audience regardless of musical background.

1.2 The eventual composition and performance set-up (curated space):

Part of the composition is improvised during the solo performance in a curated space in front of an audience where seating arrangement, the placement of loudspeakers, and decor, are perceived as parts of a whole that make up the composed piece.

For the composition, the curated space in which it's performed is as much a part of the piece as the sound material and a drawn replication can be found in appendix II and III.

Four monitors form a square behind the audience, four smaller monitors face the audience, two subwoofers flank the audience and then the plates were in the middle. The performer was placed behind one of the audience rows and was mostly out of sight which deviates from the original plan (see appendix II).

During the concert, the performer was sending out sound elements placed on a timeline, divided between the four larger monitors behind the audience and then smaller ones facing the audience. They were layered on different channels and their volumes were controlled with a midi-controller. The smaller monitors were reserved for textural sounds that were supposed to seem 'up-close', while sounds snippets that had been chosen as themes, harmonic material and noise was sent out the larger monitors behind the audience. These sounds were supposed to create a larger sense of space.

In real-time, low-frequency and other sound materials were sent to the transducers, where the vibrations were picked up by contact microphones and sent back to the DAW where it'd be processed with effects and sent out the large monitors. This feedback loop created an unpredictable element in the performance. By introducing and taking out elements

throughout the performance, the final structure, the dynamics, and what was emphasised was eventually decided in real-time by the performer.

2.1 Semantic meaning and visual focus point:

The visual focus point of the composition consisted of two metal plates with transducers attached onto them, hung from two separate light stands that were arranged one in front of the other in a zigzag, thus creating a sculptural sense of depth. In order to emphasise the plates, they were draped in crunched up-, multi coloured cellophane that, due to the vibration from the transducers and strategic lightning, scintillated. A sheet of see-through PVC was hung in between to enhance the depth perception. In this way, the metal-plate installation served as not only a sonic instrument adding elements to the auditive side of the composition, but served as a focus point for the audience throughout the performance. The plates created a focus point while exploring the unfamiliar sounds coming from multiple directions.

By defining a space that differs from a general concert hall set-up, the audience will have less of an opportunity to rely on experience as to what will be taking place, and thereby be more alert.

Certain sounds were given semantic significance by strategically introducing and repeating them throughout the composition in a structure that was decided prior to the performance. By doing so, the sounds that otherwise hold no meaning or recognisable content become central occurrences for the audience to orient themselves by.

3.1 Conceptual critique

The audience was instructed to simply explore the sound material presented to them through the concert alongside the performer (in this case also the composer). Certain structural choices made for the pre-selected sound material could have benefited from a slightly longer process of experimentation with the metal plates set up in the performance space. This could have created an opportunity of meticulously structured story telling through the sounds given semantic significance and meaning. In addition, leaving more sonic space for the metal plates could have created a more impactful utilisation of the

installation that could have, possibly, communicated well with the audience. This would also have created larger dynamic changes throughout the piece.

The utilisation of the different speakers, lingering on textural sounds and allowing a slower development throughout the performance could have enhanced the audience experience.

On the other hand, leaving a large portion of the composition and performance up to improvisational chance creates a clear connection between the performer, the audience and the curated space. The decisions are being made in real time.

3.2 Conceptualisation and philosophising - dramaturgical principles in the organisation of sound:

By creating an irregular sound image that exceeds a regular stereo set-up, the intention was to spark active- and curious listening from the audience (Pauline Oliveros style), and encourage people to explore the sound elements rather than try to make sense of them. The arrangement of the sound material was more focused on creating contrasting streams of sound, repeating certain elements to let the audience build a relation to it and give it semantic meaning.

Music in the 21st Century is characterised by how space, time, performer(s) and audiences all have become aspects of a musical performance that can be decided upon by the creator of a piece. Nothing is defined before the composer makes decisions for the content, setting and execution of a piece which also means that the communication between composer and audience has changed.

In order to communicate musical concepts and intentions as a composer, certain things must be taken into consideration. A tool/concept/term that has inspired the concept for Serendipitous Intet is musical dramaturgy, the idea of attaching semantic meaning to sounds, where the loop of intention-reception between composer and audience is important. The interpretation of the semantic significance is up to the individual member of the audience.

In the book *Between the Tracks - Musicians on Selected Electronic Music*, Leigh Landy explains that the dramaturgy of music is concerned with the question ‘why’ something

takes place rather than ‘what’ or ‘how’.² The concept of Serendipitous Intet leaves it up to the audience to answer the ‘why’. It concerns itself with the curation of the performance space, the creative choices made when recording sound material and the arrangement thereof, and to how to communicate with an audience.

To Pierre Schaeffer, empirical composition was anchored in listening and searching for humanity and beauty within (unfamiliar) sound material within sound recordings. In the PHD “Writing with Sound: Creative Praxis in Radiophonic Art”, Christopher Williams studies how sounds can be rendered semantically meaningful. In his presentation “The Dramaturgy of Empirical Composition” he explains how musical dramaturgy concerns itself with the creative choices, and aesthetic decisions and judgements a composer make.³ These choices and decisions eventually creates a discourse, a *mise-enséne*,⁴ from which the audience (co)-compose an understanding of the piece. Williams continues and writes that

[i]t is in the function of production dramaturgy to develop and shape such a discourse and to identify compositional techniques that will serve the compositional intents of the composer. The composer in this way mediates between aesthetic intention and ideological production - the technical execution using audio technology.

[...]

The listener will make readings (produce sense and meaning) at the various levels of signification, beginning with simple identification of sounds, through the meaning-structuring of soul sequences, and progressing to interpreting [coming to an understanding of) the combination of phonic sequences at the ideological level. A composer who consciously articulates the work at these various levels simultaneously, will continually reward attentive listening [and aesthetic listening. [...]⁵

² Leigh Landy, “Hildegard Westerkamp’s Beneath the Forest Floor (1992)” in *Between the Tracks - Musicians on Selected Electronic Music*, ed. Miller Puckette and Kerry L. Hagan. (Cambridge, Massachusetts. London, England: The MIT Press, 2020). 44.

³ Christopher Williams, “The Dramaturgy of Empirical Composition” (Presentation, 2017 Australasian Computer Music Conference: *Do Android’s Dream of Computer Music?* Elder Conservatorium of Music, University of Adelaide, Sept 28th-Oct 1st, 2017), https://www.academia.edu/35647593/The_Dramaturgy_of_Empirical_Composition. 2.

⁴ Williams on Patrice Pavis: “The discourse of the *mise-en-scene* authorise the choices and selections made by the composer, validates the sonic elements incorporated into the completed acoustical work as meaningful, and rationalises the rejecting of others. Ibid. 4.

⁵ Williams, Christopher “The Dramaturgy of Empirical Composition” 4.

Empirical composition is thereby built on a foundation of the composer exploring sound material and finding techniques that help produce and write the intended dramaturgy by experiencing the sound material themselves. The eventual interpretation of the piece can not be fully controlled by the composer, and rather relies on the subjective knowledge, interests and background of the audience. The choices made in relation to sound material, the arrangement thereof and what elements are in focus are what the audience will be interpreting.

Contemporary composer and performer, Javier Alejandro Garavaglia speaks of the difference between intrinsic- and extrinsic dramaturgy where the intentions of a composition and the interpretation thereof are either predetermined by the composer or relies on the inner universe of the individual audience member.⁶ The intrinsic dramaturgy can be split into ‘a priori’ where the materials for a creation of the whole piece are determined before its conception and the intentions of the composer can be interpreted afterwards, or as ‘a posteriori’ where the dramaturgy of a piece does not have a predetermined, dramatic plan evident to the listener and needs further information from the composer to be interpreted.

Serendipitous Intent attempts to combine the ‘a posteriori’ intrinsic dramaturgy with extrinsic dramaturgy to achieve an intention-reception loop between composer and audience: By using intrinsic principles to create a conceptual foundation for the composition and for the composer to go by (setting up recording situations that encourage sound exploration), and by relying on tools, such as the techniques Iannis Xenakis writes about in “Determinacy and Indeterminacy”, an internal understanding of the piece is established for the composer. The process of interpretation is then up to the individual members of the audience which relies on extrinsic dramaturgy. The intended meaning of the composer thereby holds no significance to the interpretation of the audience. The piece simply intends to rely on intuition through setting up a recording process of sound material where nothing is planned beforehand. The production is an improvisation, the editing process is an improvisation, and parts of the performance are an improvisation. The process is therefore built around making artistic decisions based on a direct reaction to

⁶ Javeier Alejandro Garavaglia, Garavaglia, “Music and Technology: What Impact Does Technology Have on the Dramaturgy of Music?”, *JMM: The Journal of Music and Meaning* 7, Fall/Winter 2008, <http://www.musicandmeaning.net/issues/showArticle.php?artID=7.2>, sec. 2.3.

sound and the intention of the piece is for the audience to do the same. There's no need to figure out the intentions of the composer since the listening experience of the individual member of the audience is more interesting. In the text, Xenakis writes that “[i]n art, as in science, creation is based on intuition much more than on rational elements, which come afterwards”.⁷ For *Serendipitous Intent*, the process of rationalisation is left up to the audience.

⁷ Iannis Xenakis, “Determinacy and indeterminacy”, *Organised Sound* 1, no 3 (Winter 1996): 148, doi:10.1017/S1355771896000210.

4.1 Appendix I - New media composition process overview:

New media composition		Serendipitous Intent
Pre-production: Concept development and research	<ul style="list-style-type: none"> • Theory • Poetry • Science • History • Social issue commentary 	<ul style="list-style-type: none"> • Process as a point of focus —> empirical composition (Shaeffer, Henry)—> Bottom-up approach (Curtis Roads). Strategy (Cage). • The setting + communication with audience: imagination response, tension response, prediction response, reaction response, and appraisal response of the listener. • Xenakis
For whom and what is the piece for?	<p>A personal piece or a commission?</p> <ul style="list-style-type: none"> • Theatre, synced media, exhibition <p>What's the role of the composer?</p> <ul style="list-style-type: none"> • Organiser of sound? • Collaborated effort with performers? 	BA graduation piece
Generate sound material/ choose sound sources (e.g instruments).	Choosing techniques	<ul style="list-style-type: none"> • Organ percussion (MIDI, recording), • Lyra + re-amping. • Improvisation as a principal during the production - happy accidents • Use of instruments/materials/computer (I'm going to send vibration through steel plates and amplify the vibration of the plates. This signal will be processed through effect sends.
Elements	<ul style="list-style-type: none"> • eg. Frequency spectrum • Dynamics • Harmony • Contrasts 	Roads: “[c]ompositional processes need a balance between sparsity, relaxation, and repose as well as density, tension, and action”.
Structure of the piece	<p>since there are no rules or defining traditions it's up to the composer themselves to figure out a system for the creation.</p> <ul style="list-style-type: none"> • Climatic • Circular • Stream • Chapter based • Impulse/improvisation. • Use a graphic representation as a 'score'. • Collect data as defining parameters. 	Empirical composition - accidental outcomes/structure

<p>Pre-performance: The experience of the piece</p>	<ul style="list-style-type: none"> • Making a conscious decision of how the listening experience is going to be: • Live-performance or recorded media? • Improvisation, following a score • Individual listening experience or the experience of a crowd? • Performer/audience relation • How the space will be • Stereo, binaural, quad, 5.1, ambisonics • Stage/no stage • Stage design (Lights etc). • Visual aspects • Projection, screen, • Visual performance, choreography • Placement of the audience • Participatory? • Seated or standing 	<ul style="list-style-type: none"> • Solo performance improvising to something that has already been composed and produced in a studio
<p>Who's the performer?</p>	<ul style="list-style-type: none"> • Solo performance or collaborated • Hired musicians/performers (need for a score?) 	
<p>Gear needed and technical assistance</p>		

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