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Foreword

Dear Readers,

The relation between sound and listening entails one of the most intriguing philosophical riddles: if a tree falls in the forest and no one is there to perceive it, does it still make a sound? The riddle is based on George Berkeley's (1685-1753) manuscript A Treatise Concerning the Principles of Human Knowledge (1710) and until now, no agreement on the answer has been reached. As people have debated the answer for over 300 years, it is definitely not the aim of this special issue of *Documenta*, een tijdschrift voor theater to solve this riddle. On the contrary – in one way or another, all contributors to this issue question the relationship between sound and listening. Their contributions originated in the context of the doctoral school Sound & Listening on the edge of music, performance, film and new *media*, a five-day platform that took place in May 2019.

With this doctoral school we aimed to gather doctoral researchers - both practice-based and academic - and artists, to share work and thoughts on sound and listening in the field of music, performance, film and media studies. We introduced the participants to a phenomenological perspective that enabled them to question and (re)think the functioning of sound and the possibilities of listening. During the week it was of the utmost importance to always start our adventure with a shared listening experience, in order to refrain from isolating sound as a side effect of the image but instead fully acknowledge its particular meaning-making potential in perception. In order to expand the phenomenological framework, we asked the participating scholars to focus on some key concepts that characterised their way of dealing with sound. In small workshops taking place in the afternoons, we tested the relation between different the keywords and diverse sonic situations. We dialogued about the implications of those key words for a phenomenological approach to sound and listening on the intersection between academia and the arts. We encouraged the participants to be both generous and greedy, stubborn and accommodating, while we facilitated a place to play, a situation to momentarily change our milieu and challenge our perspectives (Merleau-Ponty 136 & Ixxiv).

From thinking in and through sound and listening, new opportunities, questions and ideas arose for both academic and practice-based research. In the aftermath of the doctoral school this special issue of *Documenta*, *tijdschrift voor theater* presents you some of those valuable insights and questions. Each contribution highlights how several aspects or key concepts addressed in the doctoral school resonate with that particular author's own field of research.

Musicologist and dancer Martine Huvenne (BE) opens this volume by introducing you to the phenomenological framework she presents to her students at KASK. School of Arts in Ghent. Currently. Huvenne teaches at the film department and coordinates the European Postgraduate in Arts in Sound (EPAS). The programme of the postgraduate training hands the students tools for approaching and investigating sound as an independent artistic discipline. During the doctoral school Martine shared that same phenomenological framework, one that she has been building for years, with our participants. Now it is your turn to familiarise yourself with this framework. In a combination of baselines derived from Husserl. Merleau-Ponty, Shaun Gallagher and others, Huvenne subscribes to and stresses the importance of experience, perception and the body. She invites us to (re)think (about) how sound functions in our highly visual culture. The framework offers a first step to open up the ocular centrism that dominates the domain of film. It functions as a tool to search for new possibilities to work and think in and through sound, not only doing so in the context of film, but also in the domain of performance, new media and music.

In No time for caution, scholar in performance studies Elizabeth Tack (BE) immediately takes up the challenge of Martine Huvenne and operationalises some of the phenomenological baselines in her analysis of Christopher Nolan's (1970) film Interstellar (2014). She decomposes the fragility of the music and reveals how through the embodiment of the listener, the diegetic use of sound functions as a question about the emotional state and involvement of the spectator on the one hand and functions as a permanent guidance in listening on the other hand.

Cognitive musicologists Bavo Van Kerrebroeck (BE), Mattia Rosso (IT) and Pieter-Ian Maes (BE) deal with the emotional state and involvement of the spectator and performer in a live context. From their cognitive perspective they question the perks and difficulties of the phenomenological framework for a systematic approach to

musical interactions. Based on their own research practice, they confront the quantitative or subjective values of phenomenological research with the quantitative or objective data gathering of embodied music cognition - and argue for a complementarity of both. After an elaborate theoretical outline, they briefly present four research projects (two supervised by Pieter-Jan Maes, and two research projects executed by Van Kerrebroeck and Rosso themselves). Based on the early stages of these projects they suggest that the complementarity between quantitative coordination patterns and subjectively felt qualities of musical interaction can enforce the impersonal mode embedded in perception (Merleau-Ponty 215).

As the editor of this special issue, it might appear strange to incorporate a contribution of my own. But as I was a full-time participant - with the same obligations, privileges and restrictions as the rest of the group - those five intensive days of thinking and exploring together with peers expanded my framework in such a way that I finally found the courage to explore the expression that the touch of sound is more than a metaphor. In the eponymous article, I confront my experience of the auditory choreography Hear with Merleau-Ponty's phenomenology of perception. In causing a confrontation with my own habit of perceiving, *Hear* helped me to reveal a resemblance between the erection of hairs on my arms and the reaction to sound in the inner ear. The generated insights stress the importance of my listening body and its functioning in the corporeality of a group of audience members and performers.

The contribution of photographer Krien Clevis (NL) deals with the question how researchers and artists think through media. As a photographer, Clevis' work has been embedded in the previously addressed ocularcentric dominance. But throughout the development of her artistic practice she started questioning that dominance. She became curious about starting a dialogue between her photographs, sound, geography and history. Recently she has started to ask herself questions such as: how can we think through image and sound? How do different media converse with one another? What could sound add to the genius loci of a photographer's artistic research? With a walk along the development of her own artistic research and especially a reflection on the works *Limbo* and *Footsteps of Piranesi* Clevis suggests that it is the knowledge of silence that creates and stimulates a profound listening to our genae loci.

Subsequently, sound artist Inge van den Kroonenberg (BE) gives us an insight into the discovery of such a knowledge of silence. In her writings she reflects on the mediation of sound, silence, time and place during the development of *Ce qui précède voir*. More precisely she describes and deconstructs the role of her own listening in this particular creative process. Inspired by sound artist and sound ecologist Hildegard Westerkamp, van den Kroonenberg defines her creative process as *soundwalking*: a creative practice in which listening equals a way of working that reveals the environment and generates a profound ability to notice (Westerkamp 2006) and to pay attention. Kroonenberg's contribution reveals how listening for Ce qui précède voir creates "a sense of inspiration, excitement and new energy" (Westerkamp).

The portfolio section of this issue provides you with tools for a creative listening practice to different media of your own. It aims to reveal the environment of the doctoral school or, put differently, the collage of contributions invites you to experience your own soundwalk on paper. It has been constructed as "an opportunity to let the world [of sound and listening] in, without any compulsion to respond" (Westerkamp). I hope it offers you a sonic sense of inspiration and excitement and enables you to "listen without expectations, assumptions or judgement" (Westerkamp).

The first guide on your listening adventure is photographer Krien Clevis. She invites you to listen to her photographic work *Limbo* and look at images from her artistic research for Footsteps of Piranesi and to think-through-media. With her contribution she thus asks you what you hear in-between image and sound. Can you hear the genae loci of the images? Does Clevis' knowledge of silence resonate in your own listening practice?

Thinking in-between sound and image is exactly what the second guide and independent radio maker Katharina Smets aims for with her podcast on the creation process of Fotograf (2018). Fotograf is a documentary performance that Smets realised in collaboration with Inne Eysermans and Ingrid Leonard and deals with an unresolved story of Smets' grandmother, which was captured in over 100 photographs. During the creation process of this performance, Eysermans, Leonard and Smets travelled to places they recognised from the pictures. In this contribution, Smets reflects on that adventure. Scan the OR-code and listen to Katharina retelling the story of a quest for sonic places of memory.

Your soundwalk on paper continues with multimedia artist Anouk De Clercq and her dialogue with the medium of film. In her contribution she gives you the opportunity to discover what possibly hides behind the visual aspects of a film. With *Black*, she has developed a film on paper. In this imaginary trip in darkness she confronts you with a written voice-over on a recurring black screen. How will you deal with this paradox of a full but empty darkness and a voice-over that speaks in silence? How do you open up your listening towards the ambiguous relation between what you see and hear?

In Listening out for the ambiguity of reliable things, sound artist and philosopher Salome Voegelin presents the reader with the score of the lecture performance that she staged during *Sound & Listening* on the edge of music, performance, film and new media. She continues the challenge to explore the appearance of ambiguity between the visual and the audible. While reading you can re-experience and even re-perform her lecture.

Your soundwalk on paper ends with a contribution by sound artist Anna Raimondo. She hopes that at the end of this portfolio you will be ready to negotiate your own listening. In Towards gendered listening, Raimondo provides you with tools and questions to have a closer look at your own open, widened or newly discovered listening practice. Put yourself out there and play.

I am happy to close this portfolio by offering you the closing words I read on the last day of our doctoral school.

As an appendix to this special issue, Steff Nellis wrote a review on Luisterrijk der letteren. Hoorspel en literatuur in Nederland en Vlaanderen, a new book edited by participant Siebe Bluijs and his colleague Lars Bernaerts.

I hope you discover the joy of listening through reading.

Leonie Persyn Guest editor

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Introduction to a phenomenological approach to sound and listening

-- Martine Huvenne --

Under the title Sound & Listening on the Edge of Music, Performance, Film and New Media a group of academic and artistic researchers were invited for a doctoral training course in May 2019. Our aim was to start discussing and thinking from practice rather than working with the traditional form of ex-cathedra lectures followed by a Q&A. This alternative approach of sharing thoughts and research included some phenomenological guidelines: practising phenomenology rather than thinking about it, allowing a thinking in movement aligned with a more conceptual thinking, approaching key concepts from a practical, intersubjective context rather than searching for definitions. In concreto each of the participants was invited to take part in a peer discussion in order to question his/her own research topic from a phenomenological perspective.

To start off the doctoral school I presented some quotes and key concepts as material to elaborate upon and as means to question a phenomenological approach to sound and listening in the group discussions. This text is an echo of this short presentation. It is a starting point to introduce various quotes, thoughts and key concepts I used in my own research towards a phenomenological approach to sound in film based on texts of Edmund Husserl, Dan Zahavi, Maurice Merleau-Ponty, Claire Petitmengin, Shaun Gallagher and Roland Barthes

A doctoral school starting from experience?

The unusual format of the doctoral school, with its accent on common experiences and group discussions, was the result of a previous 'reflective residency' with Dra. Leonie Persyn, Dra. Katharina Smets and Drs. Duncan Speakman in 2018, bringing academic research and research in the arts together. This reflective residency resulted from many discussions about the interaction of theoretical thinking and artistic practice. In my own research I always started from the experience of sound and listening and used phenomenology as a liberating theoretical framework. I was curious and somehow convinced that my own research could be expanded into other sound fields than that of cinema.

In the context of the reflective residency we decided not to talk or discuss without sharing a listening experience. The rules of our meeting were defined as such: every player had to present his/her personal artistic work or the artistic work at the basis of his/her research. Speakman invited us for a sound walk, Persyn proposed listening to some film fragments by Chantal Akerman and Smets presented parts of her radio work. To experience, together, before the stage of reflection, seemed a very inspiring method to advance in research. We were thinking together within the framework of our shared experiences and proposed keywords. Each participant concluded this intensive four-day-long meeting with a personal choice of keywords, put in a kind of mind map. It was Leonie Persyn who proposed to carry forward this method into the doctoral school Sound & Listening on the Edge of Music, Performance, Film and New Media.

A phenomenological approach to sound in film?

Phenomenology (founded by Edmund Husserl) differs from introspective psychology and also from objective knowledge. Phenomenology can be understood as a philosophical analysis of different types of world-disclosure. The phenomenological attitude gives the possibility to focus on the appearance of public objects in relation to the subjective side of consciousness. The subject is understood as an embodied, socially and culturally embedded being-in-the-world. (Zahavi 2015, 1-4)

In my own research I focused on sound as a dynamic audible movement, that is able to transmit an experience in film without attracting attention or asking the audience to reflect on the experienced sound. In classical film sound theories, e.g. Michel Chion's Audio Vision (1994), sound is defined as an 'added value', synchronised or not with the moving image. In film, however, sound reveals this dimension of audiovisual perception that is best suited for transferring experiences or for communicating an invisible world. Sound then is not only heard, but also felt (bodily). The challenge in my research was to develop a theoretical framework to understand and discuss about this bodily experience and creating the knowledge to evoke this experience in film, an intuitive knowledge that is very well elaborated in the art of sound recording, sound editing, sound design and sound mixing. A phenomenological approach, focusing on the phenomena and describing listening experiences, was a first step. The phenomenology of Merleau-Ponty with its emphasis on the importance of the body in perception, a second step. But the revelation was the discovery of Husserl's different types of temporality and his insight of the kinaesthetic experience as motivation for the intentional act in which the intentional object is constituted.

Husserl operates with three different types of temporality: the objective time of the appearing object, the subjective time of the acts and experiences, and the pre-phenomenal absolute streaming of inner time-consciousness which he describes as a temporal process of a very special nature, different from a consciousness of time. The temporality of inner time-consciousness cannot be constituted but is experienced.

According to Husserl, our acts are tacitly self-aware, but they are also accessible to reflection. They can be reflected on and thereby brought to our attention. (...) Inner time-consciousness is simply another name for the pre-reflective self-awareness of our experiences, a streaming self-awareness that is not itself an intentional act, a temporal unit, or an immanent object, but an intrinsic and irrational feature of our consciousness. (Zahavi 2003, 88-91)

Based on these insights from Husserl and as an invitation to introduce a phenomenological approach in one's own research, I first highlight a few basic thoughts on phenomenology after which I operationalise

them within the context of sound in film:

- 1) Phenomenology starts with experience; perception is not simply a reception of information.
- 2) Phenomenology is an attitude in which we are interested in how things appear as correlates of our experience.
- 3) Phenomenology as a philosophical analysis of different types of givenness.
- 4) Our perception presupposes a particular type of bodily self-sensitivity: our experience of perceptual objects is accompanied by a co-functioning but unthematic experience of the position and movement of the body, called kinaesthetic experience.
- 5) The body at the centre of its listening is a situated body.
- 6) The world as the primordial unity of all our experiences.

Phenomenology starts with experience

The primordial role of experience is one of the crucial insights for choosing a phenomenological approach in research.

In phenomenology perception is not a simple reception of information, but it involves an interpretation which frequently changes according to the context. Phenomenology starts with experience rather than by what we expect to find, given our theoretical commitments. It asks us not to let pre-conceived theories form our experience, but to let our experience inform and guide our theories. In phenomenology we are interested in how the things appear as correlates of our experience. (Gallagher and Zahavi 2008, 10-25)

Applied to sound and listening, this quote invites us to reflect on the way we use words to describe sounds. Generally, we reveal our 'listening strategy'. I can listen to the source of a sound (I hear a dog barking) or to the meaning of a sound (the sound of the alarm clock means having to wake up). A musician can speak about the rhythm of the sounds of a city.

But emphasising the experience as a starting point asks for 'open listening', a listening without referring to the source or the meaning of a sound, or to the musical parameters of a sound. In terms of sound and listening, we have to admit that it is difficult to get rid of our "theoretical commitments and pre-conceived theories which try to define or distort our experience". Furthermore, there is a lack of words to describe this 'open listening' as an experience, because we cannot capture it in a concept or in an image. In film the 'felt sound' plays a very important role. We all recognise how sound can bring us in a certain mood or distract our attention, without really specifically listening to that sound. How can we discuss this crucial filmic element without reducing its role in function of the image or the narration? How can we start with experience?

Phenomenology is a discipline, an attitude in which we are interested in how things appear as correlates of our experience

In phenomenology the subjective side of consciousness is crucial. What we see or hear is not the object in itself, but an appearance, a phenomenon revealed through our senses. Excluding listening to the source of the sound or trying to define the meaning of a sound brings us to the felt sound correlated to an embodied listening. We do not only listen with our ears, but also with our body. The listener with his/her body at the centre of his/her listening, listens from a first-person perspective, resonating with the sound, resonating with his/her life experience, bringing these resonances together in the experience of the sound.

Phenomenology as a philosophical analysis of different types of givenness

In *Phenomenology: The Basics* (2019), philosopher Dan Zahavi states that phenomenology can be seen as a philosophical analysis of different types of givenness.

Phenomenology is concerned with the way in which the object shows or displays itself, i.e., in how it appears. (...) it is possible for one and the same object to appear in a

variety of different ways: from this or that perspective, in strong or faint illumination, as perceived, imagined, wished for, feared, anticipated, or recollected. (Zahavi 2019, 1-45)

To understand this quote, it is necessary to realise that, in phenomenology, perceiving something is not a one-on-one activity, because the intentional object is constituted in the intentional act. Phenomenology makes a distinction between the appearance, the intentional act and the intentional object. Intentionality is the relation between consciousness and its object.

In the case of sound this means that a perception of sound is always correlated with a listening. The meaning or the source of the sound as an intentional object is 'constituted' in the intentional act. We can thus make use of different listening strategies, constituting different intentional objects.

Listening to a clip from *Un condamné à mort s'est* échappé ou *Le vent* souffle où il veut [A Man Escaped] (Robert Bresson, 1956) (34'12"-35'13") reveals how much is happening in one single moment. In the clip we see a person in jail (Fontaine) who is planning a way to escape. Bresson immediately invites us to listen together with the character from his first-person perspective. We cannot only hear what he hears but also the way he is hearing the presented sound. As an audience we are invited to move with Fontaine. But at the same time, we can focus on different aspects of the sound in this fragment: the gestures of the character, the sounds produced by the jailer in the corridor, the different spaces presented through sound, the position of the sounds in the different spaces and in relation with the character, the materiality revealed in the sound...

In short, the different listening strategies reveal different appearances and characteristics of the sound in this clip. The sound can evoke spaces as much as the listening mode of Fontaine.

Kinaesthetic experience

According to Edmund Husserl, the intentional act is motivated by a kinaesthetic experience, which is not yet reflectively constituted in origin:

(...) perception presupposes a particular type of bodily self-sensitivity. Our experience of perceptual objects are accompanied by a co-functioning but unthematic experience of the position and movement of the body, termed kinaesthetic experience. (...) This kinaesthetic experience amounts to a form of bodily self-awareness and, according to Husserl, it should not be considered as a mere accompanying phenomena. On the contrary, it is absolutely indispensable when it comes to the constitution of perceptual objects. (Zahavi 2003, 99)

I refer to Zahavi's reading of Husserl (Husserl's Phenomenology 2003, 98-110) to explore what this kinaesthetic experience might be. Zahavi starts from the fact that, for Husserl, an appearance is always an appearance of something (genitive) for someone (dative). In terms of an appearance in space this means that there is no pure point of view. but always an embodied point of view and that spatial objects can only appear for and be constituted by *embodied subjects*. Husserl argues that the body is a condition of the possibility for the perception of and interaction with spatial objects, and that every worldly experience is mediated and made possible by our embodiment. With this insight Husserl starts to examine bodily mobility and its contributions to the constitution of perceptual reality and calls attention to the role played by movement (movement of the eye, the touch of the hand, the step of the body, and so on) for our experience of space and spatial objects (Zahavi 2003, 99). This insight makes it possible to consider experienced sound in terms of a pre-reflective, non-thematic awareness of sound. In film it is clear that we have to distinguish a reflective, thematic awareness of sound, which leads to the perception of sound, and a pre-reflective, non-thematic awareness of sound, which resonates within the realm of experience. It is rare that we listen to the sonic environment attentively during a scene, but one sound can catch our attention and direct our gaze to something. Sometimes a 'sonic environment' puts us in the right mood to understand a filmic situation...

We can experience sound, without giving it a meaning or without searching for the source of the sound. The body of the listener then resonates, moves along with.

Philosopher Claire Petitmengin, specialised in neuro-phenomenology and more specific the pre-reflective experience, speaks about a felt sound, experienced in an embodied listening from within. (Petitmengin e.a., 2009). For his part, French literary theorist and philosopher Roland Barthes speaks of panic listening, as an open listening connected to the listening of a psycho-analyst in order to discover what is evoked by those aspects of sound that do not 'mean' anything (Barthes 223-229).

The body at the centre of its listening is a situated body

The body of the listener is always at the centre of his/her listening: "Were it to be modelled spatially, the auditory field would have to be conceived of as a 'sphere' within which I am positioned" (Ihde 75). In sound editing or *com-position* of sounds, this means that the body of the listener plays a role not only because of the bodily 'position' in space but also because of the situatedness of the listener's body. Merleau-Ponty distinguishes between positional spatiality. which is the spatiality of external objects, and spatial sensations and the situational spatiality. He explains the situational spatiality by means of the example of a primitive person in the desert who is always "immediately oriented without having to recall or calculate the distances travelled and the deviations since his departure. When the word 'here' applied to my body, it does not designate a determinate position in relation to other positions or in relation to external coordinates. It designates the installation of the first co-ordinates, the anchoring of the active body in an object, and the situation of the body confronted with its task" (Merleau-Ponty 102-103).

This quote has different consequences for sound and listening and especially for sound recording and sound editing. Sound has the possibility to transmit an experience without explaining what is happening. This means that, in terms of the transmission of an experience through sound, the unity of a situational space is not defined by a geometrical or objective 'system' imposed from outside (e.g. image), but by the transmitting of the situatedness of the listener in the sound recording, editing and mixing. This situatedness is the anchoring of the active body in the sound. The sound then is an auditory dynamic movement, a time-object inviting the audience to bodily move along with.

The world as the primordial unity of all our experiences

The pre-reflective kinaesthetic experiences are characterised by a bodily intentionality, an intentionality that can be perceived as affective. The act of listening is then a passive activity. Merleau-Ponty describes passivity as "being encompassed, a situated being (...) that is constituted of us", rather than as a causal action exerted upon us from outside (Merleau-Ponty 451). Merleau-Ponty describes this as a passive synthesis, that brings sensory experiences together into a single world (Merleau-Ponty 344). It is not the image that is at the centre of perception, but the body of the perceiver.

The senses translate each other without any need of an interpreter, they understand each other without having to pass through the idea (...) My body is the place or, rather, the very actuality of the phenomenon of expression (*Ausdruck*); in my body, visual and auditory experiences, for example, are pregnant with each other, and their expressive value grounds the pre-predicative unity of the perceived world, and, through this, its verbal expression (Darstellung) and intellectual signification (Bedeutung). My body is the common texture of all objects and is, at least with regard to the perceived world, the general instrument of my "understanding". (Merleau-Ponty 244)

For Merleau-Ponty the world is the primordial unity of all our experiences, instead of a visible unfolding of constituting thought. Time then is 'literally the sense of our life', and only accessible to the one who is situated in it (Merleau-Ponty 454). Time is thus no longer a real process or an actual succession but arises from the relation to things: "We meant, in speaking of a passive synthesis, that the multiple is penetrated by us, and that, nevertheless, we are not the ones who perform the synthesis" (Merleau-Ponty 451).

Conclusion

In this article I aimed for an introduction to phenomenology in relation to research in the arts. Rather than explaining what phenomenology is, I presented phenomenology as an attitude that enables us to describe those elements that cannot be grasped in concepts. I highlighted a few basic thoughts on phenomenology that I used in my own research focusing on the invisible and touching aspects of sound. As a researcher, the phenomenological approach of sound and listening, nourished by insights of Husserl and Merleau-Ponty, gave me the opportunity to describe the importance of the pre-reflective experience in the study of sound in film. The correlation between sound and listening, and the possibilities of different listening strategies became crucial in my methodology. Introducing insights such as kinaesthetic experience, the situated body at the centre of its listening and the passive synthesis, make it possible to start research from a resonance with and an intuitive comprehension of art. Theory and practice then are communicating vessels. There is no need to apply theory in practical actions leading to 'academic art' or to reduce art practice to theoretical concepts.

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No time for caution

-- Elizabeth Tack --

This article aims to examine the use of sound in Christopher Nolan's space epic Interstellar. By means of established sound theories it is explored how music and diegetic sound work together with the visuals to transfer an immersive filmic experience to the viewer-listener. Through concepts such as fragility of music, embodiment and sound traces it is shown that listening is an active act by which the viewer-listener constructs meaning. Materiality and spatiality of sound contribute to shaping a physical as well as an emotional reality. Movie sound is an important aspect to engage the viewer-listener in the cinematic experience, which is particularly exemplified in Interstellar.

No time for caution: Geluidswerking in Interstellar

Aanwezigen op de première van Christopher Nolans ruimte-epos *Interstellar* verwachtten een film te *zien*, maar kregen deze onverwacht ook te *horen*. Men kon niet om de bijzondere sound mixing, die de nadruk legt op zowel diëgetisch geluid als muziek, heen. Waar de kijker normaal gezien omver geblazen wordt door de regisseurs eigenzinnige invulling van de concepten tijd en identiteit, is het deze keer de soundscape die tot nadenken aanzet. Meer dan ooit zette Nolan in op het auditieve aspect van filmmaken: ondanks de sprekende beelden domineert de geluidswerking in de kijkervaring.

Nolan zelf noemt zijn modus operandi impressionistisch: geluid wordt in deze film niet per se gebruikt om de realiteit weer te geven maar vooral om het gevoel dat die realiteit oproept te evoceren (Giardina 1). Hij wil met andere woorden een ervaring overbrengen en begrijpt

heel goed dat mensen hun gewaarwordingen niet alleen visueel ervaren, maar dat alle zintuigen daartoe worden ingezet. Dit is niet voor de hand liggend in de westerse visuele cultuur, waarin – zoals het woord op zich al impliceert – het oog als instrument al sinds de oude Grieken domineert op andere zintuigen (Ihde 7). Theoreticus Don Ihde argumenteert echter dat deze culturele voorkeur voor het zien zorgt dat we onoplettend worden voor de volledigheid van de ervaring. Zoals het zien een rijkdom aan informatie doorgeeft, zo doet het luisteren dat ook (Ihde 8). Om een ervaring op een zo compleet mogelijke manier over te dragen moet men dus aandacht schenken aan zowel de auditieve als visuele dimensie en deze benaderen als complementaire entiteiten (Ihde 204).

Omdat elk frame in *Interstellar* een nieuwe momentopname is die de kijker moet beleven, wordt de beeld- en geluidswerking telkens herdacht. In tegenstelling tot de conventie in mainstream cinema om een geluidshiërarchie aan te houden waarbij de menselijke stem primeert, kent Interstellar geen vaste rangorde. Nolan bekijkt in elke scène hoe de sonore dimensie vorm moet krijgen om op de juiste manier zijn verhaal te vertellen en dit los van de klank die het beeld vraagt. Enerzijds wordt er gefocust op correct, diepgaand en nauwkeurig diëgetisch geluid, dat de kijker een zo volledig mogelijk beeld van de situatie geeft, anderzijds wordt alle streven naar realiteit overboord gegooid door sfeer en emotie heel opvallend met muziek te onderstrepen. Om deze verrassende visie op wat geluid in cinema kan betekenen te realiseren, werkte de regisseur samen met twee bekende namen binnen de geluidswereld: componist Hans Zimmer en sound editor Richard King. Interstellar is niet hun eerste samenwerking en dat voel je. Het drietal creëerde een innovatieve soundscape, zowel op vlak van muziek als het gebruik van diëgetisch geluid.

Nolan staat er om bekend zijn eigen visie door te drijven. Hij blijft de thema's die hem reeds als onafhankelijke filmmaker nauw aan het hart lagen ook als grote speler binnen de mainstream cinema onderzoeken. Na zijn eerste filmische successen kwam hij definitief in het commerciële filmcircuit terecht. Hij maakte naam als de regisseur die van de gebaande paden in Hollywood durft af te wijken zonder door datzelfde Hollywood verstoten te worden (Joy 1). "He's the rare filmmaker with the ambition to make great statements on a grand scale, and the vision and guts to realize them" (Corliss 1). Normaal gezien

kunnen we die grote statements terugvinden in zijn ondervraging van tiid en geheugen in relatie tot identiteitsvorming (Joy 1). Wie Nolan denkt, denkt non-lineaire plotlijnen, meditaties op de relativiteit van tiid en personages met een identiteitscrisis. Het hoeft niet te verbazen dat ook *Interstellar* gevuld is met de gekende thema's, maar deze keer trekt Nolan de thema's door in de geluidswerking. Zelf spreekt hij over geluid als de gereedschapskist met tools die hij zijn toeschouwers aanreikt om een welbepaalde lezing van zijn films op te roepen. Meer dan verhalen vertellen, wil hij ideeën delen. In *Interstellar* gebruikt hij geluid als een belangrijke tool om dat te doen.

De geluidswerking benadert op een nieuwe manier het verhaal, dat zich afspeelt in een dystopische toekomst waarin de aarde langzaam maar zeker onbewoonbaar wordt door een virus dat bijna alle gewassen aantast. Een team wetenschappers gaat onder leiding van ex-astronaut Cooper, gespeeld door Matthew McConaughey, op zoek naar een andere planeet die door de mensheid bevolkt kan worden. Deze reis brengt hen naar andere sterrenstelsels, nieuwe planeten en zelfs zwarte gaten. Op de missie spoken twee dingen door Coopers hoofd: een bewoonbare planeet vinden en zo snel mogelijk terugkeren naar zijn kinderen die hij op aarde heeft achtergelaten. Hij weet welke plicht hij te vervullen heeft, maar het afscheid en gemis van zijn kinderen vallen hem zwaar. Het wetenschappelijke en hoogstpersoonlijke dat gedurende de hele film in wisselwerking met elkaar staat, komt in Coopers psyche duidelijk naar voren. Het is exact deze wisselwerking tussen het reële en emotionele waar Nolan, Zimmer en King uitdrukking aan willen geven door middel van de soundscape. Doorheen het plot zindert één belangrijk metafysisch vraagstuk op de achtergrond: wat betekent het om mens te zijn? Zimmer probeert uitdrukking te geven aan deze vraag via de soundtrack. In deze akoestische vraag verweeft hij tegelijkertijd een antwoord dat de toeschouwer er zelf moet distilleren.

Er valt niet naast twee hoofdcomponenten van de soundscape te luisteren: er is een niet-aflatende aanwezigheid van muziek en opvallend hoorbaar diëgetisch geluid. Niet alleen heeft het diëgetisch geluid naast de muziek een prominente rol in de soundscape, het is ook zeer gedetailleerd uitgewerkt. Een voorbeeld hiervan is een van de eerste scènes waarin Cooper en zijn kinderen een drone van de Indische luchtmacht zien overvliegen en deze achterna gaan. Alle luchtvaart hoorde namelijk jaren geleden al stilgelegd te zijn. Je hoort de beweging van een zwaar gewicht op grind als Cooper naar zijn auto rent, een klik en metalige wrijving als het autoslot open gaat en de doffe slag als de deur sluit. Vervolgens rijdt de auto recht door een maïsveld; je hoort het ratelende geluid van een auto die met een platte band rijdt, het ritselen van de bladeren en maïskolven die als lichte gewichten tegen het metaal van de auto slaan. Als de auto remt, schrapen de banden met een sterk afnemende snelheid over de ondergrond. De drone maakt een schel gezoem dat naarmate de nabijheid van het toestel van intensiteit verandert. Deze geluiden zijn door hun sterke uitwerking bijna allemaal te identificeren zonder het bijbehorende beeld te zien.

Tegenover het zeer materiële diëgetische geluid staat dan een soundtrack die audiogewijs heel clean is. Als typische Hollywoodcomponist volgt ook Zimmer de trend om alle materialiteit in de opnames van muziek weg te werken om een zo zuiver mogelijk instrumentaal geluid te bekomen (Chion 114). Hierdoor zijn veel gebruikte instrumenten goed te herkennen: zo hoor je vaak of het om strijkers, blazers, een piano of orgel gaat. De individuele klankkleur van elk instrument blijft overeind in de totale compositie. Een overgroot deel van de soundtrack is geschreven in mineur, wat bij de luisteraar altijd een zekere spanning oproept, ongeacht de algemene sfeer van een muziekstuk. De muziek bij de droneachtervolging heeft een gestaag tempo en bestaat vooral uit hoge, vloeiende, warme tonen, maar toch roept ze een gevoel van opwinding bij de kijker op. Naarmate de jacht en muziek vordert, komen er muzikale lagen bij die zorgen voor een hogere intensiteit. Een ander voorbeeld is de scène waarin Cooper en dr. Mann op de ijsplaneet rondlopen. Naast de dialogen hoor je enkel het kraken van ijs, een diep geruis en doffe klappen die als vallende sneeuw geïnterpreteerd kunnen worden. Het gebrek aan enig ander diëgetisch geluid duidt de verlaten- en uitgestrektheid van de planeet aan in het auditief plan. De muziek, die onophoudelijk te horen is, draagt hier aan bij: ze bestaat uit uitgestrekte, diepe tonen en is heel traag. De donkere, minimale klanken roepen een gevoel van onbehagen op. Telkens opnieuw vormt het diëgetisch geluid de omgeving, terwijl de muziek inspeelt op emotie.

De fragiliteit van muziek

Het allereerste dat de toeschouwer opmerkt, is de muziek. Die speelt al voor de film begint; terwijl de logo's van productiehuizen nog de revue passeren, zetten Zimmers eerste tonen in. Dit is het moment waarop de gemiddelde toeschouwer zich opmaakt om op de film te focussen. Niet-filmische beelden en geluiden komen in de periferie van de kijkers aandacht te liggen. We worden immers constant omringd door visuele en auditieve velden, maar halen daar slechts selectief informatie uit. We kiezen telkens opnieuw een kern en daarmee impliciet ook een rand waar we onze aandacht op richten (Ihde 205). Door met de muziek te openen, komt de auditieve focus van de kijker daarop te liggen. Die focus blijft niet de hele film expliciet op de muziek liggen, maar ver van de auditieve kern zal ze zich nooit verwijderen. Toch mag muziek nog zo een vooraanstaande rol spelen in de soundscape, ze is nooit alleen. Zowel andere klanken op de geluidsband als geluiden uit de omgeving van de toeschouwer kunnen haar doordringen. Zelfs als er op de geluidsband van de film enkel muziek te horen is, is de toeschouwer zich bewust van zijn eigen omgeving: de ademhaling van de persoon naast hem, het geluid van een auto die buiten voorbij rijdt. Ook in de bioscoop, waar het scherm groot en de klank luid is om zo te streven naar immersie, breekt het geknars van iemand die popcorn eet door de illusie heen.

Hoe meer men probeert te focussen op muziek, en muziek dus in de kern van het auditieve veld plaatst, hoe meer men de randgeluiden hoort. Ze worden op dat moment als storend ervaren en komen hierdoor expliciet naar voren, hoewel ze zich eerst impliciet in het auditieve veld van de toeschouwer bevonden. Don Ihde noemt dit fenomeen de fragiliteit van muziek: "It becomes impossible (...) to secure an exclusive focus on music because of the global presence of sound" (Ihde 221). Paradoxaal genoeg letten we als luisteraar meer dan ooit op de totaliteit van de geluidsband, net omdat de muziek zo aanwezig is. Nolan vraagt op deze manier een andere luisterhouding van de kijker, één die niet enkel op zoek gaat naar wat informatief is maar openstaat voor alle auditieve elementen. Roland Barthes noemt dit panisch luisteren, wat inhoudt dat de luisteraar zich voor alle klanken openstelt en op die manier geen betekenis zoekt, maar die laat ontstaan (Barthes 224). Het luisteren is een proces. De kijker creëert op voorhand geen verwachtingen, maar laat over zich heen komen wat er komt, staat ervoor open om bewogen te worden

(Barthes 227-228). Zimmer zelf doet in zijn composities zijn best om geen aanwijzingen te geven waar zijn muziek naartoe zal gaan en verwacht dus die open houding van zijn luisteraars:

One of the things that's really important is that the music gets to occupy its own space and time, it's not tied to the mechanics of the cut. [...] The music is written on the story, not so much on the cut. And there's a juxtaposition that creates a certain unease. I work really hard at keeping the emotional signals [of where the music is going to go] hidden. (Dickson 1)

Daarbij sluit de opmerking dat de muziek geschreven is op het verhaal en niet op de montage aan bij de visie van sound editor Richard King. Voor hem was het belangrijk om geluid te selecteren dat het moment ondersteunt en eraan bijdraagt. Het gaat hem niet enkel om geluid dat specifiek bij de scène hoort. (Yewdall 263) Merk op hoe King het over een 'moment' heeft en niet het shot of de scène. Het geluid moet dus bij het idee of thema passen, en niet op het beeld geplaatst worden, zodat de toeschouwer meegetrokken wordt in een emotionele belevenis. Door muziek niet te componeren volgens de montage leeft ze een eigen leven, heeft ze een eigen tempo en spanningsboog. Ze is opvallend in haar eigenheid en toch geïntegreerd. Ze volgt niet naadloos de gebeurtenissen die we te zien krijgen maar sluit er wel perfect op aan. Juist door deze juxtapositie heeft ze een grotere invloed op de toeschouwers. De muziek geeft geen narratieve sleutels weg maar biedt de kijker een extra emotionele dimensie van de ervaring, één waar hij voor kan openstaan door het panische luisteren dat van hem verlangd wordt.

Op het moment dat Cooper en kinderen de drone achtervolgen in hun auto en Tom recht op een afgrond afrijdt, gaat de muziek daar niet in mee. Die gaat aan hetzelfde tempo met dezelfde melodie verder en kondigt op geen enkele manier een naderende catastrofe of oplossing aan. De muziek begeleidt de emotie van de toeschouwer in de opwinding van de droneachtervolging en negeert – net zoals Cooper – wat er verder om de personages heen gebeurt, terwijl het diëgetisch geluid ons dan weer in het midden van de actie zet. Als Tom op het laatste nippertje op de rem gaat staan, komt de muziek even abrupt tot stilstand als de auto. De krijsende remmen van de auto zijn hoorbaar, maar daarna wordt het stil. De stilte is relatief – er is nog altijd *room tone*

- maar na de combinatie van muziek, dialoog en geluid die wegvalt lijkt ze absoluut. Hier komen beeld en klank samen om een impact te hebben op de kijker, een impact die groter wordt naarmate het panisch luisteren van de toeschouwer toeneemt; hoe meer elementen van de geluidsband de toeschouwer oppikt, hoe vollediger de ervaring die op zijn beurt tot een natuurlijke constructie van betekenis leidt.

Materialiteit van de omgeving

Auditief begint de film met muziek en een zacht, gestaag ruisen met een wisselende intensiteit. Daarna wordt het scherm zwart en horen we een voice-over. Er verschijnt een vrouw in beeld en terwijl ze haar verhaal doet krijgen we een close-up van de gewassen te zien waar we nu de wind door zien waaien. Dit shot geeft betekenis aan het ruisen dat we eerder hoorden. Tot nu toe is het geluid heel sereen maar dat verandert met de volgende sequentie waarin we een piloot zien neerstorten: we horen schrille, machinale klanken, gejaagde staccato piepies en rammelend ijzer. Het geluid is haastig en doet onrustig aan. Ook het lawaai van de motoren neemt een prominente plaats in: het staat op gelijke voet met de stemmen van de acteurs. Tijdens de crash is er enkel diëgetisch geluid en geen muziek aanwezig, die komt pas terug zodra Cooper wakker schrikt uit zijn nachtmerrie en we in het hier en nu van de filmische wereld zijn beland. Op dit moment is al het diëgetische geluid weggevallen en horen we enkel de stem van zijn dochter, terwijl de muziek opnieuw inzet op de achtergrond. Deze eerste twee minuten reiken ons al heel veel narratieve elementen aan die later belangrijk zullen blijken te zijn, maar nog meer wordt onmiddellijk de toon gezet voor het gebruik van geluid zoals eerder besproken. Muziek is bijna nonstop aanwezig op zo een manier dat ze niet op gaat in het beeld en vooral bepaalde gemoedstoestanden opwekt bij de toeschouwer. Ze begeleidt niet het visuele, maar de emotie van zowel personage als toeschouwer.

Het omgevingsgeluid is vaak vrij opvallend: sound editor Richard King gaat op zoek naar een hyperrealisme dat de filmische wereld levensecht maakt. In de hierboven beschreven sequentie hoor je een ruimtevaartuig; het uitzetten en inkrimpen van materiaal, de wrijving tussen verschillende onderdelen... King heeft naar geluidsopnames van NASA geluisterd om zo de omgeving van een ruimteshuttle zo goed mogelijk te kunnen simuleren (Yewdall 263).

Om tot deze zeer gedetailleerde soundscape te komen, past King heel goed toe wat Michel Chion "materializing sound indices" noemt. "Materializing sound indices" maken geluiden materiëler en concreter (Chion 114-115). Ze bepalen of een geluid fysiek aanwezig lijkt of slechts een abstract concept blijft. Hoe meer *materializing sound* indices, hoe echter het geluid overkomt. King zet hier heel hard op in en bekomt zogenaamde haptische geluiden. Haptisch refereert volgens filmcomponist Miguel Mera aan "a mode of perception and expression through which the body is enacted" (Cooke en Ford 159). Het diëgetisch geluid is zo gematerialiseerd dat het bijna gevoeld kan worden. Door bijvoorbeeld de minutieus uitgewerkte soundscape in het ruimtevaartuig, kan de kijker zich voorstellen hoe het is om daar zelf te zijn. Het geluid transporteert de toeschouwer naar de filmische wereld en bouwt een ruimtelijkheid op die de visuele ruimte ondersteunt. Het voelt alsof we midden in de actie staan omdat we de geluiden herkennen en horen hoe ze ons omgeven. Dit terwijl de muziek de geluidsband auditief overheerst, maar net omdat de diëgetische geluiden de muziek doorbreken, zijn ze zo goed hoorbaar en is de omgeving die King creëerde levensecht.

Samengevat leidt de opvallende aanwezigheid van de muziek dankzij Ihde's fragility of music ertoe dat de toeschouwer/luisteraar meer open staat voor alle klank in de film. Dit zorgt voor een panisch luisteren dat geen intentie in zich heeft maar betekenis laat ontstaan. Om te weten die betekenis zich dan vormt en inwerkt op de luisteraar moeten we verder met Véronique Campans filmisch luisteren.

Belichaming van het luisteren

I said, 'I am going to give you an envelope with a letter in it. One page. It's going to tell you the fable at the center of the story. You work for one day, then play me what you have written.' He was up for it. And it was perfect. He gave me the heart of the movie. (Nolan in Jensen)

Zimmer schreef het eerste muziekstuk voor deze film nog vóór Nolan hem het verhaal en de context uit de doeken gedaan had. Als enige houvast kreeg de componist van de regisseur een korte tekst over de relatie tussen een vader en kind (Dickson 1). Puur op intuïtie en emotie componeerde Zimmer een muziekstuk en deze werkwijze heeft hij de rest van de film volgehouden (Dickson 1). Emotie overbrengen door middel van muziek is op zich niet vernieuwend, maar door het plot secundair te maken in de ontwikkeling van auditieve lagen wordt van in het begin ingezet op emotionele kracht. Dit leidt tot muziek die vanuit Zimmers eigen ervaring is geschreven waardoor hij op een andere manier aansluiting moet zoeken bij de toeschouwers. Het filmisch plot is dit keer namelijk niet het bindmiddel tussen muziek en kijker-luisteraar.

Hoe komt die connectie met de kijker dan wel tot stand? Sinds de komst van de geluidsfilm is de algemene opvatting dat filmmuziek geslaagd is als ze opgaat in het beeld en onbewust gehoord wordt door het publiek (Cooke en Ford 103). Gorbman, auteur van Unheard *Melodies: Narrative Film Music* (1987), spreekt hier over het concept van hechten: film zoekt naar middelen om de afstand tussen de kijker en het verhaal te dichten, en muziek is daar één van (Cooke en Ford 109). Deze hechting moet echter subtiel gebeuren omdat de kijker zich anders te bewust is van het feit dat er überhaupt een afstand is, waardoor de eenheid tussen kijker en film alsnog niet bereikt wordt.

Deze subtiele hechting legt Zimmer naast zich neer door de muziek autonoom van het beeld te laten gedijen en niet één op één in de montage te monteren. Hierdoor wordt ze net aanweziger. Hij werkt op een andere manier: dankzij bovenstaande anekdote weten we nu dat de muziek er was vóór het beeld en kunnen we verder gaan op Véronique Campans essay L'écoute filmique (1999) waarin ze spreekt over het filmische luisteren, wat verder gaat op Barthes' panische luisteren. Ze ziet klank niet in relatie met beeld, maar als onderdeel van de volledige waarneming die door alle zintuigen gevormd wordt. Het visueel plan kan bijvoorbeeld auditieve mogelijkheden suggereren (Huvenne 2012, 76). Omdat het filmisch luisteren inzet op alle zintuigen en niet naar een op voorhand vastgestelde betekenis zoekt, geeft dit ruimte aan de mogelijkheid om bewogen te worden door het geluid (Huvenne 2012, 84). Op die manier is luisteren een belichaamd luisteren: betekenis ontstaat in het bewogen worden door de energetische beweging van de klank (Huvenne 2016, 130-131). We horen niet alleen met het oor maar met het hele lichaam, en zo kan het geluid een brug zijn om een connectie te leggen met de toeschouwer.

Jennifer Barker argumenteert dat film heel veel tactiele elementen bevat, ook al manifesteren die zich niet (in de eerste plaats) op het oppervlak van het lichaam. Niemand zal ontkennen dat elementen zoals spanning, energie, snelheid en ritme onderdeel zijn van film. Als ze goed geïmplementeerd zijn, zal de filmkijker deze condities zelf ervaren (Cooke en Ford 161). Zowel de muziek als het diëgetisch geluid draagt daar aan bij. De muziek ondersteunt vooral de existentiële worsteling waar Cooper mee zit: hij wordt heen en weer geslingerd tussen plicht en wensen, tussen verschillende liefdes en passies die niet hand in hand gaan. Omdat geluid omnidirectioneel is, omringt het de luisteraar die altijd in het centrum van de auditieve ervaring staat (Ihde 76). Bovendien resoneert het met zijn lichaam waardoor de luisteraar geabsorbeerd kan worden door het geluid. Het kan de opdeling tussen de innerlijke werking en de omgeving uitwissen (Ihde 76). Zo kan de kijker één worden met de auditieve, en bij extensie filmische ervaring.

Dit belichaamd luisteren betekent ook dat er ruimte is voor de interpretatie van de toeschouwer: Husserl spreekt in zijn genetische fenomenologie over de pre-reflectieve ervaring waarin het eerstepersoonsperspectief een rol speelt (Huvenne 2012, 111). Als luisteraar hoor en onderscheid je verschillende geluiden, en dit horen komt voort uit de zintuigelijke ervaring waardoor je bewogen wordt. In de pre-reflectie, dat voelen voor het denken, zit het belichaamde luisteren. Het eigen perspectief speelt dus een rol in het laten ontstaan van betekenis. Daniel Deshays spreekt over images sonores: beelden die in de klank ontstaan op basis van persoonlijke ervaringen van de luisteraar (Huvenne 2012, 73). In het belichaamd luisteren zit de emotionaliteit van Interstellar: het geluid werkt in op de toeschouwer en laat tegelijkertijd ruimte voor eigen inbreng, zodat het elke toeschouwer op een andere, persoonlijk relevante manier beweegt.

De bezetting van het ensemble bestaat uit strijkinstrumenten, houtblazers en een koor. Hiernaast zijn er solo's voor piano, viool, harp en gitaar. Naast deze gebruikelijke instrumenten, implementeerde Zimmer ook een iets gedurfder instrument: het orgel. Het groteske aan de muziek is niet zoals gewoonlijk afkomstig van een gigantisch percussie-ensemble, zoals in vorige samenwerkingen tussen Nolan en Zimmer, maar van een kerkelijk instrument. Bij de start van het project gaf de regisseur de componist een horloge met de inscriptie 'this is no time for caution' - de opdracht was duidelijk (Frey 1). Zimmer ontwikkelde een nieuwe taal. De keuze voor het orgel brengt meteen een betekenis met zich mee aangezien we zijn kenmerkende klank onmiddellijk associëren met spiritualiteit en religie. Het orgelgeluid werkt in op ons ontzag voor iets dat groter is dan onszelf, in deze film geen god of onbenoembare kracht maar het heelal met zijn eigenzinnige, onontdekte natuurkundige wetten. Zimmer maakt gebruik van de geaccumuleerde kennis van de toeschouwer om op die manier een connectie te leggen die iets betekent. Door het belichaamd luisteren en gebruik te maken van de kennis en ervaringen die in ons brein zijn opgeslagen, leggen we de connotatie met het transcendente en geeft de muziek een nieuwe dimensie aan de filmische ervaring.

Ruimtelijkheid in het geluid

Campan legt verder de nadruk op het feit dat we in film naar een opgenomen geluid luisteren. In het kader hiervan spreekt ze over syncope: het opgenomen geluid blijft steeds op een zeker niveau naar zijn oorsprong verwijzen en kan dus nooit volledig samenvallen met het filmische beeld (Campan n.p.). De verwijzingen naar de oorsprong van het geluid bepalen dan ook mee de audiovisuele perceptie door de toeschouwer. Zoals eerder gezegd geeft ze niet om de relatie tussen klank en beeld in het filmische luisteren, maar legt ze de nadruk op de ruimtelijkheid van het geluid (Huvenne 2012, 85). Deze ruimtelijkheid is op zich al een factor die de toeschouwer in de filmische beleving trekt aangezien de luisteraar de positie van het opgenomen geluid aanneemt (Huvenne 2012, 132). Zo passeert de drone die Cooper en zijn kinderen achterna gaat niet voorbij ons als toeschouwer maar voorbij degene die het geluid opgenomen heeft. Aangezien de luisteraar in het centrum van zijn luisteren staat en door de ruimtelijkheid van het geluid de drone hoort naderen, overvliegen en weer verdwijnen, lijkt het alsof de drone effectief boven hem vliegt. Zo kan het geluid hem naar de filmische wereld transporteren. Als Cooper en zijn familie na een baseballwedstrijd moeten vluchten voor een windstorm horen we als luisteraar de wind rond ons razen. Auditief omringt hij ons zoals hij in de filmische wereld de personages omringt. Het geluid resoneert met de toeschouwer en betrekt hem daarmee in het verhaal.

Sporen naar betekenis

Als laatste aspect aan Campans filmische luisteren hebben we geluidssporen. Zoals eerder besproken komt de betekenis van het geluid op een procesmatige manier tot stand. Klank is een temporeel element en overstijgt het momentane. Wat voor het moment kwam is belangrijk om het huidige moment te plaatsen, het huidige moment zal inspelen op het volgende. Een duidelijk voorbeeld is muziek, waarbij we mentaal alle gehoorde noten in een configuratie plaatsen om zo het geheel te percipiëren. Het ritme, de toonhoogte, de lengte van de noten... bepalen allemaal samen mee hoe we een muziekstuk ervaren. Het filmisch luisteren laat toe sporen in de klank te vinden door zijn procesmatige manier van een betekenis te laten ontstaan (Huvenne 2012, 85). Niet alleen de ontwikkeling van het geluid op zich, maar ook de veranderende relatie ten opzichte van het beeld en de akoestische elementen ervan zijn belangrijk in deze zoektocht naar sporen (Huvenne 2012, 78).

Zimmer maakt vooral gebruik van muzikale motieven die doorheen de film terugkeren en in combinatie met het beeld als spoor tot betekenis leiden. Terugkerende motieven verbinden de bijbehorende narratieve gegevens met elkaar en dragen die verbinding over naar de kijker. Op die manier wordt info uit de juiste scènes aan elkaar gekoppeld om betekenis te laten ontstaan. Zimmer gebruikt verschillende wederkerende motieven, maar het belangrijkste spoor volgt Coopers existentiële zoektocht. Hij was ooit astronaut maar sinds hij niet meer kan vliegen weet hij niet meer wat aangevangen en mist zijn leven een doel. Hij heeft wel de liefde voor zijn kinderen, maar elk moment op aarde verlangt hij terug naar zijn astronautenbestaan. Bij de eerste kans die hij krijgt, gaat hij dan ook terug op missie, in de veronderstelling dat hij hiermee zijn doel weer gevonden heeft. De muziek toont ons echter al van in het begin dat de betekenis van Coopers leven niet in het redden van de wereld zit, maar in de band met zijn dochter.

Doorheen de film worden gebeurtenissen die zijn vaderhart sneller doen slaan ondersteund door de muziek waarin telkens het motief terugkeert. Zo horen we het motief als Cooper en zijn kinderen de drone ontdekken, als hij vanuit de ruimte de videoboodschappen van zijn kinderen bekijkt, als hij in de vijfde dimensie in Murph de oplossing voor het probleem vindt en een laatste keer als hij herenigd

wordt met zijn dochter. In de vijfde dimensie wordt zijn eigen positie in het grotere geheel duidelijk en ook op persoonlijk vlak komt hij tot een catharsis. Hij realiseert zich wat het voor hem betekent om mens te ziin en dat is de verbinding met anderen, in ziin geval met zijn kinderen. De muziek kan dus gezien worden als een spoor naar zingeving. Het motief hint al van in het begin naar de essentie van het mens-zijn, maar dit wordt pas duidelijk als we alle beelden waar het motief bij opduikt gezien hebben. Telkens het motief terugkeert wordt het ook duidelijker; de eerste keer dat we het horen, zit het vervat in een muziekstuk met verschillende harmonische lagen waardoor het moeilijker te onderscheiden is, maar op het einde van de film staat het motief steeds meer alleen en wordt het luider in de geluidsband geïntegreerd. Dit symboliseert de reis naar betekenis die Cooper aflegt. In de relatie tussen dit motief en de beelden die erbij horen, zit de betekenis van de film verstopt.

De boodschap van de stilte

Een ander opvallend aspect in de geluidswerking is de absolute stilte die Nolan soms toepast. Hoewel dit een accurate weergave van de werkelijkheid is, er is immers geen geluid in de ruimte, heeft dit toch een heel bevreemdend effect. We zijn als filmkijkers zo gewend om geluid te horen, zelfs al is het een simpele room tone, dat het gebrek aan geluid onnatuurlijk lijkt. Het is iets waar we niet naast luisteren. Het maakt iets in ons wakker, een gevoel van onbehagen: de grote leegte van het heelal ligt op de loer, het onbekende lijkt dreigend. Volgens professor Kathryn Kalinak functioneert geluid in film als een brug tussen de realiteit van de toeschouwer en de filmische, fictionele wereld. Stiltes wijzen ons op het fotografische karakter van films: wat gefilmd is, is een opname van iets uit het verleden (Larsen 190). Geluid transformeert het opgenomen beeld naar een heden dat zich al dan niet in een fictioneel universum bevindt (190). Als dat geluid er niet is, beseffen we des te meer dat we naar een opname aan het kijken zijn. Heel even laat de magie van de film ons los en zweven we tussen twee realiteiten in. Het geluid uit de eigen omgeving dat tot dan toe in de auditieve rand zat, komt weer in de kern van onze aandacht. Aan de ene kant zorgt dit voor dit onbehaaglijke gevoel, en dat is ook een emotie die we in het dagelijkse leven wel eens kunnen hebben als we te diep nadenken over wat 'de ruimte' nu precies is. Dit onbehagen linkt de film aan de realiteit van de toeschouwer, herinnert hem aan zijn bestaan op

een planeet in die gigantische ruimte. Aan de andere kant geven de stiltes ons tijd om te reflecteren. Ze komen vaak na een climax in de muziek of een oorverdovende explosie, wat de emotionele impact op de toeschouwer alleen maar groter maakt. Het is een moment van rust in een film die altijd maar blijft verder denderen. Daarbij fungeert de opvallende stilte ook als een element dat de muziek doorbreekt, aangezien die anders zo prominent aanwezig is. Op die manier kunnen we de stilte linken aan Ihde's fragiliteit van muziek: ze benadrukt extra de aanwezigheid van de muziek eens die weer opstart. De absolute stilte voelt aan als een schok, maar de muziek die erna terugkomt doet dat even hard en eist de aandacht van de toeschouwer op.

Besluit

Interstellar is een wetenschappelijke film die over emotie gaat, en in deze schijnbare tegenstelling ligt de sleutel tot de geluidswerking verborgen. Aan de ene kant creëert Zimmers monumentale soundtrack een juxtapositie tussen de theoretische dialogen en objectieve ruimteshots enerzijds en de menselijkheid van de astronauten die zich in deze wereld begeven anderzijds. Ze zoekt naar emoties, zowel in het verhaal als bij de toeschouwer, en haalt ze op een procesmatige manier naar boven. De muziek activeert de toeschouwer via een belichaamd luisteren en het aanspreken van diens persoonlijke kennis en ervaring om betekenis te kunnen construeren. In wisselwerking met de muziek van Zimmer staat dan de soundscape van King die de subjectiviteit waar Zimmer voor zorgt van een realistisch kader voorziet. Waar realisme normaal gezien slechts belangrijk is tot de mate waarin het beeld en verhaal geloofwaardig worden, gaat King nog een stap verder. Na analyse, onderzoek en empirisch experiment geeft King ons levensechte diëgetische geluiden die ons via syncope naar de wereld die Nolan opbouwt transporteren.

Samengevat is het geluid in deze film een vraagstelling enerzijds, en een leidraad anderzijds. De bijdragen van King en Zimmer combineren de mogelijkheden van het filmmedium tot realisme met de mogelijkheden tot interpretatie van die gevormde realiteit. De geluidsband laat de luisteraar dankzij de fragiliteit van muziek toe zich open te stellen voor alle auditieve elementen en die zelf samen te brengen tot iets betekenisvols. Het geluid is wat dit ruimtespektakel een intiemere, persoonlijkere dimensie geeft. Het maakt de film op

mensenmaat. Mathew McConaughev zegt het zelf: "Nobody is able to put more scope, scale, awe on screen than Chris, But I think he was wanting to take the next step, toward something more intimate" (Jensen 1). Door de muziek te laten ontwikkelen op het verhaal ontstaan er geluidssporen die naast het visuele een tweede narratief plaatsen dat het psychologische karakter van deze film uitdiept.

Door zich niet aan formules of conventies te houden (no time for caution!) kwamen Nolan. Zimmer en King tot een synthese van geluid die de fysieke werkelijkheid perfect nabootst en op hetzelfde moment een emotionele werkelijkheid voor de toeschouwer opent. Deze twee lagen bestaan naast elkaar en kunnen beiden ervaren worden dankzij het filmische luisteren en de sporen van Campan. Nolan wist al bij het eerste stuk dat Zimmer componeerde dat de muziek het hart van de film symboliseerde (Jensen 1). De beelden gaven dat hart een lichaam, de soundscape gaf dat lichaam een brein.

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Notes

- Met diëgetisch geluid wordt geluid bedoeld waarvan de bron in het beeld of de gesuggereerde offscreen ruimte bestaat (Cooke en Ford 111).
- Mondelinge opmerking van de regisseur in een gesprek over zijn laatste film Dunkirk (2017). Een deel van het interview is opgenomen in een Youtubevideo van Jack Howard (2017).
- Complete stilte in film is zeldzaam. Scènes die als 'stil' beschouwd worden, zijn meestal nog voorzien van room tone, een opname van een stille omgeving. In het echte leven is het immers nooit compleet stil.
- Geciteerd in "Inside 'Interstellar', Christopher Nolan's emotional space odyssey", een artikel van Jeff Jensen (2014).

Linking embodied coordination dynamics and subjective experiences in musical interactions: a renewed methodological paradigm

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Embodied music cognition provides a valuable and comprehensive research paradigm within systematic musicology to describe and explain musical sense-making. The basic claim underlying musical embodiment is that subjective meaning, in its broadest sense, is actively constructed within humans' bodily interaction with music. As such, the empirical study of bodily coordination may provide insights into the subjective aspects of musical experiences. In the present paper, we advocate for a dynamical systems approach to human music interaction, focusing on the time-varying principles, and the relational aspects of the musical interaction process. We propose a model that integrates these focus points, to investigate the link between embodied coordination dynamics. subjective experience and sense-making. We then discuss possible quantitative and qualitative techniques that allow to operationalise the model into concrete empirical music research. Finally, we conclude by presenting some illustrative research cases conducted at IPEM. Ghent University institute for systematic musicology.

Section 1: Introduction

"You are the music, while the music lasts" (T.S. Eliot - Four Quartets, 1943)

Combining quantitative methods with qualitative methods or so-called mixed-method approaches can enable a deeper understanding of phenomena by gaining insights from multiple perspectives. However, we argue that their value is not found by merely searching for correlations in quantitative data and qualitative reports of subjective experiences. Instead, the central thesis of this paper is that this value is found by using appropriate procedures and routines that reveal interaction dynamics, meaningful constraints, relations and influences using the common vocabulary and theoretical framework of coordination dynamics.

The coupling of the quantitative and the qualitative has historically been a hotly debated topic (Sale et al.). From a pragmatic viewpoint, the discussion here is held while acknowledging the fact that research always occurs in a social, historical, political and cultural context (Bresler; Creswel) and stresses the fact that 'reality' is an ongoing, dynamical and meaningful transaction between environment, mind and sense perception (Barone and Pinar; Horne et al.). This discourse is situated in the domain of digital humanities and aims to extend the recently coined 'humanities 3.0' concept (Bod). As such, it acknowledges the value of using digital tools to discover patterns (humanities 2.0) alongside hermeneutic and critical approaches (humanities 1.0) but argues that one should go beyond mere patterns and focus on the underlying principles that create them.

Both qualitative and quantitative methods are valuable and necessary approaches to gain knowledge. In any research domain, qualitative and quantitative approaches have shown their value as respectively inductive and deductive instruments (Creswel). Qualitative research allows for a deeper understanding and appreciation of phenomena while quantitative research provides a more precise analysis and prediction with the goal of generalisation (Razafsha et al.). In addition, quantitative methods feature a larger distance between researcher and research, exchanging meaning for a higher level of abstraction. However, both are systematic attempts to examine concepts (Razafsha et al.; Bodie and Fitch-Hauser). Simply

put, quantitative methods are particularly powerful in discovering patterns in occurring phenomena (regularities, inter-dependencies, trends), while qualitative methods are particularly well suited for interpreting the found patterns. The combination of quantitative and qualitative data provides additional insights and is now widely applied in research using mixed-method paradigms (Creswel). However, as both methodologies study different phenomena, combinations should remain complementary and should not be used for cross-validation (Sale et al.). We assume this mixed-method approach here complemented by the vocabulary and features of dynamic systems theory. From the latter we use non-linear quantitative methods for pattern discovery and argue for the use of qualitative methods for their interpretation.

In the present article, we want to contribute to the debate on human interaction with music. In accordance with the embodied music cognition (EMC) paradigm that will be introduced in section 2, we approach musical meaning as an active process: a lived experience, created in-the-moment of people's interaction with music and situated in a specific socio-cultural context and personal 'histories' of experiences (Leman, Embodied Music Cognition and Mediation *Technology*; Cook). The human body, its motor and (neuro)physiological functioning are thereby attributed a central role. The core assumption is that the observation of the body, and its functioning, may provide access to the subjective realm of musical experience, feelings, and sense-making. In that regard, observable patterns of bodily activity and the subjectively felt quality of that interaction are essentially coupled, making the integrated use of quantitative and qualitative methods necessary. Supported by new technologies for measuring bodily activity (movement, physiology and brain activation) and computational analysis methods, empirical research has profoundly ameliorated our knowledge on the embodied basis of human music interaction (Lesaffre et al.). Yet, some important challenges lie ahead.

A first challenge pertains to the enormous variability in the observed patterns of embodied music interaction, both in time and space, complicated further by the manifold contextual and personal factors. Given this variability it is hard to interpret and generalise musical behaviours and experiences. Typically, the solution is found in a reductionist approach stripping away the lived experience of

a real-life musical interaction to a greater or lesser extent. Yet, it's hardly ascertainable that variation, deviation, dynamical change and surprise are at the core of musical pleasure and sense-making. For this reason, this article approaches human beings and their musical environment as a complex adaptive system, seen from the dynamical systems paradigm. The core insight we adopt from the dynamical systems paradigm is that, instead of looking at the appearance of patterns in their manifold variability, we need to focus on the understanding of the organisational principles that lead to the manifold observable patterns of music interaction. It is here that quantitative methods can help in the detection and analysis of patterns while qualitative methods can help with their interpretation and reveal the relation to their underlying organisational principles. According to the paradigm, these principles are generic, regulating pattern formations in physical and biological systems nature-wide. This includes systems that involve human embodied interaction and the subjectively felt qualities of these interactions. What is especially interesting is that dynamics, variability and instability are at the core of these organisational principles in order to allow systems to behave flexible, adapt to change and evolve towards qualitatively new forms of organisation and behaviour. Finally, the dynamical systems paradigm provides a valuable vocabulary, giving the opportunity to connect the languages of people involved in music interactions (interpreters) with music and cognitive (neuro)science (pattern finders). The methodological model incorporating these notions from dynamic systems and EMC forms the content of section 3. A selection of quantitative techniques used for pattern detection and analysis are discussed and introduced in subsection 3.1.

Secondly, we need to deepen our knowledge on the nature of the subjective experience of human interaction with and via music. Early attempts of investigation, which were rooted in the domain of phenomenology (Pike; Dura) will be introduced alongside the EMC paradigm in section 2. The original objective of phenomenology is the systematic attempt to uncover and describe the internal meaning structures of a lived experience (Van Manen). Qualitative methods seem best suited to undertake this task, given that the study of an experience is primarily approached from a first-person perspective (F. J. Smith; Gallagher; Randles). Nevertheless, the complementarity of seemingly decoupled opposites such as the quantitative and qualitative has historically been included in the phenomenological view.

Phenomenology arose out of the need to bridge Cartesian dualism between objects 'out there' and subjectivity 'in here' (Kearney). A deeper elaboration on this view may foster the development of innovative methods for the integrated study of quantitative and qualitative aspects of human music interaction (Schäfer et al.). To this end, more recent psychological and neuroscientific accounts on the quantitative study of subjective experience are discussed in section 3.2.

Finally, we end this paper with a section on four research experiences which incorporate the methodological model from section 3 in their practice. While some of them are still on-going, they aim to illustrate how the quantitative and qualitative techniques from subsections 3.1 and 3.2 can be used in empirical research of dynamical music interactions.

Section 2: Theoretical background

The goal of this paper is to present a model, implementing a renewed methodological paradigm to study dynamical musical interaction processes. An essential feature of this paradigm is the aim to link quantitative coordination patterns characterising a musical interaction, to the subjectively felt *quality* of the interaction. The realisation of this paradigm relies on the combination of different theoretical frameworks. At the core lies the EMC theory that provides a global theory on the intricate relationship between bodily movement and subjective sense-making. As an extension, we propose to integrate the theory on coordination dynamics, as it allows us to deal with the spatiotemporal variability and complexity inherent to musical interactions, by focusing on the generic structuring principles underlying musical interactions. Finally, we refer to the framework of phenomenology, as a means to integrate a first-person perspective to the experienced quality of a musical interaction, linked to the concepts of intentionality and agency.

Embodied music cognition EMC is rooted in more general theories on embodied cognition and interaction (Varela and Thompson; Anderson) and embodied forms of phenomenology (Merleau-Ponty). These theories have led to several complements and extensions such as in the enactive, extended, embedded, ecological, emotional, engaged, expressive and emergent approaches (Hutto and McGivern).

Core concepts of all these approaches are the close action-perception coupling and the interaction with the environment.

The core idea of EMC is that an intentional level of musical interaction is established through corporeal articulations and imitations of sensed physical information provided by the musical environment (Leman, Embodied Music Cognition and Mediation Technology). It emphasises the role of the human body as mediator for meaning-formation and places it in an interconnected network of sensory, motor, affective, and cognitive systems involved in music perception. Subsequent accounts have extended the role of environmental and social contexts by emphasising the importance of collaborative interaction and joint action (Moran). These contexts would enable a sense of participatory sense-making, creativity, meaning-formation (De Jaegher and Di Paolo) and intense subjective experiences (Maes et al.). Others have highlighted the overly dualistic nature of a 'body as mediator' and in the distinction between encoding and decoding, nature and culture (Geeves and Sutton).

The EMC framework is valuable in the way it connects subjective experience and sense-making to situated bodily activity. However, empirical research has generally been struggling to reliably capture the complexities and variability, both in time and space, inherent to embodied musical interactions. A solution that gains increasing impact is to extend the EMC framework with a more dynamical account to music interactions. Within our proposed methodological paradigm, we integrate the interdisciplinary framework of coordination dynamics, originating in the work of JA Scott Kelso, to better capture the complexities and spatiotemporal variability in embodied music interactions.

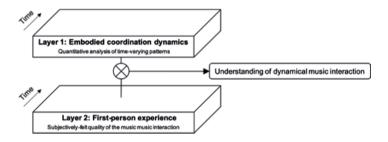
Coordination dynamics is a theoretical, methodological and analytical framework that aims to understand how patterns of coordinated behaviour emerge, persist, and evolve in living things (Kelso). This line of scientific inquiry focuses especially on time-varying coordination processes in the human brain and behaviour, making it particularly applicable to the study of embodiment in dynamical musical interactions (Borgo; A. Demos et al.; A. P. Demos et al.; Maes; Varni et al.; Walton, Washburn, et al.). Musical interactions, whether in performance or dance, require an intricate, fine-tuned spatiotemporal coordination of a large number of coupled body parts (of one or more

individuals) to reach a coherent and pleasant performance. According to the coordination dynamics approach, understanding the temporal dynamics of such musical interactions is to study the *relationships* that exist between the individual bodies and body parts, rather than studying them each on their own. In other words, bodies and body parts should be studied as a collective system and correspondingly, the unit of analysis should be shifted to the system level. The central thesis thereby is that such a system will self-organise throughout time so that quasi-stable relationships and patterns are established between its interrelated parts. The field of coordination dynamics is thereby of interest for music research as it provides valuable analytical tools to quantify the time-varying relationships and patterns within complex, coordinated musical behaviour. In addition, coordination dynamics brings in a scientific vocabulary of concepts that is suited to match the vocabulary of musicians and dancers, describing their musical experience often in terms of a dynamic interplay of moments of relaxation and tension, balance and instability, complexity and simplicity, predictability and surprise.

Phenomenology A third theoretical underpinning inherent to our proposed methodological paradigm for studying dynamical musical interaction is the framework of phenomenology. Phenomenology provides a stepping stone to the integration of a first-person perspective to the experienced quality of an embodied (musical) interaction (D. W. Smith; Gallagher). A shared importance between phenomenology and the approach presented here is given to the role of the body. Merleau-Ponty, for example, focused on the circular relationship between the objective and subjective dimensions of the body that enable a relation between the perceiving and the perceived (Halák). Concepts such as empathy and inter-subjectivity that are crucial in any musical interaction rely on this relationship (Zahavi; Duranti). Another relevant phenomenological concept is that of perceptual indeterminacy (Merleau-Ponty). It can be linked to the aforementioned positive traits of variability and instability of a dynamical system as it views the indeterminate as a positive phenomenon from which qualities can emerge. As such, it also shows a correspondence with the concept of emergence in dynamic systems (De Wolf and Holvoet) and meta-stability in coordination dynamics (Kelso). A concrete musical example is the emergence of 'groove' out of small time-differences in music (Roholt). A phenomenological account by Casey illustrates the value of investigating the subjective experience in musical contexts.

The musical experience is said to be direct, involving a 'willing suspension of belief' through the practice of so-called 'bracketing' as stated in phenomenological reductionism (Casey). Interactive musical scenarios as experimental settings could thus provide transparent investigations into the subjective experience by minimising noise from spurious mental processes and thoughts. Some neuroscientific accounts comment on the illusionary experience of a phenomenological unity in the musical experience when perceptual components such as pitch. rhythm, tempo, meter, contour, loudness, spatial location and timbre are processed separately (Niedenthal et al.; Levitin and Tirovolas). These accounts stress the experiential aspect of music but nevertheless remain vague as to how this experience comes about. Below, we will discuss some possible methods to assess the subjectively experienced quality of musical interactions from a first-person perspective.

Section 3: A renewed model for linking embodied coordination dynamics and subjective experiences



The three theoretical frameworks are combined into a working model, proposed as a methodological paradigm for the empirical study of dynamical human music interactions. As mentioned, the model is rooted in the EMC theory in the sense that human experience and sense-making (layer 2) is inherently linked to bodily action and interaction (layer 1). Yet, the model proposes to extend this basis of the EMC theory in a twofold manner. As a first extension, the model attaches great importance to the time-varying nature of embodied music interactions and their subjective experiences. As a second extension, the model advocates for a systems perspective to the study of human music interaction. As explained above, embodied coordination and sense-making are understood as collective, participatory, and relational processes.

On the level of embodied coordination dynamics (layer 1), the challenge is to better understand how humans jointly construct patterns of order (articulated in bodily movement and sound), and how these patterns sustain, break down, and evolve towards new ordered patterns throughout time. On the level of the first-person experience (layer 2), the challenge is to better understand the affective quality of the joint relationship between interacting musicians, dancers or listeners. This affective quality pertains to the communicating and negotiating of intentions, to expressivity, the feeling of togetherness. shared agency and flow among other experiential aspects. Finally, the key challenge related to the model is the investigation if, and how, the time-varying patterns of embodied coordination relate to the affective quality experienced by the musicians, dancers, or listeners involved. This final challenge might include an analysis at multiple levels of observation, for example from body part to individual or group level, and lead to a verifiable formalisation of underlying organisational principles.

In concept, it is increasingly acknowledged within the cognitive and social sciences that the time dimension and (dynamical) systems approach are relevant in research on human interaction. So far however, empirical research in the domain of music has experienced difficulties to reliably capture the time-varying processes in concrete scenarios of human music interaction. An important goal of the present paper is to briefly discuss existing methods that provide opportunities for empirical research, enabling ourselves to operationalise ideas inherent to the model presented here.

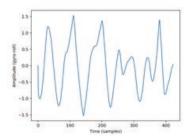
Layer 1: Quantitative measurement and analysis of embodied coordination dynamics

With increasing technological innovation, researchers now have a wide-ranging choice of tools and sensors for capturing quantitative data. This wealth of possible data poses a considerable challenge to researchers to decide on the most relevant data and eliminate noise given the envisioned research questions. In the context of music, data may pertain to audio recordings, body movements, physiological data, note sequences and many more. In this section, we introduce five quantitative techniques that are well suited to unveil time-varying patterns and processes in sequential, non-stationary and time-series data. As such, they are proper candidates to operationalise layer 1

of our model proposed above. The discussed techniques allow us not only to unveil time-varying patterns within a single time series, but equally to unveil patterns across, and relationships between multiple data streams. This makes them particularly relevant to implement the systems approach advocated for in our model. In addition, working with dynamic systems re-values outliers and individualised research through its capability of working with multiple resolutions (Holmes et al. 2013; Bresler 2006). It allows us to uncover underlying simple principles while keeping in mind intrinsic dynamics and initial conditions. It tackles the challenge of too many degrees of freedom by focusing on lower-dimensional order parameters. All these challenges are characteristic of non-linear interactions. It is a goal of the methods below to reveal the recurrent patterns, underlying structure and more general, understand the interactions between components.

Phase space reconstruction makes it possible to identify patterns and relations between non-recorded degrees of freedom. It refers to the process of obtaining the phase space of a dynamical system from its time-series. A phase space represents the set of all possible states of a dynamical system such that each state of the system corresponds to a unique point in the state space. Using an influential theorem, one can reconstruct this space using a potentially lower-dimensional time-series (Takens).

An example can be seen in figure 5. On the left, it shows a one degree of freedom gyroscope recording of a simple movement with a smartphone. On the right, it shows its associated phase space reconstruction and three-dimensional patterns corresponding to pitch, yaw and roll.



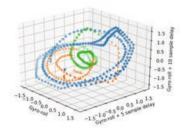


Figure 5: Gyroscope data recording of 1 degree of freedom (left) and its phase space reconstruction (right)

Recurrent Quantification Analysis This technique allows scientists to reveal structure in complex time-series. It takes the reconstructed phase trajectory of a dynamical system and counts the number of recurrences to any particular state. Its basis is a square distance matrix with recurrence elements evaluated using a cut-off limit called a recurrence plot. The advantage of this technique is that it does not require assumptions about data stationarity, data set size or distribution.

Figure 6 shows example recurrence plots with phase space trajectories on the x- and y-axes from conditions in which two subjects are instructed to tap their hand along with metronomes. The metronomes start in-phase but gradually de-phase due to different tempi. The left-most plot shows the trajectory of the metronomes' relative phase and shows a predictable system that linearly increases its collective variable. The plots in the middle and to the right respectively show the participants in isolation and looking at each other's hand moving. It shows how variability in human behaviour adds random fluctuations and structure at specific time- and phase-relationships.



Figure 6: Recurrence Plots (RPs) computed from the time series of a system's collective variable (relative phase)

Fractal analysis Fractal analysis represents a collection of contemporary methods that measure complexity. It is useful in measuring properties of systems that possess a degree of randomness and makes it possible to simplify and quantify complex relationships over multiple spatiotemporal scales. For example, it has been used to show the ability of listeners to predict tempo fluctuations (Rankin et al.), to measure complexity in musical improvisation (Keller et

al.) and to describe gait dynamics synchronised to music (Hunt et al.). An important measure is the fractal dimension, which evaluates to what extent properties depend on the resolution at which they are measured. Another technique that is often used is called Detrended Fluctuation Analysis (Peng et al.). It calculates a curve with an exponent that is an indicator of structure appearing at multiple scales (self-similarity), long-memory processes, 1/f noise and power-law relationships.

Cross wavelet coherence This technique is useful to assess synchronisation between subjects. It evaluates coordination through examination of the strength (coherence) and patterning (relative phase) of two time-series across multiple time scales. It can be applied to non-stationary data and is a form of spectral analysis for non-linear timeseries. It is able to reveal periodicities of local micro-scale structures within global macro-scale patterns (Walton, Richardson, et al.). An example of a plot of the transform is shown in fig 7 and was used to assess coordination using movement data of two players playing a shaker instrument. It indicates a higher degree of synchronisation for lower frequencies (0.125Hz or 8 second period) and a regular phase-lag (a quarter cycle or 2 seconds) between the two players indicated by the upward arrows. This observation can then be related back to the musical phrases and their interpretation by the musicians.

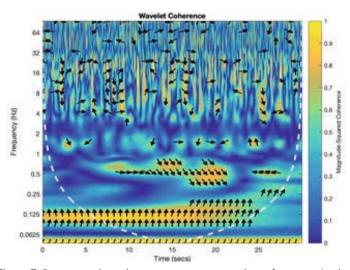


Figure 7: Cross wavelet coherence on movement data of two music players

Dynamic models When relevant (control and order) parameters have been defined and an in-depth understanding of the non-linear coupling between components has been achieved, one can formulate a mathematical formulation of a dynamic model. They are useful for prediction and allow a deeper understanding of phenomena through their formalisation of a general organisational principle. They can be experimentally tested and are built upon simple dynamic models. To name a few, models exist for rhythm perception (Large), synchronisation (Mörtl et al.) or join-action (A.P. Demos et al.).

The presented techniques obviously do not represent an exhaustive review of techniques for non-linear analysis of dynamic systems. Neural networks might be used to learn underlying dynamics without defining an explicit internal model beforehand. Other (linear) movement analysis methods based on principal components (Toiviainen et al.), topological structure (Naveda and Leman), probabilistic (Sievers et al.), sequential (Françoise et al.) or functional (Caramiaux et al.) models have shown their value but do not capture fine-grained spatiotemporal structures or non-stationary data well. Linear methods such as Fourier analysis, auto- and cross-correlation can provide helpful directions for subsequent analysis. A good evaluation of the use of both linear and non-linear methods is given (Ravignani and Norton) in the context of measuring rhythm complexity.

Layer 2: Assessment of the subjectively experienced interaction quality

In this sub-section we intend to raise an important methodological problem in the study of subjective experience, namely its operationalisation in experimental settings. How can we translate the subjective experience into observable variables, in order to measure some dimensions of the subjective experience without interfering with the experience itself?

Partial solutions to tackle such a big problem are already available for adoption. They are presented here as a non-exhaustive methodological overview with practical suggestions for empirical music research. At this layer, the researcher is confronted with the methodological challenge of organically integrating the assessment of subjective experience and the measurements of dynamics recorded during musical interactions. As we stressed over the course of the present article, this integration is a condition necessary for a deeper understanding of the phenomenon.

Questionnaires and scales

The first point worth clarifying is the validity of verbal reports from the subjects as quantitative data, as we often rely on their content to measure dimensions of the first-person experience. Interrogating the subject about its own awareness is so far the most direct form of access to the experience; in-depth interviews, focus groups, questionnaires, concept mapping, focused life history narrative, audio/video/document analyses, documentary analysis and case studies can provide access to the domain of subjective experience (Razafsha et al.).

Nevertheless, when it comes to measuring the quality of an ongoing interaction, verbal reports suffer from the intrinsic disadvantage of being mediated by self-referential cognitive processes that eventually lead to verbalisation. This implies this sort of data cannot be collected without perturbing or interrupting the flow of the interaction. Hence, there is a need for the report to be referred to a posteriori with respect to the original experience. The solution is sub-optimal, as the subject would refer to a memory of the experience rather than to the experience itself. Furthermore, reports collected a posteriori are usually a summary that are difficult to relate to the time-varying nature of interactions.

Time-varying ratings

In order to facilitate the mediation between the participant and its experience at the time of the measurement, video-audio stimulated recall is a valid approach which has been proposed in music research (Desmet et al.; Caruso et al.). It consists of presenting to the participant a recording of his own performance, so that he or she can associate freely, coming up with expressions and intentions to specific moments of the experimental session. An annotation system is then provided to continuously rate subjective parameters of interest over the course of the stimulation to generate a time-series that can be related to the time-varying measures recorded from the interaction. A practical use-case for annotation will be presented in the next section.

We want to point out that the variable to measure should be carefully selected, since repeating the procedure several times can be tedious for the participants and compromise its own reliability. Since the approach provides measurements that are limited in richness and

nuances of content, the researcher should ideally collect as much information as possible by complementary and less systematic means. Open questionnaires and interviews at the end of the session give the participant the opportunity to elaborate on some crucial moment of the experienced interaction, which is potentially a valuable source of information on attributed meanings.

Inference from physiological markers

Besides the above-mentioned methods and based on processes of intentional evaluation by the participant, disposing of a 'toolkit' of sensors for measuring biomarkers can provide the researcher with access to some low-level dimensions of the subjective experience. For instance, analysing the electroencephalogram (EEG) of a person presented with subliminal stimuli can be enough to know whether the stimuli were consciously perceived or not, without asking for any verbal report (Dehaene). Very far from being any sort of 'mind reading', the approach consists of looking for physiological patterns of activations that work as a 'signature' for relatively low-level dimensions of consciousness.

The set of tools for the detection of physiological markers spans the central, peripheral and autonomic levels of the nervous system (Steinbeis et al.; Grewe et al.). Electromyography (Ekman; Tamietto et al.), pupillometry (Laeng et al.), electro-dermal activity, heart-rate and blood pressure among others (Critchley), have widely proven to provide valid signatures of some components of subjective experience. Over the years, all of these peripheral measures have been correlated to regional brain activity in order to shed light on the hypothesis of so-called 'somatic markers'. Such quantifiable markers represent states of body arousal which are integrated in the brain to give rise to emergent feeling in the immediate experience of the here-and-now (Damasio).

We want to stress that physiology can give access to low-level dimensions of conscious experience, such as arousal and basic emotions. Higher-level processes such as meaning attribution and interpretation are out of the reach of these techniques when they are not combined with subjective reports.

Section 4: Cases

What follows is a summary of some ongoing studies carried out by the researchers at IPEM, whose line of research is inspired by the integration of coordination dynamics into EMC. Questions they attempt to answer can be summarised as follows: how is coordinated behaviour structured and evolving over time? How do individual actions lead to the emergence of stable forms of coordination between interacting people? How can we interpret the patterns observed in an experiment in light of the participants' subjective experience? And, most importantly, how can we design interactive experimental scenarios in light of the methodological reflections presented in previous sections of this paper?

Joint musical interactions (A. Dell'Anna)

In the context of musical interactions, the concept of 'homeostasis' was proposed as a stable state characterised by an optimal equilibrium of behavioural, physiological and subjective parameters within a system (Leman, The Expressive Moment: How Interaction (with Music) Shapes *Human Empowerment*). According to the proposal, the quality of a collective performance directly depends on the behavioural stability of the individual parts engaged in the interaction. In order to test the validity of such a construct, dell'Anna (under revision) designed a novel dyadic singing task inspired by the medieval Hocket technique: each participant is provided with a musical score, such that the partners have to alternate with one another in singing individual notes in order to form together the global pattern of the song.

After the task, both participants are presented with audio-visual recordings of their joint performance and asked to continuously move a slider up and down to rate the quality of the interaction. As we previously mentioned, such approach makes it possible to correlate the course of the performance to a time-varying series of subjective ratings, instead of entirely relying on questionnaires which fail to grasp the evolution of the experience over time. Furthermore, presenting the recorded performance to the participants implies that they do not have to rely solely on their memory for the assessment. In this sense, the method attempts to minimise the mediation between the actual experience and the moment when a participant is asked to recall it.

The influence of Carnatic dance of intentionality in piano performance (G. Caruso)

The author of this study is a professional pianist who dedicated her PhD project to the integration of performer's self-reports into the EMC framework (Caruso et al.). Starting from the EMC notion of mediation, she investigates how performer's intentions are translated into observable actions and adds a reflective method to assist the artistic practice. She defines a two-way process of bottom-up processing, based on quantitative recordings of a performance, and top-down processing consisting of qualitative annotations from the performer.

The latter component of the process is defined as *performer-based* analysis and is based on the methods of stimulated recall (Bloom) and thinking-aloud (Van Den Haak et al.). In such a way the performer provides structural, interpretative and technical annotations to her own recorded performance (first person perspective) and combines these with extracted features and patterns using quantitative methods (third person perspective). This method is closely related to the paradigm presented in this paper as the performer-based analysis allows for the visualisation of gesture-sound performance patterns with their interpretation through annotations of gesture-sound intentions. An additional step could be a more dynamic account of this approach incorporating non-linear aspects of emergence, self-organisation and sudden (non-linear) qualitative shifts in both the experience and the performance. Such an approach would account for the time-varying feedback loops occurring between the performance and the performer's experience.

Neural bases of coordinated collective behaviour (M. Rosso)

Over the past year, one of the authors of the present article started his project adopting a joint finger-tapping task for dyads of participants, during which their brain activity is recorded by means of electroencephalography (EEG). The main goal of the project is to investigate what changes in the brain activity of two people when they pass from behaving as individual units to behaving as a coupled system. In the paradigm, each participant is instructed to tap the index finger on a sensor, keeping the tempo of a metronome. Depending on the condition, participants can see each other's actions, hear each other's

actions or perform the task in isolation. The way the metronomes are programmed is meant to lead the two participants to dynamically explore a whole set of coordinative states over time, recurrently creating a conflict between the timing they are instructed to keep and the timing of the partner's actions. When participants are coupled via a sensory modality, we observed the emergence of spontaneous reciprocal attraction leading to stable coordinative behaviour despite instructions to ignore each other.

Brain dynamics taking place over the course of the interaction are systematically related to the time course of collective behaviour, to its stable states and to its transitions. Questionnaires are introduced at the end of experimental blocks to make sense of the observed patterns in light of the subjective interpretation of the participants. For instance, observed patterns of interpersonal coordination can be experienced as the result of either a cooperative or competitive process. The distinction implies that very different cognitive processes can account for similar observed coordinative patterns. hence the need for orienting and interpreting the analysis of brain dynamics in light of qualitative data.

Simulating musical interactions in virtual reality

(B. van Kerrebroeck)

The aim of this ongoing study is to investigate the simulation potential of a musical interaction. Its motivation is the search for new. immersive experimental scenarios allowing for careful measurement and control of experimental stimuli and to offer insights in technology-mediated (musical) interactions. The study uses virtual reality to compare settings in which a pianist plays with a live or a virtually recorded version of another pianist. The recorded pianist is controlled using principles of coordination dynamics to enable a realistic behaviour. Concretely, it allows the recording to adapt its tempo and playing position in the score based on the playing of the other pianist. To evaluate the simulation, we record behavioural data such as the timing of notes and player movement as well as physiological data such as pupil dilatation and gaze direction. This quantitative data is complemented with a questionnaire gauging experiential aspects of presence, flow and immersion together with annotations using the performer-based analysis method. Non-linear techniques such as the ones presented in section 3.2 are then

used to identify occurring patterns in the interaction (that is, in the behavioural and physiological data) and enriched with interpretations using the recorded qualitative data.

Section 5: Conclusion

The main contribution of the present work is the proposal of an approach to orienting methodological solutions in music research. This approach aims to integrate the dynamic and non-linear aspects from coordination dynamics with the embodied music cognition framework. In addition, it stresses the use of qualitative data from first person perspectives complementing quantitative methods to achieve a better understanding of complex phenomena at a systems level.

Interactions between brains and bodies can nowadays be quantified, described and modelled at a millisecond scale (Heggli et al.) and show emergent patterns that they underlie. Bringing the model described in this paper into music research might shed light on the organisational principles underlying patterns in complex cultural phenomena such as musical interactions. A theory-driven use of the tools at the researcher's disposal is an opportunity to contribute to the hermeneutical turn in Digital Humanities 3.0 (Bod). In line with the Embodied Music Cognition theory, we argue that emergent patterns can be better understood by building a knowledge of the time-varying dynamics occurring at the level of the body, conceived as the mediator of interactions with sound and music (Leman, Embodied Music Cognition and Mediation Technology). The experimental design in this line of investigation would ideally develop interactive scenarios that bring together physiological measures, motion analysis and subjective assessment in a way that minimises the inevitable mediation of the experience due to the measurement. Some operational steps in this direction have been initiated, for instance with the performer-inspired analysis (Desmet et al.) and the use of motion capture to 'mirror' intentionality in musical performance (Caruso et al.). In parallel, the corpus of existing literature on joint action spanning from the simplest forms of rhythmic interactions (Konvalinka and Roepstorff) to actual musical practice (Sänger et al.) provides a solid grounding for extending the study of dyads or groups of subjects as interacting systems organised by coordination dynamics. Current empirical music research already employs elements of the model presented here. However, a further cross-disciplinary approach guided by an integration of these different elements might lead to a new and deeper understanding of musical interactions.

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The touch of sound, more than a metaphor: The inscription of the listening body in the corporeality of a group

-- Leonie Persyn --

About a year ago, someone told me: "Don't forget that the touch of sound is more than a metaphor." The sentence stuck in my mind for over a year and triggered several questions. What is the touch of sound exactly? Why do we use it as a metaphor? The answer to those questions definitely is not an obvious one. Each time one of these questions crossed my mind over the last year, I remembered one particular moment during Hear (2016), an auditory choreography by Benjamin Vandewalle and Yoann Durant, where I got goose bumps all over my body. In this article I want to track down what happened exactly during that moment of piloerection: the appearance of goose bumps, the erection of small hairs, by stretching the metaphor to a corporeal experience and endowing it with a phenomenological touch.

Introduction

With their auditory choreography Vandewalle and Durant explored the materiality of sound and its trajectory between, against and through different bodies (Caravan Production, 2016). Hear was performed by a different group of volunteers each performance, who stood in the midst of a blindfolded audience. Being blindfolded in advance of a performance does not correspond to any regular audience practice, but in the context of Hear it proved to be a necessary condition to experience the materiality of sound and to inscribe the body in the corporeality of a group, which consisted of performers and audience members. With the help of Merleau-Ponty's Phenomenology of perception (1945; 2014) and through an investigation of that particular moment of piloerection, I will trace the inscription of my own listening body in the performative context of Hear.

In the first section of this article I take a look at the uncommon practice of blindfolding and how it interferes with what Merleau-Ponty would identify as habits of perception. The observation of those interrupted habits brings me closer to my listening body and will help to clarify how I position myself in a situation of discomfort. through listening. These are necessary and preparatory steps to diving deeper into the functioning of piloerection and its importance for the inscription of my listening body. The complexity embedded in those diminutive seconds of experiencing goose bumps do not only require the description of my experience and the artistic choices in the performance Hear, but also demand a methodological framework on the edge of phenomenology, philosophy and neurobiology. In order to formulate some answers to the touch of sound I mainly draw from Merleau-Ponty's Phenomenology of perception (1945; 2014), Mark Patterson's The senses of touch. Haptic, affects and technologies (2007) and Matthew Hertenstein's The handbook of touch (2011). This interdisciplinary framework enables me to reveal a resemblance between the erection of hairs on my arms and the reaction to sound in my inner ear.

After this, I repeat my description of the same moment in my experience of Hear, but focus on the influence of what happens on my perception and functioning as part of a group of audience members in the midst of sounding performers. This variation makes it possible to link the moment of piloerection to the ability of grooving

together and results in a conclusion about the importance of what Merleau-Ponty would call 'a perpetual contribution of my subject's corporeality' (265) to the context of Hear.

Away from my habit of perceiving

17 April , 2018. Tonight is the performance of *Hear* in a chapel nearby STUK: House for dance, image and sound in Leuven. It is a sunny Spring evening and together with fellow audience members – whom I have never met before - I am waiting outside in the front garden of the chapel. After waiting for about fifteen minutes choreographer Benjamin Vandewalle briefly introduces us to the piece. He explains how each of us will be blindfolded and guided inside the performance space shortly after. And so, it happens

Once I receive the blindfold, I hesitate, just like the people around me. Nervous laughs and giggles fill the front garden. I put on the blindfold. Although it feels soft, it also feels uncomfortable, due to the slight pressure on my eyes. I close my eyes, which makes me feel a bit more relieved. I hear the festival that is going on in the park behind me, bicycles passing by, birds singing, footsteps approaching and fading.

My listening sharpens. My attention increases and shifts. I no longer focus on what is happening in front of me, but rather listen sideways and to the activities behind my back. Due to this shift in attention my body seems to fall backwards once in a while. Since I have put on the blindfold I constantly have to negotiate my centre of gravity. Slowly it becomes more silent around me, an auditive sign that many of the fellow audience members have already been guided inside. I wait and listen, but I can't hear if someone is approaching me. Out of the blue I feel how someone puts a hand on my shoulder and gently takes my hand. My guide has arrived. The guide leads me towards the performance space, the mild movements that are transferred to my hand indicating in which direction to proceed. We walk slowly. The atmosphere changes as soon as we enter the performance space: the temperature drops, and a rustling sound fills the entire space. My right hand is placed on a chair; I have arrived at my seat. Once I sit down, I start to listen more carefully. The rustling sound locates itself on the left side of my body. It sounds rich. The density of the rustling opens up and closes. It is constantly transforming, like a swarm moving through the air. I think to myself: "I am ready." But actually, I still feel quite uncomfortable and I don't know if I am ready at all.

These first moments of *Hear* clearly do not correspond to a regular theatre routine. The blindfold especially obliges me to breach with my habit of perceiving. First and foremost because it violently eliminates my sense of sight. The blindfold ascertains the anonymity of my perceptions. Even more than when I do see, my perceptions are "presented to me as anonymous" (Merleau-Ponty 223). I am no longer able to locate my own perceptions precisely because I cannot visually indicate their source. As soon as I am blindfolded, my ears constantly switch between different sounds. Each time their suddenness surprises me, as these sounds must have been there already before I was blindfolded. The obstruction of my sight and the suddenness of the sound 'offer my ears with an [increased] anticipation of sensation' (219). It is exactly in this anticipation that my raised attention takes root. It makes me cautious for what is happening behind me and underwrites my inability to respond to the suddenness of the sounds approaching me. The fact that I constantly have to negotiate with my centre of gravity thus originates from the obstruction of my visual perception habits, caused by the blindfold. The shift in dominance form seeing to hearing makes me address my sense of balance and confirms Maurice Merleau-Ponty's predicate that "hearing communicates with other senses" (239), because it confronts me with things and people that sound. The confrontation with the other(s) reinforces the production of a certain solitude I experience while waiting for my guide to arrive. According to Merleau-Ponty, solitude and communication are inseparable from each other and always define two moments of the same phenomenon (376).

At this moment I yet know what that phenomenon is, but my presumption that the solitude I experience stems from the loss of sight, is confirmed. The blindfold enforces me to re-habituate, to adjust my habit of perception. Habit then has to be understood in the way Merleau-Ponty defines it in *Phenomenology of Perception* (1945; 2014):

Habit expresses the power we have of dilating our being in the world or of altering our existence through incorporating new instruments.(144) Re-habituation to a blindfolded way of perceiving in *Hear* demands a removal from my visual being in the world and asks for the incorporation of new instruments in my perception. I need to explore the senses, which are normally dominated by my sense of vision, and I need to explore different possibilities to combine and rebalance the experiences acquired by my ears, my noise and my sense of touch and balance. I have to address all parts of my body and make "[my intentions and gestures] participate in the voluminosity of my own body" (Merleau-Ponty: 144). Only when I do so, I will 'allow' my body to re-habituate to another way of perceiving and "to be penetrated by a new signification" (148). This was the thing I wasn't sure about, once I was seated on my chair. How could I open up my body and allow for a confrontation with new significations? Is it what happens when I sharpen my listening?

To formulate an answer to these questions, in the next section, I will recall how the blindfold imposes the anticipation of non-visual sensations. According to Merleau-Ponty, these are exactly those anticipated and anonymous sensations that will reveal a new existential rhythm through which I can relate myself to another (way) being (in the world) (221).

A situation for my listening body

In order to analyse my listening, I need to be able to step back into my experience of attending *Hear* on 17 April. In an effort of retracing my experience and situating my listening body, I materialised my experience of *Hear* in a paper scale model. This model helps me to situate, re-experience and analyse my listening within the performative situation of *Hear*. The scale model combines sounds, spaces, trajectories, positions, forms and specific moments of the performance.



Figure 1: Scale-Model: materialisation of my listening experience. © Leonie Persyn, 2018



Figure 2: Bird's perspective on the Scale Model: materialisation of my listening experience indicating where I was (a.), where I thought I was (b.) and the rustling sound which filled the room in the beginning (c.) of the performance. © Leonie Persyn, 2018

Now back to 17 April. So there I am, sitting on a chair somewhere in the chapel (a/b. in Fig. 2) while trying to anticipate the upcoming sensations. The only thing I can do is focus on what I hear. The rustling sound (c. in Fig. 2) goes on for a while and starts moving. It comes closer and spreads out. I calm down. The movement carries me around for a while and then fades into softer textures, which are situated closer to the ground (d. in Fig 2). Their softness feels close to my body. I even bend my head towards the ground a bit, left or right ear down, depending on where the sound is coming from. During this sequence the same sound travels between the audience members. It constantly shifts between near and distant. The near feels very close and almost graspable. While when I perceive a sound as distant, I fail to distinguish its location.

Suddenly a new sound occurs (e. in Fig 2), and it is immediately followed by a second and different sound (f. in Fig 2). I am hearing two different sounds simultaneously now. Their tempo and rhythm increases, while the soft and smooth undertone of the rustling sound disappears. Each time one of the new sounds appears, it demands my attention. Although each time the sounds seem to come from somewhere else, they mostly remain at ear level. Once in a while they sound together and generate a certain density. In the midst of such a moment of density, I am surprised by a short popping sound (g. in Fig 2). It multiplies and spreads around the room. I recognise the spatialisation and development of this sound, it reminds me of the moment when you notice it has started raining. The popping sounds playful. I smile.

More sounds enter my hearing. Some are new and unfamiliar to my listening experience. Others I recognise from earlier on. My auditive experience becomes more layered and I stop questioning where I am. I perceive a high-pitched whistle, a sound completely different from all the ones before. Its discrepancy, compared to the sound before, demands my focus. For the first time the sound travels higher than my ear level. My spine elongates and I almost spread my arms wide open. It feels as if someone lifts the roof from the chapel's walls and when the whistling sound starts to slowly turn, I even imagine the walls opening up, away from each other. I can almost smell grass. I see blue and green. The space I experience expands in several directions.

The whistle catches my ear, "I deliver over [...] my entire body, to this manner [...] of filling a space named blue or red" (Merleau-Ponty 219). For Merleau-Ponty such envisioning of a sound equals the experience of a (new) modality of existence (243). The moment I see blue and green during *Hear* and experience the expansion of the performance space, my body allows for and synchronises with that new modality. According to Merleau-Ponty, "I echo the vibration of the sound with my entire sensory being" (243). The 'virtual movement' of the walls, the ceiling, my spine and arms thus reveals itself as the "foundation of the unity of my senses" (Merleau-Ponty 243). The whole voluminosity of my body is involved: my mind, spine and arms "are addressed and escape from anonymity" (Merleau-Ponty 111). I can finally re-habituate. For the first time I am completely free from my visually dominated being. I feel at ease in my new (and blindfolded) habit of perception. My body opens up. Now I am ready to listen. By stepping out of anonymity my non-visual senses make themselves ready to be penetrated by new significations. In this acknowledgement of its voluminosity my body "appears as a power for action within the frame of its own anatomical apparatus" (Merleau-Ponty 111). This appearance of my listening body originates in and through a strange tension between different time dimensions: the virtual movement my body produces, is a movement through which "my body ties a present, a past and a future together" (Merleau-Ponty 277). It is the moment in which my body rebalances my sense of vision, sound, smell, touch and balance. The virtual movement signalises the transcendence of my body and indicates when Hear transforms into a situation (Merleau-Ponty 173) that I can cope with. The tensions between vision and the other senses, between what was, what is and what will happen is a necessary condition to persist in the situation.

More concretely, to persist implies that my sensations are intentional (Merleau-Ponty 221) and that I not only remain open for new significations penetrating my body, but also that I familiarise myself with those significations (Merleau-Ponty 221). I listen to the existential rhythm my sensations propose (221) and that are characterised by various intentional arcs between tension and release. Or, in other words, the intentional arcs help me to situate myself both within the relationships between my senses and within their relationships with intelligence, sensitivity and motricity (Merleau-Ponty 137). Due to my bodily sensations, I perceptually engage in the situation.

The intentional arcs of the proposed existential rhythm generate contemporaries, which ensures that my perception offers me a field of present. The field of present offered in *Hear* ties in with the dimensions of both the here and there and the past, present and future (Merleau-Ponty 277). A re-habituated perception thus expands my field of presence and gives me the opportunity to familiarise myself with the milieu projected around me and creates the possibility to change my position. It compels me to 'take up the situation' (Merleau-Ponty 270) to tacitly sense the motives and organisation of *Hear* as a (choreographed) situation for my listening body.

My listening body and its moment of piloerection

Now that I am engaged in the situation and I start to listen, sounds triggering my imagination, I (virtually) move. The whistling goes on for a while and I enjoy each subtlety of my listening experience. It feels as if due to my willingness and the opening up of my body, the moment of whistling expands in time. I experience a suspended moment of release.

Strangely enough I do not notice when the whistling stops. It fades out and only after a while I notice it isn't there anymore. Similar sound textures to those at the beginning of the performance fill the room. They sound fuller, richer, clearer and closer to my body. The sounds seem to move around more. They travel through space and around my body.

Suddenly I hear people in the distance in front of me. A lot of them. They are screaming, or no, wait, they are laughing. Or are they just talking? They come closer, they accelerate, and the volume of their voice becomes louder. A crescendo. The sounds pass (h in Fig. 2). I listen and embody their movement. Piloerection occurs: the hairs on my arms erect. A short shiver descends down my spine. I am confused and focus on the diminuendo of the voices. The next thing I really listen to are low men's voices singing.

Piloerection is the erection of small hairs on the body that occurs due to short, mostly unexpected and uncontrollable contractions of the small muscles at the base of our hair follicles, according to Merriam-Webster (2020). Piloerection emphasises my body as my

"general instrument of understanding" (Merleau-Ponty 244), it actualises the texture of my skin as a phenomenon of expression and shows how passive touch presents the state of my own body (328). According to the article "Sensory Processes of Touch" written by neuroscientists Aislyn M. Nelson and Ellen A. Lumkin in the *Handbook of Touch* (2011): "Light [or passive] touch is a perceptual combination of pressure, vibration, stretch and hair movements" (36). Nelson and Lumkin distinguish three steps at the basis of touch transduction and describe what happens from the moment in which forces "impinge upon touch-sensitive cells in the skin" (38). This impingement starts the transmission of sensory information to the brain through "the opening of mechanotransduction channels" (38) and the depolarisation of cells by electric signals (38). This particular process of passive touch is situated mainly in our largest organ, the skin (3), but also occurs in other organs, for example in the hair cells in our inner ear. The erection and movement of the hair cells in the inner ear are at the basis of our hearing apparatus. A closer look at the functioning of the hair cells will establish the importance of touch for listening. The hair cells are located in the stala media - in between the tectonial and the basial membrane - of the organ of cortic (Fuchs 214). Due to the vibration and pressure of the surrounding membranes, the hair cells start to move and the mechanically gated channels open (Fuchs 217; "Organ of Corti"). This enables K⁺- ions to enter the hair cells, which in turn opens the calcium channels and enables the entered calcium to trigger the neurotransmitters. Last but not least signals are sent through the nerves toward the brain (Fuchs 217; Organ of Corti). Only through this transduction of touch in the inner ear, I am able to hear.

This similarity between piloerection and the hair cells in the inner ear is particularly interesting in the context of *Hear*. It demonstrates my being in the world and indicates that piloerection becomes a form of embodied cognition. It occurs when I "experience the accord between what I aim at and what is given, between intention and realization" (Merleau-Ponty 146). During the moment of piloerection the sound effectively touches me, it shows as a sonic phenomenon that "encounters an echo in me" (330). In other words, at the moment of piloerection, "I echo the vibration of the sound with my entire sensory being" (243). The sounds transfer the movements of the performers into the virtual movements in my experience. These virtual movements lie at the basis of my unity of senses, which in

turn facilitates the accord between my intention and the realisation of the movements. The appearance of the accord between intention and realisation indicates that, at the moment of piloerection, touch is more than a physical contact with the skin.

In his book *The senses of Touch* (2007), Mark Paterson distinguishes three main modalities that intertwine within touch: proprioception, a kinaesthetic and a vestibular mode (4-6). These modes open up "the manifold of touch" (1) because in the moment of touch, my perception situates my body in space (proprioception mode), generates a sensation of (virtual) movement by activating the smallest muscles of the hair cells (kinaesthetic mode), and enables my body to obtain information about balance, acceleration and deceleration (vestibular mode) (Paterson ix). In the context of my listening experience of *Hear*, Paterson's concept of the manifold of touch discloses how – during listening – body parts do not just function in parallel and simultaneously to each other, but instead "envelop each other" (Merleau-Ponty 100). Due to the manifold of touch, the moment of piloerection is characterised both as "active movement and passive receptivity" (Paterson 30). It situates my body on "the spectrum between sensing and being sensed" (31), between proximity and distance.

In the piloerection, "the invisible corporal genesis of (the voluminosity of) my listening body becomes visible" (Louppe 73). This characterisation of piloerection is based on French dance philosopher Laurence Louppe's definition of a gesture. For her a gesture "carries the full intensity of the whole body" (73). The characterisation of piloerection as a gesture clarifies my confusion after the moment of piloerection, because as Merleau-Ponty suggests: "the gesture is in front of me like a question, it indicates to me specific sensible points in the world and invites me to join in there" (191). The fact that the confusion did not really bother me means that I accept the invitation, that I "plunge into the presence of [my body's] materiality" (Voegelin 101). I no longer simply hear, but I listen, which means I "do not deduce and synthesize knowledge from what is given but create a sensuous understanding" (Voegelin 61) of the full intensity of my situated body. Through my listening I understand the sense of piloerection. It is exactly in my listening that the proposed existential rhythm of the gesture and the sensible coincide (Merleau-Ponty 192, 221). This rhythmic coincidence makes my listening groove, because I "feel the coherence of various rhythmic elements" (Roholt 4).

Whom am I grooving with? The corporeality of a listening group

According to philosopher Tiger C. Roholt groove indicates a shared sense of buoyancy between engaged listeners (113). I am not sure if I share something the moment my listening grooves, but despite this uncertainty I endorse sound artist and philosopher Salome Voegelin's claim that "listening is never separate from the social relationships that build the fleeting circumstance of hearing" (1). This means that the social relationships within the performative context of *Hear* encourage my listening and that at the moment of piloerection, during the brief accord, I hear myself within the social context defined by a group of performers and audience members. While listening I am part of a "tangible and substantial cultural experience" (Leigh Foster x), I consider my bodily reality as part of the corporeality of a group. With this reading of my listening I acknowledge that my body gesticulates and at the same time insinuates "mobility and articulability" (Leigh Foster x) within a group. Consequently my listening defines piloerection as a gesture and confirms how it "carries the full intensity of my body" (Louppe 73) But it also expands piloerection toward the geste as "an utterance situating the gesture in the evolution of the human community" (Louppe 73). In the context of *Hear* this human community exists of performers and audience members. Both actively influence and activate my listening space and experience. But how did this human community evolve during my listening experience? Let's go back to the very beginning of *Hear* in front of the chapel.

I am attending the performance on my own. I did not bring a friend and except for the people performing I don't know anybody in the front garden of the chapel. The audience is scattered around, but for one reason or another we all stay close to the fence, as far as possible from the chapel. Some of the audience members talk and most of us enjoy the last sun. In front of me is a professor with his students. By eavesdropping I can understand that they are law students. It surprises me. The atmosphere amongst the audience is soft and full of expectation. The moment choreographer Benjamin Vandewalle speaks up, everyone in the front garden abruptly stops his conversation and concentrates. As he continues and explains how each of us will receive a blindfold (s)he is supposed to wear a little fuss arises and spreads around. Excitement and discomfort seem to clash, but eventually we all put on the blindfold.

Once blindfolded I can hear the others around me, I hear clothes rubbing against each other, a cough, a sneeze, a laugh, ... All those sounds help me to not give in to the temptation of removing the blindfold. It is as if the others through those sounds are saying: you are not alone in this situation and we feel as uncomfortable as you do. I hear how one by one my fellow audience members are guided inside the performance space. Out of the blue someone gently puts a hand on my shoulder. Although I am surprised by it, I am also relieved. There we go, I think. I know because of the explanation from a few minutes earlier that I am accompanied by one of the performers. The relief offered comes from someone I did not see before, a performer. I still feel uncomfortable, but I easily undergo the guidance.

As soon as I am guided inside, I sense the shelter of a roof and walls around me. What I hear changes. There are no birds anymore and the music of the festival that is going on in the park decreases in volume. But I hear a rustling sound filling up the space. I sense that a lot of people are present in this room, more than only those I waited with. I can't pin down how many we are occupying the space and I feel overwhelmed. Due to these changes my uncomfortable feeling peaks and I focus on my breathing. Something I always do when a space feels (too) crowded. I am not part of a particular group anymore, I feel as in a state of transition, in between two groups: the audience member I shared my waiting with and the performers I did not encounter before the show.

The auditory choreography evolves, and sounds spread out in space, they generate air and room. I relax little by little and gain comfort in the situation. I feel movement around me. My neighbour coughs. I am disturbed, it sounds close, closer than I expected. For a second I lose my attention, I shuffle around on my chair in an effort to distance myself from the cough and regain my attention and comfort. The cough raises my awareness of the performative situation, which I temporarily had forgotten.

New sounds come in, it takes a while but again I forget where I am and with whom. Despite or maybe even as a result of my ignorance I am totally at ease. I am completely absorbed by my listening. At that moment the piloerection arises. I smile. I sense my own listening and my bodily engagement in that listening. I am no longer absorbed or lost. In the moment of piloerection, I sense how others are nearby

as if the hairs on my arms are antennae that explore the space for others listening simultaneously. There is no longer a disruption between the ones I shared my waiting with and the performers I didn't encounter in front of the chapel. We seem to engage in listening, and I feel as if we start to listen as one group.

After the singing voices, I hear the sound of someone detaching a blindfold. I wait. A performer takes off my blindfold. I am not seated where I thought I was. I have to adjust to the visual confrontation with all those people. I look to my right. The man next to me says something about the performance, I can't respond with words, I just nod my head and smile. Once every one of the audience members is released from the blindfold the last performers disappear. It remains silent for a while, before the applause hits in. It feels strange to applaud, it doesn't feel as the appropriate sound quality. Performers enter the performance space and disseminate in between the audience. The audience applauds. We no longer listen together, the group dissolves again in performers and audience members. Immediately after the applause my neighbour utters: "they were more than I expected." I remain seated for a little bit longer.

The cough of my neighbour equals the most striking moment in this evolution of a community within the performative context of *Hear*. Something happens there: I become highly aware of the performativity of the situation and of my listening. The sound of the cough and its proximity confirms the presence of other bodies. The fact that I can hear how my neighbour tries to hold and stifle the cough confronts me with the intentions and consciousness of those other bodies. In his *phenomenology of perception*, Maurice Merleau-Ponty writes that such "a confirmation of a foreign consciousness in front of my own [...] immediately turns my experience into a private spectacle" (360). My neighbour's cough "shatters the confidence I enjoyed in the solitude" (369) of my listening. The moment of the cough reveals how "solitude and communication must be two moments of the same phenomenon" (376) and confront me with the fact that "every perception is a communication or a communion" (334). It confirms the other's presence and existence and gives me a glimpse of the other's intention. Before the coming into awareness, the social aspect of my listening "existed silently and as a solicitation" (379) to tune in. I can only recognise the solicitation as such and tune in when I allow my body to respond to the solicitation. In

the case of the cough I don't tune in, on the contrary I shift my attention to the sounds produced by the performers. Although I don't tune in to the cough, I can't cease to be situated in relation to it. I change my position; I refocus my attention on the sound produced by the performers. I tacitly sense how the performers, too, have to re-organise after the cough and suddenly I realise they are obliged to listen in order to sound.

But when do I tune in to the sounding and listening of the others present in the performance space? In order to answer that question, I have to take into account Merleau-Ponty's remark that "our relation to the social [...] is deeper than every explicit perception" (379). In the context of *Hear* this means that there has to be more at stake than for example the explicit perception of my neighbour's cough or the most surprising and catchy sounds produced by the performers, before I tune in. From the start to the finish of my experience, I am related to the social context of *Hear*. Even when I do not explicitly perceive the other, we all (performers and audience members) coexist. Our coexistence remains implicit.

During the moment of piloerection, I encounter an echo of the sonic vibrations in my sensory being. These vibrations are produced by the movements of the performers. Their qualities are not only defined by the form, scale and materiality of the space but also by the listening, presence and position of each performer and audience member. According to architect and philosopher Brandon Labelle the echo makes the reverberating presence of sound "material and dimensional" (7). This implies that the reverberating presence of the sounds in *Hear* reflect and rebound the sounds produced by the bodies of my fellow audience members and the performers. Or in short: The others become present through the materialisation of their sounds in the echo. Through this echo my fellow audience members and the performers become proximate. In the moment of piloerection, I echolocate the others and situate them close to me. For a short moment of time we closely and implicitly coexist in the same situation. The (moment of) piloerection thus characterises as instantaneous: a point of ending and beginning at the same time (462). Piloerection is the moment in which the temporal dimensions of past, present and future touch upon and intertwine with the spatial dimension here and there. It is the moment in which my listening space and the listening space of the others, both performers and

audience members, envelop each other. It is the moment in which we tune in and in which our listening starts to groove. The moment of piloerection is then and there where we put ourselves at play, where we "amuse ourselves in (inter)changing our milieu(s)" (Merleau-Ponty 136). Due to the fact that piloerection is instantaneous - it almost simultaneously appears and disappears - to put myself at play implies that I constantly have to start over again. In order to groove I have to perpetually contribute and communicate with the world in a corporeal way (265). Because only when I allow the corporeality of the group to "speak to the reciprocity of my body" (Durham 4), I fully acknowledge my body as an interface between the representation of audience members, performers, and the materiality of my own listening. Only then can I tune in and experience how my listening grooves along with the listening of performers and audience members. The moment I tune in, I inscribe my fully acknowledged listening body into the corporeality of the group that comprises the social context of *Hear*.

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Thinking-through-Media:

The Genius Loci from Artistic Research

-- Krien Clevis --

Art can be motivated by the desire to map current social issues or concerns addressed within a particular discourse (without actively participating in it), while art may also be used to initiate discussion through the media it produces. Moreover, through its way of showing things, art establishes a connection with its audience. In this context I describe the role of art, of any discipline, within such discourse as 'mediation'. Aside from being a vehicle for ideas or concerns, art also serves to constitute, displace, recreate, change or translate them. From this perspective, as well as on the basis of the artist's autonomous mode of thinking, art may in fact reveal different or alternative scientific perspectives to their audience, users, etc. In their research, artists capitalise on the synergy between their own artistic practice, the various relevant research concerns, and the unique interactions involved – while also pursuing reflection on these aspects. This is where artistic research and the different methods of thinking-through-media come in. My contribution will be one of a non-musician. As a visual artist, curator and researcher, I explore the role of images and their meaning when researching a specific place. By developing this notion of thinking-through-media in-between image and sound, I discuss three 'sightlines' to provide more detailed insight into artistic research methods and practices, including my own.

Part I: PLACE & MEMORY

As an artist I am fascinated by the phenomenon of *place* in relation to beginnings and final destinations. As a researcher, I studied the connection of the concept of place with *memory*, but also with the idea of transience and the transition from life to death. As my research was geared towards places of meaning, I also aspired to create *new* places of meaning. My search for them involved a journey through time and space – not just à la recherche du temps perdu (Proust 1913), but also à la recherche du lieu perdu. It all started with my own memory.

I grew up with *images*. My father was an architect, my mother was multi-creative. As a child I would sit at my father's drawing table and make sketches of the people who were going to live in the houses he designed. Had I been raised in another family I might well have developed other talents. My earliest memory, which dates from 1962 when I was two, is set in a nineteenth-century town house in a little village in Limburg, close to the Dutch/German border. This memory, if it is a real one indeed, is linked to sound rather than some image: I am an active toddler, leaning on the edge of my playpen. I remember this because I heard music on the radio: Maria Callas, Madame Butterfly (as I would learn years later). This was also the first time. as I remember now, that I had to cry, moved by the beauty I heard. Sometime later on (about a year or so, a long time in a child's experience). I cherished that memory and whenever I wanted to listen to the radio I would go and sit in the intimate space of my playpen. The *Top 40* was my favorite show, and for a long time it would really bother me when some song no longer made it to the list. Trying to cheer me up, my mother would tell me that there were evergreens. but that didn't convince me, for it meant you had to wait until some deejay would play your favourite evergreen on the radio, implying you were completely dependent on his whims.

In the early 1970s my parents became fervent collectors of *Alle 13 goed* – sets of the best loved pop songs which they played all the time, ad nauseam. Still, I realised that something quite different was going on as well. I had become aware of the notion of fleetingness, transience. If time made it possible for things to take place, because of the passing of time things would also be gone again in a flash, vanishing into the past. I began to record specific moments in stories and I started drawing – to capture some of the moments soon to be lost.

This new awareness in me, fuelled by a single song or sound fragment, proved defining for the rest of my life and, through its documentation, also for my artistry. The 'Proust phenomenon', the power of smells to trigger early memories, is well known of course. Although my abovementioned memory was evoked not by a smell but by a sound, classical music in particular, the effect was basically the same.² In my case it pertained to a feeling of sorrow that not until much later I was able to link to the notion of the passing nature of all things. This is important to me because it touches on what in essence a memory embodies: a realisation of that which is not there anymore. I remember, and therefore I am. To me this understanding implies a desire to organise and cultivate some memory - reconstructing it, as well as shaping it and showing it. My starting point, in other words, is: why do I want to create certain images? Is it possible for us to grasp elements from our past experience? Is it possible for us to hold on to what is bound to pass? Our autobiographical memory exists as thoughts, on paper, and in images, and it is invoked by images, smells or sounds.

First sightline: Artistic sightline: doing a place

Artistic research is a specific mode of research in the domain of arts from the perspective of the arts themselves. This may apply to all arts (fine art and design, composing music, new media, film, performative art, etc.). It implies research by artists who start from their own work, which is realised in the questions they ask in relation to particular concerns in (the development of) their work. Unlike in strictly scholarly research, these concerns come into being in part by doing, trying, exercising, experimenting, developing, making. In this context, making involves such various mental activities as thinking, analysing, studying, understanding, scrutinising and reflecting. This process of making, including the problems that present themselves as the work evolves, gives rise to critical reflection, which in turn provides the basis for further research, also in other contexts (cultural, historical, and other scientific domains or practices). In my own practice, I'm not just interested in studying 'place', but also in occupying a 'place of my own'. My research expanded into three areas linked to art: archaeology, architecture and (art)history. While archaeology seeks to uncover places and architecture works with places' data in order to create new buildings, art (history) capitalises on a place's multiple meanings and the role of perception – the

significance of different ways of looking to a particular place. In my own practice an art piece is the result of the intertwining of different studies and reflections throughout the making process.

Human beings are capable of three creative modes of action in particular: visualising, complementing and symbolising. Visualising, in the sense of man who builds what he has seen - to understand nature - and who subsequently tries to express it (where nature suggests unlimited space, man will build a fence); complementing. in the sense of adding something that is missing; and symbolising, as the main step that expresses the mode of *man-made* action, namely the power to translate, transform something into a new product, medium or place. The Norwegian architect Christian Norberg-Schulz (1926-2000) thus characterised the basic principle of creating or making as a process that takes place in order to appropriate a place and the transposition that comes about between idea and imagination or translation in a tangible object (Norberg-Schulz 1980). In the research of artists, the process of making coincides with the process of thinking 3:

Doing - making (the whole process) = knowing → reflecting → artistic research

Sound, smell and image are all autonomous sensory entities. They are tangible and have auto-biographical power; they all appeal to our sense of memory. Tangibility, tactility, grabbing, touching, feeling, smelling, tasting and hearing also apply to materiality – the material with which we create art. Artistic research is thinking through the material, determining its language, and what it represents; but also: what does the material do, and what does it bring about? The material represents and is performative at the same time. The performative/ performativity is defined as an expression or mode of expressing which not only describes or represents an act in language, but also causes something or sets something in motion.4 A text does not just have a meaning, but also does something, it is itself an enactment. Performance as method starts not from a given reality which precedes a personal experience, but from the world that is being enacted, performed or from the situation in which freely and actively a new world or reality is performed. In the performing or visual arts, a performance is a physical presentation within a seemingly familiar context in which acts occur which may completely surprise the spectator. In such instance, the performance or act refers to

generating a world, creating something new. No two performances are identical; in fact, they are always unique and they will also be experienced as such because each spectator is unique as well. The performative implies a fluid world in which subjects and objects do not yet exist, have not yet materialised, but in which they are in a state of ongoing change or transformation - one which is unstable and hard to repeat (Salter 2002). Thus, the performative *makes* and *realises* the world at the very moment it is called up by the audience.

Through my photoworks I intend not only to represent a place, but also to generate a world (like in the work *In Limbo*, see § 2.1 and Portfolio **Figure 1**). Basically, a photograph invites the observer to look while simultaneously directing his or her gaze. The image itself (the sightlines within the work), or the way of showing (the frame, installation in space, sightlines on the work), functions as a device which can be operated by the observer, who thus also gives meaning to the work. As spectators we select the images we perceive on the basis of the sightlines we ourselves create. The interaction or 'cross-traffic' between these sightlines – or: the meeting of making and receiving – takes place where representing and performing, the game of creating, converge and can be experienced by the spectator. Through my photoworks, I intend to share the visual story with the audience and find a way in which viewers of the work may appropriate the story and add to it by mobilising their own perceptions.

Artistic research involves acts of thinking through making. As argued by Tim Ingold, a drawing, for example, "is a process of thinking, not the projection of thoughts" (Ingold 2013: 128). Therefore artistic research makes material arguments. Art can create a world by using specific materials. A place as perceived in the 'real' world can be transformed into a new place by using the power of the imagination. Artistic research involves a form of thinking through matter (including the various disciplines, media and methods). Accordingly, artistic research is a form of thinking-through-media. It is a thinking through the material, determining its language and what it represents. But also: what does the material do, and what does it bring about? The material represents and is performative at the same time. As such, the material itself may activate the spectator as well.

A transposition occurs from idea to image, or to sound, etc. This transformation is important in the process of realising my own



Figure 1: In Limbo (2012-2015) © Krien Clevis

work. I complement and symbolise places; I record and render visible. I select some existing 'real' place to which I seek to add a new dimension; I disconnect or disengage a place from its everyday environment and give it a new context. In doing, acting, making, the place is transformed and all its physical elements and atmospheric qualities may resonate in the artwork. By fencing-in a place, it is isolated from its environment and takes on a symbolic function. From a social and historical perspective I look at and comment on a place and by photographing it I appropriate it, making it visible in its new context. The transformation process determines the expressiveness of the ultimate image. The artistic 'I' may refer to the 'maker' in various guises: a visual artist, composer, performer, etc. Artistic research is about that *transformation*: in fact, the creative process - the work's materialisation - is the embodiment of the research.⁶ In the transformation, the process of thinking through making, the research becomes visible.

All art essentially seeks to appropriate a place in the transformation process and elevate it, so that it becomes a new 'autonomous' place. In this respect, the process of making a photograph involves an ethnographic process of observation: selecting the right moment, the right time of day and of year, while also leaving room for chance, serendipity. This also means knowing a place through and through, appropriating it and trying to grasp its spirit. The places I research are historical, actual (daily life) or imaginary (from my memory). They are all local – if within a larger global context – and many of them are *lieux perdus*, places of meaning no longer present as such in the real world. Being subject to ongoing changes, these places are marked by new layers of construction, temporal and spatial aspects, which are being overwritten all the time. If they did not yet figure as places of meaning, they become so by being photographed – I (re) create them also as maker.

My mode of research centres on three dimensions of places in particular: artistic, historical (§ 1.2) and embodied (or ethnographic, § 3.1). They determine the three similarly named sightlines in my work. All these places can be traced in time, and different layers of times are represented in the places (the present making contact with both past and future). Moreover, they also have in common that they revealed themselves to me: as given places, they are on my mental map, on a daily base in my hometown of Amsterdam, or

when staying in Rome or when travelling. I may run into them as part of everyday activities, when jogging or walking, which involves exploring and repeating the same routes. I have grown familiar with them and made them my own. At one point, they simply will reveal themselves to me. Next, it is up to the spectator to do something with these places. A major element of that is that spectators should manage to appropriate the new place by means of the photo also: ideally, the power of their imagination should trigger all sorts of associations and memories. This can be prompted by the image itself: a certain darkness, an indefinable atmosphere, or an added sound for instance, which stimulates the imagination (as in the work *In Limbo*). At the end, the spectators of course are 'doing' the place as well, activated by their own associations.

Second Sightline: Historical sightline: Genius Loci

To get to the 'bottom' of a place (historical, concrete, imaginary), I have studied the phenomenon of *genius loci*, the spirit of place, which in antiquity referred to the protective spirit of some area or location. This originally Roman concept emphasises the characteristic nature or atmosphere of a certain location or the impression it left. It pertains to a metaphorical quality rather than a strictly defined one, a quality which becomes manifest in a suggestive or associative manner. By making a photo of a place I try to activate its spirit again – as a form of intervention in that place. The places to be photographed have a certain, given quality, but there is also a dimension that you can play with or certainly influence by making the photo. In this respect I consider the camera I use as an external eye that enhances the observation, an element that at times becomes visible on the actual photo only.

It is not impossible, however, to catch the *genius loci*. It is hidden in layers of time and space, but can barely be seen, if at all. At the same time, it may be experienced. The genius loci is always unique to a place and bound by it. A place changes because its surroundings or contexts change across time and space. This is not to say, however, that the genius loci is an unchangeable given. A place's spirit is determined by all the people who in one way or another ever used that particular place. Every event or occurrence takes place, leaving traces behind that will in part define that place.



Figure 2: Bewaarplaats / Storage 4 (2012-2015) © Krien Clevis

In my photoworks, I look for ways to activate that genius loci and to incorporate the locations to be photographed in a new meaningful place. Just as such locations become isolated from their surroundings (in nearly all cases the image has no sounds, for instance), the photo of that place is literally and figuratively cut from raw reality. liberated from its existing context and thus itself becoming a new place. To me, they are sanctuaries, temporary storage places of indefinable residues or relics. In the series *Bewaarplaats / Storage* (2009-2012) (see Figure 2). I tried to 'capture' the genius loci of a contemporary construction site in Amsterdam, which through recent digging activities became directly linked to an age-old history. The underground location, part of a new subway line, reveals - much like in a time capsule – how a place in its very core, through excavation of the soil and subsequent construction, is changed and overwritten. The process of digging, the victory over forces of nature, the quest for the lowest point made possible by the construction effort – all reveal the changing history of a meaningful place that becomes a new one by recording it on a photo. The individual associations this image may subsequently evoke among spectators add another layer of meaning.

In my photoworks I try to represent that intangibility hidden in processes. But in contradiction to what the use of language suggests. when recording, fixing some moment in a photograph, the *genius loci* will always escape us. My photos thematise the quality of place in an affective manner. It is about a place's not-taken-for-grantedness, including its sightlines, terrestrial radiation, pits and traces. It is about 'triggering' that specific, not always visible quality of a particular place, and herein lies what the photos do/bring about. With my photos I try to appeal to the audience's affective, empathic and associative powers and to activate the atmospheric quality of a particular place. This sets in motion and actualises the genius loci.

Part II: IMAGE & SOUND

Is it possible to grasp sound? Does a *genius loci* exist of/in *sound*? Where do we encounter the genius loci of sound, and if we find it, does it reflect the emergence of a new place? If we cannot capture this spirit in an image, can we do so in a sound? Is there something in between? Here I come back to my initial question: How can we conceive of this thinking-through-media in-between image and sound? Like an image, sound renders visible a taste of the past: like a Proustian effect, 8 sound may trigger particular memories instantly, while images tend to provoke associations, depending on the kind of images used. But sound, perhaps more than images, may actually cause movement in response to the act of listening, which inevitably takes place as a temporal experience. Sound, in other words, may move us, as it were, into the past. Literally and figuratively, our perception of sound involves time travel – into the past reality and, after the sound dies down again, out of the past, underscoring, much like a memory, its fleeting character.

In Amsterdam, at 23 metres below the surface and precisely halfway into a bored tunnel connecting two subway stops, I found the sound of *nothing / nothingness*, as being a soft distant noise, like the echo of a cloud. It was ephemeral vet tied to this particular place; it grew more dim when doing two steps forwards or backwards, while it also became increasingly mixed with the sounds of the outside world, the faint noises coming from the future platforms of the metro station under construction. This experience revealed to me how changeability and the noises tied to a place come together.

In Limbo (see also the Figure 1)

The work In Limbo (2012-2015, Duratrans Lightbox with sound installation, 130 x 158 x 24,5 cm) evolved from the special attraction of the sound generated by the original place. As part of my mental map, I passed this place frequently while doing research at the Royal Netherlands Institute in Rome (KNIR). For me, the sound strengthened the image from the outset – it being a monotonous, piercing, indeterminate sound, which grows stronger and fades again while passing by, Much like the Proust phenomenon, I grew chained, as it were, to this place through its sound, which will forever stick in my memory. The actual place does not exist anymore; like so many others, it has been overwritten and took on a new role in my image. At the same time, I wanted to let the image keep all of its power of association and be open to the viewer. The sound is guite determinate, but it also triggers specific associations. Another sound would paint the image very differently indeed. I would like to engage in a kind of tense, animated interaction with my audience, as on this

one day in Ghent in May 2019, during my lecture at the KASK. If the genius loci of sound exists at all, in In Limbo it is intrinsically tied to place. It actually gives rise to an *in-between* experience, as in a passage between place and time.

Transformation

The changeability of the *genius loci* is crucial for my research. The quality of a new place lies in its *transformation*. The original genius loci which can still be felt changes because the context changes. This merely renders the newly emerged situation, which has incorporated the old one, richer, adding a new layer of meaning to the whole. This is essential to my search for the final place, which for the time being cannot be localised.

In the new places I create as an artist I try to offer spectators possibilities for opening up new layers - of memory, history, the genius loci of the site. The new places are expressions of my historical research and link up historical places with new, incorporated places. They are sites of transition, constantly subject to change, the final stop or destination being unknown. The permanent movement in fact reflects the mystery of the genius loci. Photos ought to be seen, but also felt (Barthes n.p.). 10

Places of transition are productive because they change all the time. Layers of time and space from divergent historical periods may briefly coincide in a momentary 'here and now'. This permanent dynamic suggests a connection with the concept of intertextuality. referring to the notion that every text is built from a mosaic of existing texts. Intertextuality suggests a fluid system, in which each text is in dialogue with other texts, and, more broadly, with the cultural context at large. 11 Yet there is more to it. Different, unlike images are connected to each other, reflect on and influence each other. Histories, places and media enter in a dialogue with one another. generating echoes which resonate in new times and places.

Is it possible for us to hold on to what is bound to pass? Can we isolate or 'fix' time and space? Do we have the power to touch the ephemeral and retain it, if only momentarily? And if so, are we closer to the in-between image and sound? The in-between image-and-sound indicates a transformation, a transition between image and sound. Passing in between place and time, it invokes a moment in which all disciplines converge and reinforce each other.

By 'digging' in collective classical history and tapping my personal recollections. I found fertile soil in which my fascination for place. transience, and transition could take root. My photo works involve photos in context which tell a story about a place. In my current work the Duratrans Light Boxes themselves serve as artistic accommodation, each work having its own individual encasing. As such each box is like a 'house' telling its own story, a temporary museum for the image, captured in a photo. It turns my photoworks into objects. Historical, current, or imaginary places, all shrouded - 'placed' - in a context of their own. The new house operates performatively: it gives visitors a red-carpet welcome by pulling them into the image, sprinkled with scent, and coming with climate control and sound. The sightlines on the work are enhanced by performative media, mutually influencing each other from the essence of the image in equal measure. The method of artistic research works by thinking-through-media, underpinning the genius loci, no matter how imaginary or ephemeral.

Disciplines may become interdisciplinary and media may become interchangeable and experienced side by side, and as such they all contribute to what constitutes our personal motivation. In artistic research I am concerned in particular with thinking-through-media. This involves a process that cannot be analysed from the outside by others; rather, it can only be transformed, reflected on, played with and felt from within by the maker. Subsequently, the work may find its way to the audience, which should ask what it brings about, rather than passively wondering what it means, as a way to generate active involvement. Artistic research refers to the trajectory the artwork has covered based on questions, studies and reflections, in order eventually to occupy a new place of its own, which in turn needs to be interrogated. This dynamic involves a continuum, and as such it embodies the very heart of research.

Part III: SILENCE

In recent years, I have been researching places with a more ethnographic approach. In 2014, I got the opportunity to start a new research at the Via Appia Antica in Rome, the oldest 'memory lane' of Europe, the road that like a green lung crosses southern sections of Rome. Initially I took part in an archaeology project performed by two Dutch universities in collaboration with the Royal Netherlands

Institute in Rome, and these concentrated on the first Miles V and VI of the ancient road. But my own project, called *In the Footsteps* of Piranesi, took much longer than anticipated, for each time I discovered new places to observe, and independently I worked on it until recently, concluding it with an exhibition in the Allard Pierson Museum for Archaeology in Amsterdam.¹²

The Via Appia Antica, named for its instigator Appius Claudius, was constructed as a basalt road between Rome and Brindisi, in the south-east of Italy. From its inception in 312 BC, it was considered as the *Queen of the Roads*, used for the transport of military units, goods and people. It was also the oldest and longest 'avenue of the dead'. From the first centuries BC onwards, this stretch of the road evolved into an exclusive residential neighbourhood and cemetery at the same time. After many of the funerary monuments had fallen into decay and even disappeared in the foliage for centuries, they were rediscovered in the modern era. In particular since the eighteenth century, the Via Appia Antica also attracted the attention of artists from around the world who represented elements of it in their paintings, drawings, etchings, photographs and, later on, movies.

In my research project I am guided by questions such as: What did the Via Appia look like? How was this collective memory lane viewed in different periods? What were the sightlines on the road like? How has the road changed over time? And how do we look at it now? Every historical image of the Via Appia is based on interpretation. From the mid-eighteenth century on, this road, its monuments and the surrounding landscape began to be mapped again. We will probably never have much certainty about its actual construction; the various drawings and maps available are all interpretations and reconstructions from later eras.

In historical imaging, the Italian graphic artist and architect Giovanni Battista Piranesi (1720-1778) made the first records of the ruins. In his wake, innumerable archaeologists, historians, architects, artists and photographers revisited the monuments. 13 Thanks to their interpretations and ever-shifting perspectives, a rich and layered pictorial history of the Via Appia Antica has come down to us. As such, the representation of the Via Appia is also a story of images and in particular photography - a story of a changing landscape and of changing perspectives on its cultural heritage.

Third Sightline: Embodied/ethnographic sightline: actina from within

As part of my interest in the different perspectives that have shaped the perception of the Via Appia, I have been intrigued by all sorts of details that informed the representations of the different historical image-makers. I was wondering how they selected a specific angle or point of view for their representation of the funerary monuments along the road? What would happen when I tried to figure out the coordinates of their position and subsequently take pictures from the exact same spot? Along which sightlines do I need to look? What are the changes to be observed? How does some new image of the monument and its surroundings compare to the images made in the past? How did the monument's relation to its immediate surroundings change over time? Why did one take up that particular position way back then, and what did one see? What did earlier artists want to see or not, and what do we see today? These questions served as a starting-point for my research on Mile V and VI of the Via Appia Antica in Rome. Along these two miles I tried to establish the exact positions used by historical image-makers for depicting the road, focusing on their representation of the monuments in its immediate vicinity.

My research project does not focus on one monument as such or all the archaeological knowledge about it. Rather, I concentrate on the exact spot taken up by former artists for observing and representing the monument. By literally following in their footsteps, but also figuratively, through my study of their artistic point of view. I managed to find out what changes over time become noticeable. Although any place or location might be suitable for a project such as mine, as long as specific artistic representations are available, precisely along the Via Appia Antica it is hardly self-evident that a particular place and the memory of it converge in a natural way. This road is in fact a perfect example of a site that has been in motion for over two millennia, always adapting to new needs and the ravages of time. Behind the scenes of the seemingly eternal monuments, paradoxically, a never-ending process of change has been unfolding. In this project I concentrated on the question of how this has played out. The different perspectives on the landscape and in particular the often-clashing interests regarding this ancient stretch of road preservation versus opening up for specific uses – served to underpin my study of the historical vantage points. The places of meaning along this road eternalised in paintings, etchings and photographs prove to be part of a much larger continuum.

But how does my research relate to its concerns about research methods? Here, as an artistic researcher, I use an ethnographic approach; participatory observation plays an important role in my research. The body of the ethnographer is both observing and participating. Observation is also self-observation. This is why empirical ethnographic research can be seen as an *embodied practice*. Through observation, writing and documenting the ethnographer establishes the 'authority' of being a witness, of 'being there'. All these forms of observing function as a constructive lens "to look through, in order to gain new ways of seeing". 14 My ethnographic approach, I believe, involves a method for enriching the (historical) context of the funerary monuments, if only by trying to follow in the footsteps of my artistic precursors. As an artist-researcher, or contemporary image-maker, I explore the challenges of my fellow-image-makers from the past by zooming in on the exact location of their creative intervention. The participant observer becomes an observing participant. I thereby rely on the medium of photography, using the camera as a tool for meta-observation. As such this method in part follows from the kind of research questions I am concerned with and the medium I work in (see Figure 3).

In my case I use the ethnographic object-subject relation in two ways: the object is the artistic point of view in relation to what is being observed, while the subject is the artist. And thereby I deploy the object-subject relation in a historical dimension. This ethnographic gaze or attitude is not geared to breaking down cultural, social or political boundaries. Nor does it reflect a forced or trendy 'ethnographic turn' in my work. 15 My 'transgression', my crossing of cultural boundaries from an ethnographic perspective, involves a way of dealing with history. This method is realised in the history of the image, which is frozen in the single moment of taking a photo, and as such this method coincides with the material and context. Thereby I am less interested in object-related study (such as archaeological study) than in (re-)establishing a perspective on how and why a particular 'artist' or historical image-maker once approached that object. I focus on: which position did the artists take up and why? What did they see from that spot, and what do I see today? I act from 'within', as it were, from the angle of the inves-



Figure 3.1-3.5: Work in progress during the field research (2012-2019) © Krien Clevis

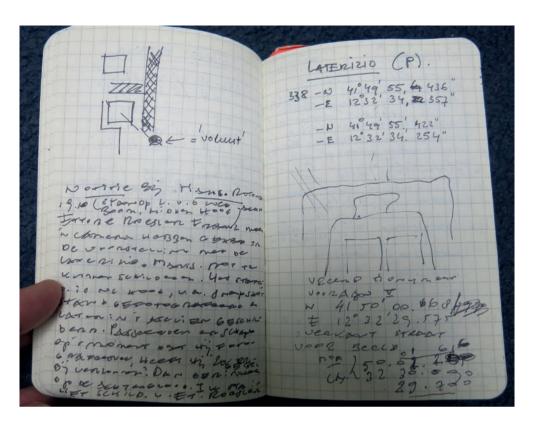








Figure 3.1-3.5: Work in progress during the field research (2012-2019) © Krien Clevis

tigated position, from the vision of the historical artist, and from my own body. The ethnographic other in fact is the 'subject' of the historical artist. As a contemporary artist I study this subject as an 'object', an ethnographic other.

In this respect, I play with the notion of 'looking and being looked at' - as an almost voyeuristic exchange of roles that occurs in the moment of photography. The ethnographic other in fact is the 'subiect' of the historical artist. As a contemporary artist I study this subject as an 'object', an ethnographic other. This alterity or otherness is not outside of me, nor does it involve a colonial approach or representation of an exterior or alterity indigenous object. 16 Rather, the object 'fuses' as it were with the 'subject' because I put myself in the shoes (read: vision) of the historical artist. Only the constraints of time set limits. In this sense my research is guided by the question of whether the artist transforms her own 'self' into the 'other' or whether the (observed and described) 'other' is transformed into a 'self' in the artwork? The change of roles can take place through my camera's 'extra eye', and it is thus fixed (momentarily). The underlying concern is that in this way the changes of the place are revealed - or made more insightful at least – in a confrontation with time itself.

Genius Loci again

My approach is craftsman-like. On the basis of the historical image (drawing, watercolour, etching or photo) I study the position of the old master in situ through observations, analyses and measurements. To me this is much more difficult with respect to an (early) master such as Piranesi than with respect to a photographer. For instance, for his comprehensive publication Antichità Romane (1757), Piranesi relied on his detailed observations and studies on the Via Appia Antica, but also on his unbridled imagination, and Labruzzi added to his pen drawings a more romantic perspective. In contrast, a camera produces an unaltered registration. The lens type or negative format of a photograph from the past may be hard to verify, but it is well possible to reconstruct the exact setting of most photos. They leave no doubts on where the changes took place.¹⁷ Still, some nineteenth-century photographers, such as the brothers Fratelli Allinari (active since 1852) were all but 'lazy painters'. 18 They did their utmost to find the most spectacular or subtle angle to show what they wanted to show.¹⁹ These changes are still at work. The 'Queen of Roads' has no eternal status: its special quality is precisely reflected in its permanent change.

It is possible to describe my approach as follows: I study the original image or photo, observe the monument *in situ*, and try to determine the exact position of the old master. I use visual material on which both a monument and the road are visible and therefore measurable. I look at the horizon, the vanishing points, the perspective of the road and the perspectival shortening of the monument, the cut (of the image), the points of contact (between different monuments). In short, I deploy some of the basic lessons in perspective from the 'art-academic tradition'. Next, I fix the scene by defining the GPS coordinates, make a photo of the original artist's position and take a new photo from that exact same spot, and in this way I try to discover why and how at the time the monument was represented in its context from this angle. Affective aspects of place thereby play a major role. As an artist, you need to gain detailed knowledge of a given place on your own.20

By repeating the journey, visiting the same place again and again, recognising the influence of the seasons, the time of day, etc., using all these ethnographic observing-documenting methods (i.e. walking, observing, writing, measuring, photographing, filming, recording, etc.), you make a specific place your own, whereby gradually its unique identity will reveal itself. An identity that in this instance has been variously represented by artists in the past. This is no easy task, for you do not simply take a picture to find out from which exact position a previous image was made. Rather than with snapshots, or recordings of moments, my concern is with recordings of time, and this calls for careful attention and a lot of patience. The digital or, in particular, analogue camera functions as a camera obscura, as a closed black box, in which moments from different times briefly converge and instantly vanish again. Using an analogue camera will put even more pressure on the method of detailed observation and analysis, given the technological constraints (a roll of film has only 36 slides).

All image-makers offer an interpretation based on the concerns of their time. Even when following in the footsteps of their precursors, they take up a historical position *and* a new one. As such they are handmaids of time. They can only confirm that time, in their time,

changed once again. This can be communicated in a romanticised fashion in a drawing, through the unalterable eye of the camera or in other ways. Regardless, their own footprints literally mark the always historical role of time, providing yet another new perspective in an ever-wider continuum. Instead of existing as a static given, a place of meaning is overwritten all the time, thus taking on new meaning. The concrete result of my in situ working method is a new photo, which seemingly records historical perspectives, but 'merely' reveals the changes of the place in context. And this is in fact my basic concern. How do you record or 'freeze' places of meaning within the quality of change? ('Freeze' is an intrinsically ephemeral notion of course: once, after a big rain shower, I saw the tropical summery Via Appia Antica suddenly change into an autumn-like, transient place.) At the same time, also here the *genius loci* may well be sustained through the artistic method of photography. The atmospheric quality of place cannot be captured in a single moment; only in the passing of time more elements will reveal themselves. But where I as an artist try to 'capture' a place, and appropriate it. my focus as artistic researcher with an ethnographic attitude is in fact to let go of the place, so as to make it subject to study and analysis. 'Contact' occurs only when time and position, through the extra camera eye, converge. Sometimes an un-expected gift of time renders new details visible. For example, I 'discovered' a stretch of the ancient road near the Tumulus Orazi, which in a photo from the late nineteenth century was not visible, or through the eyes of the old master (or my camera's 'extra eye') you see how exactly the road seems to go on infinitely when looked at from a specific perspective. At the same time, places can be entirely transformed by the presence or absence of trees and plants.

Based on many hikes along the Via Appia Antica, I gathered an array of data concerning the various positions of artists in the past. 21 The photographic results, or, that is to say, the new photos, together with the historical images, form the basis for the actual artistic processing. These results amount to dozens of one-minute movies in which I have projected the new image material about the historical places as filmed in one minute (see Figure 4). This was quite an operation, not just involving a beamer, a slide projector, a film camera and a self-made mask, but also involving my own body. Because when the mask does not work sufficiently and the colour temperature of the camera changes during those one-minute stretches, I may be able to deploy my body for regulating or manipulating the passage of time in front of the camera – the effort then being an *embodied practice* indeed. These movies, along with the historical representations, constitute the basis for the exhibition in the Allard Pierson Museum, in which a 2000-year biography of two miles is artistically translated into a 20-meter walk through the main museum corridor. I combined artistic visions of seven monuments along these fifth and sixth miles in 2D projections and 3D surroundings, and these were accompanied by 3D print models and by sound, which bring the road to life in its various dimensions. As such, several disciplines and time layers come together in its representation: 1. the historical image of the historical image maker, 2. the historical point of view I photographed, 3. the time travel movies, which show the changes of time, and 4. the 3D-application, which projects a view onto the future. The last layer has to be added by the public: they can arrange their own journey through time by means of the interactive applications.

Silence

In the end, the overall aim of this *In the Footsteps of Piranesi* project is to contribute to the *recording of time changing*. This project also contributes to the cultural biography of this specific area: the tangible past incorporated into the all-encompassing present; to follow in the historical footsteps that left traces in the present, and to 'activate' or 'embody' them, as it were, to render visible the changes of time. It situates contemporary research in a historical context and towards the future, of which we are a part as well. In the end, you may well see it as a tribute to the first artistic research in situ by my artistic predecessors. They are in fact the first contributors of looking at places of meaning (call it heritage places); they rendered visible the hidden tracks and traces of the monuments along the Via Appia, thus contributing to a continuously changing time and place. They gave me the opportunity to encounter and explore them again and made us believe that these places are vital and alive. "With each new encounter with the place, with each new experience of the place, meanings and memories may subtly, or otherwise, be rewritten or remade" (Smith 77). These places of meaning are thus simultaneously about change and continuity, an *in-between place and time*.

As a study, *In the footsteps of Piranesi* is an investigation of the actual positions or points of view of my artistic precursors. Although it is



Figure 4: G.B. Piranesi (1750-2016) Still one-minute movie © Krien Clevis

common to try to look into the minds of artists from the outside. I think it is more worthwhile to try and see what they saw - using their 'footprints' as literal basis of their inner perspective on the outside world. Turning upside down points of view is the expression of a principle, a certain method to re-conquer time, if only for a moment (Holmes 174).

The ethnographic method allowed me to broaden and deepen my artistic research. But I learnt most from the places I studied. As such, my approach involves meta-observation and a meta-listening (read: understanding) of place, allowing a place itself to start speaking from different perspectives, and this may pertain to the nearby trees, plants, birds, goats, earth, soil or other relevant elements. It is this *knowledge of the silence* (which cannot speak for itself or be captured in words, and which can only be experienced affectively)

that a specific place will produce. Affective aspects, atmospheric quality and notions of silence associated with some place are all actors that contribute to doing a place in different ways. They are important for our understanding when listening, understanding and thinking through media in-between image and sound.

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Notes

- 1 This phenomenon has been linked to Proust's A la recherche du temps perdu, in which he describes how his eating of a 'madeleine' as an adult reminds him of the happy moments of his childhood.
- Already in the nineteenth century studies were done of people's earliest memories (such as by Viktor and Catherine Henry in 1896 and F.W. Colegrove in 1899). These studies revealed that early memories are nearly always described in visual terms, rather than in terms of smells or sounds. See also the chapter on "Flitsen in het duister: eerste herinneringen" in Draaisma, 2001.
- 3 Norberg-Schulz, in Genius Loci, refers to Heidegger's theory of poiēsis, which goes back to Greek antiquity. The notion of technē is linked directly to making. See also Wesseling 2007.
- 4 The British linguist philosopher John L. Austin was concerned with the relationship between 'saying' and 'doing' in language, thus providing the basis of contemporary debates on performativity. See also the introduction of Salter 2002.
- Ruth Benschop describes Ingold's theories about Making in her inaugural speech, 2005 (35-37).
- 6 Or as Henk Borgdorff puts it: "For the opposition between theory and practice as soon we learn to understand the dynamic of the emergent field as a chain of transformations, ... interactions, and articulations that may ultimately produce more reality" (Borgdorff in Herzogenrath 39).
- The genius loci refers to the atmospheric quality of a place whose meaning is rarely obvious right away. Indefinable by nature, the genius loci frequently determines a place's feel and character. For more on this, see Norberg-Schulz 1980, in particular the preface and Chapter I.
- 8 I refer to the first note, the Proust phenomenon, see 1.

- 9 I refer here to a brain experiment, a research I conducted in collaboration with a neuro-psychologist in the F.C. Donders Centre in Nijmegen (Centre for Cognitive Neuroimaging, 2007-2009). We tested a set of images combined with specific sentences on a group of ca. 30 voluntary test persons. The images I made contained only 'neutral' images, without any references to a certain emotion. The sentences however contained a neutral charge and a fear-provoking charge. For example: "The boy stepped bravely on the beach" and "The boy was never found again". At random these images were presented to the test persons both with and without the different sentences. The outcome of the experiment was that almost every test person had the highest score when seeing the image in combination with the fear sentence. It changed their perception and memory of the image. In addition, we found out that the area in the brain we had tested (amygdala) was close to the area where the association originated. See Willems, Clevis, Hagoort 2010.
- 10 The original title is La Chambre claire (Paris: Galimard 1980). See in particular Chapter 2 on the notions of stadium and punctum.
- 11 The concept of intertextuality was launched by Julia Kristeva (1941) in 1969. She claimed that every text is intertextual in the sense that every text is built from a mosaic of existing texts. Rather than being an autonomous object or closed system, a text is always linked to other texts and. more broadly, the cultural context at large. For Kristeva, the text is a crossroads of all sort of possible ideological (social, political, literary) systems which an author integrates in text, be it consciously or not. These systems, then, are not so much tied to the author, but function autonomously.
- 12 The artistic results of my photographic field research are gathered

- in the exhibition: February 21 May 31, Allard Pierson Museum, Amsterdam. See: https://allardpierson. nl/events/via-appia-revisited-tiidreizen-over-de-eeuwige-snelweg/.
- 13 For example, Giovanni Battista Piranesi (1720-1778) is leading the long line of those who mapped the Via Appia Antica. He is followed by the Italian draughtsman Carlo Labruzzi (1748-1817) and several anonymous draughtsmen who did the Grand Tour. Next came the architect Liugi Canina (1850-1853), who exactly (re)constructed the Park, nearly at the same time as the early photographers in the mid- and late-nineteenth century, such as Thomas Ashby (archaeologist/photographer) and the Alinari and Alessandri brothers, followed by photographers from the 1950s and 1960s, who represented the funerary lane in a meanwhile radically changed urban landscape. At the same time, the Via Appia also serves as décor for fashion photographers and filmmakers, like the famous Pier Paolo Pasolini (1922-1975). The tourist snapshots of the 1970s were followed by creative reinterpretations by artists in the 1990s and later.
- 14 Ruth Benschop describes Hirschauer's theories about the "Ethnographic description and the silence of the social". See Benschop 2005 (p. 24-29).
- 15 I refer to Hal Foster's criticism of the 'ethnographic turn', which was taken by artists from of the mid-1960s. Foster, H., "The Artist as Ethnographer", in The Return of the Real. Cambridge: The MIT Press, 1996.
- 16 I refer to Claude Lévi-Strauss's The Savage Mind (1962) and the parody on colonial ethnographic research, as described in The Ethnographic Burlesque (1998).
- 17 Such as a displaced monumental piece of marble in a photo from Underwood & Underwood, ca. 1900. Other photographers also control the situation, such as the French photographer Jacques Henri Lartigue, who mirrored the negative

- to get the desired result in printed form (1960).
- 18 I refer to the term used by Hans den Hartog Jager in an article for newspaper NRC, which at the time caused a stir. Den Hartog Jager, H., "Luie Schilders", in NRC, 27 September 2003.
- 19 For example: the Via Appia in an infinite perspective, or the Via Appia as a convex road – formed by lava, which in the Iron Age flooded the ancient road from the nearby volcanic mountain range, the Colli Albani. Or just consider the changes of time itself on the Via Appia Antica. as recorded in detail by, for instance, the archaeologist and fairly good photographer Thomas Ashby (1874-1931), who in the late nineteenth century made photos of the 'walls' put in by Canina half a century before. More than half a century later, in 1968, the changes of time were photographed again by Maria Grazia Cederna, wife of Antonio Cederna (1921-1996), who expressed his discontent with the pollution and decay of the Via Appia resulting from the urban developments in the 1950s in pamphlets such as 'I Gangsters dell'Appia'.
- 20 'Given' refers to: not found yourself, but given by historical artists. At the same time, it refers to what Christian Norberg-Schulz means by the atmospheric quality of a place and how it gives itself (1980 n.p).
- 21 These data concern the various positions of artists in the past, the coordinates of those positions, my photos based on these coordinates, descriptions of the historical images/ photos, the motivation/ history of the artists involved and my observations about changes of the scene in relation to the present. I process all data in a database (Excel), which meanwhile covers 10 monuments, more than 100 positions of some 50 different artists, as well as 1000 pictures. Together with the historical prints, my own new photos serve as starting point for my actual artistic processing.

Ce qui précède voir

-- Inge van den Kroonenberg --

Notes on my work 'Ce qui précède voir', a site-specific installation that I made at the site of an old lavoir. A meditation on sound and silence in relation to time and place. An exploration of acoustic ecology and Deep Listening, while reflecting on my relationship with the environment, its nature and culture, and mediated through sound.

Silence

On the edge of the southern French village of La Romieu a winding road descends into the countryside where a rural landscape of rolling hills, dry grass, and open fields shimmers quietly in the heat of late August. A few times a day I walk down this road, wearing shorts, a worn-out T-shirt, and sandals. The only people I cross along the way are a man walking his dog early in the morning and a lady performing the same duties in the evening, always pretty much at the same moment in time. There are never any cars, though I do hear some in the distance now and then. After a sharp turn in the road, up pops an almost invisible track that bends along an overgrown hillside and descends towards an archaic site concealed in the shadow of high trees. It's a bit of a hidden place that strikes me by its simplicity and charm. Embedded in the landscape a stone, rectangular reservoir filled with clear water catches the eye. Above it, a roof of thick wooden beams with antique roof tiles provides shade and shelter. From a source in a cavity down the slope, fresh water streams gently into the reservoir. This is La Romieu's lavoir, the place where back in the days women used to wash their laundry. It was built in the nineteenth century, together with many other public lavoirs that were then being founded in communities all over France. Later, with the development of waterworks and sewage systems, lavoirs

were no longer used for washing and with their demise, their social function of serving as a gathering place for women went lost as well. Deprived from its position within the community, the La Romieu lavoir fell into decay and was slowly reclaimed by nature. The city of La Romieu, however, has by now restored the lavoir and has registered it as cultural heritage. Today, the serene and romantic nature of its picturesque location attracts hikers and tourists.

Walking around the site, taking in the environment, I imagine the women of the village coming here to wash, chat and sing. It must have been a busy gathering place, with all kinds of issues discussed and personal thoughts shared, all for women's ears only. Today, I am the only woman here, gazing at reflections on the water and listening to the sound of dry leaves rustling gently in the wind. In the corner of the lavoir, a few bumpy stone steps lead to a platform near the waterside. It's a perfect spot to sit down and enjoy the scenery, so I pull off my sandals and lower my dusty feet into the cold water. I close my eyes and open my ears. The subtle sounds of floating water, rustling trees, birdsong and buzzing insects make a delicate soundscape that evokes a certain experience of silence. But what is silence?

In her autobiographical *A Book of Silence*, British writer and academic Sara Maitland underpins the subtle differences in the experience and meaning of silence.

Beyond the purely auditory experience there is an even greater range; there are emotionally different silences and intellectually different silences too. I have come to believe that while sound may be predominantly a brain phenomenon, silence is a mind event. The experience of silence is more tightly bound up with culture, cultural expectation and, oddly enough, with language than the experience of sound is. (187)

Much of the book is an exploration of different kinds and uses of silence, and different silent places like deserts and islands. The silence of the lavoir, its landscape and soundscape, triggers me to think of an environmental composition that would invite the listener to explore their own experience of silence and engage with the sonic environment of the lavoir.

Listening

I became familiar with listening as a practice through the work of experimental composer and electronic music pioneer Pauline Oliveros, who coined the term "Deep Listening", an approach she described as "[a] way of listening in every possible way to everything possible to hear no matter what you are doing" (The center of deep listening 2020). Deep Listening is a practice of radical attentiveness. It's about being alert and profoundly open to your auditory perception. In her work, Oliveros explores the difference between the involuntary nature of hearing and the voluntary, selective nature of listening. I was very fortunate to be able to attend one of her Deep Listening workshops two years before she passed away in 2016. I remember the "Slow Song" exercise, in which the participants had to move as slowly as possible through a big room while singing a song as slowly as possible. The result was an enthralling drone of delayed songs through which I experienced an intense physical and spiritual connection to sound.

Deep Listening is more than just actively listening: it powerfully engages memory in what Pauline Oliveros calls "memorial/associational" listening, as well as the imagination, in what she has termed "imaginal" listening. Both join the listener and the "listened" in a complete embodied practice. (Coulombe 116)

Deep Listening evolved from minimal music with a long, durational character, often performed in spaces with resonant and reverberant acoustics. Its practice, however, is now applied to non-musical events as well. When I consciously listen to my surroundings, I give my attention to sound, and sound is signified through my listening. My listening is subjective. Each sound that I hear gets a meaning that stems from my personal experience and memories; a personal lexicon that I have built throughout the years. Listening attentively to the environment of the lavoir evokes memories, feelings and images. While listening, I always arrive at this point where the actual sounds that I hear and the sounds from my memory start to resonate with each other. It's a slow and transformational process in which I gradually get immersed by sound. It's also a letting go of my expectations and opening up to new aural experiences. Just listening to the nature of the sounds at the lavoir liberates me from prejudice

and connects me with the present. Although I might have listened to the sound of murmuring water a thousand times before, in this moment it is the first time I listen to it at the lavoir and when I come back tomorrow. I will listen to it for the first time again.

Dialogue

Another approach to listening consciously to your environment is by soundwalking. During a soundwalk I open my ears to my direct environment to gain deeper knowledge of its acoustic qualities. This starts with listening to the sounds of my own body. They are closest to me and establish the first dialogue between me and my environment. Becoming aware of my own sounds - my breath, the rustling of my clothes, my footsteps, ... – is essential to relate to the environment on a human scale. The sounds that I make interact with the sonic environment of the lavoir, which in response gives my sounds a specific acoustic quality. By paying close attention to my own sounds, I become part of the soundscape I'm listening to. Heading over to the lavoir becomes a daily practice through which I get to know its sonic environment, into which I want to immerse my own sound.

I got to know soundwalking through the work of composer, radio artist, and sound ecologist Hildegard Westerkamp. The majority of her compositional output and research on acoustic ecology deals with aspects of the sonic environment. Through her work I realised that conscious listening is a way of taking care of your surroundings. Her unpretentious approach to listening and soundmaking inspired me to include soundwalking in my workshops, which led to remarkable insights in how people listen differently to the same environment. Walking "by ear" initiates an intimate dialogue between me and my environment. It deepens my relationship with places and makes me read the soundscape of the lavoir, for example, as a possible score.

Soundwalking reveals the environment to the listener and opens inner space for noticing. It is precisely this that creates a sense of inspiration, excitement and new energy. Not only does a soundwalk raise general consciousness towards the acoustic environment, it also creates a living connection between listener and place. (Westerkamp 2006)

Sounds

At the lavoir, I expand my listening from the sound of my breath to the rustling leaves and the wind blowing through the trees. They are continuous sounds that form a subtle background noise in which the other sounds get absorbed. Say, for instance, the sound of rustling grass in the fields nearby. I can see the grass moving but I can't hear it because the sound of the wind through the trees is much more prominent. When I'm walking slowly from the trees towards the fields, the balance changes gradually and the grass becomes audible. Once in a while. I hear a high-pitched crackling sound coming from the brushwood behind me. It's a very abrupt sound which immediately grabs my attention. When it's there I'm always surprised by it and very eager to hear it again. The occasional burst of clipped wing-beats emanated by a couple of collared doves nearby is joy to my ears. I spot these birds every time I walk to the lavoir. The typical flapping sounds of their wings rise from the background like a short solo passage. A relatively loud sound compared to the rest of the environment, is the humming of a big black carpenter bee as it buzzes underneath the roof above the reservoir. This sound intimidates me a bit and it's hard to keep my eyes closed while listening. Its resonance fills the whole space. After the bee has flown away, the lavoir sounds even more silent than before and I realise how my attention got absorbed by her noisy presence. A very quiet sound is the murmuring of water streaming into the reservoir. Its waves and pitches remind of the phonetics of language. It's like someone whispering in my ear, and on the edge of the inaudible. So what is it that I hear?

When sound balances on the border of what is discernible, the mind is a willing prompter. I observed this a few years ago during the performance *Dead Plants and Living Objects* by Japanese artist Rie Nakajima and Belgian musician, composer, and sound artist Pierre Berthet. By putting all kinds of sound objects in a space, Nakajima and Berthet create poetic, playful compositions. In this performance, they set up an installation on a hillside, with sound objects dispersed in tall grass, running down to a stream. I remember watching a large white balloon that was slowly deflating while rocking gently in the early autumn breeze. The attached aerophones made no perceptible sound, or maybe they did, but I wasn't able to hear it.

With the sounds from the environment blending in, I wasn't sure if what I heard was part of the performance or part of the surrounding nature. But maybe this didn't really matter, it just made me want to get closer and listen.

"A way to get closer to things' inherent spirits is to listen to them" (Nakajima 2019).

Besides the continuous and occasional sounds of and around the lavoir, I notice a quiet tapping sound, adding an unsteady rhythm to the place. Somehow an empty plastic bottle has ended up in the stream, and it now whirls around in the reservoir, bumping against the border. When I remove the bottle, the rhythm is gone. With this small gesture I made a subtle change in the acoustic environment of the lavoir. This was to become the starting point of my site-specific composition.

Place

I like to work with found materials. They are connected to the place where you find them, and each material, natural or artificial, adds a specific connotation to the environment. The only materials I brought myself are thin rubber tubes. At the end of each tube sticks a little air stone, a small black bulb that is used in aquariums to regulate oxygen flow. For my installation I use them the other way around, to regulate the water flow. Like a sponge, the air stone fills itself with water and when saturated, it releases a drop. I search the area for more plastic bottles, which I fill with water from the reservoir, and I put the tubes in the bottles. When the other end of the tubes are at a lower point, the water starts to flow and the air stones start to drip. With my found materials - sticks, stones, empty cans, dry leaves, rags, feathers, shells, an empty wine glass - I assemble small sculptural objects to direct the course of the water, similar to the way a marble rolls down a marble run. While exploring the different acoustic qualities of each object, a composition of drippings takes shape. Inserting an empty can adds a hollow, metal 'tick-tock'. Drops on dry leaves make crunchy, sizzling sounds. An empty wine glass makes a clear 'ting', which changes into a soft 'plop' as the glass slowly runs full. Drippings on a wet stone make high-pitched splattering sounds. Droplets falling directly on the water surface make

plop-plop-plunk-like sounds depending on the height of the bottle.

The creation of a sound work for a specific place is likely to involve, first of all, a deep consideration of the attributes of that place. Decisions may then follow about what aspect or aspects of it to engage with and whether that engagement will reveal, obscure, or contradict the apparent or hidden features of the place. (Gottschalk 242)

In *Experimental Music Since 1970* composer and writer Jennie Gottschalk puts forward that experimentation is a practice that pushes past that which is known, to discover what lies beyond it. It's a way to reveal sound in its present-day experience and create an openness to the sounding event in which a state of uncertainty is accepted. In working with sound, I found that tension created through uncertainty, caused by the interplay between fixed and unsteady elements, makes one a great listener and enables a work to tell its own story.

I place the drippings around the reservoir in different positions. While playing with the dripping sounds made by the different materials, a subtle composition of various rhythms and pitches originates. Unpretentious in appearance, the installation seems to blend quite naturally with its surroundings. Adjusting a detail in the arrangement of the materials affects the sound of the drippings instantly. As the bottles empty, the intervals between the drops extend, making space for sounds from the environment to enter the silence in between. While listening to the ensemble of drippings, my attention expands further and further to the ambient sounds of the lavoir and beyond. It's a playful composition that tickles the ear and triggers the imagination, a fragile and temporary installation in which physicality, fugacity, and ecology are embodied in the acoustic potential of a single drop.

Time

When I first came upon the site of the lavoir I sensed that, despite its decay, the place still fulfilled an important role within the community of La Romieu. It occurred to me that it would be a delicate task to create a work that would be in sync with its surroundings rather than superimpose itself upon it. With *Ce qui précède voir* I added

non-intrusive elements of sound to the sonorous environment of the layoir. The nature of the materials Lused made the installation. blend in with its surroundings, much like the sounds it produced. The alterations of the environment were subtle vet substantial. In order to notice the work, one had to be immersed in the environment. The installation required my daily care, filling up the bottles and setting the drippings in motion. Doing so I met other people visiting the site and more than once a conversation unfolded. The drippings created a setting to reflect on the sounds and silences of the lavoir. its acoustic ecology and, most interesting, the way people listen.

It's the quality of listening one brings to sound that makes it our own, according to the quality of our attention. If you open your body and your mind to listening with an active attitude, you will draw out very specific things. The condition for listening is obviously different according to the point in time, according to one's state of mind. That's the mirror effect, it's a reflection of one's state of mind in that moment. There exists a means of listening to any sound and making music of it. (Radigue and Eckhardt 47)

Walking to the lavoir a few times a day to refill the bottles and listen became a steady ritual. My activities adapted to the rhythm of the installation; the length of my walks got adjusted to the timespan of the drippings. It challenged my experience of time passing by and made me appreciate the repetitive nature of the work. With *Ce qui* précède voir I wanted to create a space in which the listener could find their own time, a moment always in transition, reminiscent of the work of French electronic music pioneer and contemporary composer Éliane Radigue, ehodr compositions evolve so slowly that the listener experiences past, present, and future as a static, coexistent moment. This I wanted to emphasise by the fragile and tactile character of the drippings, an installation made by materials as temporary as the sounds they produced. I think this was also what made the installation so appreciated in a public space. During the time it was exhibited at the lavoir, it was never removed or demolished. Why would one destroy drops, dry leaves and empty bottles anyway? The work resonated its own fugacity and by this, joining the listener and the "listened" in a brief moment in time.

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PORTFOLIO

Thinking-through-Media: The *Genius Loci* from Artistic Research

-- Krien Clevis --

Figure 1: In Limbo (2012-2015) © Krien Clevis



Figure 4: G.B. Piranesi (1750-2016) Still one-minute movie ©Krien Clevis







Fotograf. Een podcast

-- Katharina Smets --



Barbara in de zomer van 1941. Gefotografeerd door Bogdan Friedrich, pseudoniem "August".



Black

-- Anouk De Clercq --

Brussel, 15 maart 2019

Ik heb besloten u te schrijven zodat ik kan zwijgen. Ook al zou het zwijgen van een kunstenaar overgewaardeerd zijn, dat zei Beuys in elk geval over Duchamp. Maar hoe neem je het woord als een kunstenaar die wil zwijgen. Willen de meeste kunstenaars zich niet net uitspreken in hun zwijgen? Spreekt elke mens trouwens niet veel meer als hij zwijgt? De kunstenaar, de facto een zoekende mens: kan hij zoeken terwijl hij oeverloos babbelt?

Spreken is nu, in deze eeuw, meer dan ooit poneren, hermetisch opsluiten in begrippen, de twijfel weren. In het spreken nu, hier, kan ik nooit de aarzelingen, twijfels, haperingen, het zoeken, naar voor brengen. Dat wat zo eigen is aan een kunstenaar, aan een zoekende mens. In een intiem gesprek doe ik dat, niet in een publiek gesprek. Dat hoort niet.

Alhoewel. Het beste gesprek dat ik op de radio heb gehoord was er één met de Belgische dichter Leonard Nolens. De schrijver spreekt: de stilte van het aarzelen, van het zoeken naar woorden. Het spreken als werkproces, als schrijfproces. Er is bijna niets kwetsbaarders. Alles van waarde lag tussen de regels.

Woorden verhullen vaak meer dan dat ze onthullen. Zoals "tussen de regels lezen" ook zo'n mooi begrip is, de mooiste tussenruimte om even in te verblijven en wérkelijk geraakt en begrepen te worden. Ik heb me altijd aangetrokken gevoeld tot tussenruimtes en heb me er ook altijd heel erg thuis gevoeld: een treinstation, een luchthaven, een lift, een tapijt, een sauna, een theater, een bioscoop, een bibliotheek, een museum. Het zijn plaatsen die buiten de werkelijkheid lijken te vallen, buiten de tijd, waar de dingen vaak in een geïntensiveerde

toestand aanwezig lijken te zijn. Die geconcentreerde aanwezigheid van weinig is iets wat in bijna al mijn werken terugkomt. Elk werk is een *jardin secret* - een tussenruimte, een overgangsruimte - die ontstaat door de onverwachte combinaties, die kleine conjuncties, de minimale fusies die mogelijk zijn in die ruimtes tussen beeld en muziek, tekst en beeld, tussen muziek en architectuur...

"Il faut cultiver nôtre jardin", zoals de oude man tegen Candide zegt. Die tuin bestaat niet. Ieder van ons moet die tuin bouwen en verbouwen. Maar wat net zo belangrijk is als het vinden van die geheime tuin, is hem openstellen, zien hoe een publiek - de ander - erin beweegt. Wanneer ik mijn werk laat zien, kijk ik naar de gezichten van de mensen die naar mijn beelden kijken en luister naar hun interpretaties. Ook daar: kleine conjuncties en minimale fusies. Voor ik mijn werk daadwerkelijk maak, beschrijf ik het eerst, behoedzaam, als een dier in een nachtelijk bos. Eerst is er een lijst met woorden of korte zinnen, fragmenten, die ik heb gelezen en gemarkeerd, of geschreven. Alsof ik eerst langs de synoniemen moet om tot het eigenlijke woord, dàt woord, te komen. Dan wijs ik het aan: daar, dat is het. Om tot tonen te kunnen komen.

Als ik werk, zoekt alles - de visuele elementen, de vormen, de klanken, enzovoort - zijn eigen oorsprong. Alles zoekt naar een naam (een heuvel, een licht, een muur, een lijn, een cirkel, een punt). Wanneer alles een naam heeft gekregen, benoem ik het werk en geef het een titel. De openingszin in één van Duras' boeken - ik weet niet meer welk - luidt: "Apprenez à lire, ce sont des textes sacrés." Apprenez à écouter: in haar films leert ze ons luisteren.

Als ik haar boeken lees, lijk ik altijd haar stem te horen. Maar niet op een onaangename manier; het geeft een lichamelijkheid aan haar woorden en lezen wordt nog meer visceraal. Hebben schrijvers een bepaalde stem in gedachten? Spreken ze de zinnen luidop voor ze die schrijven? Of proeven ze de woorden als ze neergeschreven zijn? Moet het stil zijn om te kunnen schrijven?

Schrijven als een manier om te zwijgen. Een weg naar de geest. Een reis in mijn gedachten en mijn leven en mijn reacties op het alledaagse. Het is belangrijk voor mij om het op te schrijven, om orde op zaken te stellen, maar het is ook belangrijk voor mij dat mensen zien wat ik doe. Het is de manier waarop ik communiceer.

"How do I know what I think, till I see what I say?" vroeg Alice. Edmund Carpenter ging daarop verder en vroeg, "And how do I know who I am, until I see myself as others see me?" Daarover gaat het. Het lezen van Gaston Bachelard's *Poetics of Space* heeft een grote impact op me achtergelaten. Toen ik het las was het alsof mijn pogingen om ruimtelijkheid te vatten en te begrijpen, plots heel concreet in woorden werden gegoten. De ene herkenning na de andere. Prachtig is dat, als de woorden van een ander zo binnenkomen en resoneren.

Bachelard zegt dat als je leest, je jezelf dan een kamer leest (en dat als je schrijft, je jezelf een kamer schrijft). In elk geval is lezen (en schrijven) een intiem gebeuren, geborgenheid daarbij een vereiste. Paradoxaal genoeg moeten schrijvers, zo zegt hij "have to induce in the reader a state of suspended reading. For it is not until his eyes have left the page that recollections of my room can become a treshold of oneirism for him."

Dus er is de kamer van de schrijver en er is de kamer van de lezer. Ergens tussenin die twee kamers gebeurt het, een ontmoeting ergens tussenin de regels, in die tussenruimte. Er is daar dus sprake van een "correspondence" tussen 'binnen' en 'buiten', tussen 'hier' en 'daar', tussen 'ik' en de 'ander'.

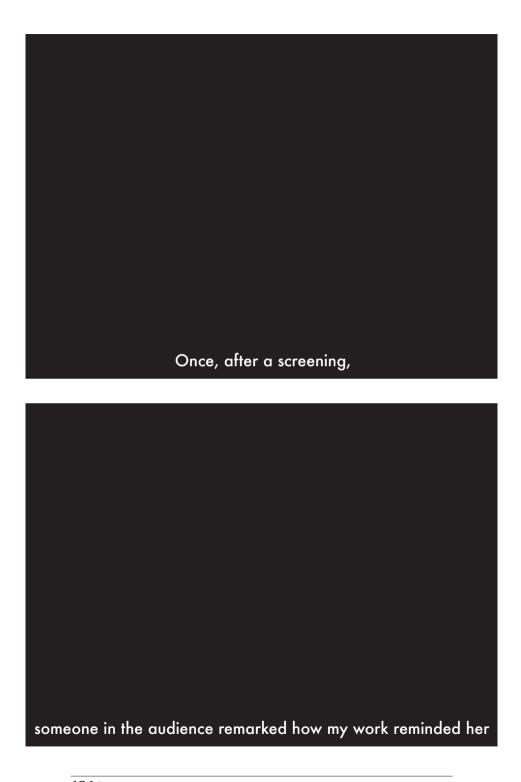
Waarom niet gewoon zwijgen en beelden laten spreken. Of muziek. Is dat niet de meest directe weg naar een ander? Van mij naar u bijvoorbeeld?

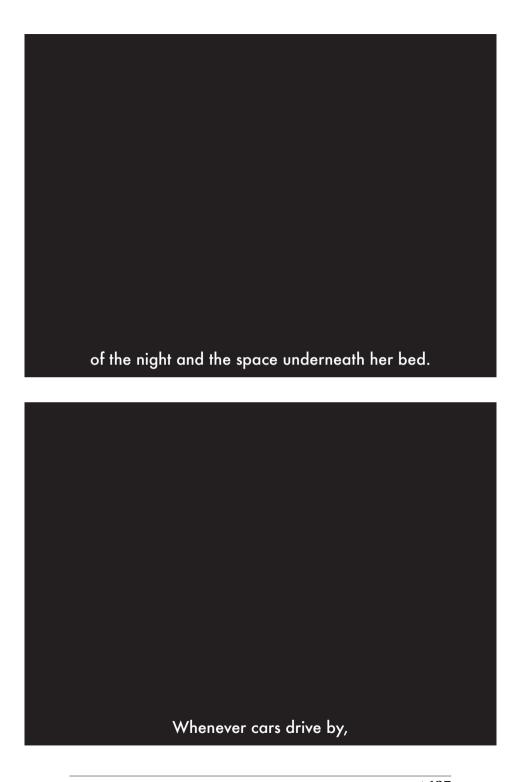
Het regent in Brussel. Het regent zo goed als op mij terwijl ik dit schrijf, met dit verschil: er zit een dakraam tussen mij en de regen. Veertig jaar geleden zat Marcel Broodthaers in zijn Brusselse stadstuin te schrijven. De regen waste zijn woorden weg, de inktpot liep over en toch ging hij manmoedig door met schrijven. In *La Pluie (Projet pour un Texte)* is dat.

Hij leek iets te willen bewijzen. Dat tekst ook beeld kan worden? Dat cinema - in tegenstelling tot schrijven dat wil poneren en vastleggen - een project in wording is waarbij elk moment een ander vervangt? Dat cinema een kunst van de beweging is en niet slaaf hoeft te zijn van een dwingende narratieve structuur met als enige doel zijn publiek te absorberen? Ik weet het niet: het is de melancholie die me erin aanspreekt, van een man die in weerwil van de omstandigheden verder doet.

Is dat niet wat kunstenaars doen? Woorden, beelden en klanken begeesteren. Aandacht geven aan en vragen voor de intensiteit van alles. En soms ook zwijgen en schrijven.

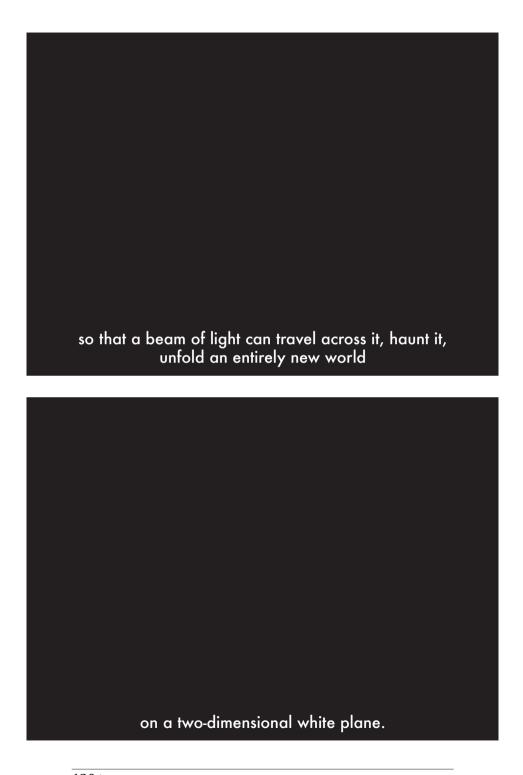
Hoogachtend, XX

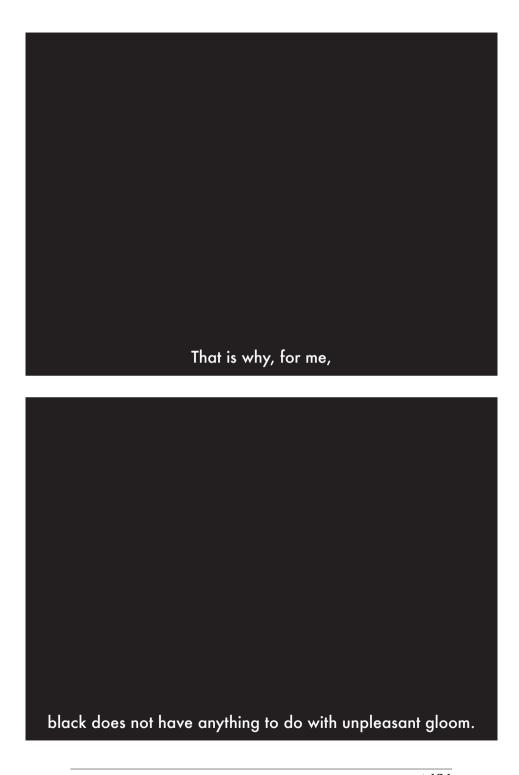


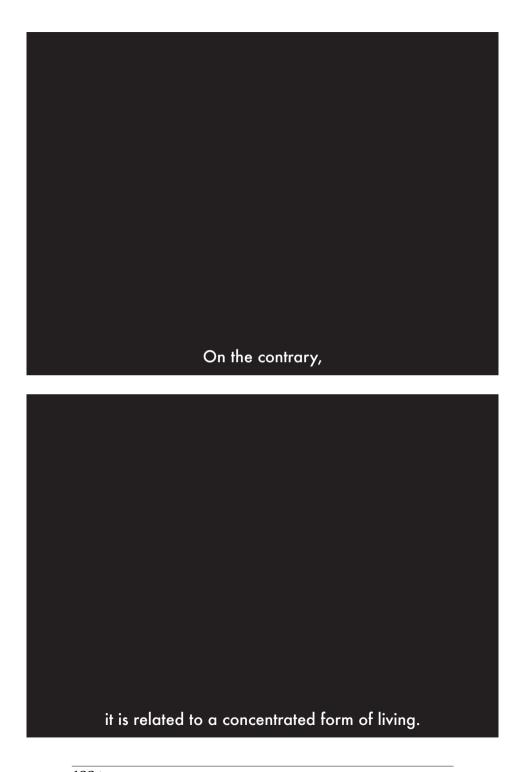


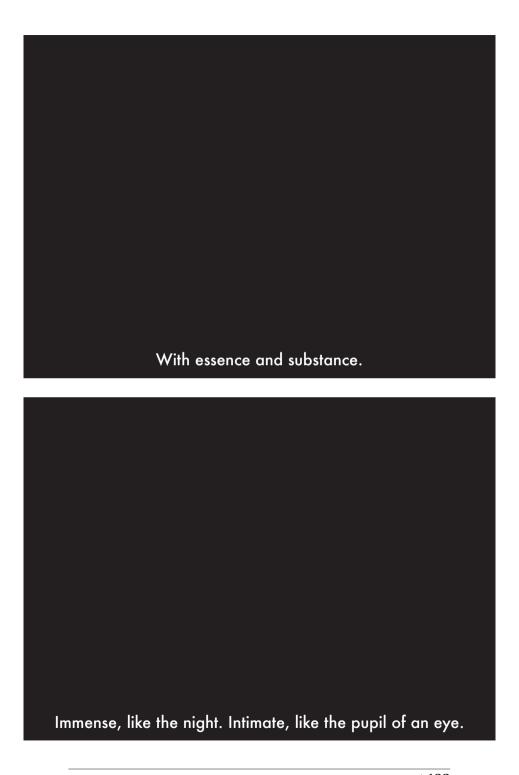


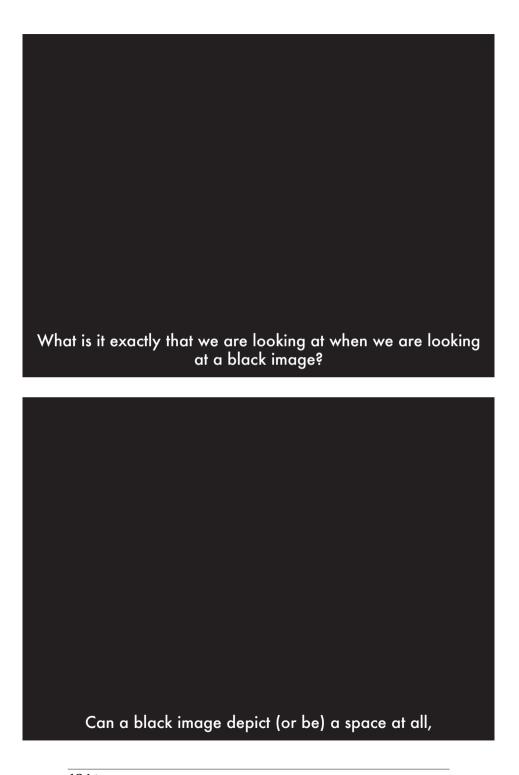
Where people watch a world come into luminous being on a screen.
The room is darkened

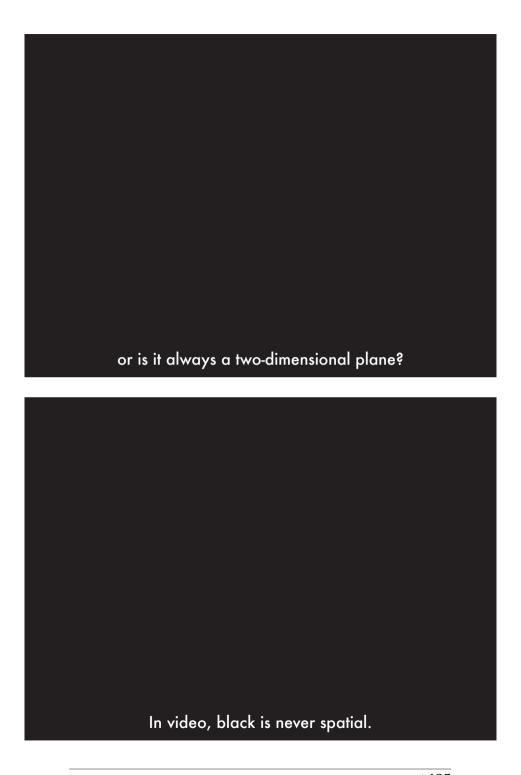


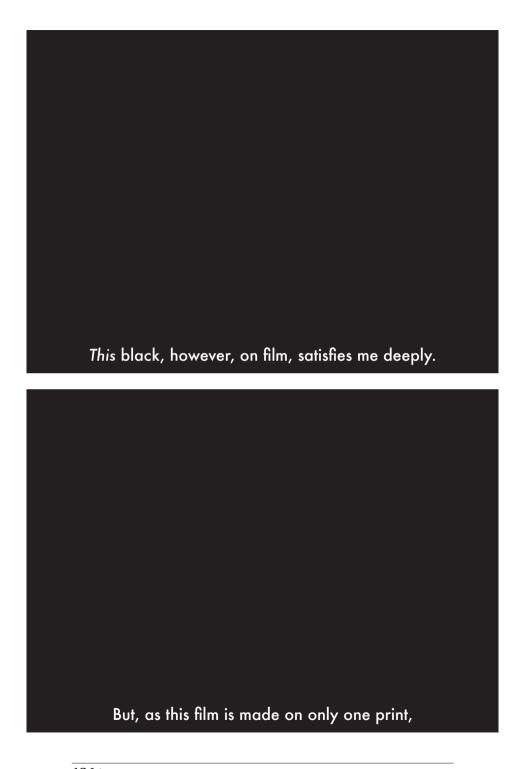




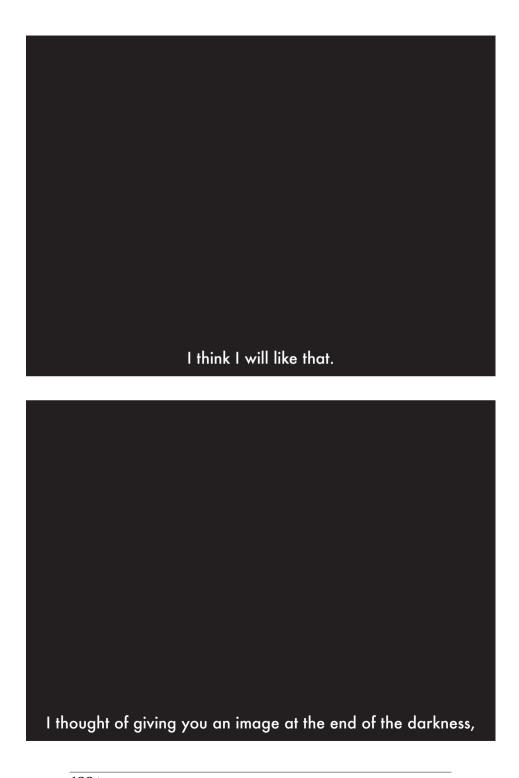


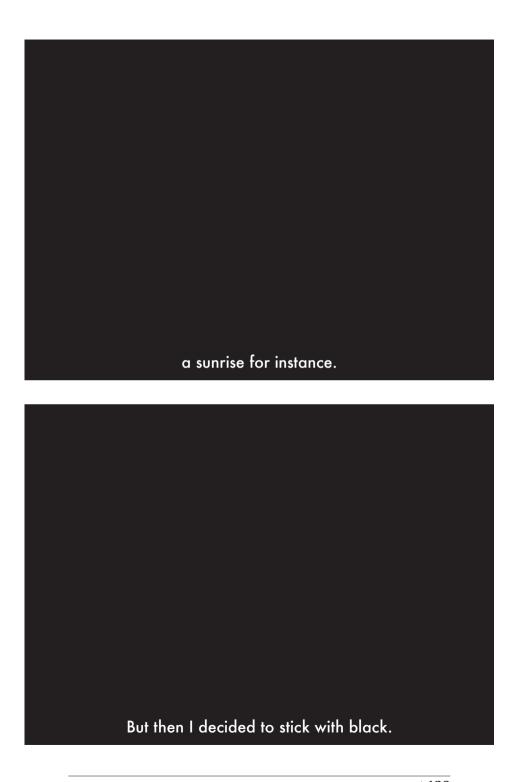


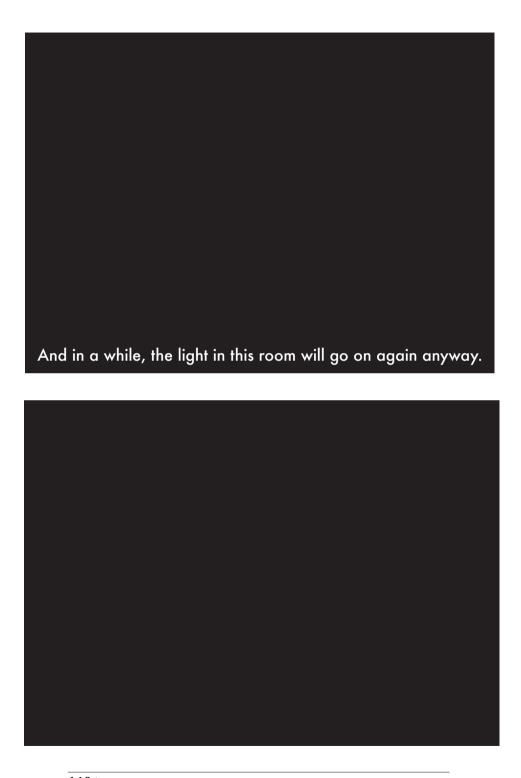




after a couple of screenings, it will not be black anymore.
Dust and scratches will dance in the dark.









Listening out for the Ambiguity of Unreliable Things

-- Salomé Voegelin --

This essay is a score that invites the performance of works, texts, poems and sounds in a reading and singing out loud. This is an invitation to make sounds, movements and gestures that do not theorise but activate and inhabit, in a phenomenological consideration, the concepts and ideas thus performed.

Before I perform

Normally I would now simply do the performance. I would not say a word. I would sit here silently and then I would get up and perform the material that I brought with me: musical tracks, records, books, texts I have written myself, texts by other people, poems, songs, scores... I would, without explanation, do what I term a *curatorial performance*: a sonic citing of things and thoughts for which I gather my research on the floor in front of me, in patterns of organisation and disorder. I would pull out different elements of this research, pulling it together, putting it on a temporal line: curating the material into something that is neither an exhibition nor a performance, nor is it a lecture. Instead, as a curatorial gesture, it creates an experience that demands we encounter the material between these descriptive frames and in excess of them.

In thinking about this event and in thinking about this as a study day or a study week on phenomenology and art, I became aware of this performative methodology as a methodology of 'bracketing'. The material performed brackets itself out from expected formats

and contexts of reception. It thus brackets itself off from the expected interpretation of what it might mean and reference. And as its referential system is suspended, the material is brought into doubt, demanding re-orientations, re-considerations, to listen and look again to find a contingent sense, which remains insecure and unsecured in the agency of this performed speculation.

This activity of seeing/hearing the work anew all the time introduces and frames the critical rigour of perception as a making sense of fragments in their correlate temporality without achieving a totality or a consensus, but moving continually in speculation. Thus knowledge describes a 'remaining in process' and in co-dependence, which as relational knowing foregrounds not 'this' or 'that' but what things are together in their formless in-between. This knowing does not pursue a reveal or a conclusion, instead it emphasises experience and puts knowledge into a speculative suspense that involves also the suspense of the 'knowing subject' in a speculative subjectivity rather than a certain identity.

It is the same suspense that I am expecting of myself in research: suspending, as much as possible, my preconceptions, my ideas of what the things that I put together are. It is also the suspense that I hope to encourage in an audience, who might have engaged with some of the elements I am presenting before, in a different context, and who thus also have preconceptions that need bracketing off to achieve a different perception.

The *curatorial performance* in this context then is a tool for bracketing, for a phenomenological epoché, not unlike the chopping off of the attack of an instrumental sound in musique concrète, since both serve to interrupt access to a source and its referential clarity, to trigger instead a different perception. This is done not to deny this source, but in appreciation of what its cultural interpretation covers and hides: historically, ideologically, conventionally. Consequently such a bracketing enables a reimagination of what else something might mean and stand for. And so the bracketing off in performance of the material gathered on this floor is not a denial of previous readings. Instead, it is a careful invitation to re-examine, to re-listen and to re-hear what we thought we knew all along, and to reflect on how we knew it and how this knowledge constitutes us.

As a phenomenological curating this bracketing performance foregrounds what else things might mean, and who else we might be, and brings us to knowing on a different route. This route does not neglect rational thought and objectivity, but is aware of the deeply invested and asymmetrical ways in which we relate to knowledge and its authority. Therefore it is motivated by doubt as the source of everything, understood as unreliable things, and revels in the ambiguity of things without a name or a form.

What is left after the performance: an essav score

Stand in your favourite place

Roar like a lion

Recite The punk I scorn and the cutpurse sworn,

And the roaring boy's bravadoes. The meek, the white, the gentle Me handle, touch and spare not;

But those that cross Tom Rynosseross

Do what the panther dare not.

Although I sing, etc.

Tom o' Bedlam, sixteenth-century poem by an anonymous author.⁵

Sit on a chair

Text 1 Listen without certainty to your own voice reading the following text out loud:

This listening is about doubt. About admitting that we do not really know what we hear. And rather than searching for a real knowable that could confirm what things are, we make up for what we are not sure about through guesses and invention, with a contingent imagination as well as through desire and fear. In this way we participate and are complicit in what is known. Therefore, how it is known cannot find legitimacy in a lexicon of a priori words and truths, but is contingent, generated in the encounter, and necessitating a discussion at least about who is listening.

However, that does not mean things heard are a lie.⁶ Rather, it suggests that reality is plural and that the line between the real and what seems imagined and invented is much thinner and slighter than we would like to admit. The sonic is threadbare and ragged, its boundaries porous and pliable. It is ineffective in holding off other realities that sound from the invisibility, at the margins: that have no name, no classification and no clear shape, but resonate within the expanse of the real their marginality and formlessness. This doubtful elasticity of the heard makes us question the certainty and formedness of the supposedly real, even of the visual.

When listening, the unknown and fabulations seep into what we trust to be real, what we thought we have seen, expanding it, darkening it, filling it with the flesh of invisible bodies, shapes and things, coming nearer and touching the flesh of our ears: sinister, erotic and unsettling, questioning the infrastructure of the actual, its knowledge pathways and those of its communication; and demanding we re-perform and re-think what we think we see and hear. In this way we glean a 'certainty' that is based not on language but in the encounter and on the flesh, and that constitutes the real in its possibility, again and again.

To this sense, this score unperforms language through the sounding voice that seems arbitrary and unreliable in relation to its visual and lexical articulation, but not in relation to its body and breath. Language as grammar, as the infrastructure of meaning that underpins, orders and explains sense, tries to take back from this uncertain expanse a recognisable shape. It tries to make a space between ears and sound for objectivity and unambiguous thought. It hopes to apply lexica and criteria, to create an order of meaning and sense that give the heard the perspective of the seen, where things have a place and a form. The sound of the voice sounding and listening by contrast resists this clarity and organisation. Instead, it collapses the distance of knowledge, and brings the unbelievable into the real. It opens facts to the invented, the unreliable and its sonic fictions, and destabilises maps, lexica, language and plans.

Thus it demands another way to understand what might be real, not from the certainty of things by themselves, 'this' or 'that', 'you' or 'me', but from the unstable contact between them and between us, into which the possible slips to infect actuality with its experiential doubt and sensorial truth

Stand up

Perform **Light Song**

stand underneath a light source

tilt your head up and stare into its glare

imagine its sound

tune into it and sustain its pitch as long as possible.⁷

Sit down

Text 2 Read this text in a whisper.

Listen for unstable contacts between breathed words:

This pitch creates an unstable contact that is wavering and stands in the way of science and philosophy's desire, to quote Quentin Meillassoux in *After Finitude* (2009): "to carve out a path towards the outside for itself". 8 To be able to think the world beyond human thought and experience, in mathematics and the ancestral. For Meillassoux, this relative outside is the outside of the correlationist, the phenomenologist, for whom reality is an intersubjective mode of being in the world, and of the idealist, for whom reality is transcendental, a matter of reason and necessity, bound to general laws of nature. Accusing them of religious fanaticism and ideological dogmatism, Meillassoux suggests that both produce a fideist obscurantism of a proper truth by relating knowledge to the body as flesh and the rational mind respectively. In response, he proposes that the stability [of the laws of nature] must be established as a "mind-independent fact", "which is to say, from a property of time which is indifferent to our existence", which is not thought or experienced within our actuality, but as the absolute possibility of a mathematical reality, calculated without human interference. Thus his aim is to reach the unthought via ancestrality, the exploration of the pre-human world, without referring it to human experience or theorisation through mathematical computations, not tampered with by human "corrections", to get to an "irremediable realism": where "either this statement has a realist sense, and only a realist sense, or no sense at all".10

By contrast, staring into the flickering light and catching its unsteady pitch, I see a radical realist sense in the unreason of sound, in its wavering unreliability and its consequent demand for a contact that remains unstable. From there I pursue a reality that includes the impossible and the improbable, the invention and the sinister. And so, instead of reaching an unfaltering knowledge we falter the path of knowledge, its hierarchies, methods, tools and language, and enter into deliberate doubt: to practise knowing on the high sea at night, without a compass, a proper vocabulary and grammar to organise and structure what we think we see or which path to go; suspending the infrastructure of knowledge to come to knowing through the responsibility of the encounter and its performance.

It is the phenomenological epoché, the bracketing off of the name and its referent, that provides a method and frame for this abandon. Its practice of suspense and doubt enables the excess and overflow of a structural description while ensuring legitimacy for its experience as knowing, rather than denigrating it to sheer believe and dogmatism. The experiential-knowing thus performed is invested in the present encounter rather than in an a priori meaning or an ancestral objective sense. It has the capacity to include the formless and to create non-sense, the sensate sense of processes and the in-between, from where it purposefully doubts a cultural visibility in order to see more and differently what we thought we knew how to recognise.

And here we close our eyes and go into the depth of seeing itself, to see differently.

Stand up

Read When children ask me. "How does one make a film?" I always say that you have to have freedom to make a film, and to have freedom, you need confidence. I tell them to close their eyes, to look at the stars, and look into their hearts. and then to open their eyes and see if the film they want to make is there, in front of their eyes.

from a conversation with Djibril Diop Mambéty¹¹

Lie down

Listen to *The Glad Circle* (Mollin+Voegelin) 2017, from 16:45-18:30 https://soundcloud.com/mollinandvoegelin/the-glad-circle

"...give me cigarettes the red pack over there, they are expensive, write it in the book.

Give me two cans of milk, give me two packs of butter, two kilos of white bread and three of Chinese rice.

Write it down

Two pots of chocolate spread, make it four.

Give me my cans of milk, I want my milk. Give me my chocolate, my chocolate.

Write it down, we will pay later.

Write it all down "

Stand up

Text 3 Read the following text through closed evelids:

Djibril Diop Mambéty's instructions surprise the optical control exerted by society, neo-liberal capitalism and its sphere of cultural visibility. They catch it off guard and channel it through experience and the relationship with the interior world: the stars, the heart, the cells, the blood, the sensation of heat upon skin and evelids. They perform the interior that does not look but sees things anew, sees pathways and processes, flows and rhythms and how things relate rather than what things are.

The Glad Circle was composed by David Mollin and Salomé Voegelin for Saout Radio at Dokumenta 14, in response to Mambéty's film Hyènes from 1992. It tries Mambéty's instructions, to close the eves to see, on the radio, and seeks the film's confrontation of capitalism through an interior gaze. Thus the radiophonic piece invites a listening with closed eyes to see whether the film is there in what it shows, catching our sight off guard from the inside rather than projecting on to the seen from the outside. And so we listen and make sounds. to see the same anew, on a wavering track that makes an unstable contact and does not assume but creates.

Mambéty is interpreting and translating or probably rather transforming Friedrich Dürrenmatt's Besuch der Alten Dame, a play from 1956, from a European setting into an African context. The play is about a woman who was once terribly wronged by one of the men in her hometown, which she subsequently had to leave, destitute and without hope. Now she comes back, a wealthy lady, to seek revenge through the exploitation of the townspeople's greed. Setting it in post-colonial Africa, Mambéty creates a cross-time simultaneity with the original plot through capitalist neocolonialism and consumerism, and constructs a gaze from the depth of the between of things: between technology, culture, language and meaning, seen with closed evelids, rather than in surface calculations.

In this way he creates a different vista: a looking without an optical mechanism trained outside, but with a different imagination, trained on the inside.

Recite I am the darkness between the suns, one said.

I am nothing, one said.

I am you, one said

You- one said- You-

And breathed, and reached out, and spoke: 'Listen!'

Crying out to the

other, to the others, 'Listen!'

from Ursula K. Le Guin in The Shobies' Story¹²

Sit on the floor

Text 4 Read this text in excess of its words and in abundance of their meaning:

This depth is the 'back' and 'behind' that Maurice Merleau-Ponty discusses in the working notes of his book *The Visible and the Invi*sible (1968). According to him, it is "the dimension of the hidden", which is the place of my looking, my simultaneity with the thing, which therefore I am too close to see but I exist in simultaneity with, and thus I can hear while sounding myself. 13 I hear this sound of my simultaneity with others not as a horizon

of my being but along vertical lines as the possibility of our encounter, establishing the depth of the in-between where it does not serve language and structural meaning, difference and differentiation, but the movement and configuration of a performative sense.

The visual representation, language, the map and the lexicon, goes around this depth, avoiding its simultaneity; avoiding its openness onto the hidden of the world. It ignores our body and that of things as they stand in its depth, where they are in the way of an absolute view, but sense its excess and perform its abundance.

The visual works on the surface, on the capacity of a *hyper-invisibility*: the invisibility of a normative truth that is so unquestionably accepted as to have become naturalised as the only and singular truth, whose investments we fail to see when we stare at its referent and name, but which we cannot fail to notice when we listen to its expansive sphere. The hyper-invisibility of normative structures of knowledge and truth are ideological and strategic. They rely for their acceptance on not being seen but pervade the visible. They help us organise and structure knowledge but do not prompt us to query its investment: its ideology and politics, what it leaves out, where its blind spots are and what perspectives it creates. The depth of sound's actual-invisibility, the demands and challenges of its unseen and plural existence, by contrast, point directly at these blind spots at the back of and behind the surface measure, and insist we participate in the performance of the unknown instead. Accordingly, phenomenology as I practise it here is a performance of the in-between that works from blind spots and is motivated by doubt in objective certainties and measurables which it unperforms through a simultaneous sense of things. In this way it foregrounds the encounter and does not deny or ignore the impact of human presence on what can be known - it does not describe its fleshly knowing as human 'corrections' that need to be avoided to get to an 'irremediable realism' - but pursues a radical realism that takes responsibility for the impact of human presence and starts from the contingency of our individual experience as an experience-with, to grasp ourselves in the simultaneity of a being-with. Such a phenomenological practice does not put human perception at the centre but understands it as constituted in an elastic marginality that accounts for difference, our individual life-worlds, without a universal comparison but in contingent negotiations with every other thing. Thus its correlationism does not practise or legitimate an anthropocentric view, but performs knowledge as a knowing-with that arises from a being-with, in a contingent and doubtful co-laboration with human and nonhuman things. In this way it performs a phenomenological materialism that has the capacity to question the asymmetries of knowledge participation, what counts, what is legitimate, what can be heard and listened to, through intersubjectivity as interbeing in unreliable and ambiguous connections with every other thing. These connections and in-betweens need performing again and again, to know them in knowing rather than in names and referents and to understand also how they are conditioned by particularity: the cultural, economic, ideological as well as physiological and educational circumstance that opens the world to us in different and not entirely symmetrical ways.

Stand up

Recite With an host of furious fancies Whereof I am commander, With a burning spear and a horse of air, To the wilderness I wander. By a knight of ghosts and shadows I summoned am to a tourney Ten legs beyond the wide world's end: Me think it is no journey. Yet I will sing, etc.

Tom o' Bedlam, sixteenth-century poem by an anonymous author. last verse 14

Go on tiptoes

Purr like a cat

Notes

- 1 Published in Sixteenth-Century Poetry, Paul Driver, ed. London: Penguin Books, 1996, 51.
- 2 Listening does not perform a lie as simple truth, it does not do the "fake news" of alt-right and populist politics. Instead, it dives into the plurality of the heard to engage with the world through an expanded and reciprocal sense. The lies of populism pursue an agenda of right and wrong, this or that, eschewing process and materiality for simple answers that are not accountable to the world but only to their own agenda. They borrow a rationalist rhetoric and the methods of a measurable and knowable world, to mimic their authority on a reversed message: to deny climate change through fake statistics and to incite race hate through the exploitation of immigration data.
- Thus they speak lies in a language of truth and rationality. By contrast listening unperforms conventional truths by unperforming its authority and pluralising its frame of reference through doubt.
- 3 www.soundwords.tumblr.com March 01, 2017, 8:42 pm
- 4 Quentin Meillassoux. After Finitude. New York: Continuum, 2009, 51.
- 5 Ibid. p. 127.
- 6 Ibid. pp. 126-7.
- The Hyena's Last Laugh, a conversation with Djibril Diop Mambéty by N. Frank Ukadike, from Transition 78. http://newsreel.org/articles/ mambety.htm Accessed 14/7/19
- Ursula K. Le Guin. The Unreal and the Real., Selected Stories Volume 2. Outer Space, Inner Lands. London: Orion, 2015, 92.

- 9 Maurice Merleau-Ponty. *The Visible and the Invisible*. Trans. Alphonso Lingis, ed. Claude Lefort. Evanston, Illinois: Northwestern University Press, 1968, 219.
- 10 Published in Sixteenth-Century Poetry, 51.

Towards gendered listening

Questions, exercises and reflections.

-- Anna Raimondo --

Dear Listener,

Over the last ten years, I have formulated the following question through my artistic work and my daily life: what would be the epistemological, political and aesthetic implications of shifting from a gendered perspective to a gendered listening?

I am now sharing this question with you.

In order to think about a possible answer, I will ask you a few personal questions and propose some listening exercises. You can, if you would like to, send me your questions,

You can, if you would like to, send me your questions answers, and personal thoughts about the following reading/listening process.

Please feel free to write me at:

info@annaraimondo.com.

If you decide to do so, I kindly ask you to indicate the following sentence in the subject line of your email: "I am not making this because I know something. I make this because I don't know something and I want to learn what is possible." ¹

I am listening forward,

Anna Raimondo

Question n.1:

Where do we listen from?

Michel Foucault claimed the importance of making our place(s) of enunciation transparent when we interpret the world and when we produce knowledge in the question: "Where do you speak from?" ²

By paraphrasing him, I would like you to reflect on our social, cultural, and gendered position as listeners.

Where do you listen from?

Where do I listen from?

To help you answer this question, please start by replying to the following previous ones:

Do you define yourself as a man, a woman, a trans, queer or other?

Do you define yourself as black, white, or other?

Where do you come from?

Where do you live?

Are you a legal citizen?

Which social class do you belong to?

It is now my turn to answer the question I asked you. You are now probably wondering: Where do I listen from? I wish to answer this question from my own personal point of view as a feminist by referring specifically to the concept "situated knowledge" ³, as conceived by Donna Haraway as a political and epistemological strategy, as a way (a need) to negotiate with the doctrine of "masculinist objectivity". ⁴

I define myself as a cis, white, European, Mediterranean woman. In more concrete terms, I am Anna Raimondo, born in Italy in 1981, based in Brussels since 2014, and feminist since 2008. I am able to speak different languages while fully embracing my very strong Italian accent. I am devoted to practices related to listening. You can define me as a sound and radio artist, a performer, a PhD student, a feminist daughter, a feminist partner, a feminist sister, a feminist friend, a feminist citizen and occasionally a writer and curator, too. The choice is up to you... When I listen, I try to be aware of my privileges and my fights. In resonance with the political claims, made by Françoise Vergès, 5 to decolonise white feminism, I feel an ethical need to look for a constant dialogue with other women, to recognise their fights, which could be different from mine. As an artist and radio activist, my concern is Could you think of at least one political ideology you feel personally motivated by?

Are you a religious person?

Pick one or more social roles that define you in the best way possible:

Choose one or more social roles that others use to define you but you don't feel comfortable with:

Pick one or more adjectives about yourself you identify with:

to create short cuts between what/who we are expected to hear in different places and, more generally, to expand the contexts of listening. In a radio programme or in urban spaces, in a museum, a gallery, or in a taxi, I never give voice but I try my best to spread the microphone to as many different people as I can.

Ever since I started making radio programmes, clearly claiming my position as a feminist activist, people have been telling me that I was embodying a feminist perspective. These days, I want to explore how my gendered position also impacts the way I listen. Within time and in different contexts (domestic, professional, activist and artistic), I wonder how the construct of gender conditions the way I listen and how I produce listening in dialogue with my daily feminism(s).

Paraphrasing the author Donna Haraway, "Feminist objectivity is about limited location and situated knowledge (...) and it allows us to become answerable for what we learn how to see to listen." 6 I wonder how I learnt to listen, what the patriarchal system wants me to listen to? Could I, a feminist sound artist, help to deconstruct a gender binarism? Do I have « feminist ears» too? If so. what could I do with them?

Question n.2: What is listening to you?

What is listening to me?

Write your first thoughts about what listening means to you. Do so without thinking too much. It can be a list of words, a series of actions, a series of adjectives, or situations. Write until you have filled the page.

Listening is « to expose one's curiosity to the other » 7

« It is a condition of vulnerability in which we accept to be the « doubtful I ».8

Listening is not a practice of self-identification or reconciliation and consensus, but a practice in which making « oneself the background in order to foreground the position of the other ».9

Listening creates a space « where to agree to disagree ». 10

To me, listening is to conceive the political and aesthetic possibility to unlearn, to deconstruct fixed categories and expose oneself to the vulnerability, opportunity and co-production of the not yet.

Listening is always an active practice. Listening makes me feel alive. Listening is a de-stabilising process that can sometimes give me vertigo.

Meta-listening Exercises:

Let us listen while speculating about the way we listen!

Please find a silent spot, ideally alone or with others who are doing the same exercises. You will need an internet connection, headphones or speakers, and a screen (a telephone, tablet) to scan the QR codes. Once the OR code is scanned, close the screen and close your eyes.

Exercise n.1: Listening to a drum player...

Imagine the skin, the muscles, and the arms of the mysterious drummer. Give this person a face and a body. Who are you imagining?



Exercise n.2: Listening to a voice...

Imagine the skin, the age, and the hair of this mysterious voice. Again, give this person a face and a body. Who are you imagining? In the first exercise, you listened to the piece titled « Drum Solo » by the American jazz and rock drummer Cindy Blackman Santana. 12 In the second exercise, you listened to the Moroccan musician Meriem Said, a woman who performs on the Place Jema el Fnaa ¹³ in Marrakech under the name of Said; a male name given to her by the other musicians who perform on the square and are traditionally all men. She is a woman in private who takes on the identity of a man



as soon as she performs in the public space. Her voice, I think, synthesises in a very powerful way the gender complexity.

Reflections on the way we listen: How does our listening confirm our canons and our ideologies?

When we are listening, we don't have clear references. We form what we hear. We belong to the same fluid and ephemeral space-time continuum. We become doubtful subjects. 11 In this condition, we have the possibility to either climb out of our a priori or activate our subjectivities, thereby giving new political and aesthetic forms to the heard. In so doing, we can reconfigure the real and articulate new questions rather than confirm, yet again, existing social, and often patriarchal, expectations. This refers to Judith Butler's claims that gender is a performative, ritual daily construction that achieves its naturalisation in the context of a body. ¹⁴ Focusing on listening, could we speak about it as a bodily gender performative practice where we repeat our frames of interpretations while trying to interpret the heard? Jumping out of the regime of the visible, or short cutting it through sound and the act of listening, we have the possibility to transgress the social expectations and create a gap in our daily gender performances. But what do I mean by transgression? « Transgression carries the limit right to the limit of its being; transgression forces the limit to face the fact of its imminent disappearance, to find itself in what it excludes. » 15

According to Foucault, it refers to that which can uncover the limit that has been crossed. Hence, my hypothesis posits that the limits of patriarchal structures and its norms are susceptible to being challenged and exposed through the medium of sound and the process of gendered listening. How and when could sound transgress patriarchal structures and its implicit norms? How can gender listening encourage and reveal this process? Even if it can provoke, irritate and sometimes be illegal, transgressive sound (a voice, a real or fictional sound, a noise...) is not just a physical material, it is also a social medium through which to imagine a feminist possibility, to practically establish multiple sites of empowerment. In this way, listening could then contribute to produce the not yet. This could be quite revolutionary. So, while a group of Danish start-ups (Copenhagen Pride, Virtue, Equal AI, Koalition Interactive & thirtysoundsgood) in 2019 invented the first synthetic genderless AI voice assistant called 'Q', 16 to tackle gender stereotypes, I think that a genderless voice alone cannot defuse sexist reactions to women voices. I posit rather that

the very act of listening in and of itself provides a more effective way to counter sexism because it could take into account the complexities, the singular sites of enunciation, the unicity of each voice.

As a kind of conclusion: «Sound makes the possible thinkable in concrete terms and invites the impossible to reinvigorate a political awareness and imagination » 17

I would like to conclude my intervention in the relation between listening and gender by mentioning the work of German artist Lorenza Böttner, and specifically her performance inspired by the Venus de Milo 18

In this piece, she performed as a trans armless woman, embodying the statue that represents the canon of women beauty. She stood on a podium, immobile and mute for a while, painted in white, performing a mimesis. The punctum of this performance was the moment in which, jumping down from the stage, she asked the audience: « What do you think if art came to life? » She gave voice to a statue that represents the ideal of feminine beauty, the woman-object, the represented body. In her work and in this particular performance, Lorenza has invented another body, another artistic practice of the gender, producing what could be understood as « gendered listening ». By embodying a canon of traditional feminine beauty, when the artist transformed herself in this sculpture, she gave birth to a radical critique of the role of art in the social normalisation of the white, cis-gender, valid and heterosexual body and voice. Lorenza Böttner injected a voice, her voice, a transgender voice, to this statue. I think this is a very complex and beautiful example of how sonic dimension can add and/or short circuit the visible; how it can activate a listening that produces a new site of enunciation and a new production of meanings.

Notes

- 1 Voegelin, Salomé. Sonic Possible worlds. London/New York: Bloomsbury, 2014, 1.
- 2 Foucault, Michel, Language, counter-memory, practice. Selected essays and interviews by Michel Foucault. Eds. Donald F. Bouchard. New York: Cornell University press, 1977.
- 3 Haraway, Donna, Situated Knowledges: The Science Ouestion in Feminism and the Privilege of Partial Perspective. Feminist Studies 14:3 (1988):575.
- Haraway, Donna. Situated Knowledges, ibid. 5 Vergès, Françoise. Un féminisme décolonial. Paris: La fabrique édition, 2019.
- 6 Haraway, Donna. Situated Knowledges, ibid.
- 7 LaBelle, Brandon. Manual for the construction of a sound as a device to elaborate social connection. Berlin: Errant Bodies Press, 2010, 9.
- Voegelin, Salomé. Sonic Possible worlds. London/New York: Bloomsbury, 2014, 131. Blickford, Susan in Ultra-red, The invisible seminar. Bergen: Faculty of fine art, music and design, University of Bergen, 2017, 15
- 10 Blickford, Susan in Ultra-red, The invisible seminar, ibid.
- 11 Blackman Santana, Cindy, Solo drum: https://www.youtube.com/ watch?v=Xsfg9SRgwEw (Accessed February 1, 2020)
- 12 The Jemaa el-Fnaa is Marrakech's main square and the most important part of the medina of the Moroccan city. Here, inhabitants and tourists gather both during the day and night to have something to observe the various local artistic and musical shows taking place.
- 13 Voegelin, Salomé. Sonic Possible worlds. London/New York: Bloomsbury, 2014.

- 14 Butler, Judith, Gender Trouble, Feminism and the Subversion of Identity. London/New York: Routlege, 1990.
- 15 Foucault, Michel, Language, counter-memory, practice, Selected essaves and interviews by Michel Foucault, Eds. Donald F. Bouchard. New York: Cornell University press, 1977. 34.
- 16 Genderless AI voice assistant called 'O voice': https://www.youtube. com/watch? v=t6g5KPkZjLU (Accessed February 1, 2020).
- 17 Voegelin, Salomé. Sonic Possible worlds. London/New York: Bloomsbury, 2014.
- 18 Böttner, Lorenza, Venus de Milo in Lorenza Böttner' retrospective Réquiem por la norma in La Virreina Centre de la Imatge, Barcelona, curated by Paul B. Preciado, January-Februarry 2019: https://ajuntament.barcelona.cat/lavirreina/ en/exhibitions/requiem-norm/236 (Accessed February 1, 2020).

Closing Words

-- Leonie Persyn --

Doctoral School on Sound & Listening May 2019 Ghent

Dear all.

We started our week full of expectation with the following quote by Gallagher and Zahavi:

In phenomenology perception is not a simple reception of information, but it involves an interpretation which frequently changes according to the context. Phenomenology starts with experience rather than by what we expect to find, given our theoretical commitments. It asks us not to let pre-conceived theories form our experience, but to let our experience inform and guide our theories. In phenomenology we are interested in how the things appear as correlates of our experience. (Gallagher and Zahavi 2008, 10-25)

Starting off with a theoretical quote does not really equal a phenomenological approach one could say...but still it was the beginning of our doubts, ambiguities and struggle. As the week evolved, we managed to let our pre-conceived theories loosen up.

The mappings we created throughout the week visualise how things appeared as correlates of our experience. We made parallel movements; we crossed each other's paths. But most of all we shared our listening experiences. We gained trust in each other. We started to play. The mappings were our field guides to getting lost.

Each day we pulled and pushed the edge between music, performance, film and new media through sound and listening. We made it into a place of encounter, a home, a space for dwelling and lingering. In the encounter of performance, film and new media – of academic theories and artistic practices – we allowed sound to be promiscuous. We fully expanded it as a network that teaches us how to belong and find space as well as how not to belong and drift.

We intimated, meaning that we didn't add to the complexity, but we allowed its presence. Such moments of allowance often turned into complexidences, instants in w hich incidentally insights and understandings emerged. Those complexidences were the encounters between our brain and our gut feeling. They mark the moments in which tensions sparked, experiences and thoughts were grounded. When complexidences occurred, hesitation persisted and prevailed and an intimate knowledge was suggested. The complexidences did not give answers or solutions. They slowed down our (re)search, untangled our process and accelerated our thinking.

For all of that I want to thank the scientific committee for making the encounter possible: Pieter-Jan Maes for bringing in a different, quantitative perspective, supervisor Christel Stalpaert and co-supervisor Martine Huvenne for the freedom and unconditional support they have given me. *Just do it* is not only the slogan of Nike but also the reason why I highly appreciate our collaboration.

And of course, last but not least, I want to thank all of you, the attendees and contributors, for being generous and greedy at the same time.

Thank you! Leonie Persyn

RECENSIE

Bernaerts, Lars & Bluijs, Siebe (red.).

Luisterrijk der letteren: Hoorspel en
literatuur in Nederland en Vlaanderen.

-- Steff Nellis --

Bernaerts, Lars & Bluijs, Siebe (red.). *Luisterrijk der letteren: Hoorspel en literatuur in Nederland en Vlaanderen.* Gent: Academia Press, 2019, 311 p. (ISBN: 978-94-014-6394-2)

Bij het horen van de termen hoorof luisterspel denkt de modale lezer
wellicht aan informatieve, verhalende, persoonlijke, of filosofische podcasts. Bij anderen zal ook het rijke
aanbod aan luisterverhalen voor kinderen in gedachten springen. Maar
wie denkt bij het hoor- of luisterspel
aan literaire grootmeesters als Hugo
Claus, Harry Mulisch, Gerrit Komrij,
Louis Paul Boon, Bert Schierbeek,
Ivo Michiels, Tom Lanoye of Jeroen
Brouwers?

In Luisterrijk der letteren: Hoorspel en literatuur in Nederland en Vlaanderen proberen Lars Bernaerts en Siebe Bluijs het literaire hoorspel in ere te herstellen. Aan de hand van twaalf inventieve essays van evenveel verschil-

lende auteurs wordt de tot hiertoe bijna onontgonnen geschiedenis van het Nederlandstalige hoor- of luisterspel geschetst tegen de achtergrond van de bredere literatuurgeschiedenis. Wat dat betreft, slagen de redacteurs met glans in hun opzet. Het boek toont immers aan dat het literair-performatief genre van het hoorspel wel degelijk aandacht verdient. Daarin is vooral de oproep naar verder, diepgaand onderzoek naar zowel het Vlaams als Nederlands hoorspel veelzeggend; meermaals wordt met verve benadrukt dat de veelzijdige, interdisciplinaire hoorspeltraditie vanuit verschillende onderzoeksvelden kan worden bestudeerd om bij te dragen aan de brede geschiedenis van literatuur, theater, muziek en radiokunst.

Een uitgebreide, maar kraakheldere inleiding van Bernaerts en Bluijs situeert de status van de hoorspelstudie. die lange tijd verborgen bleef (17). Dit is wellicht te wijten aan de gradueel verminderende populariteit van het genre door de steeds groter wordende concurrentie van het bewegend beeld: film en televisie. Aan de hand van een inbedding van het genre in de naoorlogse literaire stroming van de Vijftigers, de latere ontzuiling en de inzet van vernieuwende technologische middelen sinds de jaren zestig en zeventig benadrukken de redacteurs echter de veelzijdigheid en het experimentele karakter van het hoorspel. Het boek is dan ook bedoeld, zo stellen ze voorop, voor een ruim publiek onder wie in de eerste plaats letterkundige onderzoekers en studenten maar ook literair geïnteresseerden, mediahistorici, kunsthistorici, musicologen, communicatiewetenschapers en radio-professionals (5).

In een poging het ooit zeer populaire hoorspel te herbevestigen, zoomt de inleiding tevens in op haar onvolprezen literaire kwaliteiten: de laagdrempeligheid, de eerder vermelde, kwantitatief grote mate van artistiek experiment, en de commerciële doeleinden. Verder zorgen Bernaerts en Bluijs aan de hand van de inleidende tekst voor een uiterst duidelijk, gestructureerd en vooral toegankelijk handvat om aan de slag te gaan met de rest van de bundel. De thematische hoofdstukken die volgen, zoomen elk in op een van de deelaspecten van het literaire hoorspel. Deze belichten stuk voor stuk de sterke media- en genrespecifieke kenmerken in dialoog met het intra-, inter- en transmediale karakter van de hoorspeltraditie. Op die manier voelt Luisterrijk der letteren aan als een exploratief en fragmentarisch overzichtswerk dat hopelijk snel opvolging krijgt in een tweede deel

De verschillende bijdragen belichten zoals reeds geduid verschillende aspecten van het hoorspelgenre. Er is daarbij zowel aandacht voor oorspronkelijke producties als voor adaptaties van Vlaamse of Nederlandse, en internationale bodem. Doordat wordt gewerkt met diverse auteurs, worden sommige kenmerken van het hoorspel enkele keren herhaald. Dat is enerzijds verhelderend, maar voelt tegelijkertijd ook erg iteratief. Daarbij maakt de vele, vaak technische informatie, wat betreft de technologische aspecten van het medium radio sommige delen wat langdradig en te weinig wervend of anekdotisch. Andere passages, vaak met betrekking tot de inhoud van de desbetreffende hoorspelen, zouden dan weer net iets meer uitgewerkt kunnen worden om de lezer bii de hand te nemen. De details in de beschrijvingen met betrekking tot wat er precies te horen was, zijn immers erg veelzeggend en smaken naar meer.

Inge Arteel en Philomeen Lelieveldt bieden allereerst inzicht in de (in-

ter)nationale institutionele context waarin het hoorspel haar opgang maakte. Arteel focust daarbij op het Neues Hörspiel dat aan het eind van de jaren zestig invloed uitoefende op de hoorspeltraditie in Vlaanderen (39). Hoewel er aanvankelijk veel interesse was voor de experimentele kenmerken van het Duitse hoorspel. zijnde de reflectie op het medium radio, de exploratie van veelvormige spreekwijzen, de autonomisering van taal als klankmateriaal, de dragende rol van muzikale structuren en soundscapes, en de ruimtelijke decentralisering, vond de vernieuwende hoorspelcultuur geen institutionele ingang in de Vlaamse contreien (37, 45). In Nederland had het experimentele hoorspel dan weer meer succes. aldus Lelieveldt. Haar bijdrage richt zich op de dynamische en interdisciplinaire kring rond regisseur Ab Van Eyk en diens radiofonische en verbosonische hoorspelen (77).

De bijdragen van Jeroen Dera, Lars Bernaerts en Ellen Beyaert behandelen vervolgens enkele oorspronkelijke hoorspelen. Daarbij valt op dat de auteurs sterk focussen op de inbedding van de desbetreffende hoorspelen in de poëtica van de makers. Over de hoorspelen van Michiels schrijft Bernaerts bijvoorbeeld dat het "eerder eigen dan vreemd" is aan diens oeuvre (138). Deze opvatting kan breder opgetrokken worden voor de overige hoorspeldichters: hoe anders ze ook mogen lijken, vaak sluiten de hoorspelen naadloos aan

op het prozaïsch of dramatisch werk van de auteurs doordat dezelfde thema's terugkeren, worden uitgetest of zelfs uit het hoorspelgenre ontspringen. Dit tonen overigens niet alleen de hoofdstukken van Bernaerts en Beyaert aan, maar ook die van Eline Grootaert en Linde De Potter.

De artikels van Siebe Bluijs, Gertjan Willems, Eline Grootaert en Linde De Potter focussen op adaptaties, Verschillende auteurs durven daarbii aan de hand van Linda Hutcheons adaptatietheorie de vraag te stellen of de behandelde literaire hoorspelen wel als literaire adaptaties gezien kunnen worden. Zo stelt De Potter over de twee hoorspelproducties van Claus' toneelstuk De getuigen dat deze "eerder als performances van één brontekst kunnen worden gezien en dat ze dus een vergelijkbare status hebben als een klassieke toneelopvoering, eerder dan dat ze adaptaties zouden zijn" (233). Bluijs merkt daarbij aansluitend, en in dezelfde lijn als Bernaerts, op dat de hoorspeltraditie veel meer was dan een gelegenheid voor auteurs om iets bij te verdienen. Meer dan aanpassingen maken voor de adaptatie van gezichtsvermogen naar gehoor, focussen literaire auteurs in hun radio-experimenten op de genrespecifieke eigenschappen van het luisterspel. In die zin plaatst Bluijs de hoorspelen opnieuw in directe lijn met het poëticale oeuvre van de besproken auteurs (180).

Birgit Van Puymbroeck en Pim Verhulst maken het fragmentarisch overzichtswerk compleet met hun contributies over enkele befaamde vertaalde hoorspelen van Louis Mac-Neice, Edward Sackville-West, Dylan Thomas en Samuel Beckett. Bijzondere vermelding gaat nog uit naar de bijdragen van Inge Arteel, Pim Verhulst en Gertjan Willems. Inge Arteels tekst over de internationale invloed van Duitsland legt de nadruk op het hoorspel als Gesamtkunstwerk waarbij niet alleen de auteur, maar ook en vooral de regisseur en zijn of haar geluidstechnici zorgen voor vernuftige artistieke creaties (39). Beckettspecialist Pim Verhulst richt zich op de invloed van het Engelse hoorspel in een uiterst helder hoofdstuk dat de verschillen blootlegt tussen enerzijds de Radio Feature en anderzijds de Radio Play (266-268). Tot slot wil ik ook Gertjan Willems' tekst over Herman Teirlincks hoorspeladaptatie in de schijnwerpers zetten omdat hij de genrespecifieke kwaliteiten van het luisterspel onder de loep neemt en afzet tegen de theatrale en filmische aspecten ervan. Zijn focus op de productionele en institutionele context en hun intrinsieke verwevenheid met het artistieke proces biedt een erg adequaat beeld van het daadwerkelijke productieproces van historische hoorspelen (200).

Luisterrijk der letteren doet de lezer inzien dat het hoorspel in de tweede helft van de twintigste eeuw op verbluffend experimentele manier aan de slag gaat met de klassieke conventies van de literatuur. Doordat het luisterspel op een dynamische manier strategieën inzet van verschillende media, is de bundel van Bernaerts en Bluiis effectief interessant voor een breed publiek van geïnteresseerden in literatuur, film, muziek, theater, geschiedenis, radio, en communicatie. De uitgewerkte, individuele cases, verzorgd door specialisten met verschillende expertises, illustreren dat het genre een breed spectrum aan disciplines kadert. Vorm en inhoud worden dan ook doeltreffend op elkaar afgestemd. Het boek fungeert bovendien als een brug tussen jong en oud, oftewel een generatie die de literaire hoorspeltraditie als een historisch kunstobject tracht te bevatten, en haar voorgaande, voor wie het puur jeugdsentiment is. Het spoort daarnaast ook aan om te mijmeren over het succes van de eerder vernoemde, hedendaagse variant van het hoorspel. Wie weet verschijnt er over pakweg vijftig jaar een gelijkaardig exploratief en fragmentarisch overzichtswerk over de podcast?

Richtlijnen voor de auteur

De onderstaande richtlijnen zijn specifiek gericht aan auteurs die een artikel wensen in te dienen bij *Documenta: tijdschrift voor theater*.

Documenta is een blind peer review-tijdschrift dat beschikt over de A1.2-status. Het kent een B-rating op de European Reference Index en staat vermeld in de VABB-lijst. Een ingezonden artikel wordt door minstens twee leden van de redactieraad blind beoordeeld. Binnen de zes weken krijgt de auteur feed-back op zijn artikel. Het artikel wordt als publiceerbaar, publiceerbaar mits aanpassingen of niet publiceerbaar in Documenta bevonden. De reviewers maken gebruik van een sjabloon om het artikel te beoordelen. Criteria zijn originaliteit, wetenschappelijke relevantie, duidelijkheid van de vraagstelling, wetenschappelijk onderbouwde onderzoeksmethode en argumentatie, opbouw, structuur en coherentie van het artikel, toereikende bibliografie.

Inzending abstract. Het artikel wordt voorafgegaan door een abstract variërend tussen 100 en 200 woorden en een opsomming van maximum 5 kernwoorden. Stuur je abstract ter goedkeuring naar <u>documenta@ugent.be</u> vóór je een manuscript inzendt via de website.

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Referentiesysteem. *Documenta: tijdschrift voor theater* volgt de MLA-stijl met een volledige referentielijst op het einde van het artikel.

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