

Let's (be) play(ed by) an ocean: of situated actions within ecological sound art

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Jag hör sorlet från Tapeshavet långt där ute, från en storm som varit eller som är på väg. Inte som en spegel eller en dröm utan som det som bara är och har varit och som oupphörligen imiterar världens föränderlighet. De enskilda talens samstämmighet bortom alla förutsägelser som intresselös musik ur kropparnas rörelser⁷⁸.

(Gunnar D. Hansson, 2017 p. 64–65)

What else can artistic practice become when the object is not the goal, but the activator, the conduit toward new modes of existence? (Manning, 2016, p. 46)

Abstract

This chapter investigates participatory sense-making within ecological sound art. The field links to “a broader set of cultural practices in which the imperial power of ‘the human’ over the rest of the world is shifting in favor of what we might call a more eco-systemic engagement” (Hogg, 2013). In summer 2018, the project sent poet Gunnar D. Hansson, composer Anders Hultqvist and ecological sound artists Halla Steinunn Stefánsdóttir and Stefan Östersjö on a search for the sounds of the book *Tapeshavet* (Hansson, 2017), through the artistic method of activation. This chapter analyses the processes of such participatory sense-making, which springs out of an ecological-enactive approach. Based on this the author puts forth and argues for the concept of multi-entity performance (Rawlings, personal communication, May, 2019; Stefánsdóttir, 2019a) as a technique as well as analytical and conceptual stance, thus showing through doing that the ecological-enactive approach has the power of “providing one with new tools and technology and new understandings of processes, in any musical environment and its collaborative creativity, where things happen in the connection” (Stefánsdóttir, 2019b).

78 I hear the Tapes Sea purling distantly, from a storm that is past or one on the way. Not like a reflection or a dream, but like that which simply is and has been and incessantly imitates the changeability of the world. The concord of individual numbers beyond all prophecies, like music without interest made by the motion of bodies (Schenck, L., 2020).

Introduction

The origins of the field of ecological sound art⁷⁹, a sonic practice of *performative responsiveness* to an environment, can be traced to a line of sound artists and musicians⁸⁰ who took their practices outside of music institutions. The combination of such *epistemic action* with the field of artistic research holds the power to “realise experiential insights into landscape, the individual imaginary, and the situatedness of the human subject”⁸¹ (Hogg & Sansom, 2015, p. 260). As my prior work has shown⁸², the ecological sound artist is not dependent on working in outdoor sites and, given the cognitive and epistemic nature of this work, is able to bring her/his *relation-technique* into diverse types of environments.

In fact, through such engaged *doing*, the ecological sound artist brings the *thinking-through-practice* of a musician (Maharaj, 2009; Östersjö, 2008), usually confined to the rehearsal and concert space or the recording studio, out into other parts of the world. Thus “(t)hrough participation, the artist/listener can be immersed in processes that either re-activate sounds of the past or suggest possible future soundscapes⁸³” (Stefánsdóttir & Östersjö, 2019, p. 371). The notion of *thinking-through-practice* is immediately linked to James J. Gibson’s ecological theory of perception (1979). It builds on action and perception being fundamental to how a perceptual system resonates with an environment, encapsulated in the concept of affordances. This becoming underlines a *becoming with* and *bringing forth* a world⁸⁴. The ecological sound artist “is therefore implicit with the world through her/his performative thinking” (Stefánsdóttir & Östersjö, 2019, p. 372).

Some important criticism of Gibson’s theory points out that it may imply that affordances are intrinsic to the environment. For instance, Anthony Chemero argues that they are not “proper-

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- 79 My usage of the term seeks to underline how performativity characterises our relation to the environment, and links therefore to theories of the ecology of perception (Gibson, 1979) and enactive cognition (Varela et al., 1991/2016) (for further reading see Stefánsdóttir & Östersjö, 2019).
- 80 Among pioneers of this approach were Pauline Oliveros, Akio Suzuki, John Butcher, and Max Eastley, but artists who have gone in this direction in recent years are members of Team Sports, the Landscape Quartet as well as individuals like John Grzinich, Richard Skelton, and Jon Rose.
- 81 It should be noted that the meaning of the word landscape is multiple, depending on its context. In this instance it can be understood as a cultural landscape, or “a constellation of natural forms that are independent of humans, yet part and parcel of the processes by which human beings make their living and understand their own placing in the world” (Benediktsson and Lund, 2010, p. 1). Within this chapter, I choose to take an ecological perspective. The term was introduced in the 1800s and is “the science of the study of the relationships between living things and their environment” (Botkin and Keller 2010, G-5, as cited in Rawlings, 2014). The term environment will be understood as “all factors (living and nonliving) that actually affect an individual organism or population at any point in the life cycle” (Botkin and Keller, 2010: G-6, as cited in Rawlings, 2014).
- 82 For further information see Stefánsdóttir, 2019b and Stefánsdóttir & Östersjö, 2019.
- 83 The author is aware of the criticism of the usage of the word ‘soundscape’ (Hogg, 2013; Ingold, 2007) and how it proposes a slicing up of environmental experience. The word in this context should therefore rather be understood as sonic work.
- 84 The concept to ‘bring forth’ a world is inherent to Humberto Maturana and Francisco Varela’s Santiago theory of cognition (1980). According to them, cognition is not a representation of an independently existing world but rather based on structural coupling. This way, nothing exists without cognition; we bring forth a world with others through the process of our living.

ties of the environment; indeed they are not properties. Affordances (...) are relations between particular aspects of animals and particular aspects of situations” (Chemero, 2003, p. 184). The theory of perception needs therefore to proceed to “specifying the sensorimotor patterns that enable action to be perceptually guided as enacted from the structural coupling of the animal” (Varela et al., 1991/2016, p. 204). Gibson’s initial theory does no justice to the “active role living creatures play in shaping the worlds they inhabit” and that “this may include ‘participatory’ forms of sense-making that involve the enactment of emotional-affective and empathic modes of communication between agents and social groups (mimesis), and that coincide with the development of shared repertoires of coordinated action” (van der Schyff & Schiavio, 2017, p. 10). Below I will outline a socially grounded perspective on embodied cognition (Leman, 2008; Godøy & Leman 2010).

Within the field of traditional music perception and cognition, research “has tended to take little account of action, treating perception and cognition as ends in themselves” (Linson & Clarke, 2017, p. 2). Through a study of the subjectivity of the artist in music-making processes, a growing body of artistic research (Östersjö, 2008; Frisk, 2008; Dogantan-Dack, 2015; Impett, 2017) has gone to reveal knowledge that appears to support theories of enactive cognition. The term enaction was coined by Francisco Varela, Evan Thompson and Eleanor Rosch. Referred to as the ‘4E’ approach it sees cognitive processes as the overlapping dimensions of the embodied, embedded, enacted and extended perspectives of human existence (Varela, Thompson & Rosch, 1991/2016). This framework stands in contrast to any representationalism and allows for a relational understanding. Thus the field of enaction, together with ecological theory holds great promise when it comes to situating research in music in a wider context (Clarke & Clarke, 2011).

In recent years, as formulated by Julian D. Kiverstein & Erik Rietveld (2018), enactivist theories have moved more towards concepts of *co-determination* and *mutual interdependence*. For instance, Hanne De Jaegher and Ezequiel Di Paolo (2007) introduced the concept of *participatory sense-making*, later described by Di Paolo and Thompson as follows:

It happens to various degrees, from orientation of individual sense-making (someone draws our attention to an aspect of the world we have ignored) to joint sense-making (a piece of work is literally created together through a process that would not be possible by the individuals involved on their own)⁸⁵. (Di Paolo & Thompson, 2014, p. 75)

Parallel to this, and as mentioned above, artistic research in music has been paramount when it comes to dismantling some of the outdated conceptions of creative processes within Western Art Music (hereafter: WAM) “which denies the existence of bodies and their vibrant capacity of action and perception” (Stefánsdóttir, 2019b). The historically embedded narrative of the isolated genius has indeed been having a hard time, thanks to research on distributed creativity

85 This coincides with Vera John Steiner’s theories on collaboration. “[T]aking risks, buoyed by collaborative support, contributes to a developing, changing self. Through collaboration we can transcend the constraints of biology, of time, of habit, and achieve a fuller self, beyond the limitations and the talents of the isolated individual” (John-Steiner, 2000, p. 188).

(Clarke & Doffman, 2017; Laws et al., 2019; Nguyễn, 2019; Olofsson, 2018; Östersjö, 2008). For example, building on their analysis of the performer's voice, David Gorton and Östersjö (2016, 2019) present the concept of *discursive voice* when analysing collaboration within contemporary music between a performer and a composer. Other work linked to intercultural collaborations has shown the importance of empathy in such participatory sense-making (Nguyễn, 2019; Nguyễn & Östersjö, 2020).

This in turn underlines music's epistemic nature as an *act* and not a *thing*, inviting us to even further explore music-making as a culturally situated activity. "By employing an ecological-enactive perspective, we move beyond an understanding of our surroundings in terms of representation. We thus enter the arena of entanglements, or [...] 'sound'⁸⁶ relations" (Stefánsdóttir, 2019b). This way of working holds the power to put traditional performance out of equilibrium and magnify that "(t)he codes of the world are not still, waiting only to be read. The world is not raw material for humanization; [...] the world encountered in knowledge projects is an active entity" (Haraway, 1988, p. 593). As I'll go on to show, this way of working *expands* the ever-ongoing *play* across an individual's cultural experiences⁸⁷ as it offers one to *become sensate with a site* and enter a different *relational matrix*. This in turn shifts concerns and values of sense-making, thus showing that "(b)ecoming initiates the formation of new patterns that carry over into future situations" (Varela et al., 1991/2016, p. 115).

Returning to Gibson's theory of affordances then, this creative act, carried out in relation to the *other*, can be framed as an exploration of cultural affordances⁸⁸. This ability to relational-technique with the biotic and abiotic by way of thinking-through-practice as a practice of *thinking-through-listening* is therefore bound to question a politics of listening within western tradition⁸⁹—its degree of openness, its social formation, relation to territory and earth. Such engagement underlines that there is "a whole world yet to be discovered, not of unsolved issues but of relationships among things we know, of ways in which they might fit together" (Corradi Fiumara, 1990/2006, p. 17). In what follows, I aim to look at how intersubjectivity forms within the proposed case study of the activation method, and what it brings forth. A process of creativity that can be understood as an act of improvisation (Ingold & Hallem, 2007), which follows "the ways of the world, as they open up" (Ingold, 2011, p. 216).

86 The multiplicity is further magnified given that a musician's multi-modal knowledge production encompasses the kinaesthetic, perceptive, and affective.

87 I borrow the concept of 'play across any individual's set of cultural experiences' from Bennett Hogg's paper *Enactive consciousness, intertextuality and musical free improvisation* (2011) through which he explores improvisation from an enactive stance.

88 Through their elaboration of Bordieus's concept of habitus, Coessens and Östersjö (2014) claim that the concept of 'resonance' and 'resistance' can be applied as an exploration of cultural affordances.

89 In this instance it is vital to underline that any way of working 'with' and bringing 'forth' within the framework of ecological-enactive perspective, inside of artistic research, is bound to link to the concept of working 'on' (Ahmed, 2019) when it comes to accountability and care within institutions of music and academia.

The Activation Series

I have developed the method of activation⁹⁰ since winter 2016–17 within my doctoral artistic research in music at Lund University (Malmö Academy of Music). This had led to *The Activation Series*, which draws on exploration of agency, and the dynamics between the practices of performer, composer and curator in the field of contemporary music and sound art. *The Activation Series* also looks at field-recording as a methodological tool⁹¹.

In the first project titled *I play Northern Lights* (2017), I spent a large part of the activation in collaboration with performer, poet, and interdisciplinary researcher Angela Rawlings. The work is a quadrophonic sound installation “conceived as an enactivism for enhanced auditory perception[— a] relational technique of bodying and spacing”⁹² (Stefánsdóttir & Östersjö, 2019, p. 378). In the second project *I play cement* (2018–19), I entered an abandoned cement factory by Elliðaár river in Reykjavík, Iceland. This resulted in an installation for two screens and two stereopairs, later to be reworked into a piece for one screen and 8 speakers⁹³. The work invites the spectator into an immersive experience, whose composition draws on the complexity of a body’s ability to bring forth multiple worlds through its coupling and relay of action and perception. *I play cement* therefore questions the normativity of inhabiting a space. For the third project, which is the focus of this chapter, I travelled in the company of poet Gunnar D. Hansson, composer Anders Hultqvist, and performer and ecological sound artist Stefan Östersjö to the Bohuslän region of Sweden in search for the sounds of *Tapeshavet*. During the trip, I extended the activation even further as a method of collaboration.

Works within *The Activation Series* occur in the pattern of *out-of-time* curatorial intention leading to *in-time* activation, followed by a transformation of material for the last stage—its indoor presentation. The activation requires that one remains in a state of *tuning-in* and *dwelling-with* and not succumb to technological hoarding with a later compositional stage in mind. In a paper with Östersjö (Stefánsdóttir & Östersjö, 2019), I looked at the artistic processes at play in the transformation of materials created/collected in the natural environment or an indoor site when shaped for later presentation. The paper demonstrated the importance of *memory-action states* when it comes to the studio composition of the work. This will be further explored in a forthcoming paper on the work’s compositional and curatorial nature.

For the purpose of this chapter, I’ll delve into the initial moment of activation, where the ecological sound artist becomes sensate with a site. Di Paolo and De Jaegher describe such doing in the following way:

90 It should however be underlined that the act of activation has been present throughout all my case studies, starting with exploration/activation of the studio environment as well as the recording studio.

91 In recent years, the focus has shifted towards a more eco-systemic approach to acoustic ecology and the usage of field recording. We have thus come a long way from what Salomé Voegelin describes as the transparent microphone man and moved towards the body inhabiting the field (Voegelin, 2014).

92 *I play Northern Lights* was premiered as part of Nordic Affect’s concert at the Dark Music Days 2016 edition in Iceland.

93 The initial version was premiered at Dark Music Days 2018 edition in Iceland, followed by the second version at Lund Culture Night 2019 in Sweden. A binaural version of the work was premiered at DARE 2019 conference at the Orpheus Institute, Belgium.

Sense-making is what occurs when an adaptive autonomous system (e.g., an organism) regulates its coupling with the world and its own states as a function of the virtual (nonactualized) implications for its continuing form of life (organic, sensorimotor, cognitive, social, etc.) (Varela, 1997; Di Paolo, 2005, 2009; Thompson, 2007). It is an ongoing engagement with the world by an agent that is sensitive to the consequences of this engagement. (Di Paolo & De Jaegher, 2017, p. 90)

The sense-making of this project occurs within the design of looking at *situated actions*. The term was put forth by Lucy Suchman⁹⁴ in connection with her research on human-machine interactions, through which she showed that human action springs from dynamic interactions with material and social worlds (Suchman, 1987). The focus of the present study can be termed to span an engagement with a site, through tools and between participants. In fact, the constraints of affordances, imposed through the practice of the activation method, builds on a musician's ability to relational-technique through the concept of *fleshy listening*⁹⁵ (Stefánsdóttir & Östersjö, 2019, p. 379), which has the power to make multiple sense⁹⁶. Situated actions within such ways of working are thus noisy in their kinetic, perceptual, and affective states. In the instance of the search for the sounds of *Tapeshavet*, the complexity was magnified through participatory sense-making, but also by choosing an entity as a catalyst for the interactions—namely a book that stretches in its virtual form across sites and temporality.

Into Tapeshavet

The book *Tapeshavet* [Tapes Sea] by Gunnar D. Hansson (2017) forms the basis of the trip as we set out in summer 2018 on a search for the sounds of *Tapeshavet*. The name refers to a post-glacial coastline by Skagerak and Kattegat during the Stone Age, namely the Tapes transgression. Through poetry, prose, diary writings, archeological notes, botanical excursions, farm and family stories, Hansson explores Härnässet on the west coast of Sweden across temporalities. By look-

94 Through her research, presented in *Plans and situated actions : The Problem of Human-Machine Communication* (1987) sociologist and ethnomethodologist Lucy Suchman looked at interactions between humans and copy machines at Xerox's Palo Alto Research Center. Through her work, she contributed to the developing field of human-computer interaction as she refuted some of the prevailing theories around AI at that time.

95 *Fleshy listening* draws on Manning's elaboration of *fleshy touching/touch* (2006) "...which foregrounds a body's possibilities of bringing forth «relational matrices» (Manning, 2006, xiii), as a sensing body in movement. Such a stance refutes any representational approach to sensing and points towards its state of entanglement through becoming. Fleshy listening (...) suggests a further acknowledgement of a performer's tactile thinking as such a process of becoming in thinking-through-listening. This thinking (...) i.e. fleshy listening, implies the expressive and relational potential as we perform and thus compose with our bodies" (Stefánsdóttir & Östersjö, 2019, pp. 379–80).

96 This links to nested agent-environment relations (Kiverstein & Rietveld, 2018), set to be elaborated upon later in this chapter.

ing at the sites' transformation in such a geopoetic⁹⁷ way, the book becomes a mirror for climate change. Given its temporal and geological complexity, it is furthermore possible to draw the line between Hansson's book and that of geochronology, which according to Rawlings "offers an opportunity to think through an eco-ethical knowledging in temporal and spatial fluctuation" (Rawlings, 2020, p. 68). Such relational development provides humans with an opportunity "to resituate ourselves near what is deemed more-than-humanity, with the intention to interrogate and refigure the doomsday rhetoric at stake in contemporary climate-change discussions" (ibid., 2020, p. 68).

The framework for the site visits was brought forth by Hansson, together with Hultqvist, who selected text⁹⁸ from the book that they felt was of sonic relevance. In that way, we were given agency by Hansson and his longtime engagement with the site⁹⁹ to enter it. After discussions and with map in hand, we entered a quarry, a gunpowder storage, a fossilised ocean on a hillside, a small bay, and a site with stones which had been carved out for Albert Speer's architectural plans. The material gathered, in addition to the activations, consists of Hansson's narration about some of the sites and their histories, Hansson's poetry reading as well as field recordings from the sites. These became the backbone of *Tapeshavet* hörspiel (Hansson & Hultqvist, 2020) relating to the book, interlaced with sounds from the activations. Sound studies based on the activations found their way into *A Shrinking Emptiness* event premiered at the GAS Festival in Gothenburg, Sweden in 2018. A separate work, *Fjärilarna steg upp* [The butterflies ascended] (Stefánsdóttir, 2020), which builds on the activations, was premiered in October 2020 at the tropical palm house of The Botanical Garden in Lund, Sweden. The entire working process was documented through video, audio, or both.

It should however be noted that the engagement was not merely limited to on-site work. Discussions during our travels to and from sites and during meals were also part of the process. We would for example listen to sounds and categorise them, discuss and test technology, and dive into discussions around the book, its meaning and context, which could stretch from the topic of entropy over to Ezra Pound's poetry reading. Throughout this, Hansson shared insights into the Bohuslän area and its histories. As can be heard in the documentation from the site,¹⁰⁰ this fed into our work and coloured it, showing that social interaction processes "are complex phenom-

97 Magrane defines geopoetics as "creative geography, including discussions of geographer-poets and of poetry as a research method; second, as literary geographies of poetry; and third, as geophilosophy" (Magrane, 2015).

98 This included samples such as: "Fritt omskrivet: ingen kan veta något om hur det mänskliga sådant det då var fortsatte efter Littorinatiden. Om till exempel musiken förändrades. Samma sand, samma andning i bergsutfyllnaderna, snäcksaklighet och sanning, formtid, alltför sent för att hindra genombrytandet av smältvattnet, symmetribrott, väldiga vattenmassor västerut från Östersjösänkan genom Närkesundet förbi Billingens nordspets."/>"Släggor och mejslar har tystnat, stenbrottens tid är förbi, ormbunkar frodas i flis, klippan ger gravanden skydd, grönskan återtar bergen, öar skymtar i väster, hågkomst är översatt liv, tiden ett bottenlöst kärr" (Hansson, n.d.).

99 To earn or be given agency when working on a site is inherent to such a way of working. The ethics of this are set to be further explored in a forthcoming paper.

100 Some of these narrations are included in the *Tapeshavet* hörspiel (Hansson & Hultqvist, 2020) that accompanies the publication on USB. For example at 01.22 and 14.55.

ena involving different dimensions of verbal and non-verbal behavior, varying contexts, numbers of participants and technological mediation” (Fantasia, De Jaegher & Fasuolo, 2014, p. 5) and that “(p)articipants co-create the interactive situation, but *also* the interaction process as such influences the sense-making that takes place” (ibid., 2014, p. 5). In what follows, I’ll explore its formation in further detail.

Dynamics of participatory sense-making in the Tapeshavet project

In his article *Collaboration in Contemporary Music* (2016), Alan Taylor proposes that “the use of the term collaboration should be limited to the description of relationships where decision-making is shared” (Taylor, 2016, p. 567). This is reflected in the following chart where he traces the fundamental forms of working relationships:

Hierarchy in decision-making			
		Yes	No
Division of labour (separation of tasks) in imaginative input.	Yes	<i>Hierarchical working</i> Tasks are divided between the participants. One or more participants decide on the contributions made.	<i>Co-operative working</i> Tasks are divided between the participants, but decisions-making is shared.
	No	<i>Consultative working</i> The participants contribute to the same task or tasks. One or more people decide on the contributions.	<i>Collaborative working</i> The participants share both the tasks themselves and the decisions on the contributions.

Figure 1. Description of working relationships (Taylor, 2016, p. 570).

According to this, the work on sites within the *Tapeshavet* project—between Hultqvist, Hansson, Östersjö, and me— falls under collaborative ways of working as we shared the tasks and the decisions on the contributions. In the following tables, one can for example see when each participant partook in activations.

Table 1A.

Chart over activations within the Tapeshavet project.

QUARRY	Cylinder	Iron poles	Stones on ground	Stone quartet	Individual stone throwing
Hultqvist		x		x	x
Hansson				x	x
Östersjö	x	x	x	x	
Stefánsdóttir	x		x	x	

Table 1b.

Chart over activations within the Tapeshavet project.

BAY AND HILLSIDE	Dynamite storage	“Hitler’s stones”	Fossilised ocean
Hultqvist	x	x	
Hansson	x		
Östersjö		x	x
Stefánsdóttir	x	x	x

This figure is however merely a grid of the participatory sense-making that took place. For a deeper analysis, one needs, as Schiavo (2014) points out, to look towards the project’s *goal-directedness* and *meaningful actions*:

when an agent performs a purposeful action, the conscious experience of acting in a goal-oriented way depends neither on the complex of stimuli that he perceives from his body, nor on the topological coordinates of his anatomical parts; and also when a subject recognizes the intentional meaning of an action performed by someone else, the recognition is derived by the holistic evidence of the meaningful purpose of the action, and not by some neutral elaboration of the meaningless topological modifications occurring in the agent’s system of body parts. (Cappuccio, 2009, as cited in Schiavo, 2014, p. 256)

But *what* determines the goal-directedness and meaningful actions within the present case study? In this instance, it is important to note that it falls within a larger research project presented in this publication, which defines its overall intentions. Thus, Hansson’s book *Tapeshavet*, which is a key component of the larger project, sets the agenda through its complexity and its imagery related to geochronology. If we look at the activation side of things, the project does not differ so much from other ecological sound art practice, in that it “is a process of learning through negotiation and participation rather than searching for something already ‘out there’ that ‘needs’ to be represented“ (Hogg, 2013).

Returning to the book and its goal-directedness, it also resembles ecological sound art in that it is an example of sense-making at the intersection of human and environment, i.e. Hansson’s engagement with Bohuslän woven into the writing. This coincides with a perspective presented by Tim Ingold, which builds on Martin Heidegger’s claim that a thing presents itself in its thinging from out of the worlding world (Ingold, 2011, p. 214). It in fact “invites the viewer to join the artist as a fellow traveler, to look *with* it as it unfolds in the world, rather than behind it to an originating intention of which it is the final product” (Ingold, 2011, p. 216).

We thus start by becoming sensate with a site through a book, created through engagement with the very same site. Later it expands into an on-site participatory sense-making engagement as thinking-through-performing, where even Hansson enters the activations. The goal-directedness is to explore the sonic identity of *Tapeshavet*. But here we come perhaps to the most important point—the meaningfulness of our actions is prompted by its goal, but they go on to be reshaped through our work. Thus by becoming sensate with a site in explorations of affor-

dances, we come to form and shape the notion of meaningful actions, through this thinking in movement¹⁰¹.

This particular design of situated actions sets up a different gathering than normally within WAM. The participants, through their *extended* coupling (De Jaegher & Di Paolo, 2007), embark on a non-hierarchical participatory sense-making, with different cultural artifacts, and are open to different outcomes through this exploration of cultural affordances. Through agreement, we mutually shaped the *normative standards* of the project, which challenged current understanding of agency. This coincides with Di Paolo and De Jaegher's claim that

(t)he realm of intersubjectivity is animated by a force that is *neither* what goes on in people's brains or in their self-affective bodies nor what occurs in social interaction processes—if we consider each alternative on its own. On the contrary, intersubjective phenomena emerge only as a *dynamic relation* between these two broad domains: the personal and the inter-personal. (Di Paolo & De Jaegher, 2017, p. 87)

The interaction process however, as already pointed out, was not centered around human interaction but instead was affected by various entities, spanning from book to wind, cylinder, a politics of listening, and a fossilised ocean. As Margaret Morse points out in *The Poetics of Interactivity* the once useful term interactivity has gone on to mean too many things and that it 'is expressed not only in art but ubiquitously in every sphere of contemporary life where chips reside, from automatic tellers and garage-door openers to computers that access discs, CD-ROMs, and the World Wide Web' (Morse, 2003, p. 17). As an alternative, she proposes the concept of responsiveness.

This rethinking of agency is presented in the work of Susan Kozel who questions the so-called smoothness of interactivity. Kozel points out the messiness of the act where "agency might be spread across a range of human modalities, distributed across bodies and across materialities" (Kozel, 2007, pp. 186–187). Responsivity however, according to Kozel, encompasses the experimentation and the loop of activity and passivity involved. If framed as a creative act, then Lambert Malafouris, also building on the concept of 'thinging' describes this rather as an 'uncoupling' and 'recoupling' which provides "opportunities for the perceptual attunement and observational engagement that are potential sources of insight" (Malafouris, 2014, p. 153). We are therefore not dealing with any passivity. The 'measure' encompasses activity and duration of reflection—the co-producing factors within the tapestry of the creative act. This way of working through responsiveness can therefore be deemed to be a method of response-ability (Haraway, 2016)—a *responsivity for paying attention through differences*, thus enabling a *dialectical relationship*. This can, in return, be analysed as a process of improvisation, which I'll elaborate on later in this chapter.

101 This makes one perceive the book differently, and perhaps even question the act of 'reading', which was further explored in the composition *Fjárilarna steg upp* [The butterflies ascended] (Stefánsdóttir, 2020).

This state of entanglement brings us to the terminology ‘agency’, which has been questioned as something belonging solely to humans¹⁰². Building on Ingold’s plea that we look at an *organism-in-its-environment*, environmental historian Linda Nash challenges the assumption that agency belongs only to humans, on the ground that the environment can influence and constrain human actions but also affect the way environments shape human *intentions* (Nash, 2005, p. 68). Similarly, Malafouris argues for a material agency “which explores agency not as a human property but as the emergent product of situated activity“ (Malafouris, 2016, p. 5). Agency then springs out of action, and should not be confused with intentionality¹⁰³. To enter situated actions through performative responsiveness can be deemed to be an amplification of the possibilities of *intra-action* (Barad, 2007). As I’ll go on to show, this may bring on a state of *entanglement*, which affects the analytical process of this case study.

Into the documentation

It is the coding¹⁰⁴ of the documentation material that forms the basis of the following analysis of the Bohuslän activations. Such analysis is geared towards the observable but, given the importance of memory-states (see further Stefánsdóttir & Östersjö, 2019) that inform all levels of the activation method, the analysis also spans stimulated recall. Furthermore, the overall analysis was conducted from the perspective of *multi-entity performance* (Rawlings, personal communication 2019; Stefánsdóttir, 2019a). The terminology was suggested by Rawlings during our discussions in connection with the premiere of her work, *Sound of Mull* (2019)¹⁰⁵.

102 It should be noted that even in the context of agency of human, Buhrmann and Di Paolo have gone on to argue for an account of the sense of agency that distinguishes between the biological, the sensorimotor, and social forms of agency. “We have interpreted the sensorimotor approach as a world-involving perspective on action and perception. Lacking a theory of agency, this approach needed to be supplemented by extending the requirements for agency proposed by enactive theory—individuality, asymmetry, and normativity—to a new enactive concept of sensorimotor agency“ (Buhrmann & Di Paolo, 2017, p. 232).

103 This is further elaborated by Malafouris in his writing on thinging: “(T)he problem of agency arises because, on the one hand, we conflate agency with intentionality, and on the other, we conflate different types of agency (sense of agency, feeling of agency and belief of agency). These types of agency represent temporally unfolding differences in the awareness of agency that, far from being a homogeneous feeling or state, is affected by the history of the dynamics of interaction, the skilfulness of the participants and qualities of the materials involved“ (Malafouris, 2014, p. 143).

104 Artistic research is rarely driven by a hypothetico-deductive model but rather inductive reasoning. It is however possible to give the research a focus and in that instance highlight contextual sensitivity, i.e. that ‘hyphenated’ phenomena “take on variety of meaning in different context” (Silverman, 2014, p. 37). This awareness makes one refrain from a prior hypothesis but rather allows it to arise from the data analysis. This qualitative approach is labelled as ‘Grounded theory’ and its purpose is “theory construction, rather than description or application of existing theories” (Charmaz & Bryant, 2011, p. 292). It is therefore possible to claim that artistic research is at its core interdisciplinary and also that any methodolatri (Janesick, 1998) can prove to be harmful as it risks bypassing the subject’s embeddedness, jeopardising the research outcome.

105 *Sound of Mull* (2019) forms the artistic output of Angela Rawlings’ PhD research at the University of Glasgow and is a series of performance scores developed through artistic practice-as-research into how to perform geochronology in the Anthropocene.

Through my work connected to agencies and ecological-enactive approach, I had found that WAM terminologies relating to performance, and the relations and existence it brought forth, no longer served when thinking into this way of working, or when trying to open a crack in the artistic practice and its concepts through analysis. Multi-entity performance is a performance that extends to include both biotic and abiotic entities. This moves beyond the notion of *interspecies performance*, a concept which has been proposed within post-humanistic art research. This however bypasses some actors, vital to this way of working, such as haecceities, rocks, iron poles, and cement.

Furthermore, built on my work within *The Activation Series*, it is clear that people-to-come, in another space, as well as the space itself are also part of the compositional process, thus making it not a site-specific performance. However, *The Activation Series*, like much of my work, also resides at the intersection between human and environment through its site-responsivity. In that instance, some could argue that I should use the concept of *more-than-human* for analysis. If working from an ecological-enactive perspective, it is clear that a human is already, in her living state, more-than-human—given her structural coupling with the environment through her dynamic interactions. Multi-entity performance is furthermore an attempt to open up to an analytical stance that coincides with John Gatewood's wish that rather than speaking of ideas, concepts, categories, and links, we should speak of flow, contours, intensities, and resonances (Gatewood, 1985, p. 216). In what follows, I'll dive into the analysis of various formations of the performative responsivity of multi-entity performance¹⁰⁶.

With haecceities and a gunpowder storage

The fleshy-listening of multi-entity performance entails *contact*. According to Varela et al., contact,

is a form of rapport between the sense and their objects, a matching of sensitivity between a sense and an object in the sense field. It is a relational property involving three terms: one of the six senses, a material or mental object, and the consciousness based upon these two. (Varela et al., 1991/2016, p. 119)¹⁰⁷

106 Given that multi-entity consideration originates within Rawlings' (2020) research linked to geochronology, it holds the power to enact a **multi-entity justice** within the entangled temporalities of climate change and the Anthropocene. (...) This is likewise differentiated from *environmental justice* as the term suggests placement/location and unity/whole rather than the many entanglements implied by *multi-entity* and urging response (response-ability, responsibility, responsiveness) (Rawlings, 2020, p. 182). Future steps demand therefore a further exploration of its ethical possibilities and what power it holds to re-address values, tensions, and concerns within the fields of contemporary music and sound art.

107 If you contemplate a scenario where you enter a site to work under a scorching sun; you may be listening with the soles of your feet while trying to navigate the site and take in what meets you in terms of wind, trees, stones, birds, size, acoustic impact and tactile connective possibilities. It is therefore clear that the contact is multiple contacts.

As with traditional musical performance, the ecological sound artist's contact can include tools¹⁰⁸. In the first two works, *I Play Northern Lights* and *I play cement*, I developed a toolbox based on my thoughts about the sites' sonic possibilities. In the case of *Tapeshavet*, the only tools we brought to the sites, aside from the field recording equipment, were Hansson's book, my hairbrush, and some sandpaper that Hansson happened to have in his bag and found its way into the performance. All other tools were found on-site and/or brought between sites. In a few instances, such as when activating fossilised shells or a pile of stone chips in a quarry, we skipped using tools and only employed direct contact through fingers and feet.

This *thinking-through-practice* employs listening that is connected to the tactile, and bound to encompass vestibular, kinesthetic, visual, auditory and the haptic systems. *Thinking-through-music* is therefore a multi-modal phenomenon, and not merely experienced through the ears of a musician. (Stefánsdóttir, 2019b)

Within enactive theories, these have been described as *sensorimotor capacities* that are themselves "embedded in a more encompassing biological, psychological and cultural context" (Varela et al., 1991/2016, p. 173). These capacities are in turn bound to the world through action as sensorimotor processes where action and perception are "inseparable in lived cognition" (Varela et al., 1991/2016, p. 173). For a musician, this may entail thousands of hours spent exploring what the relation to an instrument affords her.

This exploration can be seen as both working with and, according to Aden Evens and Östersjö, overcoming the instrument's *resistances* (Evens, 2005; Östersjö, 2013). Our engagement with a site, through the usage of tools, was in all circumstances but one conducted in a familiar way, namely at close proximity. Only when we decided to activate the quarry from four sides, by throwing stones from a high altitude, did we radically extend the radius of the performance space¹⁰⁹.

Proximity, brought forth through contact, may also take over and transform the performing body. This happened, for example, in an activation that drew on my prior collaboration with Rawlings through performance of her piece *INTIME* (Rawlings, n.d.), in the *I play Northern Lights* activation. It builds on the movement of ocean and wind streams, conducted through a counter-clockwise circulation.

108 In this instance, it should be mentioned that angling or walking with the recording device has always been a part of the field recording practice. Within *The Activation Series*, this has however not been the focus for the employment of the tools.

109 Our preconceived ideas about this activation's affordances turned out to be misconceived; what we heard in our inner hearing as a big rumble became scattered 'clonks' as can be heard when listening to the recording. Our performing bodies were overcome by the site's acoustic affordances as much larger powers, akin to eruption or dynamite would have been needed to explore it and bring forth sonic possibilities of that magnitude.



Figure 2. Still from documentation video shot at the gunpowder storage in Fågelviken.

In a gunpowder storage, as part of the *Tapeshavet* project, I entered a variation of such movements, in contact with the space, which informed my circle. I used various tools, such as a stone, hairbrush, and sandpaper. It is a tough performance as can be seen in the documentation material, more often than not my sight is on the ground as I run through debris and try to stay afoot. My panting between circulations reveals its exhausting qualities and at the end I comment that I feel deaf on my left ear due to the loudness of sandpaper on cement. This is one of the instances where my agency is radically transformed as I shoot through the space and cannot linger in my familiar patterns of action. I become the bow as my entire body aligns with the space through topographical sonic mapping and at the same time I'm played by the space.

As I will go on to show, this is one example of many wherein a relation, and what it affords, is a fine case of entanglement. This *performability*, as *skilled intentionality*, molds to the environmental situation and is permeated by imagination and memory. This aligns with Kiverstein & Rietveld's claim that "enaction is best understood in an ecological context of nested agent-environment relations, spanning multiple scales of complexity, many of which reach far beyond what is taking place here and now" (Kiverstein & Rietveld, 2018, p. 157). They also assert that one

should not think of offline cognition as a distinct type of cognition, but as a more complex form of coordinating nested states of action readiness and activities to multiple relevant affordances. Such a process is complex because of the nesting of the activities and their increasing reach through time. (Kiverstein & Rietveld, 2018, p. 157)

The nested activities, or practices of proximity and topological exploration, as seen within the method of activations, allows only for a *leaky* definition of space.¹¹⁰ Henri Lefebvre describes this as *body-in-space* (Lefebvre, 1974/1991, p. 302). A fleshy connect, of “a practical and fleshy body conceived of as a totality complete with spatial qualities (symmetries, asymmetries) and energetic properties (discharges, economics, waste)” (ibid., p. 61). Kirsten Simonsen points out in her reading of Lefebvre’s work that an important precondition to this is that each body *is* space and *has* its space, “it produces itself in space at the same time as it produces that space.” (Simonsen, 2005, p. 4). Then this can, as Bennett Hogg argues, be conceptualised as a site “where sonic intertextuality is made possible—where transductions occurring across culturally mediated knowledges, experiences, and imaginings efface the boundaries between, and strengthen the interdependences of practices, bodies, and thoughts” (Bennett, 2011, p. 89). This limiting of the world, as occurs within the *Tapeshavet* activations, brings forth a world where a performance is *with* instead of *for*¹¹¹, which in turn shifts concerns and values. Focus is placed on an unexplored potential as performativity *in* relation, not just in the here-and-now, but in the socio-political. A responsivity situated in a nested performance space. Through this example of sensorimotor processes, or act of fleshy listening, I embody haecceities in order to sonically map a space that supports Johnson’s following claim.

The core idea is that our experience of meaning is based, first, on sensorimotor experience, our feelings, and our visceral connections to the world; and, second, on various imaginative capacities for using sensorimotor processes to understand abstract concepts. (Johnson, 2007 p. 12)

It links not only to a subject’s ability to relational-technique with abiotic entities such as in the instance of the gunpowder storage, where it could be argued that the site/space becomes a co-creator. It also forms the basis for the common intention of the project activations, to tap into this very ability to explore relations and forge new ones. This “dynamic co-emergence of interiority and exteriority” (Thompson, 2007, p. 79) yet again underlines the importance of a musician’s contact with the other which can stretch beyond her immediate surroundings in a wide array of spatial, temporal, and social relations. Through the next sections, I will explore the sense-making within further activation formations. This included activation of a fossilised ocean under a scor-

110 If employing Smalley’s typology of performance space, it becomes quickly clear that our multi-entity performance space is quite of a different design in terms of distance or movements than that of WAM. The notion of ‘arena space’ does not apply either as this is not a performance ‘for’ but ‘with’. We are not there to convey gestures to an audience and, even if one were to open the activation process and include an ‘audience’, the definition of ‘arena space’ does not apply, which he uses for the whole public space inhabited by both performers and listeners (Smalley, 2007, p. 42). Furthermore, as is already pointed out by Hogg and Östersjö (2015), the ‘arena space’ is a problematic definition since environmental sounds cannot be subsumed into the ‘arena space’. The impact of multi-entity performance on space will be elaborated in a future paper on *The Activation Series*.

111 Although this chapter does not allow for a general overview of music and cognition, it should be mentioned that the author is aware of the fact that music is, outside of the boundaries of WAM, often a case of ‘with’ rather than ‘for’, as not always is the performance stuck within WAM’s usual dichotomy between culture and nature.

ching sun. But also activations of sites, whose ambience was permeated by the utilitarian history of the past, namely quarries that were used to excavate granite, formed 920 million years ago.

With a cylinder, rusty wire, and birch bark

On day one, we stepped into a stone quarry where a ruderal ecosystem is in the process of reclaiming the site. During our work, we spotted a rusty cylinder, whose sonic affordances Östersjö and I explored through stones, rusty wire, and birch bark. This act gives them a very different agency, and links to a musician's body-object relation in terms of exploration of affordances and the brain's plasticity. Although I did not have the same lived identity with the aforementioned tools as my violin and bow, I was able to transfer my *haptic spatio-temporal know-how* onto those tools and was simultaneously shaped by the affordances.

As can be heard in the documentation material, the performance is shared between Östersjö and me. Through our goal-directedness of sonic exploration, we take turns performing, spurred on by each other's comments and performances. In fact, we lose track of time in our exploration of the performances' possibilities. Towards the end, I reach out for the birch bark, the very item that has been reclaiming the quarry. With the bark as an interface, my fingers explore the cylinder's surface. At first, the result is a paper-like sound, but then my grip creates a friction and other sounds start appearing. I comment that "there was something nice there." Östersjö concurs and I choose to proceed. At a certain point, Östersjö suggests another surface on the cylinder and suddenly it happens: the birch bark starts drawing out a sound that sonifies the friction that I feel in my hands, accompanied by a bell-like sound. Taking turns, we use adjectives such as amazing and sublime to describe the impression it leaves. I continue to explore the sounds that are coming from both inside and outside of the cylinder. Eventually, we describe the sonic performance as "almost as piece in itself."



Figure 3. Cylinder and birch in the stone quarry.

Although we may seem to be working in a familiar way, almost akin to collaborative thinking-through-listening in a chamber group, there is a shift in what the concept of *meaningful actions* entails. Through our prior analysis, we've come to state that *thinking-through-performance* can also be understood as *composing-with-a-body* (Stefánsdóttir & Östersjö, 2019, p.

382). If framed through *fleshy listening*, which draws on a performer's tactile thinking while at the same time implying the expressive potential as we perform and thus *compose with our bodies*, it is clear that the range of affordances one covers as an ecological sound artist is wide. It can in fact range from re-ranking of the value of sonic affordances to what a composition is, to what a performance is. This goes to show that form, although it is historically influenced thanks to the socialisation of one's performative body, has always emerged through bodily engagement.

Through alignment with sonic objects and becoming-with¹¹² in a performance, we *compose with our bodies* and radically shift or even remove a component that is inherent to any rehearsal or performance. Within WAM, this could include the ever-present aesthetic regulation of perfection¹¹³. *Normativity* is still contingent upon aesthetic judgement on what we consider success or failure. However, its qualities are altered through the modulation of *normativity*, which happens through a performer's *relational-technique*. The *skill of fleshy listening* is then a state of multiplicity, one which includes imagination, memory, and abstract thinking. Any understanding of it is bound to hold the power to counteract what I suggest to call the *mono-spatial practices* of WAM, on which I will elaborate in the concluding section.

The shape of this process follows the creative mode of various durations of action followed by out-of-time perceptive reflection leading again to action. It happens at quite a fast pace, but its rhythm is always that of *in-relation*. We only exit this pace in cases of breakdown of technology or disruption from the outside, for example when we're reminded by the team that we need to stop due to the heat. This links to Hans-Georg Gadamer's theories of play as a *to-and-from* movement, a behavior or action through which "all playing is a being-played" (Gadamer, 1975/2004, p. 106). Thanks to the aforementioned play across cultural experiences triggered by a book, we are playing beyond the cylinder and the birch bark. We are playing the west coast of Sweden, wide-spanning temporalities, ghosts, a rewilding; in effect, we are bringing forth a world.

If framed through the lens of skill, this echoes Ingold's claim that "the essence of skill, then, comes to lie in the improvisational ability with which practitioners are able to disassemble the constructions of technology, and creatively to reincorporate the pieces into their own walks of life" (Ingold, 2011, p. 62). The act of improvisation can also, according to Ingold and Hallam, be seen as inherent to the creative act itself. In effect, they have come to term it as an act of improvisation, improvisation thus being generative, relational, temporal, and the way we work (Ingold & Hallam, 2007, p. 4). This coincides with the claim that "what creative imagination does as an exploratory activity is allow individuals to gain access to neglected or novel affordances and thus to expand the horizon of the field of relevant affordances in which they are situated" (Rietveld & Kiverstein, 2014, as cited in Kiverstein & Rietveld, 2018, p. 159).

112 The concept of becoming-with underlines that "becoming is always becoming *with*, in a contact zone where the outcome, where who is in the world, is at stake" (Haraway, 2008, p. 244)

113 This is for example regulated through the pressure that a performance should imitate a studio recording, at times leading to performance anxiety (for further reading, see Skoogh & Frisk, 2019).

With stones and poles

Given the de-coupling of performance from the preposition ‘for’, we also performed activations that had an aleatory quality to them. One instance was Hultqvist’s activation where he started throwing chipped stones down a slope of aggregated stones. As the stones fell in a happenstance manner and hit and rolled over other stones, they created a variety of rhythms and timbre—a sonic space. In this instance, we are *with stones*, which prompts Hansson to bring up and utter text from *Hallmundarkviða*, namely its description of “stenar some rasar ut frá berg” [stones falling out of a mountain], which he urges me to read in the evening. *Hallmundarkviða* is an Icelandic poem about an eruption, believed to have been created in the 10th century. A performance of stones brings forth the first description in Icelandic language of an eruption and leads to a performance¹¹⁴ for it is perhaps this poem that gives us the idea for the quadrophonic-like performance in the quarry two days later. This shows again how the act of openness links to and expands the ever-ongoing *play* across an individual’s cultural experiences. It also echoes with what Hogg, building on Lefebvre, points out: “(s)patial practices, representations of space, and representational spaces are not discrete from one another” (Hogg, 2015, p. 286).

Following this performance, Hultqvist starts playing two rusty poles that are a remainder from a quarry construction. In a mutual thinking-through-listening, Hultqvist plays and we comment upon it. This listening gives Östersjö the idea that he should perform with Hultqvist as the two sounds together might be fascinating. Also in this instance, we have clear ideas about what is a *meaningful action*, what fits in this sonic space. The verdict is that we only want rolling or gliding of sounds, and no bell-like percussion. This gives an insight that we have already, through thinking-through-performing, formed a consensus around what qualities we seek. This is led on by the various entities and we in effect refrain from trying to play an entity as if it were another. In this case, we do not try and transform the poles into church bells although we are aware that the pole, when hit, *sounds like* a church bell. This connects to sound’s possibility, to bring forth a space or a site of relationality “between physical sounds, perceptual systems, personal associations, culturally signifying gestures, bodily and emotional responses, observed actions and reactions, and culturally learned listener expectations” (Hogg, 2011, p. 88).

Therefore, if one were to systemise the performances of *Tapeshavet* into stroking, hitting, throwing, and shaking, then such categorisation, even when split into different intensities, would be a tool of methodolatry, failing to create a crack into the kinaesthetic, perceptive and

114 The performance underlines that the force of four people cannot approximate the force of earthquake. The performance therefore becomes more a sonification of the quarry’s spatial layout, which in turn takes on a life of its own through the aleatory movement and sound of the stones.

affective side. It also excludes the receiving end, which often reacts and snaps or kicks back¹¹⁵. In the case of the cylinder, it was its rough surface and the birch bark's ability to kick back that created a resistance that was at the very core of the sound, which led us to sensing it as a *meaningful sound*. On a micro-level it can even be mentioned that I played the birch bark with my right hand, which is my bow-hand, a skill of fleshy listening that is laden with qualities beyond a mere *stroking*. This became perhaps even clearer in activations conducted the next day at Fågelviken area.

With the Hitler's stones

In the Fågelviken area, we sought out stones that have been named *Hitler's stones* by the locals, as they were carved out for Albert Speer's architectural plans¹¹⁶. The documentation footage reveals some aspects inherent to this way of working as we contemplate which microphones to use or if the wind is too strong for recording. In the documentation, we also see moments where the *outside* takes over, as Hultqvist and I lose track of work thanks to the passing by of singing swans. This underlines that our way of working happens *in a space* that we bring forth. The swans—just like motorboats on the sea, wayfarers, cars, and iron clonking on a bridge—are within our sonic space but not foregrounded as main entities.



Figure 4. Screenshot from documentation video shot at the *Hitler's stones*.

115 The terminology *kick back* links to Barad's theories on agential realism and its intra-actions. According to Barad's (1998) elaboration, phenomena or matter have the power to kick back and affect each other in reciprocal ways. This could for example range from atoms, to fetus and mother, or how the universe kicks back in scientific research. "We do not obtain knowledge by standing outside of the world; we know because 'we' are of the world. We are part of the world in its differential becoming. The separation of epistemology from ontology is a reverberation of a metaphysics that assumes an inherent difference between human and nonhuman, subject and object, mind and body, matter and discourse" (Barad, 2003, p. 829). This asks us to reconsider performativity as belonging to the human and requires a "reworking of Butler's notion of performativity from iterative citationality to iterative intra-activity" (Barad, 2007, p. 208).

116 In the instance of all other sites, we gain further insight about the history of the site. Hansson tells us about conflicting feelings it gave the locals, many of whom were communist, to have to carve out stones at the quarry for Nazi Germany. Due to their financial circumstances, they had no other option but to undertake the work.

The performances that follow give the impression of rituals. In the case of an improvisation between Östersjö and Hultqvist with stones in hand, it could be argued that it is the stone, through its cultural semiotic generative nodes, that affords them the agency of ritualistic performance¹¹⁷. It brings forth their repetitive performance as they hit on the stone. Later they shift over to letting smaller stones glide across the surface in a drone-like performance where they explore the rich affordances of such sound production.

Repetitive movements, with ritualistic impression afforded thanks to the stone and the gliding-like movement of hand with tools, is also at the core of my following activation. In this instance, it is however not a religious ritual that springs to mind, but rather the ritual of stroking or tracing.

The performance is prompted by my earlier observation of my collaborators' explorations on the stones' surface. I decide to do a performance that will be caught both with sound and video, with the visual only catching the movement of my hands and lower arm. The idea links to a similar work at Hjørseyjarsandur on the Snæfellsnes peninsula in Iceland¹¹⁸. For this work, I have brought some of the tools gathered the day before and I enter a performance spurred on by an inner imaginary related to the period when the site was blown and carved out. Again we are faced with multi-entity performance as an act of responsivity, imagination, memory, and possibility. Through the work of exploring its affordances through the sonic, I transform the topography of the stone, which I document for later usage as a photographic score. This can be termed to be *fleshy listening as eros(ion)*¹¹⁹. By limiting the view of the camera to the hands, the focus embraces all entities on equal footing and also puts the spotlight on the touch or haptic qualities inherent

117 It is worth reiterating that, during the work, Hansson shared with us the socio-political history of the site. We were therefore aware of its working-class, industrial, and socio-economic realities. This underlines the complexity of nested agent-environment relations. An activation as described above is therefore permeated by an awareness of *what-was-at-stake*. This can create an ambience that affects the performance, just as the material at hand, as defined by Thibaud:

An ambience can be defined as time-space qualified from a sensory point of view. It relates to the sensing and feeling of a place. Each ambience involves a specific mood expressed in the material presence of things and embodied in the way of being city dwellers. Thus ambience is both subjective and objective; it involves the lived experience of people as well as the built environment of the place. (Thibaud, 2011, as cited in LaBelle, 2015, p. 300)

This only goes to show the thickness of an encounter as one gets sensate with a site.

118 In the performance at Hjørseyjarsandur, I played on plexiglass on a site that is drained by ocean during low tide. During the performance, thanks to the oceanic residue and sand, the plexiglass gets transformed into an ephemeral map. Eventually the ocean flowed back and took hold of the plexiglass and the sandy map was taken over by the sea. The intention was to create a new map/topology together with multiple entities (ocean, sand, wind). My water piece was one of erosion, but also brought forth ties to baptism, through its cultural semiotic generative nodes.

119 In an article for a *Scapagoat* issue on desire and landscape, Angela Rawlings writes the following: "erosion implies not only 'loss, destruction, and diminution,' but also a state of 'being with/in eros.' Desire may, then, be understood as an erosion of sensibility, a confusion of responsibility" (Rawlings, 2015, p. 143).

to fleshy listening¹²⁰. It is perhaps in this multi-entity performance that we clearly witness how the agencies of performance/curation/composition merge and blur¹²¹.



Figure 5. Screenshots from documentation video shot at the *Hitler's stones*.

As I comment upon Hultqvist's and Östersjö's performance, I refer to the fact that I missed the variety of pitches from the day before. When I was listening to them, already an experience from the prior day has become a reference point for a stone activation and stone as entity and is affecting work towards a goal and what is determined as meaningful action. The act of repetition¹²² is at the core of this type of performance, which has strong ritual connections. There are however other types of repetition—the one needed to map a room (the gunpowder storage) from various angles or the one that is needed to work towards a sound through a tool with which you are unfamiliar or on an unknown surface, such as birch bark or cylinder. But also, as I will go on to show, a repetition through which the affordance of the space overtakes the inherent agency of speech and meaning.

120 As in other works of this nature, one can say that other entities that I consider to be in the 'back-ground' can easily claim space in the video documentation, such as wind on the ocean or rustling of leaves. This underlines the 'leaky' property of space when working in such a way.

121 This is being further explored in a forthcoming paper by the author.

122 It could be argued that the act of repetition is inherent to any exploration of affordances within music. This is however a performance with and of the territory through repetition. The goal and meaning are therefore of an entirely different sort, ranging from eros(ion) to creative playfulness.

With “space and not space”

An interesting instance of the act of repetition occurred with Hansson inside a storage room at the *Fågleviken* bay where gunpowder, which had been used in the quarry, was stored. Acoustically the space has a large reverberation. One of the ways we explored its sonic affordances was by choosing a sweet spot where Hansson took position and read passages from his book. He was thus reading a book that has a life of its own but was woven out of his interaction with the very same site over an extended time.

Hansson's performativity is different than that of the musicians¹²³. His connection/exploration is of the text of which he is also the author, but his connection is less so with the space acoustics. His reading, of his past weaving of worlds and words, travels through the space and is affected by it. His stance (as seen in the first screenshot of figure 6) is very similar to the one he embodies some months later when we perform together at the GAS Festival in Gothenburg. But the text, although read within the confinement of the storage, sends one's imagination off as he refers to the outside—the *Hitler's stones*, the bay which is around the corner of the gunpowder storage, in a different time. He is in the past and in the present, reading for people-to-come. We indeed experience what his text says: “Gränserna går inte där vi tror” [The delimitations are not where one thinks].

What follows is symptomatic of much of the process within the Bohuslän activations as we all enter discussions and feedback as the work continues. We for example feel like more can be done in terms of exploration of activation through sounding out into the space. The text also seems to have such openings or power contained within individual sentences or words that we ask Hansson to pick just a few and read them into the reverberating acoustics. We experiment with speed and pitch and gradually Hansson's connection to the space alters. In the end, it feels as if the space is guiding him, playing him. His utterances transform¹²⁴, approaching abstraction or re-arrangement through their sounding out. This transformation is easily visible in Hansson's changed body posture:

123 This underlines the individual autonomy inherent to participatory sense-making, constituted as De Jaegher and Di Paolo point out through the converging in body through norms that are biologically, socially, and habitually acquired (De Jaegher & Di Paolo, 2007, p. 99). How we go on to negotiate this can be described as *bodily poiesis of relation*. Its kinship lies with Glissant's (1990/1997) *poetics of relation*, which resists representation. It even rests in his claim for the *right to opacity* which, according to Glissant, recognises difference and also includes accepting the unintelligibility and confusion that can characterise (intercultural) communication. Listening to the other in multi-entity performance is therefore the antonym of transparency, an embracing of the thickness of it. Listening becomes a state of readiness for, as Corradi-Fiumara states, “unless we are ready, receptive—and also possibly, vulnerable—the experience of listening appears to be impossible” (Corradi-Fiumara, 1990/2006, p. 191).

124 One instance was ”rum och icke rum” [room and not room] where the words started standing in relation to the space, thus re-arranging or almost exiting the space of the sentence.

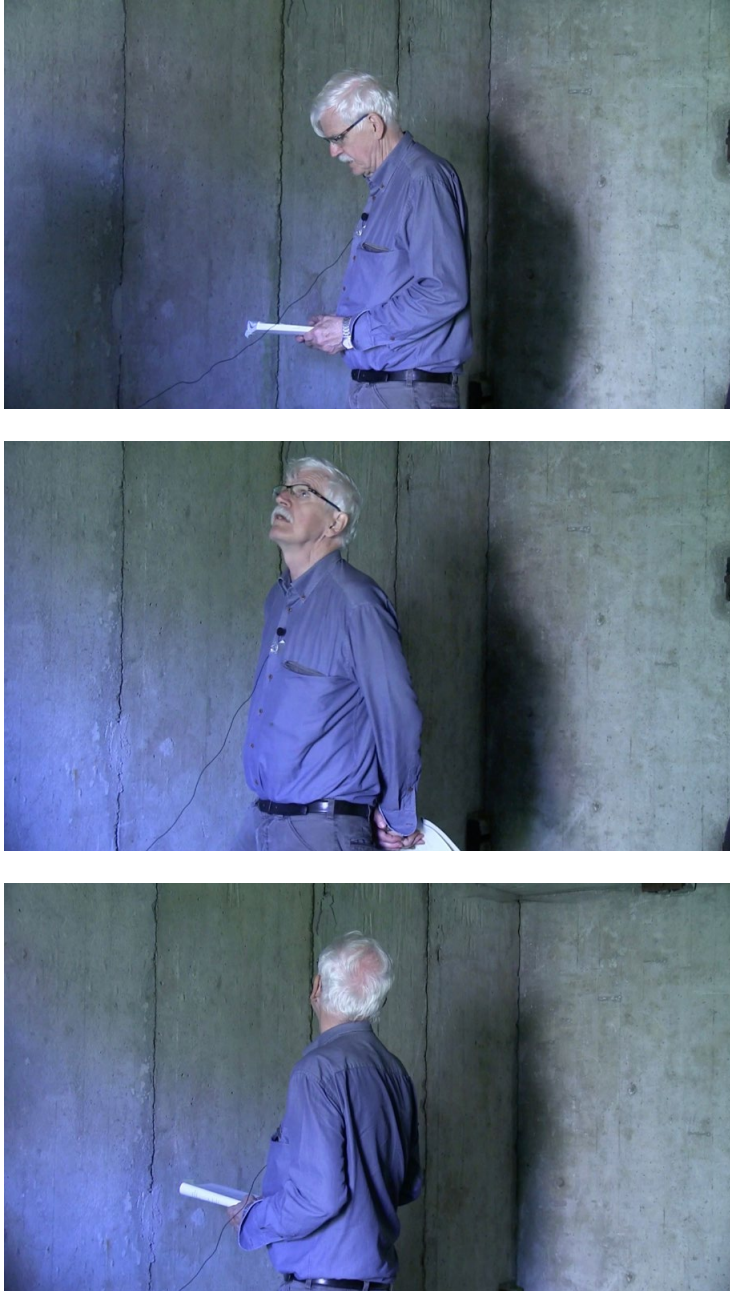


Figure 6. Series of screenshots showing transformation of Hansson's relation to space.

In this instance, the act of repetition leads to an erosion of the very entity, the text, out of which it springs. This is triggered by the engagement of *four-bodies-in-space* that react to it with all their intersubjective sense-making. This case of multi-entity performance shows the complexity involved in the material and semiotic fluctuation in the interaction between various entities in bodily poiesis of relation.

These explorations of affordances, through the act of repetition, radically change our relation to the environment. The extent of this transformation can be argued to be in correlation to the level of engagement, namely as a state of openness and trust in relation to the other. The repetition with/for difference is therefore not merely a musical one set to create a rhythm; it is also

inherent to this poiesis of relation¹²⁵, as one tries to relate to the opacity of the other but also, referring back to Kiverstein & Rietveld's (2018) nested agent-environment relations, a repetition that reaches beyond the here and now. These events produce not only changes to environments but to abilities—a transformation of culture.

With fossilised ocean towards new modes of performance

The summer of 2018 was one of extreme heat and drought in Sweden, a summer where it felt that implications of climate breakdown manifested themselves on a scale hither unprecedented. It was on one of those scorching hot days when we went and activated a fossilised ocean in the Bohuslän area. The performances stretched from micro-activations of a few shells to erosion-like activations where, through aligning with the imaginary of the book, we tried to bring forth wave-like movements of shells. They however resisted the latter, thus revealing through their agency that entities have the power to kick back and affect the knowledge made. It was also the only instance where we had to engage in a deeper discussion regarding our different siding with the act of erosion. We had in fact reached a rare moment where we did not entirely agree on what could be termed as a meaningful action as, under the scorching sun, we oscillated between intra-dwelling intentions linked to microscopic touch and to responsiveness to phenomena such as transmutation¹²⁶. According to Buhrmann and Di Paolo,

(t)he condition of asymmetry between agent and environment is more complex (able to change over time along different dimensions), since the regulation of social interactions is not completely down to either individual (De Jaegher & Froese, 2009). As a consequence, interactions with other social agents are far less predictable than those with (most) objects. (Buhrmann & Di Paolo, 2017, p. 232)

As De Jaegher & Di Paolo point out, the two forms of autonomy in participatory sense-making (individual and interactional) can lead to primordial tension that is “managed in increasingly complex ways but never disappears” (De Jaegher & Di Paolo, 2007, p. 99). It is however “not between individuals but between individual and interactive (social) order” (ibid, 2007, p. 99). This relates therefore to the participants’ embodied norms, as can be seen in one of the most visible tensions experienced within the project¹²⁷. It perhaps also explains why we often came up

125 This is set to be further elaborated in a forthcoming paper on the work's curation, ethics, and care.

126 In this instance, our interactions with entities differed as our parameters were of different relations. Where Hultqvist and Östersjö sided more with bringing forth sound that they had in their inner hearing, related to the sites past, I aligned with the microscopic and present.

127 To continue, we can thus embody norms that can accompany or conflict. A social encounter can therefore “sometimes fuel the interaction process but, through their effect on the social coupling, end up frustrating, in apparent paradox, the originally intended goal“ (De Jaegher & Di Paolo, 2007, p. 99). This again underlines the importance of openness and trust within participatory sense-making as we embrace the thickness of listening to the other. Such bodily poiesis of relation asks us to acknowledge the claim for the right to opacity.

with different ideas about activations, although we almost always united in participatory sense-making through those ideas.

When entering an activation that links to transmutation and deep time, the responsiveness relates to entities that are far from predictable *objects*. Although the complexity or noise appeared in-between the participants, it was brought on by our individual responsivity to our surroundings—a thick performativity of affective states and geological time. It could be argued that Hansson’s book, *Tapesnavet*, with its link to geopoetics and geochronology, has the potential to open up a space, which urges response-ability, responsibility, and responsiveness as described by Angela Rawlings (2020). It led to an entanglement that necessitated multi-entity performance as a new tool for analysis. This analytical tool as well as technique and conceptual stance holds the promise of enabling:

- inclusion of multiple entities in exploration of knowledge
- exploration of music as a sustainable practice
- dynamic understanding of situated practices
- fluid understanding of agency within contemporary music and sound art
- exploration of participatory sense-making
- exploration of the sense-making potential of fleshy listening
- questioning of politics of listening
- nuanced understanding of ethics, justice, and politics of care

This case study, which looked at situated actions of participatory sense-making within ecological sound art, became a first attempt at employing this tool. Through analysis, I have unpacked the processes of such participatory sense-making and shown the transformative potential that lies within the relational-technique of *The Activation Series*, brought forth through an ecological-enactive perspective.

Ecological sound art is a sonic practice of *performative responsivity* to the environment. As I have shown in this chapter, it is a *responsivity* for *paying attention through differences*, thus enabling a *dialectical relationship*. The activation method can therefore be seen as a *ritual for attending*. It is from within this that participants come to choose what matters, or their goal-directedness, as they embark on activations through meaningful actions. I have however shown how this is reliant both on the individual and collective determination of affective significance of a site, the coupling and exploration of affordances, which in return affects the affective significance and future looping of kinaesthetic, perceptive, and affective working of meaningful actions.

These dynamic processes happen through a relay of out-of-time perceptive reflection leading again to in-time action. Its measure is always in-relation; thus the act of repetition takes on various forms. It is however always as an event which changes relations. This is for example easily detectable through musical gestures. It is not merely a case of throwing or hitting; it is embedded in a musician’s prior knowledge and affective thickness. In the connection the performer and her gestures are affected by relations in action, ranging from participatory sense-making to multi-entity affordances. As I have shown, such encounters change performability, as it expands the performability to composing-with-a-body. Through this multi-entity lens, it is possible to observe how a site becomes co-creator. If framed as nested ecological states then Kiverstein and

Rietveld have gone on to argue for a skilled activity that allows for a continued attending to in absence of the environment's structure, i.e. "re-enact what one would perceive were one actively coordinating to affordances present in the environment" (Kiverstein & Rietveld, 2018, p. 158). Such performative action-readiness holds the promise of a continued attending to the activation moment and explorations of the material gathered—during the compositional and curatorial processes.

Due to the nested ways of working, space can only be defined as *leaky*, a space that both contains the virtual and actual whose entities can stretch from erosion to economies. Furthermore, it is also affected by other participants, who act according to their embodied norms. However as the space is enacted as a performance with, and not for, it creates a rupture in terms of the normative socially constituted performance space relations. During the moment of activations, it shifts away from institutional domain of power over to a space of lived experience. Therein lies the curatorial possibility, when the work returns to the institutional space, or to use Judith Butler's terminology, *scenes of address* (Butler, 2005). These spatial practices invite a broader play across an individual's cultural experiences and hold the possibility to extend them to a wider extent than is normal within the field of WAM. If understood as acts of repetition and difference, then it could be argued that a stifling of such cultural circulation can be seen as *absolute difference* and *non-reference* (in this instance I build on Georgina Born's 2010 reading of Tarde). As performer is space and has a space then such non-reference can be referred to as *mono-spatial practices*, which hinder poiesis of relation and listening to the other.

This potential play is of nested agent-environmental relations that stretch through repetition and difference across time, which was brought forth through *ephemeral gestures in the environment* (Ross, 1998) as it were, through the act of improvisation. However, we are looking at improvisation as a creative act, a process inherent to a human being's social and cultural life. As argued by Ingold and Hallam (2007), "people have to work it out as they go along. In a word, they have to improvise" (p. 1). This is improvisation freed from musical or artistic models, which in return holds great power of addressing music making's collaborative (read participatory sense-making) and communicative social spaces. Such improvisation holds the power to contribute to sustainable practices that relate to place, agency, identity, community cohesion, and difference. A tool of possibility becomes grounded in the relational commons, for our catastrophic times that require re-storying and revision¹²⁸ of the ecology of practices.

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128 This revisioning, according to Stengers, "requires of each practice to foster its own force in order to answer challenges but can also produce an experimental togetherness among practices and in effect; transform the relations to the stakes they have put up" (Stengers, 2013, p. 195).

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