

## ***Participation and creation: towards an ecological understanding of musical creativity***

by HALLA STEINUNN STEFÁNSDÓTTIR AND STEFAN ÖSTERSJÖ

### **Abstract**

This paper draws on artistic explorations of territorial and spatial forces through analysis of projects set in the natural landscape, in a specific indoor site or at the threshold between the two. Specific attention is given to the artistic processes at play in the transformation of materials created/collected in the natural environment when shaped for presentation in an indoor location. What is the relation between being and becoming in this liminal space? According to Erwin Straus, the impetus to this process is the pathic moment of sensation, a moment which evolves in two dimensions: as an unfolding of the world and of the self (Straus 1965). Louis Schreel argues that in Deleuze and Guattari, artistic practice activates a process in which «the work ‘captures’ forces at work in the world and renders these sensible. Its effects are above all real and not merely imaginary: the image is not a mental given but a concrete, existing reality» (Schreel 2014: 100). Here, Deleuze distinguishes between the percept – landscape in the absence of man – and affect, the non-human becomings contained in the artwork. This paper wishes to unpack these processes through a study of two concrete instances of artistic practice, aiming to create immediate interaction between musician and environment, in which either of the two authors took part.

### **Introduction**

Practice led research in the sonic arts, conducted in interaction with the environment<sup>1</sup> can «realise experiential insights into landscape, the individual imaginary, and the situatedness of the human subject» (Hogg & Sansom 2015: 260). Through participation, the artist/listener can be immersed in processes that either re-activate sounds of the past or suggest possible future soundscapes. Bennett Hogg describes some essential components of a participatory approach, found in the development of his artistic practice of performing violins by dipping and floating them in a river:

It was during an experiment floating my violin on a river, and listening to it through microphones placed inside the violin's body, that I learned that for me an ecosystemic art needs to be participative, inclusive, and involved. Making environmental sound art

---

<sup>1</sup> 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 Team Sports, the Landscape Quartet as well as individuals like John Grzinich, Richard Skelton and John Rose.

is a process of learning through negotiation and participation rather than searching for something already “out there” that “needs” to be represented. (Hogg 2013)

An ecological approach, such as described by Bennett Hogg above, starts out through participation and underlines a ‘becoming with’ and ‘bringing forth’ a world.<sup>2</sup> The ecological sound artist is therefore implicit with the world through her/his performative thinking.<sup>3</sup>

An ecological perspective, i.e. seeing an environment as a process, allows for different relational structures, be it in environments as diverse as a wintery beach in Sweden or a concert hall in Iceland. By shifting soundscape composition from the perspective of a passive listening to that of an actively engaged doing, the ecological sound artist brings the *thinking-through-practice* of a musician (Maharaj 2005; Östersjö 2008) – normally operating through interaction with musical materials in institutional spaces like the recording studio, rehearsal or concert space – out into the natural landscape. Such artistic practices – developed in immediate interaction with natural landscape – can also be applied in similarly ecologically grounded interaction with urban settings, and brought back into the same music institutions, as discussed below.

With reference to Denis Smalley’s categorisation of performed space, Hogg and Östersjö characterize the consequences of this move in the following way:

The ‘arena’ space of the outside is [...] a buzzing, twittering, whistling, droning, gurgling soundscape. [...] [which] envelops and forces itself into the sounding vibrations of the music. [...] While background listening may not be a strong component in the creative process of a musician playing in the relative silence of a concert hall, it becomes essential to musical creativity in the natural landscape. (Hogg & Östersjö 2015: 341)

Thinking-through-practice in such a setting of estrangement/multiplicity could be argued to further enhance or amplify the embodied, multimodal skills of a musician. As a musician spends thousands of hours practicing on her/his instrument, she/he is continuously exploring its affordances, both working with and, according to Evens and Östersjö, overcoming the instrument’s ‘resistances’ (Evens, 2005; Östersjö, 2013). This thinking-

---

<sup>2</sup> The concept ‘bring forth’ a world is inherent to Humberto Maturana and Francisco Varela’s Santiago theory of cognition (1980). Cognition according to them, 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. In recent years, as formulated by Kiverstein and Rietveld (2018), enactivist theories have moved more towards concepts of ‘co-determination’ and ‘mutual interdependence’.

<sup>3</sup> It should be underlined that our usage of the terminology of ecological sound art is, as we go on to show, a performative state and links therefore to theories of ecology (Gibson) and enactive cognition (Varela et al.). This differs from the usage of ecological sound art (Gilmurray 2018) that tends to be characterised by a focus on representation.

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 2019). Gorton and Östersjö (2016) propose a culturally and sociologically grounded understanding of musical creativity, which takes into account a musician's embodied learning processes, through interactions with technological tools (like musical instruments and scores) and psychological tools<sup>4</sup> (like notation systems), wherein the affordances of instrument shape what they propose to call a «performer's voice». This entails an embodiment encompassing «prior knowledge, muscle memory, and habits that influence and shape decision-making and live response» (Gorton & Östersjö, 2019). Importantly, a performer's voice is analyzed from a perspective which combines a perspective from embodied cognition with a socio-cultural grounding.

Even though research on music cognition has widened its methodological perspectives from quantitative approaches since the 1990's, it is however a fact that «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: 2). A growing body of artistic research (Östersjö 2008; Frisk 2008; Dogantan-Dack 2015; Impett 2017, to name a few) has gone to reveal, through a study of the subjectivity of the artist in music making processes, knowledge that appear to support theories of enactive cognition (Varela, Thompson & Rosch 2016 [1991]). Referred to as the '4E' approach, which sees cognitive processes as the overlapping dimensions of embodied, embedded, enacted and extended - the field, together with ecological theory holds great promise when it comes to situating research in music in a wider context (Clarke & Doffman 2017).

Parallel to this we've seen an attempt to employ the texts of Deleuze and Guattari to review and revise scholarly approach to music. This has stretched beyond their emphasis on Western Art Music to the experimental, electronic and pop and has also been a way to employ their concepts to critically look at listening and music's reception (Campbell 2013; Hulse & Nesbitt 2010; Moisala & al. 2017; Murphy & Smith 2001). In our inquiry the Body without Organs (BwO)<sup>5</sup> appears to be a useful model for the analysis of ecological sound art becomings; its modulation of performing/composing/curating within assemblages. The ecological sound artist enters a state of multiplicity and balances on the edge of knowing and not knowing, of exploring what a body can do and through it what a guitar can do, what a tree can do, i.e. what relationality<sup>6</sup> it brings forth. «We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot

---

<sup>4</sup> Lev Vygotskij formulated an understanding of the mediating role of technological and psychological tools, building on the observation of how tools are externally oriented, and have impact on objects, while signs (or other psychological tools) are internally oriented, towards behavioural processes in oneself or in someone else.

<sup>5</sup> Deleuze first introduced the terminology in *The Logic of Sense* (1990 [1969]) building on the writings of Antonin Artaud in the radio play *To Have Done with the Judgment of God* (1947).

<sup>6</sup> If performing with a tree, this also stretches to other entities such as wind and soil, which in return is affected by climate, relief, organisms and the soil's parent materials.

enter into composition with other affects» (Deleuze & Guattari, 2004 [1987]: 284). In this process the body is already more than one (Manning) and through it (building on Bergson) «moments of time are dimensions of each other's unity of movement into and out of each other. They are co-operating dimensions of transition» (Massumi 2002: 200). By tapping into the performers technicity, her/his thinking-through-performance, always already more than one, always in becoming, always actual/virtual through its fleshy touching/touch «of what is already not-yet there» (Manning 2007: 143) we forge a BwO. It marks the morphing from striated space, into a smooth one

filled by events or haecceities, far more than by informed and perceived things. It is a space of affects, more than one of properties. It is *haptic* rather than optical perception. Whereas in the striated forms organize a matter, in the smooth materials signal forces and serve as symptoms for them [...] A Body without Organs instead of an organism and organization. Perception in it is based on symptoms and evaluations rather than measures and properties. That is why smooth space is occupied by intensities, wind and noise, forces, and sonorous and tactile qualities, as in the desert, steppe, or ice. The creaking of ice and the song of the sands. (Deleuze & Guattari 2004 [1987]: 528-9)

We have indeed left the art machine of the past and are in the domain of becoming-bodies set to make different connections and networks through ecological sound art.

### **The aeolian guitar**

Our first example is taken from Östersjö's development of the aeolian guitar within the frame of the Landscape Quartet, a group of sound artists dedicated to the creation of ecological sound art which takes participation as point of departure, with the wish to align with «a broader set of cultural practices in which the imperial power of 'the human' over the rest of the world is shifting in favour of what we might call a more eco-systemic engagement» (Hogg 2013: 1). But how can one understand the artistic processes at play in such participative forms of artistic practices? Can ecological sound art prompt different understandings of the relation between artist and artwork as well as between human and the natural environment?

While aeolian harps have been known since antiquity, the notion of an aeolian instrument with which a performance can be created in direct interaction with the wind is more of a novelty. Ideas for aeolian guitar performance emerged from an experiment by Stefan Östersjö and Bennett Hogg with a guitar floating in the water with long strings attached on the shore. With a floating instrument, the performer can shift the angle of the strings in relation to the wind and pull the strings to tension. Following from this discovery,

Östersjö has developed a performance practice for aeolian guitar, in which a guitar is strung around one or more trees. This aeolian guitar is then performed by controlling the relative tension of the strings and their angle in relation to the wind. The instrument can either be performed seated on the ground, which allows for more detailed control with the two hands, or standing. In a performance with a standing guitarist, the weight of the performer can be distributed towards the strings and thereby the constellation of *wind-tree-strings-guitar-performer* becomes an interactive and ecological system wherein on the one hand, the vibrations in strings and guitar and on the other hand, the wind direction, are directly sensed by a performer who is first, carried by the strings and the wind, and second, can immediately also adjust to the direction and force of the wind. These interactions of the BwO are vibratory; «[h]ere interaction and production take over totally from representation, in that what is conserved is the precise possibility of the transformation of any moment through an ongoing vibration. Each percept is a marker of its singularity and resonance across the infinite plane of that moment» (Murphie 2005: 33).

Such a performance was created at Lomma beach outside of Malmö, Sweden in February 2017, as part of the ( SUND )<sup>7</sup> project with Halla Steinunn Stefánsdóttir and Angela Rawlings. As an exploration of place, aeolian guitar performance is a method to achieve connectedness and contemplation. But where is the artwork situated in such an instance of ecological sound art performance, when the assemblage of *wind-tree-strings-guitar-performer* is nearer to the percept, and the artwork thus aligns the non-human becomings of the artifact with the artist? Cezanne describes an experience which appears to be similar, but here, at the very initiation of an artistic process: «At that moment I am one with my painting (= not the painted canvas, but the world to be painted). We are an iridescent chaos. I arrive in front of my motive, and there I lose myself» (Cezanne, quoted in Schreel 2014: 99).

Deleuze and Guattari ask «[h]ow could the sensation be preserved without a material capable of lasting?» (1994 [1991]: 166), a question which seems to have a direct bearing on a performance of aeolian guitar at Lomma Beach. In what ways might recording technologies allow for a lasting representation, and in what ways will the experience of the site specific performance be transformed through phonography? Marinos Koutsomichalis argues that

what a soundscape conveys cannot find its way into some electroacoustic representation of it, and even if, hypothetically, there were no technical constraints, the recording medium would fail to preserve the original semantics and subliminal signifi-

---

<sup>7</sup> ( SUND ) was curated by Angela Rawlings and Halla Steinunn Stefánsdóttir at Inter Arts Center in Malmö, Sweden as an in-progress intradisciplinary event that «enacted an Öresund imaginary, transposed as a cabinet of curiosities» (Rawlings 2017).

cances of someone's encounter with an acoustic environment; audio recording technology is not meant to carry out such a task in the first place. (Koutsomichalis 2018, n.p.)

If «the aim of art is to wrest the percept from perceptions of objects and the states of a perceiving subject, to wrest the affect from affections as the transition from one state to another: to extract a bloc of sensations, a pure being of sensations» (Deleuze & Guattari 1994 [1991]: 167), in what sense does an ecological piece of sound art, where percept and perception are drawn together in the moment of performance, contain the character of a «monument», such as proposed by Deleuze and Guattari? First, the notion of the monument has nothing to do with memory and representation. It is rather «a bloc of present sensations that owe their preservation only to themselves and that provide the event with the compound that celebrates it» (Deleuze & Guattari 1994 [1991]: 176-168). Second, a central method in a piece of sound art that draws its identity from process and interaction is that of «vibration» (*ibid.*: 168), a state which is a fundamental characteristic of all listening (see further, Nancy 2007), but here, the resonance between the perceiving subject and the environment in the *wind-tree-strings-guitar-performer* is more intertwined than in any conventional musical performance. The human is in fact not foregrounded in such a performance although this more-than-human becoming includes a bodily understanding of eco-systems and affordances. This is a topology «that relies not on points or objects but rather on haecceities, on sets of relations (winds, undulations of snow and sand, the song of the sand or the creaking of the ice, the tactile qualities of both)» (Deleuze & Guattari 2004 [1987]: 421-22).

But what methods can we identify in the transformation of materials created or collected in interaction with the environment in the further artistic process of creating an artwork removed from the original site?

Aeolian guitar performance constituted one of several components in the urban sound art project «Invisible Sounds: Piteå Port», created by Östersjö in collaboration with the composer Anders Hultqvist and Jan Berg, assistant professor of sound engineering at Luleå University of Technology. Here, the aeolian guitar embodied interaction with the wind on the site, while accelerometers captured ground vibration, hydrophones captured water sounds, all complementing a surround sound recording from the site. Recorded over a period of several days in September 2018, the full amount of recordings were mixed to a 5.1 soundscape, with an additional sound file being produced for playing back the aeolian guitar recordings from a physical object in the space, a guitar equipped with a transducer, and stringed with fishing line to a wall in the space. Thus, the initial complexity in the performance situation on site, the result of an intentionally complexified assemblage, was transferred into an installation that can be argued to allow for people to create their own BwO. The work is sculpted not from form but rather springs out of site specific human and non-human becomings, which are released into space. Through navigation and

exploration with a vibratory site the visitor enters a composed chaos; a chaosmos (Deleuze & Guattari 1994 [1991]) that challenges normativity.

## I Play Northern Lights

This leads us to the second example, or *I Play Northern Lights (IPNL)*, a 5.1 surround sound installation by Halla Steinunn Stefánsdóttir. The work was created for ensemble Nordic Affect's concert in the 'Northern Lights Hall' (Norðurljós in Icelandic) in the concert and conference centre 'Harpa', Reykjavík as part of Dark Music Days<sup>8</sup> 2017. *IPNL* links to the authors work on an Activation series since 2016, which explores activation as method. The Activation series unites Stefánsdóttir's agency as composer, curator and performer and links to the usage of field-recording as a methodological tool. «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' relations» (Stefánsdóttir 2019).

*IPNL* was instigated from a curatorial point of view as a piece that would challenge the audience's perception of the concert hall environment, so an act of radical activation. It represents a performer's active engagement with space: a method to break away from tradition<sup>9</sup> and in so doing, exploring whether new aspects of the environment's structure can be revealed. The creative process indicates the importance of participation and action in musical practice. Eric Clarke reminds us that «when humans and other animals perceive the world, they do so actively. Perception is essentially exploratory, seeking out sources of stimulation in order to discover more about the environment» (Clarke 2005: 19). Sensation is the result of a physiological process, i.e. it does not «arise through the 'inactive' act of pure thought» (Barbaras 2004: 217-218). In Erwin Stein's discussion of the relation between sensing and movement, the two are intrinsically conjoined in the experience of the pathic, the opposite pole to the gnostic perspective of perception and recognition. Renaud Barbaras summarizes this process, which 'presents the world by limiting it':

Now to articulate what is sensed with the totality, simultaneously joining it to and differentiating it from the totality, which is the work of movement, is to understand that presence can only be present as a portion selected out from the world, and thereby retained within the very transcendence it opens up: insofar as it stems from

---

<sup>8</sup> Dark Music Days is an Icelandic annual festival of contemporary music. It was founded in 1980 by the Iceland Composer's Society.

<sup>9</sup> The artistic work discussed here formulates a critique of classical concert hall culture, in ways that can be related to Christopher Small's discussion of the emergence of a concert tradition that diminishes the possibilities for participation, and thereby also the possibility of engaging in what he calls 'musicking' (1998).

the totality relation, the testimony of the senses is not an alternative to the opening toward the world. This is what Straus wants to say when he characterizes distance (*die Ferne*) as the «spatio-temporal form of sensing.» (381ff.) Sensing is sensing at a distance, and what is sensed is essentially grasped as «over there» because it is shot through at its center by a movement in which the totality of the world is actualized. (Barbaras 2004: 225-226)

However, the museum culture of classical concert halls does not allow its audiences to engage with music through movement (Clarke 2005). *IPNL*, was therefore an attempt, within the event 'In the bottomless hollow of the winter sky' at Dark Music Days to bring movement to the audience.<sup>10</sup> *IPNL* was conceived as an enactivism for enhanced auditory perception. A relational technique of bodying and spacing. Movement is of course never absent in human perception, and through the collective gathering of the audience around the ensemble, in the performance, the role of bodily movement was enhanced. A communication/sharing of sonic sculptural qualities of one component in the assemblage, of the one that holds and affects movement; the space. The recital hall in question, the Northern Lights Hall was inaugurated as part of Harpa, concert and conference centre in 2011. It seats up to 520 people and is equipped with custom-design lightning. The layout of the hall, allows for various seating scenarios.

Works within the Activation series occur in three stages. Through the initial activation, the following transformation of material for the last stage, its indoor presentation. The real challenge in the first phase is to remain in a state of tuning in, a state of exploration, improvisation and play and not succumb to technological hoarding with a later compositional stage in mind. This therefore aligns with the aeolian performance as a method to achieve connectedness and contemplation. It yet again underlines the mediating role of technological tools in such participative way of working, driven by action-perception. And so although the work's idea started out conceptually as a piece that would be created for a 5.1 format, it quickly tuned in towards the 'doing'. As mentioned, at the core of *IPNL* is the idea of revealing the elephant in the room – namely, the room itself – and thereby also stirring the boundaries between performer, audience and the space. An event set to change the connectivity and relationships in the concert space. The *IPNL* initial assemblage, of performer-tool-site was therefore intended as a sonic topographical mapping of space, by activating the space through movement. In the final stage of digital-space-collective, the audience then, would encounter movement in the form of a surround sound-

---

<sup>10</sup> Stefánsdóttir has created two productions for ensemble Nordic Affect that place the ensemble in the middle of the hall, the audience surrounding them and the speakers, used in sound installations and works commissioned for the ensemble, surrounding them all. This upends the usual dynamics and power relations inherent to classical music concert settings, and instead creates an environment of inclusion.



scape, an electro-acoustic transposition of a site-specific performance, created for performance in the original space. A transposition that, as can be seen at the end of this chapter, allows for a re-enactment of the initial event for performer and audience alike.

The activation of the Northern Lights Hall took place in a recording session on January 3, 2016. For the largest part of it Stefánsdóttir was accompanied by a PhD researcher at the University of Glasgow, the poet and performer Angela Rawlings. The activation was conducted with tools from a pre-selected kit, which had been created intuitively by Stefánsdóttir, with the affordances and possible resistances of the hall in mind. However in some instances the performers only used their arms to activate the hall and map it sonically while moving, sometimes even at a running pace,<sup>11</sup> around the space. This was done in almost utter darkness, in order to diminish the white noise produced by the lighting system. This further enhanced the sensation of foreignness, and the state of navigating the space through what we propose could be conceptualised as ‘fleshy listening’.<sup>12</sup> It builds on Manning’s elaboration of fleshy touching/touch<sup>13</sup>, which foregrounds a body’s possibilities of bringing forth «*relational matrices*» (Manning, 2007: 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. And it is the becoming-state of fleshy touching that perhaps reflects on the weakness of the terminology of ‘embodiment’, as it can be argued to sediment habit in the body, instead of seeing it as a dynamic process of action-perception. as observed by Ingold (and further discussed in Östersjö, forthcoming) «light, sound and feeling tear at our moorings just as the wind tears at the limbs of trees rooted to the earth. Far from being enfolded into the body – as the concept of embodiment would imply – they take possession of it, sweeping the body up into their own currents» (Ingold 2000, pp.134-135). Fleshy listening/listen suggests a further

---

<sup>11</sup> The idea to run around the space in an anti-clockwise manner sprung out of Angela Rawlings’ circular performance within the work INTIME, which «documents artistic-practice-as-research conducted in North Atlantic foreshores as sites of especial geochronological interest given climate change and naming the Anthropocene.» (Rawlings, n.d.).

<sup>12</sup> As is pointed out earlier in the paper, «[t]hinking-through-music is [...] a multi-modal phenomenon, and not merely experienced through the ears of a musician» (Stefánsdóttir, 2019). The listening of a musician, whose ears are shaped through thousands of hours of practicing, rehearsing and performing, goes beyond daily life gestures where «any swiping, scratching, sliding, stroking, slapping, clapping, pushing—makes sounds or soundings, and those soundings are felt soundings» (Peters 2015: 8) as it is situated and through musical performance «patterns of sonic energy evoke bodily gestures that are culturally meaningful to an individual because our imagination is embodied» (Gorton & Östersjö, 2016, p. 58).

<sup>13</sup> The idea is put forward by Manning in *Politics of Touch* (2007), which explores how new politics can challenge the national body politic. By exploring concepts of gender, violence, sexuality, security, democracy and identity she looks at the role of the senses, and in particular touch. This mission is formulated by Manning as follows: “*Politics of Touch* seeks to do at least two things: (1) to expose the ways in which the sense – touch in particular, but always in implicit interaction with other senses—foreground a processual body; (2) to explore how thinking the *processual* body potentially influences the ways in which we articulate and live the political. The object of inquiry is therefore the body.” (Manning 2007: p. xiii).

acknowledgement of a performer's tactile thinking as such a process of becoming in thinking-through-listening. This thinking of the sonorous BwO, i.e. fleshy listening, implies the expressive and relational potential as we perform and thus compose with our bodies.

A certain familiarity with the site had made it easy to construct the toolbox<sup>14</sup> although the activation and outcome proved full of surprises; just as the body plays the space, the space plays the body. The wire strung railing with all its sounds and resistance was like an instrument of its own, a rubber ball turned out to produce bland sounds, the wooden panels played with a sewer filter colander were a source of magic, especially when performed at a mad running pace and a *boccia* ball run up and down metallic poles in a certain rhythm created a pulsating pitch. And who would have thought a grand piano lifter would be a fascinating source of sounds. As Barbaras points out, it is through this action that the space and the tool appear, they were always there, but through the activation they appear (Barbaras 2013: 169). *IPNL* therefore springs out of the 'event' of its activation, in a manner which links directly to Louis Schreel claim that the work 'captures' forces at work in the world and renders these sensible. But what does it entail: to activate/perform reality? In what ways does the *thinking-through-performance* of a musician contribute to an exploration of the pathic? In a work where the starting point is interaction with an environment through the agency of a musician, that couples her haptic spatio-temporal know-how to tools through fleshy listening and is at the same time shaped by the affordances and the aesthetics the tool and the space offer. In this instance the body is, as Manning points out, «more assemblage, than form, more associated milieu than Being» (Manning 2013: 30). This relates back to the aeolian performance, in which the performer is connected to a vibratory site, through a state of fleshy listening.

Building on that, and given the becomings in various directions of performer/composer/curator Stefánsdóttir: what is the relation between being and becoming in terms of activation of space, the composition of material in studio and the curatorial digitalised becoming in space? Does the key lie in the BwO, the agent-environmental coupling that, as we like to argue, cuts across temporality and space through the memory<sup>15</sup> of a musician? In the studio the becoming-sensate with a site continues. By listening through the

---

<sup>14</sup> The toolbox consisted of a super ball (was not included in the composition), bocchia ball, candle holder, nails, glass of a frame, grand-piano lifter, sewer filter colander, voice (was not included in the composition), work gloves, violin (was not included in the composition).

<sup>15</sup> As the BwO is created and brought forth it could be easy to underplay the importance of memory to musical creation. Real-time performance, as Frisk & Karlsson point out, encompasses the «almost mystical sensation of simultaneously being able to be in time, 'now' and in memory – in the recollection of a previous now» (Frisk & Karlsson 2011: 286). But in terms of performance, within the presented cases of ecological sound art, the performance is rather 'with' than 'for' and thus shifts the focus from notions of perfection inherent to Western Arts Music performance and puts exploration/relationality to the fore. Memory is ever present throughout being-becoming, as fleshy listening in its state of past/present/future draws on the habitus of the performer, while at the same time forms action-states that can be called upon in later processes when shaping the work for an indoor presentation.

material, the activation process appears with all its rhythm and intervals and is molded to the space, through embodied memory action states.

The interval is duration expressed in movement. It is not something we create alone, or something we can recreate by ourselves. It exists in the between of movement. It accompanies our movement, yet is never passive. It activates the next incipient movement. (Manning 2009: 17)

The composition/diffusion and curatorial strategies are also interlinked with the collective-to-be. The framing of performance as BwO magnifies therefore its relationality, the 'will have been' state of bodies. Deleuze and Guattari claim, in their discussion of history-memory and nonpulsed time that the musician «is in the best position to say: 'I hate the faculty of memory, I hate memories.' And that is because he or she affirms the power of becoming» (Deleuze & Guattari 2004 [1987]: 327). In this instance one needs however to differentiate between historical marking and the action memory employed in experimental musical practice, which is at the core of her/his practice and put into action through different couplings.<sup>16</sup> As a body that is always more than one, her movement is shaped by 'proximity', just as «haecceity is inseparable from the fog and mist that depend on a molecular zone, a corpuscular space. Proximity is a notion, at once topological and quantal, that marks a belongings to the same molecule, independently of the subjects considered and the forms determined» (Deleuze & Guattari 2004 [1987]: 301). This being-with, performing-with, composing-with can be seen as BwO, and as such, «defined by zones of intensity or proximity» (Deleuze & Guattari 2004 [1987]: 302). What becomes apparent in works such as those that fall within the activation series, is that the proximity is still present through the memory of the performer. By calling on memory the subject pretends «*to enact the states of action-readiness that would typically enable them to coordinate to affordances*» (Kiverstein & Rietveld 2018: 159, italics in original). A musician/composer/curator's way of working, through an ecological-enactive stance, which draws on embodied states of action-perception is indeed a state of multiplicity, a state of past/present/future, or the absent/possible/abstract. This is 'present' in the works presentation. As the work gets sent back into space the chamber ensemble sits with its audience and becomes one of its members as they are estranged from familiar roles. The activator, thus a member of the collective, sits in stillness and listens to her sonic body shoot like an arrow through space, running at a frantic speed. She is listening to herself, her own avatar moving in a past spaced time. Through fleshy listening she is «enhancing

---

<sup>16</sup> The phenomenon of 'coupling' links to Gibson's (1979) ecological theories, where the concept of affordance allows for an understanding of the relation between an individual and the environment through the opportunity for action. This allows for perception-action coupling. The idea of coupling also appears in the theories of Maturana and Varela (1980) where *structural-coupling* plays a role in *autopoiesis* or self-production of organisms. In this instance the authors refer to couplings in the Gibsonian sense.

the sense of tactility for the untouchable»<sup>17</sup> and thus, creates a shift in perception; a limiting of the world opens it up and so the space becomes all of the spaced bodyings present. Through *IPNL* the space becomes all of the perceptive limitations; a multiplicity of action. A technique of relation where space plays collective.

### **Towards new modes of existence?**

Our analysis, built on an ecological-enactive perspective, underlines the role of space and technological tools in the emergence of different becomings. The creative endeavours discussed mark an amplification of the performer's already existing technicity, her/his ability to *relational technique* through the BwO. Aren't we here in a territory that asks «[w]hat else can artistic practice become when the object is not the goal, but the activator, the conduit toward new modes of existence?» (Manning 2016: 46).

By coupling the performative body into different assemblages, the BwO through its *fleshy listening*, brings forth different gatherings, fuses temporalities and creates spaces as flesh «disappears in what it develops: the compound of sensations» (Deleuze & Guattari 1994 [1991]: 183). Through employing the analytical stance of BwO and the idea of fleshy listening we have shown how *thinking-through-performance* can also be understood as *composing-with-a-body*. This practice affects all stages of the process, including the curatorial, as the diffusion feeds on memory of fleshy listening and *space-to-come* when transformed for indoor presentation. This technicity creates a different topography, thus the *flesh/author*, alters the institutional/stratification between the performative and compositional.

The sonorous BwO of ecological sound art therefore offers a way into asking/exploring what the performative body can do. It shows the expansion that takes place when ecological sound art is practiced as an eco-systemic and enactive engagement with the environment, as a musician's multi-modal listening is employed in a fleshy listening. Such ecological sound art holds the potential to ultimately act as a magnifier of the expressive possibilities of the site. This musical creativity, where one lodges oneself on a stratum and experiments with the opportunities it offers (Deleuze & Guattari 2004 [1987]: 161) opens up a path towards deeper exploration of music as relational technique, as becomings where the «world and the perceiver specify each other» (Varela & al. 2016 [1991]: 172).

---

<sup>17</sup> Verbal communication by Angela Rawlings post performance.

## BIBLIOGRAPHY

- Barbaras, R. (2004). "Affectivity and movement: The sense of sensing in Erwin Straus". *Phenomenology And The Cognitive Sciences*, 3(2), 215-228.
- Barbaras, R. (2013). "The Subject's Life and the Life of Manifestation: Towards a Privative Biology" (P. B. Milan, P. B. Trans.). *Research in Phenomenology*, 43(2), 161-176. <https://doi.org/10.1163/15691640-12341252>
- Campbell, E. (2013). *Music after Deleuze*. London: Bloomsbury.
- Clarke, E.F. (2005). *Ways of Listening: an Ecological Approach to the Perception of Musical Meaning*. Oxford: Oxford University Press.
- Clarke, E.F., & Doffman, M. (2017). *Introduction and Overview*. Oxford University Press. doi:10.1093/oso/9780199355914.003.0001
- Deleuze, G. (1990 [1969]). *The Logic of Sense*. New York: Columbia University Press.
- Deleuze, G., & Guattari, F. (1994 [1991]). *What is Philosophy?* New York: Columbia University Press.
- Deleuze, G., & Guattari, F. (2004 [1987]). *A thousand plateaus: capitalism and schizophrenia*. London: Continuum.
- Dogantan-Dack, M. (2015). *Artistic Practice as Research in Music: Theory, Criticism, Practice*. Aldershot: Ashgate.
- Evens, A. (2005). *Sound ideas: music, machines, and experience*, Minneapolis, MN: University of Minnesota Press.
- Frisk, H. (2008). *Improvisation, computers and interaction: Rethinking human-computer interaction through music*. Malmö: Malmö Academy of Music, Lund University.
- Frisk, H., & Karlsson, H. (2011). "Time and Interaction: Research through non-visual arts and media". In Karlsson, H. and Biggs, M (Eds.). (2011). *The Routledge companion to research in the arts*. London and New York: Routledge, 277-292.
- Gibson, J.J. (1979). *The ecological approach to visual perception*. Boston: Houghton Mifflin.
- Gilmurray, J. (2018). *Ecology and environmentalism in contemporary sound art*. PhD thesis. London: University of the Arts.
- Gorton, D., & Östersjö, S. (2016). "Choose your own adventure music: on the emergence of voice in musical collaboration". *Contemporary Music Review*, 35(6), 579-598 <http://dx.doi.org/10.1080/07494467.2016.1282596>
- Gorton, D., & Östersjö, S. (2019). "Austerity Measures I: performing the discursive voice". In Laws, C., Gorton, D., Nguyen, T.T., Brooks, B., Östersjö, S. and Wells, J.J. (2019). *Voices, Bodies, Practices: Performing Musical Subjectivities*. (p. 29-79). Leuven: Leuven University Press.
- Hogg, B., & Sansom, M. (2015). "Perspectives from Practice". *Contemporary Music Review*, 34(4), 259-261. <https://doi-org.ludwig.lub.lu.se/10.1080/07494467.2016.1140472>.

- Hogg, B., & Östersjö, S. (2015). "Patterns of Ecological and Aesthetic Co-evolution: Tree-guitars, River-violins and the Ecology of Listening". *Contemporary Music Review*, 34(4), 335-349. doi: 10.1080/07494467.2016.1140867
- Hogg, B. (2013). "The Violin, the River and Me: Artistic Research and Environmental Epistemology in *balancing string* and *Devil's Water 1*, Two Recent Environmental Sound Art Projects". *H2 Fylkingen's Net Journal*, 18. Retrieved from <http://www.h2-journal.org/n18/hogg.html>.
- Hulse, B., & Nesbitt, N. (Eds.). (2010). *Sounding the Virtual: Gilles Deleuze and the Theory and Philosophy of Music*. Farnham: Ashgate.
- Impett, J. (2017). *Thinking-through-Music: On Knowledge Production, Materiality, and Embodiment in Artistic Research*. Leuven: Leuven University Press.
- Kiverstein, J.D., & Rietveld, E. (2018). "Reconceiving representation-hungry cognition: an ecological-enactive proposal". *Adaptive Behavior*, 26(4), 147-163. doi: 10.1177/1059712318772778.
- Koutsomichalis, M. (2018). "On Soundscapes, Phonography, and Environmental Sound Art". *Journal of Sonic Studies*, 4. Retrieved from <https://www.researchcatalogue.net/view/268080/268081/0/0>.
- Linson, A., & Clarke, E.F. (2017). "Distributed cognition, ecological theory and group improvisation". *Oxford Scholarship Online*. doi:10.1093/oso/9780199355914.003.0004.
- Luisetti, F. (2016). "Decolonizing Geopower: A dialogue with La Deleuziana". *La Deleuziana*, 4, 89-104.
- Maharaj, S. (2009). "Know-how and No-How: stopgap notes on 'method' in visual art as knowledge production". *Art & Research*, 2(2), 1-11.
- Manning, E. (2007). *Politics of Touch: Sense, Movement, Sovereignty*. Minneapolis: University of Minnesota Press.
- Manning, E. (2013). *Always More Than One. Individuation's Dance*. Durham, NC: Duke University Press
- Manning, E. (2016). *The Minor Gesture*. Durham: Duke University Press.
- Massumi, B. (2002). *Parables for the Virtual: Movement, Affect, Sensation*. Durham & London: Duke University Press.
- Maturana, H.R., & Varela, F.J. (1980). *Autopoiesis and Cognition : The Realization of the Living*. Dordrecht: D. Reidel.
- Moisala, P., Leppänen, T., Tiainen, M., & Väättäin, H., (Eds.). (2017). *Musical Encounters with Deleuze and Guattari*. London-New York: Bloomsbury Academic.
- Murphie, A. (2005). "Vibrations in the Air: Performance and Interactive Technics". *Performance Paradigm*, 1, 31-46.
- Murphy, T.S., & Smith, D.W. (2001). "What I Hear Is Thinking Too: Deleuze and Guattari Go Pop". *Echo: A Music-Centered Journal*, 3(1). Retrieved from <http://www.echo.ucla.edu/article-what-i-hear-is-thinking-too-deleuze-and-guattari-go-pop-by-timothy-s-murphy-and-daniel-w-smith/>.

- Nancy, (2007) *Listening*. New York: Fordham University Press, 2007.
- Östersjö, S. (2008). *Shut up 'n' play! negotiating the musical work*. Malmö: Malmö Academy of Music.
- Östersjö, S. (2013). "The resistance of the Turkish makam and the habitus of a performer. Reflections on a collaborative CD-project with Erdem Helvacioğlu", *Contemporary Music Review*, 32(2-3), 201-213. doi: 10.1080/07494467.2013.775812.
- Östersjö, S. (Forthcoming). *Listening to the Other*. Leuven: Leuven University Press.
- Peters, D. (2015). "Musical Empathy, Emotional Co-Constitution, and the 'Musical Other'". *Empirical Musicology Review*, 10(1), 2-15.
- Rawlings, A. (n.d.). *INTIME*. Retrieved from <https://arawlings.myportfolio.com/intime>.
- Rawlings, A. (2017). ( *SUND* ) – program notes (unpublished).
- Schreel, L. (2014). "The Work of Art as Monument: Deleuze and the (After-) Life of Art". *Footprint*, 8(1), 97-108.
- Stefánsdóttir, H.S. (2019). "H e (a) r: of an ecological-enactive perspective". *Seismograf* [Audio file].
- Straus, Erwin W. (1966). *Phenomenological Psychology: The Selected Papers of Erwin W. Straus*. Tavistock, NY: Basic Books.
- Varela, F.J., Thompson, E., & Rosch, E. (2016 [1991]). *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge, MA: MIT Press.