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Nature, wilderness and ecological awareness: Exploration, experience and the creation of audio-visual artworks of a mountain.

Av Tine Blom



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Sammendrag

Dette er et praksis-basert forskningsprosjekt i Lydkunst (Sonic Art) og målet er å lage en lydmiljøkomposisjon og audiovisuelle kunstneriske arbeider om natur og villmark. Målet er å utvikle og uttrykke økologisk bevissthet.

I dette prosjektet er ikke naturen transcendent, abstrakt eller romantisk, men heller de konkrete og fysiske kreftene i geologi og topografi og atmosfæren eller været. Villmark er det potensielt risikofylte miljøet som er annerledes enn det urbane, storbyen og andre menneskelagde miljøer.

Økologi er om naturens ubegrensede, uendelige sammenhenger og gjensidige avhengighetsrelasjoner, og økologisk bevissthet handler ikke om noe spirituelt, men om erfaringen av å være en del av og sårbar i forhold til naturen.

Forskningsfeltet er Hallingskarvet; det er stor endring mellom årstidene, det er værutsatt og det har derfor ingen permanent besetting. Jeg utforsker hvordan jeg opplever dette miljøet ved aktiviteter som å gå på tur og på ski, svømme og gjennom aktiv lytting («sound-walking»). Jeg bruker på opptaksteknologi som redskap til å skjerpe oppmerksomheten, og jeg bruker praksisen og logistikken til feltarbeid og feltopptak som en måte å utforske og erfare naturen.

Naturerfaring inkluderer kroppslige og sanselige erfaringer, og det inkluderer eksistensielle refleksjoner om liv og skjønnhet, sårbarhet og død. Forskningsutbytte inkluderer audiovisuelle kunstneriske arbeider som kan uttrykke disse erfaringene og som kan skape økologisk bevissthet.

Disse kunstneriske arbeidene vil være i tradisjonene akustisk økologi og lydmiljøkomposisjoner. De formidler miljøet i ulike årstider og vær, og de kommuniserer min sanseerfaring gjennom de oppgavene jeg utfører, grensesnittet mellom kropp og natur, og uttrykk og refleksjoner om å være eksponert for naturen.

Teoretisk og filosofisk påvirkning er blant annet Spinoza, Whitehead, Næss og Morton, Bergson, Massumi og Ingold. Påvirkning fra lydstudier og lydkunst kommer fra blant annet Schafer, Truax, Drever, Westerkamp og Lockwood.

Emneord: Kunstnerisk utviklingsarbeid, økologisk bevissthet, lydmiljø

Abstract

This is a practice based research project in Sonic Art and the aim is to produce soundscape compositions and audio-visual artworks about nature and wilderness.

I am interested in those basic conditions for human existence that are beyond the social. I am interested in environments that are not moulded by humans and in the relationship to the nonhuman. The aim is to evoke and express ecological awareness, to myself as an artist, and to different publics.

In my research, nature is not transcendent, abstract or romantic, but refers to the concrete and physical forces of geology, topography and atmosphere or weather. Wilderness is the potentially risky environment that is distinct from urban, metropolitan and manufactured environments. Ecology is about nature's unbounded and infinite connections and interdependencies. I argue that ecological awareness is not about spirituality, but about conscious and subconscious experience of being part of and vulnerable to processes of nature.

The research site is the Hallingskarvet mountain range in Norway; it has a broad range of seasonal change, it is weather exposed and therefore no permanent settlement. I situate myself and explore the experience of this environment through practical activities like walking, skiing, swimming and sound-walking. I use recording technology as tools of awareness and I see the practice and logistics of field recordings as a way to explore and experience nature.

One of the research outputs is to produce audio-visual artworks that express these experiences and evoke ecological awareness. Experience of nature includes embodied and sensory experiences of pleasure and pain, and it includes existential reflections about issues of life and beauty and vulnerability and death.

The artworks will be in the tradition of acoustic ecology and soundscape composition. These works communicate this environment in various seasons and weather conditions, and they communicate my presence in it through my tasks, the body / nature intersection, and, expressions and reflections of being exposed to nature.

Theoretical and philosophical influences are among others Spinoza, Whitehead, Næss and Morton, Bergson, Massumi and Ingold. Influences from sound studies and sonic art are Schafer, Truax, Drever, Westerkamp and Lockwood.

Keywords: Practice based research, Audio-visual artworks, ecological awareness.

Foreword

The Department of Music at Goldsmiths College, University of London accepted this report as upgrade from MPhil to Ph.D. student in Sonic Art in October 2014. It is based on three years part time of study and audio-visual productions about Hallingskarvet in Norway, and aims for completion in the end of 2015/spring 2016.

I will give thanks to Lillehammer College and Goldsmiths College for support.

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1. Introduction

Practice based research

This is a research project in acoustic ecology and it is inspired by ecological philosophy. I seek to evoke ecological awareness through the practical presence and physical exposure to wilderness. I am an artist who is interested in the practice and culture of field recording and how recording technology may function as tools of awareness. I am producing soundscape compositions and audio-visual artwork where I explore how the presence of the subject/ artist in the artwork is a way to evoke ecological awareness.

The site and my wilderness experience

The research site is at Tvergasteinstjørnet at the Hallingskarvet mountain range, which is located about the geographical centre of southern Norway. The site is about 1500 m above sea level and two-three hours uphill walking distance from society's infrastructure like railway, roads, shops and electricity.

The area has Arctic climate and is strongly exposed to the winds from the Atlantic Ocean that sweeps along the east-west-directed mountain range. These strong and cold winds make the area potentially dangerous. It is also vulnerable to erosion due to the thin layer of organic material (plants) and short summers give slow growth for recovery. In this area, where time is cyclic with seasonal and daily rhythms, I consider the weather condition as an historical constant that set restraints on human activity. Therefore, I consider this site as "wilderness".

My relationship to the site began through my family. My first trip was particularly traumatic; I was about the age of 18, it was mid-winter, dark, loose snow and increasing wind. I had no more strength and was thinking about whether life was worth living after all. Then my uncle put a rope around my chest; I kept stumbling on my skis and he finally pulled me up into the shelter.

However, I have also experienced the beauty of the site, the joy of its infinity, the relief of being released from social demands and chains, for a while, and the existential freedom and clarity of mind after some days in wilderness.

I have been there frequently during the last ten years and made sound recordings, photographs and videos.

My background in a mountainous site and winter-country has for the better and the worse put its flavour on my sense of life that has impact on my research practice. For me, the need for humbleness towards nature's forces has always been obvious and beyond discussions, as I have experienced this as a matter of life and death.

Broadly speaking, people in urban areas do not tend to share this sense of the obvious. "Nature" has become a rhetorical word with contested meanings. For many, it is mainly associated with luxury and leisure, like an exotic place to go during holidays, or an arena for personal challenge.

These different backgrounds are a challenge for communication; what nature implies and what others associate with it seldom resonate with my own experience; and I feel that my sense of it disappear in mediation.

I am interested in ecological awareness that is about physical reality; human presence is physical and the forces of nature and wilderness has impact on the human body. This means to take a non-anthropocentric or non-human perspective and to be aware of that the atmosphere, species and materials are interconnected. Humans are part of this, and are dependent, vulnerable and mortal in a very concrete, sensory way. I criticise a kind of ecological awareness that is abstract ideology and romanticism, and, I will also express a slight critique of internal oriented listening practices: sometimes I cannot choose not to be aware, for example when the wind blows strongly.

From this follows the urge to inquire into the ontology of nature, into nature experience, ecological awareness and into ways of mediation. And this is a quest in the sense that it is a process of search for a knowledge that can only be approximate.

In order to get to know more of nature and ecological awareness, I need to go beyond its cultural and linguistic representations. Therefore, I will use audio-visual ways to explore and mediate nature, which means that I also need to inquire into techniques and impacts of recording technology.

I am aware that I have chosen a broader view than is conventional in research. This is so because these are broad topics. The project can be understood as a search for the "indisciplinary", that is a space between disciplines that cannot be confined or restricted by any of

them (Cocker, 2008). This includes seeking knowledge and meaning as a continuous experimental process of phenomenological encounter and reflection, without any final truth or solution.

The project is also interdisciplinary in the sense of a process of wandering between and through disciplines; I need to draw on and make connections between the metaphysical philosophy via natural science to social science and art (and possibly, back again).

Research topics and questions

Following from this, a number of issues and questions have emerged.

The first is about nature and wilderness, experience and ecological awareness. What is nature and wilderness, and what should we do to experience this in such a way that it enhances ecological awareness?

I am interested in practices that open up for experiences of even more textured, subtle and changing surroundings. I am interested in experiences of vastness and vulnerability. In addition, I am interested in the distinction between words and practices. An example is the sensory difference between reading about the river Thames or looking at it and that of swimming in it (Deakin & Holmes, 1999), and the implications of this difference.

The second is about recording technology as tools of awareness. How can I use recording technology to experience nature and evoke ecological awareness? What impact does the practicalities of field recordings have on experience of nature, and how does nature let itself felt through my tools and practice?

The third topic is about mediation: How do I evoke ecological awareness through sonic and audio-visual art? What content and form of multimedia artwork enables me to mediate nature and the experience and sense of being wilderness?

2. Methodology and method

This is a practice led research inquiry into how to experience, evoke and communicate ecological awareness, using the methods of immersion into mountain wilderness, the practice of field recording and through production of audio-visual artwork.

Methodology: practice based research

The methodology is practice led research. This includes in(ter)-disciplinary, auto-ethnography and the process of art creation. First, I will account for some assumptions about the ontology and epistemology and the three types of knowing that is the basis for this methodology.

Ontology and epistemology

Gray in her *Inquiry into practice: developing appropriate research strategies* (Gray, 1996) emphasis that practice led research is a pluralist approach and multi-method technique that are driven by the requirements of practice and the creative dynamism of the artwork.

Such research is qualitative and naturalistic and "real world research". It's ontological foundation is that what we explore out there is real and that real world experiences and practice are complex. And it is based on the epistemology that the practitioner is the researcher that identify researchable problems and respond through practice, and this implies subjectivity, involvement, reflexivity and interaction with the research material.

In practice led research, knowledge is negotiated; it is context bound and a result of personal construction. All "mistakes" is revealed and acknowledged for the sake of methodological transparency. This means that what happens during time, like changes, decision, events and epiphanies should be accounted for in the final report, and that the research elements are embodied within and visualized by the artworks.

Three types of knowledge

The book *Practice as Research in Arts: Principles, Protocols, Pedagogies, Resistances* (Nelson, 2013) is a theoretical and practical account of practice led methodology. Nelson emphasises that practice led research is composed by the process of creative interaction between what is categorised as three distinctly different types of knowledge.

The first is "tacit knowledge" (Polanyi, 1966/2009), which is embodied, haptic and intuitive, or what you know without verbal articulation. Examples are musicians playing an instrument, or a photographer that "smells light" and thereby sets aperture and shutter speed intuitively. This is about visions, embodiment and performance.

The next type of knowledge is critical reflection or "how professionals think" (Schön, 1983)

about their own practice. This is the type of knowledge a practitioner develops when he or she, through verbal articulation, seeks to make his/her embodied knowledge less tacit. However, such articulation can never give a complete account of embodied knowledge.

The third type of knowledge is non-fiction written sources of the academy, or which is the sources of classical research. This is what he calls "knowledge from outside". We can also add fiction, literature, and the study of other artists and their artworks (Leavy, 2009).

The point is that such research is an interactive process where these types of knowledge challenge and stimulate the drive towards more knowledge and creativity. For example, creating a particular artwork both requires and leads to development of skills; this process is the source of critical reflection and articulation, and these reflections may challenge established academic knowledge on the subject. Alternatively, reading about a topic and studying similar works and artists may stimulate new ideas and visions about one's own personal practice and release an artist from his/ her own stagnating habits and ways of working.

In short, practice based research methodology means to put more focus on the process of making rather than on the final art product, which is just a stage on the way towards further development.

The handling with material of artworks or performance art develops a particular kind of knowledge (Bolt, 2007). Those who practice an art will have an experience, and thereby a knowledge that cannot be accessed without this practice. This new knowledge can challenge existing theories. This means that artists, through their practice, can extend the existing domains of knowledge through reflection on what occurs in practice.

Inter- and in-disciplinary

In relation of practice led research, the interdisciplinary relates to the theoretical, logical and abstract type of knowledge gained through studies of books and internet-resources.

Interdisciplinary research is of several types (Cocker, 2008). A way to understand it as a process of wandering between and through disciplines with an open mind, translating and find analogies between concepts and approaches. The concept of wandering refers to knowledge

seeking and meaning making as a continuous experimental process without any final truth, goal or solution.

This can also be understood as a search for "in-disciplinarity", that is a space between disciplines that cannot be confined by any of them.

As such, the project will be in-disciplinary in the sense of being in a process of phenomenological encounter (tacit knowledge) and critical reflection, and it is interdisciplinary in the sense of drawing insights from various disciplines on various stages of the project.

Methods

The methods for this practice led research project are immersion into wilderness, field recordings and creative audio-visual artwork-productions; it is log keeping and production of a website and it is studies and commentaries on literature and artworks.

Auto-ethnography, immersion and practices

Auto-ethnography is a way to strengthen the connection between "tacit" and "reflective" knowledge. This makes the development of my sensibility and capacity of self-reflection into a research tool.

Process theory states that knowledge is in flux because reality is flux (Whitehead, Griffin, & Sherburne, 1979). Here I will explore and record how this wilderness is in flux; the forms in the landscape that these processes and forces produced; the rhythm between movement and stillness; and how this is a flux towards ecological awareness.

The method is to return to this site in various seasons and to expose myself to various kinds of weather. I will experiment with practices like walking, skiing and swimming in order to explore and experience wilderness in a sensory way.

Ways to experience nature is through movement, like walking, skiing and swimming, sometimes beyond comfort. These practices give different types of experiences because they are different ways to relate to the landscape.

Walking enables sensory relationship to the ground, like hard or soft, steep or flat, dry or swampy, rugged or smooth. When I walk in nature, I need to step, jump and balance; the body

will feel like flowing, or it will resist and ache. And walking is a way to travel through the landscape and continually to discover new perspectives.

Skiing enables movement during winter season. It is another way to move the body that demands some level of skill of tools and balance. Experience of skiing depends of the type of snow: it may be icy, powdered, grainy, shaped by wind, bumpy or wet, all of which influence the smoothness and rhythm of movement.

Swimming in a mountain lake is the "ultimate" body exposure, and temperature is essential. Regarding that the aim of awareness, I cannot choose *not* to be aware when I swim in a mountain lake.

Field recordings

The art of field recordings is about technology and about logistics and practice, and all of these have triggered debates.

Recording technology

I will use recording technology as tools of awareness, being aware of debates, critiques and preconditions for this.

In sound studies, as in other disciplines, some argue that there a direct phenomenological link between sounds and experience of sound (Merleau-Ponty, Bergson, Olivero, LaBelle), while others argue that there is always an element of social construction in how we sense (Sterne, 2003). (See more about these topics in sections 5.3.1.)

This also counts for debates on recording technology. One position is that all technologies are mediators in the sense that they have an independent impact on processes and practices (Latour & Porter, 1993), (Latour, 1987). Following from this, Sterne argues that recording technologies transform and transduce sounds in such a way that there is no direct link between the sound we hear with our ears and the sounds we record with our equipment. What we hear with our ears in the field is not the same as what we hear when we use our headphones or listen to loudspeakers in a studio That we think we hear the same thing is a misunderstanding due to successful commercial propaganda towards consumers, according to Sterne (Sterne, 2003).

No matter, recording technology has impact of on how we experience sound. Microphones select sounds in a different way than our human ear, both due to the distinction between

mechanical and organic sensitivity, and because how we listen will influence what we pay attention to and what we choose to record.

This is two-edged: recording technology may have captured sounds that I did not pay attention to while recording; it may enhance them, bring them closer and sometimes make those sounds accessible that I otherwise could not hear. However, it is also so that what I record and bring with me home may not correspond to my experience in the field. This is because wilderness experience is multisensory, embodied and existential which is not possible fully to capture in recordings.

It is this dilemma, tension or gap between "the more than" and "the less than" the real life experience that are central for the use of recording technology as method of this research.

Recording technology is a kind tool of awareness of what is there and the gap of experience, it as a way to engage with and tune into wilderness, still without mistaking the recordings for reality.

The practice and logistics of field recording

I will practice field recording with an attitude of discovery, similar to sound-walking (Drever, 2009b; Westerkamp, 2010), differing only by the indirect and technological mediation of sounds. The practice of field recording may stimulate different kinds of listening, depending on type of microphone and the use of headphones.

I also consider technological fumbling or "mistakes", whether about choice of microphones or lack of windshields and skills or flat batteries as part of the experience and discovery of forces of wilderness. Recording technology is part of networks of things in the industrial society, they depend on a very particular range of temperature, and they depend on infrastructure like electricity, which are altogether a very concrete way to set the practical impact of wilderness in relief.

And field recording is a practical task that influences how I relate to my surroundings and what I aim for when I am in the field.

Also, the logistics of the research, that is, the practice of field recordings in this site, implies exposure to the forces of nature in a very concrete and physical way. It is about the physicality of distance and weight. That the recording equipment has to be carried on the back for three hours uphill is a clear experience of geography, topography and gravity and how it

makes impact on the body. The weather of the site while field working is also a direct physical experience of the range from beauty and comfort to pain and threat. It ranges from rain, roaring winds, snow, ice and fog to sun and complete stillness (yes!). This does not only produce stillness and particular sounds, but also particular physical and emotional responses and more humble attitude than mastery and conquest.

In my research, I will explore how the practice of field recording in this site has the potential of enhancing ecological awareness. It may enhance awareness of what happens in the field, and how what happens relate to larger processes in space and time. This differs from dreaming and imaginaries in the sense that practice in this site has direct, physical impact: it matters and it may be dangerous. And this is what I aim to research and express through my audio-visual works.

In short, field recording as research method is to obtain recording equipment and develop skills for using it, it is to practice field recordings and explore how the technology works, or not works, as tools for ecological awareness, and let the practice and tools resonate with and record the movements and stillness of nature. During this process, I will create and produce knowledge through audio-visual artwork.

Log-keeping, blogging and website

Auto-ethnographic method also includes the writing of diaries and logs, production of website and the process of presenting works in progress and blogging about them.

Log-keeping

Log-keeping is to make detailed description of the research process through written note-taking and/ or recordings of what happens, and what I do, sense and think while I am in the site, and also elsewhere at different points in time.

These logs serves to document the connection between practice and ideas, and the development from unarticulated sensations to more textured and elaborated thoughts, and how what happens to me demands attention and decisions regarding the progress of the project.

I reflect on how practices influence my experience. I focus on process, skills, tools, perception and how I resonance with the landscape and weather. I account for my movements and paths in the landscape; for thoughts, imaginations and junctions regarding my project; and these perceptions, sensations and emotions that altogether lay the ground for my final visual- and soundscape composition.

This way I account for what happens in the landscape and weather-world, and how I need to improvise to create an audio-visual account of this quest. And I bring with me back home these embodied memories, perspectives on nature, notes and logs and recordings and create my knowledge in an audio-visual way.

Blogging and website

Web logs or blogs are used as learning spaces in higher education (Williams & Jacobs, 2004), and blogging can be used as a tool for personal and professional development in PhD research (Ward, 2006). They belong to Nelson's second kind of knowledge, that is category of critical reflection of the reflective practitioner (Nelson, 2013), (Schön, 1983) (See section on Methodology).

Blogs provide spaces for storage of thoughts, works and other information. They are a kind of personal diaries of processes and stages of the development of students and their research projects.

Such blogs serve as a site of communication and interaction with other students and supervisors. Blogging involves emotional engagement and it is social in the sense that it has the capacity to engage people in collaborative activity, knowledge sharing, reflection and debate.

I have developed a website for this research project, where I keep uploading works and works-in-progress. This is a tool and method for communication and feedback, and a way to present and articulate the progress of the project. I also want to communicate with fellow students for mutual feedback and support.

Literature studies and commentaries

Literature and making commentaries are the third kind of knowledge of practice les research, as described by Nelson (Nelson, 2013) (See section on methodology above).

I compare and reflect on my experiences, my knowledge and my artworks in relation to literature of the relevant topics. This means that I will not produce as literature review chapter as such, but make commentaries on literature in relation to the relevant chapters.

As a method, these literatures inform, stimulate, challenge and thereby contribute to development of my own experiences, positions and ideas about my artworks.

This research is according to the premises of phenomenology, and here, my personal experience what I have done and what I have sensed is a source of knowledge. I claim that when I sense something, it is not just because of my internal imagination, but because there something is going on out there that happens to me.

However, literature may provide different and broader frames of interpretation. When returning to the mountain site, these literatures may have influence how and to what I pay attention, and my studies of literatures may also make me interpret my recordings and what they afford, in a different way.

Yet another method is to create audio-visual artworks, and this is the topic of the following chapter.

3. Artwork practice

This chapter is about artworks. The first part is about my own process and works and my thoughts and plans for further works. The next section is about how the artworks of other artists inspire and differ from my creative project.

3.1. My artworks and portfolio

I am working with a particular site that I am acquainted with and will keep returning. The site is in constant flux; events and happenings are always new. My particular experiences, understandings and intentions are changing, and my skills and techniques of postproduction develop through the research process.

In my works, I am representing the wilderness that I am immersed, how I am immersed in it, and, I express and reflect on my position in it.

The artworks are about this particular mountain and my sense of being there. There are three components, first, a kind of "eco-mimesis" (see section 5.3.2.), that is a textured - although impossible - account of how nature unfolds through changes of weather, seasons and scenery.

Second is the intersection and resonance between the body and environment or how my body is physically interacting with it. This includes the sounds of practices like skiing, swimming and walking on various grounds. The third component is subjective reflections while being there, including emotional responses, expressions and talk about the experience of presence, the sense of distance and of non-mastery.

The fieldwork is physically challenging in the sense that I go to there in various seasons and weather. Applying recording technology under such conditions is an additional challenge of technical skills. The fieldwork motivates me to challenge myself by exposing myself beyond the comfort zone. That is, why should I expose myself to icy winds if it had not been for the promise of interesting field recordings?

I am making different kind of artworks. I make soundscape compositions of the site, with its winds, water, snow, stones etc. I indicate my presence through the sounds of my intersection with environment, through body sounds, expressions and words.

Some of these compositions are more similar to a radio documentary when my voice becomes the driving force of the narrative.

And I use visuals like videos and photographs. Change of colours through seasons and weather conditions is difficult to mediate through sound. The visuals add another dimension and contribute to a more vivid multisensory experience that helps to bring the audience into the site. In order to give attention to the soundscape and to encourage listening, I do generally use photographs rather than moving images, or I use "moving stills", that is long takes with slight movement in for example grass, snow or brooks.

I start the postproduction by register time, content, technical quality and relevance/ significance of the recordings for both the sounds and visuals, and I listen and search to what the material affords.

When I work in my studio, I am trying to stay connected to my experience of the site, and this has tended to have priority to the perspective of the audience until now. As my creative productions evolve, I will need to be more conscious about the audience perspective. My development will be to be more conscious about the gap between what I think I am mediating and that of the receptions of the audience.

The portfolio

I have uploaded the portfolio of my main works on the website tineblom.net/mountain project. These are:

2011

- Sound and sensations of seasonal change at Hallingskarvet mountain range: video made of photographs and sounds, 10.47 min

2012

- Winter winds: video and sound 8.15 min
- Mountain lady / Nature love: video with voice, 3.24 min
- A day inside, soundscape composition/ narrative without voice, 7.26 min
- Trembling stonewall, sound recording with contact microphone, 2.55 min

2014

- Easter winds: video with photographs and sounds incl. some voice, 9.26 min
- September ice/ Joys of cracking, video with sound and written text, 7.34 min
- Report on field recording: photographs + radio documentary/ narrative with voice 25.15
 min

Here I will comment on the video "Sound and Sensations of Seasonal Change at Hallingskarvet mountain range"; the installation "Nature beyond Culture" which consists of four works; and then I make a short commentary on the sound piece "Report on field recording".

Sounds and sensations of seasonal change

This was my first work ever that included sound, and it is the first work of this project.

It aims to show how the light and weather continually changes the colour and texture of the landscape, that every kind of movement makes sound, and it indicates how small people are in this landscape.

It consists of sound and a series of still images. As Barthes described in his book Camera Lucida (Barthes, 1993), stills are frozen moments in time; and in contrast to the narrative drive of moving images, stills encourage conscious, personal reflection and contemplation.

Here I use stills to encourage detailed and in tuned listening. Sounds are surrounding and penetrating, they evoke the sense of being embedded and immersed, and here, they drive the narrative. We hear people's (or my, more precisely) presence in the sounds; some sounds are without corresponding images, for example can we hear the sound of people (me) walking, bathing and breathing without seeing them (me). The aim is to encourage the active imagination of the viewer/listener.

I recorded the sounds of my footsteps when I walked on various types of grounds – snow, stone and marshland and so on. I discovered how recording soundscape was a way to explore the site and this way I became aware of how sounds are an integral part of the mountains. For example, first I was annoyed about the roar from the mountain that I felt was interfering with my recordings, until I discovered that the roar was particular loud during the snow melting in springtime and after heavy rain. I also discovered silence; I think that a mountain landscape without wind and covered with silk snow must be the most silent place in the world.

I presented the video on the International Visual Sociology Association (ivsa) conference in Bologna in August 2011 and on seminars in Visual Sociology and Studio Practice in Music at Goldsmiths College in fall 2011. And it is on my website.

The work presents the site and contains most of the topics of this research. These are the character and impact of weather and seasonal change on stones, water and snow, on plants, animals and humans. The artworks that follow are variations of these, more in depth, more experimental and enactments, and technical and artistic improvements. For example, in my latest works, I experiment more with moving images, voice and reflections.

Nature beyond culture Installation

What I mean by "Nature beyond culture" is that nature is more than culture, that human culture is embedded within nature and therefore that it cannot fully represent or comprehend it.

The aims of this installation were to explore and communicate the existence of nature beyond culture through practices of engagement with the mountain in sensory and embodied way.

It consists of four works + photographs and I presented them as installations at the Engaging tactics at Goldsmiths in April 2012 and at the IUAES conference in Manchester in August 2013.

The videos were "Winter winds" (8 min) and "Mountain lady" (3 ½ min), and the sound installations were "Day and night inside" (7 ½) and sound from inside the stonewall on a windy day (looped / continuous). In addition, there were four A3 photographs and two A4.

Aims and intentions

The aims were (i) to communicate the issues of nature beyond culture and experiences of a mountain environment; (ii) to develop skills and experiments of making an installation that engage the public; and, (iii) the opportunity for feedback and to explore and understand variations in audience responses.

The theoretical topics were culture-nature relations in social theory; the sensory and bodily engagement as a way of knowing; memory and attachment to place; and the impact of personal experiences and cultural background on the responses.

Logistics and practicalities

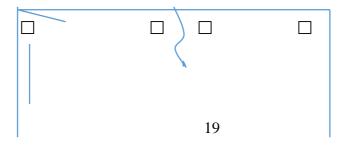
Making an installation was a grand lesson in logistics and technological issues of artwork. Here I learned that artwork is about *work*, not just ideas, and, that I better learn as much as possible about these technologies myself. And it is about planning and foresight, which is mainly developed through practice. It is an example of learning by committing myself to a task I not yet have the skills to implement.

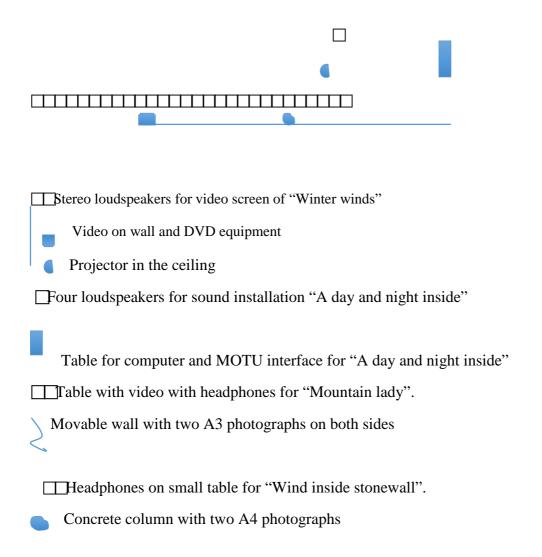
Practical supporters of the project were Alan Stanley, Britt Hatzius and Ian Stonehouse, without which this installation would have been impossible.

The following is an account of the logistics, technicalities and the fumbles of making the installation.

The installation space

The installation was in Ben Pimlott Building 3/4 at Goldsmiths Collage.





Artworks, equipment and technical issues

There were four main pieces of artwork, in addition to photographs.

Video: Winter winds at Hallingskarvet

The Winter winds video was on a DVD that were presented with a projector and two loudspeakers in stereo. It was 8 minutes long and went continuously (looped).

I recorded the video footage and most of the sounds on 3-6th of April-12, and some of the sound recordings on earlier trips. The software was IMovie-11, and I got support and advice from Brit Hatzius.

The burning of the DVD became a problem. The source file was 1920* 1080 pixels, while neither of the software iDVD nor Toast Titanium allowed more than 720*576 pixels, which

resulted in reduced quality for the installation. I used several hours on Sunday evening and Monday morning trying to solve this problem, but to no avail.

Video Mountain lady

The Mountain Lady video was also on a DVD of 720*576 pixels. It was looped and went continuously. The video was presented on small screen and with two headphones that was borrowed from the Media Equipment Centre (MUC). In addition, I bought a stereo jack splitter that made possible to attach the two headphones.

The interview was made in Norwegian and had English subtitles. The software was IMovie-11, and I got support and advice from Brit Hatzius.

Sound story of Day and night inside

The sound story Day and night inside was 7 ½ minutes long, it was looped and went continuously. This artwork was the most technically complex.

It was composed of recordings from several trips from the last years. I made the recordings with several types of recording equipment, but I used mostly my own Zoom H4n with omnidirectional stereo microphone. The composition also included contact microphone recordings of sound of walls, ceilings and floors.

I used the softwares Audacity and ProTools. It was presented with my computer that was connected to MoTU-interface borrowed from MusTech and four loudspeakers borrowed from Electronic Music Studio (EMS).

Alan Stanley and a music technician brought and mounted of the equipment, and Ian Stonehouse connected the program file on ProTools to the MoTU and the four loudspeakers.

Sound from inside stone wall

The fourth artwork of the installation was the sound of inside a stonewall in wind. I recorded it with two contact microphones and it was looped.

I presented in on a (cheap) MP3-player and with a stereo jack splitter and two headphones. These were put on a small table were the MP3player was attached with sticky "Velcro" dots. I used Audacity software for cropping away the handling noise from the recordings.

The photographs

I presented six photographs, four A3 and two A4 that I had printed on my home printer in Lillehammer during Easter. I used Photoshop software. They were glued to each side of the movable wall with blue tack.

One of them were directly connected the Mountain Lady interview, picturing her in the mountains; two others were connected to the sound from inside the stonewall, picturing the stonewall and blowing snow. I made all of these photographs in early April.

I made the three others, one A3 and the two A4's on earlier trips. The A3 were two photographs of skiers, one was a man sitting on a chair in the snow reading a book on a snowy day, the other were books in the snow.

Comments and afterthoughts

Sequential or simultaneous time?

The sounds from the "Winter wind" video and the "Day and night inside" represented "outside" and "inside" respectively. They came from different parts of the room but shared the same space.

The first part of the day I presented them in sequences, that is, I turned them on and off so that the listener/viewer could focus their attention on one of them at the time.

Then came an Austrian art student that suggested that I should turn them on at the same time.

This made the distinction between outside and inside depending how you were located in space.

So I did this the rest of the day.

By presenting them in sequences, as I did in the first part, I needed to guide the listener/viewer and explain to them where to start and where to move on next. The good side of this was to help them grasp the sound installation as narrative.

By turning on all the sounds at the same time, space became more important than time. They could experience the change of the sounds by how they moved around. This meant that they would experience it as a sound composition in space rather than a narrative through time.

I did the same change with the Mountain Lady video. In the beginning, I wanted the viewers to sit down to watch it from the beginning, but later I did not interfere, after all, it was only 3 ½ minutes and looped so they could easily see it twice, if they wanted.

Feedback and more fumbles

I got only positive feedback; there was "nothing wrong" with any of the pieces. Some said that the space was not ideal for the winter winds video. It was not dark enough to make it sharp and the video projector was not in focus. This came in addition to the low quality of the DVD, but it seemed to be that this was my worry and not the worry of others. One commented that the sounds from the four loudspeakers were too loud so that it intruded the headphone sound of wind-in-the-stonewall.

And two said that the Mountain lady video was too short, they were triggered and wanted to know more about her. And I was criticized for the title. However, I was not able to change it, since I had messed up the connections between my source files and my IMovie software on my computer and external hard disks. Later, I renamed it Mountain Lady/ Nature love on my Vimeo upload.

Report on field recording

The sound composition "Report on field recording" is mainly composed of recordings made on two trips in March 2013 and is that my latest work. This is about wintertime, I am alone in the mountains, feeling a bit cold, lost and lonely, and here I am telling about what I see, hear, feel and think while I am making the field recording. I speak in English, and I speak into the microphone as if this were people. See the transcript in the Appendix.

It is basically composed of three field-recording sessions on three different days. I have shortened the recordings, while I have not added any voice. I have added a few sounds recorded on other trips, like the fire and the camera crash.

3.2. Artworks of this project

I aim to develop a comprehensive portfolio about this site.

I will go deeper into some of the seasonal and weather conditions that were touched upon in the "Sound and sensations" video, possibly similar to the video "September Ice / Joys of cracking".

Examples are works about various types of stone grounds and water in the depth of the rockery; a work about rain and fog, another about snow melting in the spring, and a piece about sitting outside and reading, and possibly one about swimming.

I will compose another soundscape documentary about practices and reflections, possibly including voices and practices of others.

I will experiment with various mixes of the three "layers" of representation, that of "ecomimesis", body/nature intersection, and verbal reflections and storytelling.

I will experiment with various types of aesthetics and poetry. Here, the aim of poetry is to evoke the gap between consciousness and what is /not/ revealed by the audio-visual recordings (Leavy, 2009, p. 63 ff), (Morton, 2007).

I will keep developing my skills and sensibility of audio recordings and put even more emphasis on sound.

And I will experiment with various ways to immerse the camera with the elements, ex. waterproof bag for drops on the lens.

I will continue to explore my archive of those recordings that I have already made, in addition to making more trips to the site.

I will not plan the recordings beforehand; rather let them develop from the weather, who I am with; what happens and my emotional and physical condition. Still, I hope for another trip with rain and fog.

I aim to make a final installation and to publish the works on my website.

3.3. Other artists and works of sonic art

My artworks has emerged within Sonic Art practice and I will reflected upon these in the light of other sound artists. Here follow some short comments on how my works relate and differs to a slight selection of sound artists and their works. My sources are, among others, Lane and Carlyle's In the field (Lane & Carlyle, 2013), LaBelle's Background Noise (LaBelle, 2008) and various web resources.

Nature documentaries

Nature Documentaries are works between the natural sciences and art where the artists record sounds of biotopes and species that we do not have access to in our everyday urban lives. They aim for the species and environments "to speak for themselves", their compositions have very

little sound processing in the postproduction, and they do not put themselves or other humans into their work.

Examples here are recordings and works of sites like the deep sea and inside seashores and soil, and using particular microphones to do so. Examples are Jana Winderen and some of David Dunn's works.

Jana Winderen

Jana Winderen is interested in the external world; in the natural environment and to raise consciousness about ecological issues. Her focus is mainly the sounds in the depth of the ocean where people don't have access.

She find field recordings more interesting than studio-work, and uses it as a tool of discovery of the external world. She does not want to use recordings used by others, because she wants to be acquainted with the place and to communicate that experience. And she does not want to manipulate the recordings that she says is an issue about respect for other species. Still she wants them to be clear, but there is no clear borderline between "cleaning" and "manipulation".

Since she is working with inaccessible spaces and species, it makes sense that she does not want herself in the recordings; humans are not at the depths of the oceans; and she wants focus on what is there, the content, not on herself listening.

David Dunn

David Dunn's work and practice is engaging directly with science when he explores how animals, in particular beetles, orient themselves and communicate with sound, and, then he aims to compose sounds that are able to disturb these animal's behaviour. I have been listening to "Listening to what we cannot hear", "Sounds of light in trees, and his works on Beetles.

My works are inspired by Winderen's and Dunn's topic and skill of these nature recordings, however, I add the dimension of human experience.

Radio documentaries

Radio documentaries put a narrator and thereby human consciousness at centre stage. Examples are Glen Gould's "The idea of North" (Gould, 1967), which is about imaginaries and drives of people in North America towards north of Canada. In some ways, this radio documentary

reflects Morton's claim that consciousness in itself produce a sense of distance: people search but the gap between themselves and their environment still exist. (See more about Morton below in section on experience).

This work is inspiring while it differs from mine in the sense that it is anthropocentric and is all about ideas, while mine seek to convey characteristics of wilderness and particular embodied and sensory practices of immersion and exposure.

Soundscape compositions of sites and environments

Soundscape compositions are those that seek to convey the soundscape of particular places, mixing the sounds of humans and non-humans.

The artist seeks to reproduce soundscapes of for example, rivers, beaches and culture landscapes. Examples are works by Annea Lockwood and Hildegard Westerkamp. They tend to mix sounds of nature with voices of people, thereby making composition of social experiences in nature environments.

Annea Lockwood

Annea Lockwood is a sound artist and composer from New Zealand who has produced artworks for more than half a century. Her background education is in music and composition.

Among her broad range of compositions, those of interest here are her recordings and compositions of the sound maps of Hudson and Danube rivers where she seeks to reproduce soundscape of sites along the rivers towards their estuaries.

Lockwood considers how humans are part of the environment, and in her work, she adds sounds of the human environment and human voices in various languages.

Here is a quote about her work

"Aim is not to document the rivers, but to record them for the special state of mind and body that the sounds of moving water create when one listens to the complexity of rhythms and pitches. By manipulating, re-contextualizing, and framing the common elements that form the fabric of our lives, Lockwood opens our ears, our eyes, and ourselves to worlds of beauty that resonate from the surface to the depths of our beings".

(http://depthome.brooklyn.cuny.edu/isam/Newsletter%20F04/lockwood04.htm)

In other words, she is interested in the beauty of nature and spiritual and psychological resonance of a natural environment and the poetic potential of sound. This differs from my works by my more practical, physical and sometimes threatening type of nature.

Hildegard Westerkamp

Hildegard Westerkamp participated in the World Soundscape project from the 1970's, and what interests me in particular is her values and accounts for how she works in the field and her process of postproduction.

For her, recordings in the field became another way of listening and new sounds to listen to that differed from music. This was a constant process of discovery and learning of what went on outside, and this way she developed interest for perceptual and sensual kinds of knowledge.

And she was interested in the difference between the recording experience and the actual recording results. Good experiences could give bad recordings and vice versa, and when listening afterwards, she could hear things you did not notice when you were there.

She frequently uses her own voice, which becomes a mediator between the environment and the audience, filling out what they otherwise could not know (Lane & Carlyle, 2013, pp. 109-121). She emphasis that there is a complex and fine balance between the voice of the recorded environment and that of the composer.

An example of her work is Kit Beach Soundwalk is a composition about the acoustic realms of the beach and its small animals like barnacles. This is a world of "of high frequencies, inner space and dreams." (http://www.sfu.ca/~westerka/program_notes/kits.html). Another example of her work is "At the Edge of Wilderness" which is a soundscape composition combined with photographs (Westerkamp & Debeugny, 2013).

These are similar to how I feel about her works in general: they are beautiful artworks, but also too aesthetic, soft and internally oriented. I may exaggerate a bit, but this kind of Nature is beautiful and vulnerable, it is there for us to discover so we can enhance our sensibility and cultivate our spirit.

John Drever

John Drever's works are too broad for me to account for here. I will just want to mention that I bought the CD Phonographies in 2006 that was what inspired me to start sound recording. From this followed my first work with sound, the "Sound and Sensations of Seasonal Change". I now enjoy Peregrinations and Hippocampus.

Found sound, digitally processed on location Antye Greie

Antye Greie has been involved in electronic music and composition since the 1990's. She records, writes and performs music in remote locations. The main topic of her works is emotions of field recordings, which she explores and express through digital processing. My interest here are her works with field recording of remote places. An example is the Kilipsjærvi/Bioart society project of 2011, where she is processing field recordings. (http://kilpisjarvi.poemproducer.com)

She connects digital music and wilderness, and digital life with remote places in a way that dissolves any distinctions between nature-culture. Her aim is not to convey the sense of a particular place, but to convey the emotions of sounds, wherever she record them. She does not aim to bring the listener back to the place of recording, but rather to use the sounds in further elaboration.

She tends to do the postproduction simultaneously as the field recording by processing them through for example software of Max/MSP.

A way she presents her works is by performances on site, and sometimes streaming or sending them directly on the internet while performing. She presents her website, http://antyegreie.com and http://poemproducer.com.

I find it interesting how she works with Northern environments, still both her aims and the way she works with digital processing differs from mine.

. . .

I situate my practice within the field of work of soundscape compositions. These are inspiring sound artists, although my works differ from theirs in the sense that I work with a particular rough and risky environment, I let myself be exposed and my works are thereby less aesthetic and more external oriented.

4. Research topics, theoretical framework and critical texts.

The research topics are about notions of nature, wilderness and soundscape and about experience and listening. And it is about art as articulation and communication, which connects to issues of materials and technologies, creative orientations and practices like soundscape compositions.

For each of these areas, I will account for theoretical approaches and concepts, followed by more in depth commentary on the philosophical framework and critical texts. Here I draw on several authors because of their insight into the particular areas of concern.

After the main sections, I will make a short summary and account for how I use them in my research.

4.1. Nature, wilderness and soundscape

This section starts with the topic of nature, wilderness and ecology, followed by commentaries on texts and debates from various disciplines. The second part of this section is about ontological approaches to sound, acoustic ecology and soundscape.

4.1.1. Nature, wilderness and ecology

Topic and framework

Philosophers and scientists from a range of disciplines, theoretical approaches and empirical studies share the critique of the idea that humans control nature.

The philosophical foundation is that humans are part of nature, and that nature is both the source of life and of death, as the "deep" and "dark" ecologies, emphasis, respectively. I will draw on Spinoza's unitary approach to nature (Nadler, 2012), Whitehead's process theory (Stengers, 2011; Whitehead, 1964; Whitehead et al., 1979), the ecological philosophies of Næss (Næss, 1993/2012) and Morton (Morton, 2007), and also on Ingold's works about perception of environment (Ingold, 2000, 2011).

Several writers discourage the use of the concept of nature because they think it is too "purified" and transcendent (Latour, 2004b), too abstract (Ingold, 2000) and connected to the romantic tradition and consumerism (Morton, 2007). Even though nature and wilderness are contested notions, I will use the concepts here, because this research is about specifically

Norwegian wilderness, and nature is more frequently used and has a concrete meaning in Norwegian culture¹. There is a concrete and shared experience that nature presses itself upon us physically through the seasons and weather, in such a way that our society and personal lives will be at risk if we don't adapt. Nature sets conditions for human society, and therefore, to avoid the concept in this project does not make sense in terms of the practices I pursue and their reception as artworks and field recordings.

The concept of ecology is an integrated part of the concept of nature², but ecology directs attention to the interconnections and interdependency of processes and forces, of geology and atmosphere and of plants and animals, including humans.

The point here is that nature and our environment is physically real, present and has impact upon us; and that "everything is connected to everything". And since human sensibility and attention is limited, there is always more out there than we can sense and more to discover.

Literature commentaries

This section comments on texts from metaphysics, natural science and social science. Metaphysics articulates the core orientation and assumptions of the project, which are naturalistic, holistic and ecological. Natural sciences tend to have nature as their primary field of study, and the works presented here resonates with theses metaphysical approaches, they share concerns about human relationship to nature, and they resonate with some of the sonic art debates that I will engage in.

Metaphysics and ecological philosophy

Metaphysics is concerned with the basic principles and grounds on nature. Its method is philosophical speculation, and the aims are to construct holistic worldviews with consistent conceptual framework.

Here, I will shortly present the metaphysics of nature of Spinoza and Whitehead; the similarities and distinctions between them and what is relevant for this project.

Spinoza (1632-1677) in his main work Ethics (Spinoza, Spinoza, & Curley, 1996) dissolves the dichotomies of God-Nature, human and non-human and mind-body. Monism is at the core of his

¹ Examples are (Dahle et al., 2010), (Næss, 1976), (Næss, 1993/2012), (Tellnes, 2003), (Vetlesen, 2010), (Witoszek, 1998).

² Even though Morton recommends ecology without nature.

philosophy where he merges the concepts God and Nature. Nature or God is universal, unified and indivisible, it includes everything and there is nothing outside of it.

There is no distinction between metaphysical and empirical in his way of thinking. Nature is essence and substance, both abstract and concrete, multi-layered and with multiple modes or appearances. He uses the concept of psychophysical parallelism, which means that for every physical state there is also a mental state. This includes not only mind-body, but also whole nature and the planet.

The process philosophy of Alfred North Whitehead (1861-1947) contradicts the idea that substance is the essence of nature. In the work "Process and Reality" (Whitehead et al., 1979) he presents his process philosophy³ which gives ontological priority to change and movement over substance or essence. According to this philosophy, to study substance is to consider the processes that produced it, and what process of change it will (or may) undergo. In other words, what we need to explain is how and why things are stable, rather than how and why they change.

Whitehead's nature is an infinite process of becoming. Nature or reality is a series of singular events and simultaneous flows of forces and energy that is continually changing although not always so fast that we may be aware of them. It is never complete, but continually surpassing itself. This process philosophy is a core idea of this project.

He opposes the distinction between mind and body. And he criticises distinction between primary and secondary qualities; that is between those aspects of nature that can be quantified like weight and speed versus those that cannot, like colour, smell and taste, which was invented by Galileo and Locke (Latour, 2008, p. 12-13).

It is not so, he argues, that what can be quantified is in nature and what cannot is in the mind. From here Whitehead develops his concept of nature as "what we are aware of in perception" (Stengers, 2011, p. 38). That we can experience nature is another core idea of this project, and I will discuss his concepts of awareness, perception and attention in his theory of nature in the section 5.2.1 on experience.

Another of Whitehead's central points is that nature is always capable of retort. Nature is risky and you can only ignore nature at your peril; those that do not pay attention will not survive. There are

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³ For a short to-the-point presentation, see the video "Process philosophy explained" on http://www.youtube.com/watch?v=-Q6cDp0C-I8) (Cobb, 2010).

forces out there that we sometimes have to obey; there are things that you can only ignore at the pain of death.

And, yet this thing that we cannot ignore requires reminding of. We live in sheltered areas so that our attention can be elsewhere. The two natural science approaches in the following section also deal with these issues.

Comparing these philosophers, we find that none of them believes in teleology in the sense that nature has any intention or final cause. They merge metaphysics and the empirical, which means that nature is concrete and possible to sense.

They reject the bifurcation of nature. They insist on unity and the all-inclusiveness of nature and human's position within in it. Also, their refusal to make the cut between mind and matter resonates with several works that I will discuss later in this section.

Ecological philosophy

Næss' Ecology, Society and Lifestyle (Næss, 1976) and his "The deep ecological movement: some philosophical aspects" (Næss, 1993/2012) is ecological philosophy inspired by Spinoza's emphasis on the unity of human and non-humans, God and Nature.

These works are about the relationship between humans and other species on earth and the impact of human society on environment and he criticizes the "shallow ecology", that is the ideology that the ecological crisis can be solved through technological development and economic growth.

Næss calls for an "egalitarian policy of the biosphere". Life on earth has intrinsic value; independent on the value for humans, and humans has no right to exploit other forms of life. He calls for change of values and lifestyle that appreciate the quality of life rather than adhering to increasingly economic growth, and for the "awareness of the profound difference between bigness and greatness" (Næss, 1993/2012, p. 86).

Næss developed the body of thoughts in these works during the 70's and now we may consider them too "soft". That humans are not in control, that nature are more than humanity, and has the capacity to strike back are experiences that I will explore in this practice led research.

In *Ecology without nature*. *Rethinking Environmental Aesthetics* (Morton, 2007), Morton suggests a "dark ecology" rather than "deep ecology".

He rejects the notion of nature as purified, harmonic, beautiful and benign. He rejects both the concepts of anthropocentrism and biocentrism because "everything is connected to everything" and there is no such thing as a centre. And he criticises the idea of environment, which tends to refer to a general ambiance and which is an aesthetic approach.

Rather than a deep ecologist searching for our unity with all things, Morton calls for our realisation that we are distinct, mortal and vulnerable beings, dependent on other humans, species, materials and climate.

He argues that we are surrounded by particular people, species, materials, air and water which all have their own independent existence, independent on the perceiver, and calls us to accept what is different from us, what we don't like, whether it is humans, species or our waste, in short, accept our own and other's subjectivity and distinctiveness.

He proposes the concept of a dark ecology that is deeper that "deep ecology". "Dark ecology" is the realisation that what we do always has consequences; that our human species is about to destroy the conditions of which we are dependent, and to realize this is the source of sorrow and the sense of uncanny.

In my research, I will draw both on "deep" and "dark" ecologies where nature is both source of life and pleasure and it is the source of pain and death.

Even though I will not reject the concept of nature, I will use the concept without any transcendental or romantic notions, that is those concrete, physical forces and processes that humans do not control, like for example winds in the mountains. And the concept of "Wilderness" has a quite precise meaning of geographical distance from society's infrastructure of roads and shops, together with the occasional quite strong climatic forces.

Natural science

Here I will present the concept of nature that is embedded in the theories of Gaia (J. E. Lovelock, 2005) and the Anthropocene (Crutzen, Steffen, Williams, & Zalaciewicz, 2010). Both of them postulate that humans are about to take over the world, but we are not in control.

The Gaia theory postulates that the Earth is an organic whole, in the sense that physical, chemical and biological processes have mutual impact on each other. In the geo-historical time of the human species, these processes have been balanced in a way that sustain an atmosphere suited for humans, but are now changing in a way that threatens life on earth as we know it (J. Lovelock, 2009).

Paul J. Crutzen labels our present geological epoch as that of the "Anthropocene", which is the period where the human species have taken over the planet and are dominating other species. Human beings are now the most influential natural force, "nature" is fenced in and "wildlife" is like our domestic animals.

A reason to worry is that we are changing the atmospheric composition of the planet and thereby undermining our own existence. "The Anthropocene represents a new phase in the history of the Earth, when natural forces and human forces became intertwined, so that the fate of one determines the fate of the other." (op. cit. p. 2231).

The theory has a tension between dominance and control. It says that humans today are dominating everything and influencing everything, but by doing that we are about to destroy the conditions for our lives.

There is an illusion of dominance. Humans cannot be dominating earth because our existence and our experience only happen as *part of* nature. Nature is always capable of a retort; therefore, it is beyond control.

Both these works consider planet Earth as a single entity or "spaceship" in orbit around the sun, influenced only by the sun and the moon. Nature has "laws" or regularities, but these are only partly predictable because of their infinite complexities. And they are not controllable.

These theories inspire this project in several ways. Geological history both conditions and affords human production and performance, however, human activity and settlement is within a limited (geo-) historical time and space, and within a limited range of natural conditions. This means not too windy, not too cold or too warm, or too wet or too dry.

Also, they emphasise how nature and culture⁴ are intertwined, which resonate with the social science approaches of the next section. However, the perspective of the anthropocene is from inside human society and out. This project is like an inversion since its perspective is to go to its margin and explore how nature lets itself felt outside the territory of human settlement.

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⁴ I choose to use the concept of culture as reference to humans and human society. Culture includes aspects of society, but they are not identical, among other things, because society may also include assemblages of non-humans.

Social science

The social sciences tend to be highly critical to the concept of nature. Their concerns are the intersection between nature and culture and not nature as such; and the ways they approach this intersection reflect their discipline and theoretical agendas.

I structure the social science approaches and authors that I present here according to critique of nature as abstraction; nature as social construction and discourse; nature as environment; nature as geographical space and biology, and nature as networks and entanglements.

Nature as abstraction

There is a strong social science critique of the concept of nature as abstract, transcendent and pure and this critique calls for an immanently, empirical, situated and hybrid concept of nature.

Latour is a strong opponent to the concept of nature, and his "We have never been modern" (Latour & Porter, 1993) is dedicated to this critique. What he calls "The Modern Constitution" is the framework of thought that according to him has guided the development of science in the 19th and 20th centuries.

This "Constitution" guarantees that "Nature" is transcendent and surpasses us indefinitely. This is the idea that, "It is not men who make Nature; Nature has always existed and has always already been there; we are only discovering its secrets" (op. cit. p.30). At this point Latour expresses a head-on critique of Spinoza's Nature-God, while he resonates with him in his call for a concept of nature that is immanent, that is concrete, physical and present.

According to Latour, another core and false assumption is that it is possible to make an analytical distinction between the concepts of Nature and Society. In reality there is no clear-cut distinction between them, he argues; everybody knows this, therefore, we have never been modern, but scientific discourse still evolve around these purified concepts.

His concept of *hybrid* refers to what is in the intersection between nature and society: any tools of science are hybrids between nature and society, so are any scientific knowledge about nature.

Latour's project is to criticise the way that the nature sciences produce knowledge; they should admit that the "Laws of Nature" that they discover in their laboratories are just the outcome of the setting. He argues that they use the abstract concept of Nature as a tool of power. For him, and for most of social science authors, nature is immanent and hybrid, and in his *Politics of Nature* (Latour, 2004b), he suggests to get rid of the concept once and for all.

This leads to a central point in this project. Yes, the position here is that nature is immanent, empirical and situated, but it is not always a hybrid. Analysis based on the postulation that nature is a hybrid exclude the possibility that there are natural forces that exist independent of humans. This is what this research is about.

Nature as social construction and as enactment

Another social science approach is to analyse how the discourse on nature varies according to historical context, social position and interests.

"Contested Natures" (Macnaughten & Urry, 1998) is about the various ways that nature is socially constructed and represented. Its topic is how writings and practices vary with culture and class in Britain, particularly since 18th century.

During this period, social and economic development changed the British landscape, and the authors make a social and political motivated analysis of how various groups of institutions, walkers, writers and artists represent the landscape.

This approach puts society and its settlements at the centre stage and contrasting itself to "nature" as only the barren land at the margins. This kind of nature is arena for explorations during the last centuries, and both literature and visual media is representing it as if thoroughly controlled.

Nature as space and biology

Geography looks at nature-culture relations in the landscape and across and within bodies. There is no nature-culture distinction because society penetrates both landscapes and biological matter.

Whatmore's *Hybrid Geographies*. *Natures*, *Cultures*, *Spaces* (Whatmore, 1999) combines approaches from Geography, Science and Technology Studies (STS) and Non-representational theory. She is inspired by several of the authors like Whitehead, Bergson Merleau-Ponty, Latour, Ingold and Thrift.

She studies the intersection between nature and society as space and as biology or bodies, and applies theories of corporality and embodied practices. She considers knowledge practices of everyday life. She relates to affect, sensations and in habits that are engaged in "thinking through the body" which includes "the knowhow, tacit skills and bodily apprehension through which everyday life goes on" (op. cit. p. 5-6).

Whatmore criticizes the notion of nature and wilderness as a space outside of society. Social life and nature are heterogeneous entanglements and humans are part of a "more-than-human" world. Humans and non-humans are entangled into each other's lives to such an extent that we cannot say where one ends and the other begins.

She writes about wilderness management, treatment and experience of (being) wild animals; and about genetic resources and GM foods and relational ethics. She inquires into "things in the making", that is the process of how things happens. Her method is to "flesh out" the topological conception of wildlife by making textured narratives or virtual journeys about for example, the way wild creatures are caught up within networks and the technological reach of society.

So, how does this connect to this project? Whatmore writes as if from within the period of the anthropocene where humans have taken over the world (Crutzen et al., 2010). Her aim is to show how nature is incorporated into to fabric of social life and thereby her project is not concerned about the nature beyond.

That nature is missed out the very moment it is caught into a conceptual framework is a position in the following section on experience. Whatmore is also aware of this, and particularly the approaches that point towards body, affect and awareness are central for this project.

Thrift is another geographer and in his book *Non-representational theory* (Thrift, 2008), he takes nature into account in several ways. He states that "Nature is astonishingly prolific, able to produce infinite variation and exquisite adaptation, and abundantly and unremittingly cruel. Nature does not take sides" (op. cit. p.25). This position resonates with Whitehead's postulation of nature as the infinite and potentially threatening, and with the idea of this project that there is nature beyond culture.

Thrift supports the argument that humans are part of nature by referring to our drives and impulses that is outside our comprehension; this is an argument that has similarities with Freud's concept of the subconscious and it leads to the concept of affect.

Thrift's discussion of nature is mainly about how we experience it. I will discuss more about non-representational theory in the section on experience.

Nature as sensory relational environment

Social scientists tend to prefer the concept of environment before nature. This is because they consider "nature" as too abstract and contested, and because "environment" includes both culture and nature.

Ingold in his *Perception of the Environment* (Ingold, 2000) and *Being Alive* (Ingold, 2011) criticises the concept of nature for being too crude. People who live in nature, like hunters and gatherers, have no similar concept because they are embedded in it and thereby need more nuanced concepts. He argues that only those who have no relationship to it refer to "nature"; it indicates distance to the reality that we perceive, as if we are outside of our environment. And, according to Ingold, it indicates a "global perspective", which is someone's attempt to speak for all of us, while hiding their position and their agenda. There is no such thing as a global perspective because we cannot view the world from outside of it⁵ (Ingold, 2011, p.96).

Ingold emphasises that all relationships and perceptions are situated, and that the environment is the relational field in which we inhabit, move and perceive. We should not conceive of environments as passive, "taken-for-granted" background of which we do not need to pay attention in everyday life. They are "alive" in the sense that they are constituted by dynamic entities with particular trajectories or lines, as described in *Lines: a brief history* (Ingold & Dawson, 2007). Environments are material and they are happening to us and with us. In this sense, the concept of "environmentalisation" is the process of problematizing how people are part of the happening of our environment (Marres, 2012. p. 22).

Here I will use "nature" as what is non-manufactured material and atmospheric. I will use environments when I aim to include the human practice and relations. This means that not all nature is environment, for example the society of octopuses in deeper sea-beds, and not all environments are nature, like for example indoor office environments (even though they depend on air and water).

Nature as networks and entanglements

Michael Callon, John Law and Latour developed the conceptual framework for the Actor-Network Theory (ANT). Here I will refer to Latour, who developed his approach to ANT in his Science in Action (Latour, 1987), elaborated it further in "We Have Never Been Modern" (Latour & Porter, 1993) and in "Reassembling the Social" (Latour, 2007).

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⁵ However, astronauts may have something interesting to tell.

According to ANT it is the networks of connections, that is, the on-going performances of relationships that constitutes society. To analyse society means to make empirical accounts of the networks of relations.

From this follows that there is no clear distinction between macro and micro level of society, in the sense that general "macro" processes will be possible to identify as having impact on "micro" levels, and that it is all the network activity on "micro" level constitute "macro".

This has also impact on how we understand time and space. Considering space as constituted by the on-going performance of social networks, these networks are not only local, they have external connections, and this means that it is difficult to make a distinction between where a space ends and another begins.

Also, ANT brings non-humans into the analysis of social networks. Humans and non-humans interact all the time and non-humans have impact on relationships between humans. Latour introduces the concept of "actant" that in principle gives non-humans equal status as humans in a network. Agency is distributed and not necessarily intentional, which means that what happens depends of several "actants" and is not necessarily intended, nor can be controlled.

My interest here is how I can use ANT to study nature beyond culture. It has similarities with ecological thinking in the way it brings to the foreground the dynamic connections and relationship between species and materials. Will it make sense to use ANT on networks where no humans participate?

In this practice led research, I will analyse a site where the non-humans are the main forces and processes to such an extent that humans are not in control. We are not even needed. It is the dynamic interactions of winds, water, stones and plants that produce this site; their "networking" goes on without humans, while we can participate by exposure and immersion. However, the challenge is that the complexity is infinite, since where does the wind, or the water, begin and end?

4.1.2. Sound, soundscape and acoustic ecology

Topic and framework

Sounds are inseparable part of nature, and regarding the ontology sounds, I will draw on Truax (Truax, 2001) and LaBelle (LaBelle, 2008). In short, a sound is a vibration that moves from a

source, happening or event, and it is moulded by the space it travels through and also adds other sounds on its way.

The concepts of Soundscape and Acoustic ecology derive in particular from Schafer (Schafer, 1977/1994), and emphasis the interconnection between all that happens around us, and how we perceive it. Practicing acoustic ecology is about tracing, listening and trying to make sense of what happens in our environment. Soundscape is a condition of an environment, as we hear it, while soundscape composition is the attempt to reproduce and express this experience.

Literature commentaries

I will comment on text about ontology of sound, the concepts of acoustic ecology and soundscape.

Ontology of sound

Sounds are physical and mechanical vibrations in media, like air, water or other materials. These vibrations are physical energy that affects human and non-human materials, like the body.

Truax, in his conference lecture "Composing music with the Environment" (Truax, 2010) decribes the character of sound through space or volume. There is space or volume *within* the sound (ex. structural richness and temporal richness).

And there is volume in the space that produce reverbations, so the sound we hear includes the volume of the space it travels through. All frequencies travel equally fast, but reverbs from walls and objects in space arrive later. This "reverberant tail" tells us about the shape, size and quality of the space is such a way that we sound has its space included.

In other words, sound is shaped by the space through which it moves, but the volume of sound and the volume of space make so that we cannot easily separate between the cause or source of the space and the space of sound.

I will take as point of departure that the vibrations of sound are modes of (mountain) nature that exist with or without human awareness. The physicality of sound is relevant in my research in the sense that it is external to humans. By enhanced listening, more become available for us, which is the topic of section 5.2.2.

Acoustic ecology and soundscape

The concept of soundscape refers to our auditory relationship to the environment and derives from Schafer's *The Soundscape: Our Sonic Environment and the Tuning of the World* (Schafer, 1977/1994). The field of acoustic ecology is the study and representation of sounds of natural environment, and Schafer's concept of soundscape is any acoustic field of study. Such studies mainly deal with the connections between sound and place, listening and social meaning, and the connection between representation, sensibility and creativity of soundscape composition.

Schafer's sensibility is influenced by ecological ethics, in the sense that he values natural and harmonius sounds above the cacophony of mechanical sounds of urban life. These ideals are not necessarily shared by later users of the concept.

In the *The World's Soundscape Project's Handbook of acoustic ecology* (World Soundscape & Truax, 1978), what is central about the concept of soundscape is how it is perceived and understood, and as such depends on the relationship between individuals and the environment.

The concept of is also used in natural sciences beyond the antropocentric perspective. The article "Soundscape Ecology: The Science of Sound in the Landscape (Pijanowski et al., 2011) use sounds of landscapes and animals consider sounds as integral part of the ecology of an area, through which one can analyse environmental characteristics, relationship between species and the impact of human produced sounds. The article is yet another example of how to explore our external reality through sound, and that soundscapes are more than a matter of human aestethetics.

Sound perspectives and inside / outside.

In her article "Speaking from inside the soundscape" (Westerkampf, 2001), Westerkamp argues that we are always in interaction with the soundscape from the inside, in sense of space; it is not an object that we can study from the outside. Here, she resonates with the argument that positions are always embodied and situated (Stengers, 2011), (Thrift 2008); that we are within an environment (Ingold 2000). According to them all, the soundscape is an integral part of the social setting where our experience is influenced by other factors as well.

Kelman in his *Rethinking the Soundscape* (Kelman, 2010) show how the term is used in various ways; some authors focus on locally produced or mediated music; others on how various

communities attach meaning to sounds. For example, Truax also include soundscapes of "artificial environments", like musical compositions and other mediated sounds.

4.1.3. Summary and relevance

All of the authors presented above reject the idea of bifurcation of nature.

Spinoza's concept of nature is where everything is connected and nothing is outside. Whitehead's concept of nature is based on process theory where everything is the continually and infinite forging and dissolution of relationships. They reject the bifurcation of nature into body – mind, nature – culture and primary and secondary qualities.

The natural scientists Lovelock and Crutzon argue that the whole planet is a biosphere of which we are dependent, and that we influence it without being in control of the consequences.

Social science authors presented here also criticise the bifurcation of nature, however in different ways. They refuse any principled distinction between humans, non-humans and things, and calls for social research to include "more-than-human". They seek to dissolve the distinctions between inside/ outside and otherness, and argue that description and analysis is always situated, and should start from an immersed position. From this follows arguments about social constructions and politics of representation, which leads attention to what the concept of nature means for various social groups.

In order to go beyond studies of linguistic representations of nature, several of these authors argue that we should study nature or rather the environment as a relational field. The environment is produced, and therefore should be studied, as a process of lines or trajectories, which merges issues of ontology and epistemology.

Following the rejection of bifurcation of nature, sound is integral, real and physical and should therefore not be analysed as something separate. And the concept of soundscape and acoustic ecology should necessarily be considered as anthropocentric, in the sense that sounds and vibrations from landscapes, atmospheres and species exist without the existence of humans.

In the following, I will use the concept of soundscape both as an integral part of nature, and, as something that I enter into depending on where I locate myself. It is there without me, but through my movements, I also contribute and participate in the soundscape.

Nature is something I am inside, while wilderness, regarding the state of our planet today, is more about a particular geographical / atmospheric condition where I feel forces of nature more directly,

and that I can enter in order to explore and to be exposed. This also counts for the soundscape.

4.2. Experience, embodiment and listening

What I mean by nature beyond culture requires an interrogation into the concept of experience, which is central both to the concept of nature and to technology as exploratory tool. If it is so that "nature is what we are aware of in perception", as Whitehead claims, then tools that enhance perception should also enable experience of nature.

I am interested in how can experience be not an exit from nature where experience moves us away from nature, but how can we engage with experience as an exit into nature. So, the topic of this section is how various disciplines and authors approach this issue.

Then follows a short interrogation into approaches to listening in sound studies.

4.2.1. On consciousness, embodiment and practice

Topic and framework

Some basic concerns and works on experience that are relevant for this project are Bergson's intuition vs. intellect (Lawlor & Moulard, 2012), Massumi's emphasis on affect (Massumi, 2002) and Merleau-Ponty's phenomenology (Merleau-Ponty, 1966). They emphasises that we experience more than we are conscious of and thereby tune down the role of cognition.

In contrast, Morton (Morton, 2007) emphasis that consciousness is a particular human characteristics, for the better or the worse; it is central for how the human subject understand his/her surroundings, but consciousness also maintains a sense of distance. Therefore, he criticises the idea of a kind of pre-conscious immersion with nature, both as possibility and as value.

This practice led research emphasises the importance of practice, embodiment and tasks for how we experience nature. Here I draw on Thrift (Thrift, 2008) and Ingold (Ingold & Dawson, 2007), (Ingold & Vergunst, 2008), among others.

These approaches create a tension. On one hand, as biological creatures we are inseparable parts of nature, and on the other, our subjectivity maintains a sense of distance to our surroundings. I will seek to express and explore this tension in the practical artworks.

Literature commentaries

Intuition, intellect and language

This section will discuss the distinctions between intellect, sensations, affect and awareness and the limitations of language. I will shortly present how positions of Spinoza, Bergson, Whitehead and Massumi inform this project. And I will end this section with Morton and his defence for consciousness and language in artworks about nature.

Spinoza (1632-1677) in his *Ethics* makes a distinction between three kinds of ideas or knowledge (Spinoza et al., 1996), (Naess, 1975), (Nadler, 2012). The first is what he considers as random experience of sensory images and perceptions that give partial and confused knowledge. The second kind of knowledge is Reason that includes the ability to situate objects in all of their causal connections, and shows how and *why* they are.

The third kind of knowledge is intuition that takes all what is known by Reason and grasps it in a single act of the mind. Reason sees things under the aspect of eternity (*sub specie aeternitatis*) that is, abstracted from time and place, and apprehend them in their causal relationship to the "eternal laws of nature". He thinks that intellectual love of Nature (and God) is our understanding of the universe, and it is our happiness and our wellbeing.

Spinoza's theory of affect starts by situating humans in the midst of the universal laws of Nature. Similar to other beings, humans strive to exist or persevere our essence of being, as far as we can by our own power. An affect is this change in our power of existence, for better or for worse. When we are affected in a way that supports and strengthens our being, we feel joy, and when we are affected in a way that weakens us, we feel sad or afraid.

Bergson (1859-1941) in his *The Creative Mind. An introduction to metaphysics* (Bergson & Andison, 2002) makes a distinction between intuition and intellectual thinking as types of knowledge that give access to different sides of reality.

Intuition is unconscious or pre-cognitive knowledge that connects us to our environment. Bergson's intuition differs from Spinoza's in the sense that it experiences reality as duration, in the continuous flow of reality, as an unbroken and smooth stretch of time – it is the sense of what is about to happen, as described in his *Time and free will* (Bergson, 2001).

Intuition consists of entering into the thing, rather than go around it from the outside. This "entering into" gives absolute knowledge. It does not represent its knowledge; it acts it. Intuition is always an intuition of the reality "out there" (Lawlor & Moulard, 2012).

Intelligence is conscious, conceptual and analytical knowledge that relates to form. Such knowledge treats everything mechanically and consists in dividing or reconstructing things by means of synthesising perspectives, disconnected from what was perceived in the first place.

Whitehead's (1861-1947) main works are *The concept of nature* (Whitehead, 1964) and *Process and reality* (Whitehead et al., 1979). His concept of nature is what we know instinctively or is aware of in perception. Nature is infinite, and the more attentive and aware we are, the more of nature we will have access to and more can be learned (Stengers, 2011, p. 69).

Experience is "foothold" to reality; there are things "out there" that captures our attention; we cannot be aware of something that does not exist. What we experience belongs to what we are aware of (Stengers, 2011, p. 64).

However, our awareness will always come from different positions; it is biased, partial and will never encompass it all. We all have a particular position in time and space that gives us different focus for the act of awareness - we may call it "locus standi", standpoint, situated, perspective, or "point of view" (POV).

The variation of standpoints is not what you and I decide inside our minds: it depends on what happens to us, but the way we interpret it is not given (op. cit. p. 65).

Whitehead opposes the bifurcation between nature in our awareness and the nature that is the cause of awareness (op.cit. p. 38). Therefore, we cannot distinguish "what" we know from "how" we know it; what we know merges with the method and position of knowing. There is always such-and-such a way of knowing.

Reality is what happens; a "happening" is an occasion of experience, and an event is what happens during a particular period in time. There are some events which exact the death penalty for inattention (Whitehead, 1964, p. 187-188), and humans will not survive unless we are attuned and attentive to our conditions for survival (Stengers, 2011, p. 62).

Whitehead states that "The sense organs testify to the importance of paying due attention to nature, *on pain of death*". Sensual experiences are sources of knowledge of nature that are critical for our existence. And all our senses are sources of knowledge. The body is not what explains but what testifies (op. cit. p.69), and therefore, concrete embodied experience is the touchstone that puts reality to the test (op. cit. p.48). For example, if I hit a stone with my toes, the pain is the proof that there is reality outside of my body.

To some extent, Whitehead's positions inform this research. His philosophy is never to go beyond usual experience but rather to transform it, to make what usually "goes without saying" matter (op.cit. p.46). For him, experience is a way to find an exit *into* nature. This is contradictory to Kant's metaphysics where experience is subjective and do not give us access to reality, and it contrasts Spinoza's position that sensory perception as confused knowledge.

Massumi (1956-) in his *Parables for the Virtual* (Massumi, 2002) discusses the connection between nature or reality, affect, sensations, body and language.

Affect is the full impact of reality upon us, that we somehow respond to, or store in our bodies. It is the connection between us, the past and, the becoming of reality. "The excess" is that which affects us that do not reach consciousness.

The body is the route to affect; it feels through movement, and it "thinks" and makes decisions before it has reached the conscious mind. The body doesn't just absorb particular sensory stimulations; it infolds contexts, it infolds situated volitions and cognitions (op.cit. p.30). And it is affected in such a way that makes it a kind of "recording device", or a carrier or storage of experience.

Bergson, Whitehead and Massumi argue that abstraction and simplification is restricted knowledge and from this follows their critique of language as a way to access reality or nature.

Language divides the continuity of duration into sections and intervals. When the conscious mind has translated the affect into words, then the singular experience is simplified and reduced. Through language, affect is categorised as personal emotions, captured into systems of discourse and thereby made socially available and sharable. The excess has disappeared on the way, it is "lost in translation" while at the same time it is stored as memory in the individual body.

The question then is to what kinds of knowing can connect with those parts of empirical reality that language leave out. This is a central challenge in this quest for nature and I will discuss this through the project.

In his Ecology without nature (Morton, 2007) Morton emphasises the importance of human consciousness in how we relate to our surroundings. He criticizes the aim of immersion in order to go into a higher spiritual unity with the supposedly harmonic nature.

He refers to Descartes and puts emphasis on individual consciousness and subjectivity, and he claims that these are what keep us aware of our distinctiveness in relation to what surrounds us. Maintaining our subjectivity is the only way that we can relate to our vulnerability and the

consequences of what we do for others and ourselves. It cannot and should not be dissolved because it is this uncanny sense of distance or gap between our surroundings and us that makes us humans in this world and aware of our life conditions and vulnerability. This sense of distance is also the precondition for openness and search. We should strive to bridge this gap, but we will never succeed. Subjectivity and consciousness closely relate to language, and this has impact for how he considers the role of language in art.

Phenomenology

Phenomenology is a strong tradition in experience of environment. *Maurice Merleau-Ponty* (1908-1961) developed phenomenology from Edmund Husserl (1859-1938) and his main work is *Phenomenology of Perception* (1946/66) (Merleau-Ponty, 1966). Perception is the primary form of contact between consciousness and the world; it is embodied and pre-conscious. And perception is active and constitutive: we experience through our involvement in the world (Tranøy, 2011).

Merleau-Ponty criticizes the idea that the external reality is objectively given; any perception of the world is only partial. He refuses to make a distinction between the perceiving body and the world that it perceives. He argues that the world and the body are intertwined and mutually engaged, and thereby he dissolves the distinction between object and subject.

"(S)ince the living body is (...) stitched into the fabric of the world, our perception of the world is no more, and no less, than the world's perception of itself – in and through us." (Quoted from Ingold, 2011, p. 12).

Ingold is influenced by Merleau-Ponty, and I discuss his works elsewhere. Here follows a short presentation of some interdisciplinary works that are inspired by the phenomenology.

Abram's *The spell of the sensuous* (Abram, 1996) and *Becoming an Animal* (Abram, 2010) take Husserl's and Merleau-Ponty's phenomenology as point of departure and makes the quest to experience of nature into experiments and enactments in a way that makes nature become "alive".

These books take a strong position against language; however, in order to write books, we need to translate our embodied engagement and sensory experience into written language, and interpret them as stories. The books are about enactment of these ideas and relationships and reveal the surplus of experience that sensory engagement can afford. However, there is not a much reflection on the limitations, partiality or structural preconditions for such experiences.

Bachelard's *The poetics of space* (Bachelard & Jolas, 1994) is about phenomenology or lived experience of architecture in everyday lives. He introduces the concept of "topo-analysis" which is

about the study of the sites of our intimate lives. The argument is that the way we experience spaces in houses resonates with our intimate inner, mental landscapes. The author criticizes analytical language and expresses these experiences partly through philosophical reflection, and partly through expressions of poets and poetry.

These authors focuses on modes of sensory experience and relationships to our more-than-human environment that tend to be under-communicated both in our everyday lives, and in this sense, they inspire this practice based.

Biophilia hypothesis

The Biophilia hypothesis is an approach to human relationship to nature that derives from evolutionary theory of the natural sciences. The *Biophilia hypothesis* (Kellert and Wilson 1993) argues that humans are animals that developed in green forests and fields. The hypothesis is that this is the reason why being in such environment tend to relieve tension and fills us up with energy, and explains the quest for attuning into the larger and living environment of which we are a part.

Hessen in his book "*Natur – hva skal vi med den*?" (Nature – what shall we use that for?) (Hessen, 2008) refers to the Biophilia hypothesis when he argues that there is biological component, not only cultural, in why people tend to be drawn to nature. He describes his own sensory and existential satisfaction with being in forests and mountain in various weather conditions.

Demographic growth and consumption lifestyle leads to extinction of other species and ecosystems, of which we have shared destiny. This threatens the life of future generations of humans. Now the larger share of the world's population lives in cities, and people have little direct sensory experience with uncultivated green fields and forests. Nature has become an abstract; it does not exist or is inaccessible for them and there is lack of consciousness about how we depend on it.

Another work on this vein is *The last child in the wood* (Louv, 2010). Nature has always been a source for sensory nourishment, Louv argues. The book introduces the concept of "nature deficit disorder" and is about the mental and physical cost for new generations of not having direct sensory experience with nature.

These works informs this inquire into experience of nature. I want to experiment with how I can present experience of nature for city-dwellers to make in a less abstract manner. I want to focus on the connection between people's bodies and physical actions in the way they interact with the environment. However, I will also keep in mind that nature is not always benign, which is another side of nature experience.

Post-representational theories

In the following section, I will present social science approaches to experience of environment, followed by experience as embodied practice and performance, and approaches to sensitization and awareness

Concept of environment

Thrift's in his book *Non-Representational theory* (Thrift, 2008) are in tune with the authors above in their emphasis on space, embodiment, affect and practice as the sources of experience of an environment.

His connects his approach to human experience and perception to the concepts of environment and space, among others. An environment is the circumstances within which we live; we are part of it, make and influence it; and we are made and influenced by it. Environments have always multiple scales; they are not just local "here and now", rather, they are extended in time and space.

Environments are extended in time in the sense that they are produced by practices of the past and expectations for the future (cmp. Bergson's *longue durée*). And they are extended in space in the sense that they may be part of networks and connections from a broader space (cmp. Latour's ANT below). Perception is not a matter of being near or distant since distant networks may penetrate what is near; and local practices may have distant effects. Therefore, he recommends a non-hierarchical approach to space.

Thrift also bases his approach on Bergson's and Whitehead's process theory. Space is always in a process of becoming: it is produced by continually changing configurations of actors, material entities, processes and practices in everyday life. This is also in tune with Lefebvre's "*Production of space*" (Lefebvre, 1991) and Soja's "*Thirdspace*" (Soja, 1996).

Spaces are entangled, and production and perception of spaces are distributed among actors. Therefore, the experience of an individual cannot comprehend space. An enriched and textured account of an environment or space needs to adhere to multiple "voices" and trajectories, whether human or non-human.

Embodiment

Several social science authors supports the idea that perception is embodied and depends on practice.

Experience is perception that develops through embodied practice in an environment (Ingold, 2000), (Ingold & Dawson, 2007), *Ways of walking* (Ingold & Vergunst, 2008), (Ingold, 2011) and Thrift

2008). Movement is sensory experience and makes us continually change our perspectives, in a literal sense. We sense different things because the space we are moving through keep changing, among other things because we experience it from different positions.

We perceive the environment through our whole body. Most of our responds to our environment are unconscious; we make nearly all intentions and decisions before they reach our consciousness, and nearly all actions are reactions to other actions. And perception is multisensory which means that it is a synthesis of all our senses and that no single sense has priority.

Ingold, and Thrift, emphasizes that perception is a function of movement and that wayfaring is the fundamental mode by which we inhabit the earth.

"We perceive (...) from a path of observation, a continuous itinerary of movement. Locomotion, not cognition, must be the starting point for perceptual activity" (Ingold, 2011, 45-46).

Thrift (Thrift, 2008, p. 8) recommends that environments and social life should best be studied through practices, which he defines as "material bodies of work and styles that have gained enough stability over time".

However, he is not interested in the conscious point of view (POV) of the subject, like Ingold. Thrift argues that practices are not the properties of actors as individuals, but of the practices themselves. Individual actions are part of networks of practices, and these practices will fall out of use as the networks change.

For him, conscious attention depends on the intensity of the activity, not on the subject. What we *do* produce thought, particularly those activities that increase the intensity of our relationship to the environment.

Ben Anderson (2010) in his *Taking-place: Non-representational theory and geography*, argues that the this non-individual or subjective approach is inspired by Walter Benjamin's *Arcades Project* (Benjamin & Tiedemann, 1999) which Anderson describes as

"mobile, embodied, geo-historical specific sensuous way of knowing. It is not the individual's, experience, but rather "modes and moments of subjectification as they emerge across an abstracted collective of habits and gestures, speed and slowness (...)" (op. cit.p10).

Therefore, in this project, the interest is in on-going practices of being in nature, where focus is on attention to the spaces, environments, happenings and networks of which I am part, and to which I respond with attention and actions.

Sensitisation and awareness

In this section, I will account for Latour's social theory of sensitivity and for Ingold's critique.

Latour is a founder of the STS tradition and emphasises experience is as social process that develops in the dynamics between articulation, representation and communication. He argues that we experience reality through the networks that we are part of, and to learn to be affected or sensitized is a matter of learning. Without it, the world's abundance of sensory stimuli is not available for us or remains meaningless.

In his article "*How to talk about the body*" (Latour, 2004a) he articulates his approach to sensitization and learning by the example of the training of salesmen in the industrial branch of perfume manufacturing.

A sensitized body gives access to a differentiated sensuous world. The increased sensitization of the body makes us register the world in a new way. Acquiring a sensitized body produces at once a sensory medium *and* a sensitive world. The point for Latour is that sensory categories are standardized. This has similarities to social construction theory.

In contrast to Latour, in his *Being Alive*, Ingold (Ingold, 2011) argues that there may be other circumstances where learning to be sensitized is more like an open discovery of a field rather than sensibility according to conventions.

Ingold adds skill to the dimension of engagement and the quality of attention. Perception depends on attentive engagement with what we do, with our intention and our practice. Engagement is to be attuned and responsive to the task as it enfolds. This engagement has developmental effect on the producer as a conscious being.

In other words, sensory awareness is not a matter of learning and transfer of sensory conventions; rather it depends on practice. And practice is not only "doing", it has another quality in the form of involvement, engagement and attention.

4.2.2. The practice and art of listening

Topic and framework

Because there is always more out there than we can hear, a common theme in sound studies is how conscious attention and practice can enhance listening. Categories of listening are about attention and focus, like "listening in search" and "listening in readiness" (Truax, 2001) which is about "external listening". "Internal listening" or "deep listening" (Oliveros, 2005) is about

"listening to ourselves listening" (Westerkamp in LaBelle, 2008), that is the reflections and chatter in our own minds that external sounds trigger is us.

And listening can be trained, for example by conscious "ear-cleaning" (Schafer) and by "sound-walking" (Drever, 2009b; Westerkamp, 2010).

Even though we are inside the sound in space, there is always a listening perspective. What we hear depends on where we are located when we listen, and where we move (LaBelle, 2008). Also what we do, our task and motivation, decide the relevance of sounds and thereby our focus of attention (Ingold, 2011).

A central point in my research is that what we hear depends on what happens to us; listening is a conscious act, yes, but sometimes we cannot choose *not* to listen. Sounds may be signals of warning of which we cannot ignore; the forces and movements that sounds derive from, have impact upon us in a different way than aesthetic pleasure.

Literature commentaries

Experience, sound-walks and listening

Listening is the concious experience of sound, and before accounting for various practices of listening, Truax's in his *Acoustic communication* (Truax, 2001) focuses on characteristics of sound, sound as communication, practices of listening and the impact of technology.

He argues that what we hear and how we listen are, among other things, influenced by the relationship between the soundswaves.

Sounds may be particular, distinguisable and potentially meaningful (high fidelity or "hi-fi"), or they may be merged in such a way that they are difficult to identify (low fidelity or "lo-fi"). Hi-fi environments tends to encourage listening, while lo-fi do not. This has impact on the practice of listening. And it has impact on our ability to hear the sounds that we produce by our own movements, which influence our sense of space (Truax, 2001, p. 23-24)

In other words, the sound qualities of the site influence the way we listen. When we move from a site to another, we can shift our level of sensitivity and thereby adjust to different sound intensity or noise levels (Truax, 2001, p. 15-16).

That both the sound level and the quality of sound matters is the topic of Sara Mainland's *The book of Silence* (2009). She makes a textured elaboration of how noise impacts everyday life, and reports from an experiment in silent living in Scotland. Silence partly depends on geographical distance and social disentanglements from urban everyday life, which also helps to slow down the chatter of the mind.

Regarding this research, I expect that this mountain site encourage listening; there is no need to block out sounds and there are few sounds typical for urban environment.

Experiences are multisensory

Ingold's "Four objections to the concept of soundscape" (Cha. 11 in Ingold, 2011) takes embodiment and emplacement as point of departure for his list of critiques of the concept of soundscape.

He argues that the world we are part of is not sliced up according to human senses, and what we sense is always a selection of what is out there.

He compares sound to light, not to vision. Similar to light waves, sound is mechanical waves through a medium. As such, the soundscape is a phenomenon of experience, that is, our immersion in the world. Sound is not the object, but the medium of our perception. It is what we hear *in*.

Light and sounds are mediums in which we exists, and therefore they are inseperable, because we experience environment in a multisensory way. The senses influence each other; they are not isolated and therefore add information to each other. People experience the environment through several sensory interfaces where sound is one of them; how we hear sounds cannot be distinguished from the other ways that we sense our environment, like vision and touch.

These objections are hardly controversial. They resonate with Spinoza and Whitehead and their concept of nature, with Westerkamp (2001) and her argument that we hear sounds from our position inside these mediums (mostly air), and with the works of Truax and Drever (more about this below).

In the following, I use the concept of soundscape in a way that resonates with Schafer's original intention of tuning of the environment. I am not concerned with any moral or spiritual aspect of the concept because I search beyond the anthropocentric or human perspective.

Schafer calls for tuning in to the experience of the particular place. This is also the intention of my research and is central for the discussion of soundscape composition. In short, I take as a point of departure that there is more out there than I am able to grasp, which I am curious.

Listening as cognition, attention and skill

Truax's communicational theory of listening is to study sound in relation to meanings or cognitive processes (Truax, 2001, p. 11). Listening is about cognitive processing, intention, attention and skill.

Truax suggests various categories of listening, ranged according to levels of attention.

"Listening-in-readiness" is when we listen to sounds that gives direct relevant information about what happens. Listening is about detection of change; and attention depends on whether variation in sound content brings forth new information (op.cit. p. 18-19). For example, we may listen to the monotonous rain, but after a while we will turn our attention elsewhere.

Another type of listening is "background listening". Not all sounds in an environment are relevant at a particular time. Sounds are stored in our memory and bodies; listening depends on associations being buildt up over time, so that familiar sounds can be identified. We may not be conscious about a particular sound before it is gone (Truax, 2001, p. 22).

"Listening in search" is to listen *for* something. This is to constantly seek for, and consciously try to distinguish a sound among others, and is the ability to focus on one sound to the exclusion of others. This means that listening also is a skill that must be practiced.

"Sublimial perception" is yet another type of listening which is beyond Communicational theory (Truax, 2001, p. 25). These are sounds or rather vibrations, that the body only registres unconsciously. This resonates with Massumi's concept of affect (Massumi, 2002) discussed in the section of experience.

"Reduced listening" is to listen to the sound itself as a kind of music, rather than seeking to identify its source and meaning which listening to soundscape is about.

Pauline Olivero's "Deep Listening" (Oliveros, 2005) adds the internal dimension of listening. Such listening includes the sounds and voices of our mental processes, and she wants us to pay attention to how external sounds trigger and intermingle with our internal voices. Deep listening is a practice and attention intended for experiencing heightened and expanded awareness of the sound/silence continuum.

Listening and the practice of sound-walking

This brings us to the practice of soundwalking, which is the practice of listening directly to the environment, exploring what the naked ear hear, unmediated by recording equipment.

Soundwalking is a practice of "tuning into the world".

Drever's article *Soundwalking: Aural Excursion into the Everyday* (Drever, 2009a) is about the history, theoretical approaches and modes of soundwalking. Soundwalking is any walk outside where the intention is to listen to the environment in "a state of readiness for attentive unprejudiced listening". He describes soundwalking as listening for the sake of sonorous engagement and "orchastration. Listening with the intention of "orchestration" is to consciously choose between what we want to be our foreground and background sounds, and stop listening to what we experience as noise.

In her Lecture "What is a Soundwalk?" (Westerkamp, 2010), sound-walking is a way of being aware of ourselves. She recommend to "Listening to oneself listening", the kind of metalistening where we pay attention our own inner dialogue, reflections and associations of the soundscape, similar to Olivero's Deep Listening.

More important than revealing relationships within the acoustic environment is to be aware of the relationships between experiences and the acoustic, social place, and it reveals to us the special poetics of place. As such, Westerkamp is concerned with spirituality, and how our imagination and memory process alter what we hear.

Other literatures

These works on listening and communication puts humans at centre stage. Julie Cruikshank's *Do Glaciers' listen?* (2005) is about aboriginal people's knowledge of mountains and glaciers in Alaska and their encounters with colonial powers. They considered the glaciers as sentient, animate and able to respond to human behaviour, which is contrary to viewing them as resource for human progress. This bring to the foreground modes of sensory experience and relationships to our more-than-human environment that tend to be under-communicated both in our everyday lives and in research, and in this sense they inspire this research.

No matter, the enhancement of listening, through soundwalking or otherwise, is abaout sensitisation and is a way to enhance awareness of nature.

4.2.3. Summary and relevance

The philosophers presented here consider cognition and reason to have limited access to experience.

Spinoza's concept of intuition is an extension of reason towards more integrated knowledge. Bergson, Whitehead and Massumi consider intuition or awareness to have direct access to nature, even though it is always temporal, situated and partial.

The concept of affect is experience that is not yet conscious. Spinoza's affect indicates of our ability to preserve ourselves in the world. We feel joy when we are strengthened and sad when we are weakened. Massumi follows Bergson, and, for Massumi, affect is the direct connection to nature, and it infolds into our bodies and becomes embodied.

For these philosophers is awareness prior to thought. Direct access to nature is lost when we translate it into language and into socially categorised sensations.

The biophilia hypothesis of natural science claims that humans are animals that are drawn to green fields and forest because this was the environment of our evolution.

Merleau-Ponty in his phenomenology emphasis that we cannot make a distinction between the perceiving body and the world that it perceives; rather they are intertwined and mutually engaged. This has inspired several authors, and those presented here seek to connect to their environment through a heightened state of presence and sensory awareness. However, they tend not to problematize the social and cultural preconditions for such awareness.

The social science authors that I have presented in this section support the positions that experience is situated, which means that it depends on your social position and where you are situated. They also share the position that language sorts and filters sensory experience into predefined social categories that also structure the experience. Their particular interest in the representation of experience puts the source of our experience, for example our natural environments, into the background.

An alternative position promoted by non-representational theory is that experience is outcome of what happens, practices and performance. Sensitisation to an environment depends on intensity of the activity. This is the position that nature or environment lets itself felt as embodied, affective experience.

Regarding this project's aim of enhancing ecological awareness, I draw on both "deep" and "dark" ecology (Næss, 1993/2012), (Morton, 2007). Not only is ecological awareness about complexity and variation of our surroundings; it is also about how we are part of, dependent on and vulnerable to the nature we are in the midst of. Nature and wilderness in particular, is a matter of life and death, not just about aesthetic pleasure and subjective refinement.

Listening depends on qualities of the environment (ex. resonance) and qualities of the sound (ex. high and low fidelity). And listening depends on attention and skill, and sound-walking is a way to practice listening. I am less interested in "deep listening" as such, rather, I may use such listening as a way to explore and tune in to what goes on around me.

In my research, I am attentive to how seasonal change and weather changes the sound qualities of the site, and how my practices influence what I hear and contribute to sound-making.

4.3. Materiality, creativity and soundscape composition

This section has three subsections; about issues and approaches to materials and tools, to creativity and skill and then more directly to sound and artwork.

4.3.1. Materiality, technology and recording technology

Topic and framework

This project depends on tools, and therefore, the concepts, issues and debates regarding materiality and the use of tools that have implications for our understanding of recording technology and the issue of transparency of this research.

Tools are mediators (Latour & Porter, 1993), that is, they influence the practices and the outcomes in which they are used; they are part of networks of things, which means that a tool depends on another tool and a particular infrastructure for it to function the way we want (Thrift, 2008), and the also influence the sensory experience of the user (Vetlesen, 2012).

These issues resonate with the debates in sound studies about recording technologies as transducers, and the issue of transparency, and they touch upon this endeavour to access and communicate wilderness through recording technology.

Literature commentaries

Here follows a short presentation of some central authors and texts.

Mediators, Intermediators and Quasi-objects ... and transducers

Latour analyses the relationship between nature and society by drawing attention to how objects and things interfere with, and conditions, social life.

He distinguishes between things as "intermediators" and "mediators" of social processes. "Intermediators" are things that transport, transfer or transmit energy between Nature and Society without influencing any of them.

A" mediator" or "quasi-objects", however influences both the entities between which it is mediating, and, the content of its mediation (Latour & Porter, 1993, p. 77). The quasi-objects are simultaneously physical matter and social, and they thereby belong both to nature, to the collective and to discourse. Latour has designed the concept in order to highlight that things are concrete, socially connected and effective; and they enable us to trace networks (op.cit. 89.)

In this practice led research, the concepts of mediators and intermediators are relevant in the issue of transparency of recording equipment.

Society of things, Networks and Entanglements

Field recording are at the heart of acoustic ecology, and recording technology are material object at the heart of field recording. Material objects are part of networks, and both our everyday lives and the practice of field recordings are entangled with tools.

In his non-representational theory (Thrift, 2008) Thrift discuss how things are part of a "society of things" in the sense that they are part of larger groups and connections. They are not individual, isolated objects, but classes of things produced and consumed and thrown away; as such they may be part of global networks of production, consumption and waste.

This has impact on how he understands the use of tools. Tools exist within a network of relays. They are connected to other tools, for example a table connects to a chair; a headphone and a microphone connect to a recorder. A chain of tools may be vulnerable, and, since a chain is never stronger than the weakest link, a lack of or breakdown of one single device may interfere with or disable a full line of practice.

And tools are part of local and global material networks; they must be transported, which again depend on infrastructure.

High vs. low technology

Næss' in his *Ecology, Society and Lifestyle* (Næss, 1976) and Vetlesen in *Technology, Nature* and *Ethics* (Vetlesen, 2012) claim that type of tools have impact on our experience and suggest a distinction between low vs. high technology.

Different types of tools influence the degree of attention to nature; some types of tools distracts us by drawing attention to the handling of the tools themselves rather than to our aim of using them and the environment we are part of.

Næss` critique of "high" technology is based on how it makes people and societies entangled into loops of networks, which, according to him, redirects attention, resources and time away from intrinsic values and local concerns; these entanglements make people struggle to keep up the pace of technological change without any particular goal. In line with this, such technology tends to be so demanding on skills and re-education that all focus is kept on the tools and their functioning, to such a degree that the tool-user's goals, that they were supposed to be used for, is lost (Næss, 1976, p. 111-114).

Vetlesen (Vetlesen, 2012) follows Næss´ argument and discuss how various types of tools directs or diverts us from nature. He refers to the example of the wood cutter´s axe and the embodied attention and skills involved in the process of cutting down a tree, compared to that of a man inside the vehicle of a wood cutting machine, where the physical and attentive demands are drawn and limited to virtual screens and buttons.

Næss's and Vetlesen's critique resonates with Marx' concept of alienation from the *Capital* (Marx & Engels) and *Estranged Labour* (Marx, 2004). Among (a lot of) other things, Marx

discusses the preconditions for tools to be human extensions that empower their users, in contrast to how they become barriers that alienate them.

The position here is that whether tools directs or diverts people from nature depends of the setting and we cannot answer this on a general basis. However, I will explore these interesting postulations in this research. Are "high technology" barriers in these conditions, or is it possible to use technological advance equipment like electronic recording as tools of awareness? If so, what are the preconditions?

Recording technology as tools of awareness

Schizophonia, transducers and transparency

Schafer's concept of *schizophonia* refers to the split between the sound and its original source ("their natural socket"). On the site of the soundscape are the original sounds and tied to the mechanism and the characteristics of the space and that produced them. In contrast, electroacoustically reproduced sounds are mobile copies that may be restated at other times and places (Schafer, 1977/1994, p. 272)

How to deal with this split is a central issue in debates on soundscape composition, and the issue of transparency is about the relevance, meaning and technological conditions for this split.

This split connects to Schafer's normative position, which is not shared by LaBelle and others. First this because the sound we hear are not necessarily similar to "the original socket", since the space it travels through, and the sound of other events are added on the way. And second, what is added on the way and during its presentation offers a kind of opportunity for audience to create their own meanings (ref. LaBelle). This is similar to Walter Benjamin's position on mechanical reproduction of artworks (Benjamin et al., 2008) that it undermines any fixed meanings and liberates the audience for independent and creative interpretation. However, this contradict the intensions of soundscape, which I will return to below.

The third issue is about technology, in Latour's terminology (Latour & Porter, 1993), this is about whether recording technology like microphones are mediators or intermediators.

Sterne in his *The Audible Past: Cultural Origins of Sound Reproduction* (Sterne, 2003) argues that the development of sound recording technologies and practices of sound (re-) production

were part of the industrial revolution and thereby capitalism with its market economy and consumerism.

He analyses sound in relation to social practices and meaning and how sound technologies and sound (re-) productions were socially constructed in advertising. He argues that advertising portray sound (re-) productions as "real" in order to challenge people's scepticism and make them attractive as consumers, but in fact, they are social constructions and industrial products.

Basically, Sterne writes about sound reproduction as studio art, the role of sound reproductions and mediations for the relationship between people, and performances for the sake of reproduction.

He emphasises that recording technology are transducers, or mediators in Latour's terms. They don't transfer a sound from a place to another but do something to them on their way.

What we record is not the same thing as we hear. He rejects that there is such a thing as "truth" or presence in reproduced sound, for example, that there is a natural relationship between a "sound and its natural socket" as I will return to in the section on soundscape below.

He criticizes a notion of "authenticity" that exists prior to its reproduction because in the case of studio art and art performances, he argues that the "original" is reproduced for the sake of reproduction, and therefore had not existed without the copy.

However, he accepts a notion of authenticity that refers to the intensity or consistency of the listening experience. This is a claim about effect and affect, and thereby of subjective and psychological "truth".

Most of the approaches of the Audible Past are not particularly relevant for my work. I am not doing studio art, and the sounds that I record exist prior to me recording them and I am not interested in market value or consumer goods.

I short, microphones do something to the sound, and the argument goes that what comes in, for example the soundwaves produced by a brook, is not identical to the soundwaves that we hear through our recorders and loudspeakers.) It is only so through our imagination.

My aim is to use recording technology as tools of discovery; and, to reproduce my own and my technologies' experiences of mountains environment. This means that what is relevant for my project is his point about the "authenticity" as referring to subjective truth. Am I able to communicate this experience to the audience? This is also a matter of skill.

The practice of field recording

In the book "In the field. The Art of Field Recording" (Lane & Carlyle, 2013), the authors conduct interviews with eighteen sound artists about their motivation, practice, artworks and experiences with field recordings and sonic art. I will refer to this below when I discuss the particular artists.

Westerkamp in her *Speaking from Inside the Soundscape* (Westerkampf, 2001) discusses practices and issues of field recordings and compare listening with or without recording technology. To listen through the microphone alters the recording and listening practice in several ways. Microphones differ from the ear in the sense that they do not pay attention selectively according to meaning and relevance. They select according to frequences and intensity, distance and scope and through various mediums (air, water, material), all depending on type and quality of the microphone.

She refers to listening through headphones as being in a "bubble". Within this "bubble", listening causes a shift in perception in the sense that sounds become closer to the ear and are often amplified. They become tools of awareness by enhancing attention during the listening process.

However, headphones disconnect our ears from the environment and reduce sensitivity to distance and ability to localise sounds⁶. Also, we become separated from our social company because we hear differently than them.

When we do fieldrecordings, the listening experiences through our ears and through the different types of microphones give us various sonic input and awareness that altogether influence sense of place. Therefore, these various listening practices are of equal importance. There will be more about Westerkamp's accounts of field recordings in the next section.

⁶ This point is relevant for Whitehead's warning that lack of attention maybe at "the pain of death"; by potentially blocking our attention to increasing winds, slippery rolling stones or stepping into a brook.

Summary and relevance

Approaches to materiality and technology reveal some ironic and practical issues that contribute to put my wilderness experience into relief in a practical way.

Recording technologies are part of "families of things" which cannot function without each other. Each part, for example a battery, are nodes in networks of particular practices, and thereby preconditions for such practices.

They are entangled into social networks that may be part of global networks. They are consumer goods that depend on infrastructure like transport and electricity, and thereby produced for contrary circumstances than wilderness.

And recording technology influences my experience. I cannot separate the way I use these tools from the practice and the outcome of our task. Sense experience and knowledge that I gain from a microphone also depends on the microphone, in addition to what happens around me.

That I use "high" technology as a tool for ecological awareness is a challenge against the positions of Næss and Vetlesen. Here I will explore what are the preconditions for the use of recording technology in a way that expands, rather than restricts, awareness.

4.3.2. Consciousness and skills

Topic and framework

Ingold (Ingold, 2013a), (Ingold, 2013b) and Morton (Morton, 2007) have in common their emphasis on consciousness and attention for human experience and creativity.

<u>Ingold</u> emphasise that creativity is about craft, skill, and technology and about the conscious attentive connection to materials the craftsman / artist is working with. He claims that "skilled practice involves developmental embodied responsiveness" (Ingold, 2011). Here, this means that handling recording technology is a skill to be developed through practice, and that working with the raw material of the sound recordings is about creative skills and attentive connection with what these materials afford and.

In his Ecology without Nature (Morton, 2007), Morton considers consciousness as a main human characteristic. Consciousness is the reflection and expression of individual subjectivity and identity, which also means that our consciousness maintains the sense of distance between the self and the surroundings that we cannot dissolve. This sense of distance creates tensions

within us, and this is the source of creativity. Morton argues that art derives from the creative negotiation between the external impacts and the internal, conscious response.

He criticizes the striving for "ecomimesis", that is to produce descriptions or "documents" that are most similar to nature as possible. Nature cannot be copied because it will always be bigger than us. We are in it and therefore cannot contain it. Even more details will not fill the gap between nature and our consciousness. Therefore, he recommends including in the artwork the reflections of the conscious subject on his/her sense of distance.

In this project I combine the "ecomimesis", that is somehow to share with the audience what it is that I experience, and I reflect on this through expressions and reflections in the field.

Skill and craftsmanship are central issues of art-production and practical field recording, even though they are often under-communicated and taken for granted. In this project, I account for my "mistakes" and fumbles, the process of developing my skill; and how this process stimulates new thoughts about my topics and developments of my artwork.

In particular, I draw on Ingold's work on creativity and "thinking through making", as a journey created through the intermingling of consciousness and materiality (Ingold, 2011), (Ingold, 2013b).

Here follows a bit more in depth presentations of these concepts and literatures.

Literature commentaries

In his Ecology without nature (Morton, 2007) Morton criticizes some basic concepts and notions in environmental art and literature.

Romantic literature and art tend to apply a concept of nature that is transcendental and aesthetic. He argues that Hegel's idea of "the beautiful soul" has an aesthetic relationship to its surroundings that is somehow independent or unaffected and thereby distant to the demands of everyday life, and it has a romantic idea of full immersion nature.

"Ecomimesis" is a strategy of art for coming closer to nature. It is based on the assumption that we will sense more of nature when we produce more detailed and textured descriptions that "look alike". In some sense, "ecomimesis" resembles the illusion that "documentation", for example by photographs, speaks for itself.

"Nature Writing" tends to be part of this strategy. It is the process and product of writing a detailed report of a subject's experiences while being in nature. Examples are that "while I am sitting here, I see such and such", and "now I am telling you that such and such happens around me".

Even though a writer may strive for "ecomimesis", he or she is unable to dissolve the distance and distinction between the individual subject and the object of nature. Morton argues that Nature Writing tend to emphasises and increase this distance, and presents a profound critique of Abram's works (Abram, 1996), (Abram, 2010), present in the section on phenomenology above.

Therefore, rejecting the strategies of ecomimesis and immersion, he calls for an art that expresses the subjects' sense of distance to her surroundings, as a search without closure.

Summing up, Morton rejects the idea of a transcendental nature, the idea of a general environment, the idea and value of "the beautiful soul" and immersion into nature, and the idea that ecomimesis brings us closer to "nature".

In his When ANT meets SPIDER: social theory for arthropods (Ingold, 2011, pp. 89-94), Ingold argues that Skilled Practice Involves Embodied Responsiveness. This means that skills become part of the bodies' way to respond to materials and situations; they imply attention and consciousness and needs time to develop.

In the lecture Thinking through making (Ingold, 2013b) Ingold talks about creation of artefacts, and argues against the position that a process of creation starts with an idea about form in the mind of a person or genius, which is then projected into a material. He argues that creations are outcomes of processes where consciousness and the body (ex. hands) intermingle with materials and form it through the interactive sensory process of the encounter. Materials are resistant and ideas develop along the way, through the way the material responds to how you handle it.

"... making ..is .. an inherently mindful activity in which the forms of things are ever-emergent from the correspondence of sensory awareness and material flows in a process of life.....the maker – operating within a field of forces that cut across any divisions between body and environment - is caught between the anticipatory reach of the imagination and the frictional drag of materials."

Ingold argues that ideas and artefacts are cast-offs of the process of encounter with materials.

This is relevant for this project in the sense that my artworks and my ideas develops from my

practice on several stages, among them, the practice of walking in the mountain environment, the practice of field recording and the process of postproduction with the recorded material. Further development of the artworks and of my thoughts, ideas and theory are outcomes of further practice.

That one cannot always make a distinction between the tool, the tool-user and the creative practice and skill is a claim from his book *Making* (Ingold, 2013a). Here, he focuses on the quality of our engagement and involvement with the tools. He argues that whether tools empower the user depends on embodied skill and craftsmanship, and our capacity to correspond with the material we are working with (Ingold, 2013a, p. 7).

Animals, including humans, have the capacity of sensitivity, attention and intention, which are preconditions for the use of tools.

Ingold's theory of skill is about embodiment and becoming: agency does not depend on aforethought or planning; rather, the skill of using tools depend and develop through on a conscious process of embodied practice.

He makes a distinction between knowledge about, which derives from a study of other people's writings or practice, and knowledge from the inside, which is from within attentive and creative practice (Ingold, 2013a). This distinction resonates with Bergson's distinction between intellect and intuition and their different access to reality (Bergson & Andison, 2002) which was discussed in the section on experience and metaphysics.

Altogether, being in and adapting to natural environment depends on tool use⁷; a person's skill are embodied and develops through time and repetition; and from this follows individuals' capacity for adaption, and that tool use needs to develop through time.

And it means that the handling of recording equipment is an embodied skill. The question is whether we can develop this skill to such an extent that we need no conscious attention for handling it and thereby enables fully attention to nature. This is relevant for the discussion of recording technology as tools of awareness.

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⁷ Another thing is that there are limits to adaption, no matter skills. For example, we cannot stand up straight in any kinds of winds, and in this sense, embodied skill is about foresight and prevention.

4.3.3. Soundscape composition as method and art production

Topic and framework

The aim of soundscape compositions is to enhance our understanding of the world, in a way that have impacts on the way we listen in our everyday lives. The composer's knowledge of the environmental and psychological context influences the shape of the composition. And the aim is that the listeners should be able to recognize the source material and that his / her knowledge of environmental and psychological context should be invoked (Truax, 2010).

This tradition inspires my work and what I am try to do. Here follows commentaries on some relevant concepts and literatures.

Literature commentaries

Drever describe the character of soundscape compositions in his article *Soundscape* composition: The convergence of ethnography and acousmatic music (Drever, 2002). Soundscape compositions are characterised by the composer's and listener's knowledge of the sound source and its cultural and environmental context.

Drever argues that the practice of soundscape composition is similar to ethnography; the composer is like an engaged, embodied ethnographer that engages in research, focus on fieldwork primarily through sensous experience and seeks to evoke and communicate the sense and meaning of a place through composition with electronic recordings from that particular environment (Drever, 2002, p. 22-24).

Westerkamp (Westerkamp, 2002) in her *Linking Soundscape Composition and Acoustic Ecology* accounts for soundscape composition and the practice of field recordings in more details. For her, soundscape composition is an extention of the field of acoustic ecology. Following the ethical tradition of Schafer, she argues that it is an aim to raise awareness of ecological issues through enhanced attention to sound.

The way she accounts for the practice of field recordings resonates with Whitehead's and Bergson's process philosophy that reality is a series of singular events, and, is in tune with Barthes in his *Camera Lucida* (Barthes, 1993) presents his theory of photography as capturing slice of time and space "that was but is not longer".

"Each new recording will create a totally new piece as it is nothing more than a specific moment in time, an excerpt and detail of a place with its very own sound characteristic. It can only speak specifically of the moment and that place, not in general terms." Westekamp (2002)

For Westerkamp, the value and intention of the soundscape composition is to communicate a sense of place, in order to enhance awareness.

"But paradoxically, that specific moment and place can contain all the ingredients, out of which a meaningful language can emerge that adresses soundscape and listening issues."

"Its essence is the artistic sonic transmission of meaning about place, time, environment and listening perception." (Westerkamp 2002)

In other words, the kind of soundscape compositions that she recommends are those where the intention is to keep in touch with the experience of the environment.

This informs the method and aim of this project: Field recording as a method means to explore and immerse into mountain nature; to develop knowledge through a process of embodied, sensory engagement, and to report and produce a media artwork that resonates and mediates the experience of this place.

She accounts for the method in more detail: a soundscape composition is the outcome of the composer's social background and relationship to place; what happens in the setting; and, what the recordings afford.

The social background of the composer includes relationship to the place and listening and composition skills. These influence the selection of sound sources, microphone type and placement and the experience she aims to transmit in the artwork.

The experience and recordings depends on what happens in the setting at the particular point in time. Settings change with season, weather and time of the day together with the social situation and our practice.

The composer needs to relate to the materials of the field recordings as representations of experienced place and lived time. The composition develops through the composer's "dialogue" with the recorded material. The recordings may be altered and filtered during the postproduction. Altogether, the composition process is the outcome of the interaction between sensitivity to the place and setting; to what the material affords, and the sound processing tools.

Westerkamp recommend that the sound composer should do both the field work and the composition, as long as the aim is to evoke the particularity of the place at a particular time, to articulate the composer's sense of the place, and to reveal meanings of the sounds and draw the listener inside these meanings. This means that we need to transmit precise information and

knowledge about our intentions and time and place of the recording, we must demystify the technological processes.

In "Seeking Ursound. Hildegard Westerkamp, Steve Peters, and the Soundscape" (Cha. 13 in LaBelle, 2008), LaBelle comments on assumptions about recording technology, the contradition between ideals and realities of the practice of acoustic ecology, soundscape and field recording, and about soundscape compositions.

Here he states that audio recordings are as the heart of acoustic ecology, which relies upon recording technology's referential character to fully mimic and embody "real" sound. Acoustic ecology seems to have a nostalgia for "primary sound" or "Ursound", the search for spirituality and inner harmony and immersion with the natural world, and that there is a tension in soundscape compositions between the scientific and search for the real, and that of cultural creativity and production. For him, acoustic ecology and soundscape compositions are sources to explore the problematic of cultural production that aims for the real. He has this interest in common with Morton (Morton, 2007).

4.3.4. Summary and relevance

Sounds are modes of nature; they are physical vibrations through mediums produced by movements and exist with or without people being aware. What people hear and the meaning they attach to it constitutes the soundscape of an environment. Listening is cognitive and intentional and influenced by skill and practice, and sound waves can affect us unconsciously.

Field recordings are a way to explore and engage with the environment. The use of recording technology depends on skill, and I can use them as tools of awareness in the sense that they may enhance attention to particular sounds. The practice of field recording also influence the social setting.

In tune with other approaches presented above, our experience of sounds of nature are "footholds to reality", still, they are no less partial and situated. Recording technology influence the sounds we hear through them by for example their various ways to filter frequencies.

Recorded sounds are not fully transparent in the sense that they are not comprehensive imprints of experienced sounds. However, experienced sounds are also filtered in the sense that ravens and lemmings hear different frequency range than humans.

Soundscape composition can be considered a method that connects the sounds of what happens in the setting, the composer's relationship and sensibility of place, the type of recording technology and listening and composition skills. The outcome or media product is an artwork that aims to evoke a sense of place.

Recording technologies are tools of awareness in the sense that they enhance my awareness of the site I am in. This implies that these tools make me absorbed, and engaged with listening.

However, recording technology is also like a basket, that is a tool for collecting raw material for postproduction and thereby communication outside of the site. This means that ideas about postproduction and audience may influence how I experience my fieldwork. I may have made up my mind beforehand of what I shall record, and I may evaluate the sounds according to what I think that the audience will like⁸.

Anyhow, there will always be a distance between what I experience in the field, and what I think that I record, and the collections of recordings that I bring with me home. This is also about this sense of distance, which the main challenge of postproduction.

Regarding my practice of fieldwork, I draw on experiences of others, for example as is expressed "In the Field. The art of field recording" (Lane & Carlyle, 2013) and "Speaking from Inside the Soundscape" (Westerkamp, 2001).

In this practice led research, I seek to make an audio-visual work that explore and express different sides of nature, wilderness and my subjective relationship too it. I seek to express how small and vulnerable we are in relation to the bigger forces of nature, and I use my tools and develop my skills to do so.

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⁸ Luckily, each trip to the site is always different due to light, weather and season; so I cannot be fully plan what to record.

5. Chapter outline

Here follows the chapter outline of the written dissertation. In the first chapter is the present of the project, the second chapter is about the practice of field work, the fourth is about postproduction and artworks, and fourth is findings, final discussions and conclusion.

Cha 1. Introduction

Presentation

This is a practice led research project in Sonic Art and the aim is to produce soundscape compositions and audio-visual artworks about nature and wilderness that enhance and express an ecological awareness.

The research is to explore a particular mountain environment in Norway, and what it reveals about experience of nature, human condition and vulnerability

The research site and the background story

• Site of the fieldwork

The project site is Hallingskarvet mountain range in Norway, which is weather exposed, has a broad range of seasonal change and is distant from society's infrastructure.

• The background story of my relationship to the site

I have a personal relationship to this place from my youth, and that I have developed in particular the last ten years.

• The initial experiences of field recordings of sounds, photographs and videos

I will account for my first experiences of photography and sound recordings in this site and reflect on the use of sonic and visual art for expression of nature experiences.

Core concepts and research inquires

The core concepts are nature, wilderness, ecology, soundscape, acoustic ecology and ecological awareness. The core inquiries is about experience of nature and wilderness, about field recording and about sonic and audio-visual artworks. Here I suggest research questions:

• What is nature and wilderness, and how do embodied practices enhance ecological awareness?

- How can I use recording technology to experience nature and enhance ecological awareness? What impact does the practicalities of field recordings have on experience of nature, and how does nature let itself felt through my tools and practice?
- How do I evoke ecological awareness in sonic and audio-visual art? What content and form of multimedia artwork enables me to mediate and evoke nature and the experience and sense of being wilderness?

Cha. 2. The practice of field-recording

I am inquiring into the use of field recording and recording technology as a way to explore this mountain site and my experiences of being within it.

This chapter is about field recording as a practice and tool of awareness. The first part is about my own practice, the next part is reflection and discussion of my experiences and practice in relation to that of other artists and in relation to literature on the topic.

2.1. My fieldwork practice

In this section, I will make a detailed textual auto-ethnographic account of my practices and experiences on the site. The sources of this writing are my memory and fieldwork logs and diaries. I will also account for my experiences and practice through sound recordings and visual material.

I will reflect on how my practices and the weather are forming my experiences and the relationship between these experiences and what I find in the audio-visual material.

2.2. Discussions on field recording

In this section, I discuss my own fieldwork experiences in relation to that of other artists and literature on the issue. And I will discuss these in relation to literature on nature and wilderness, experience and listening, and acoustic ecology and ecological awareness.

The section is about recording technology as tools of awareness and the logistics and practice of field recordings as a way to explore and experience nature.

The practice of field recordings of other sound artists

I will discuss my own fieldwork experience in relation to other sound artists' accounts of their practices of field recording. These issues include their relationship to their recording technologies and logistics of field recording as a practical, concrete and physical way to

experience nature. And they include field recording as a kind of sound-walk with emphasis on movement and on conscious listening; the impact of the planned and imagined artwork and an imagined audience on the experience of being present in nature, and the choice of sounds to record.

Nature, ecological philosophy, acoustic ecology and the practice of field recording

I will discuss my fieldwork experiences in relation to literature on nature, experience and listening. I will start with short commentaries on some of my works followed by discussion of how this informs my own experiences.

Nature, wilderness and ecological awareness

Here I will inquire into the particular kind of nature experience that I get through my fieldwork.

Nature, wilderness and ecological philosophy

This section focuses on philosophical theories about nature and nature experience; about concrete engagement with mountain wilderness, and how this relates to the experience and practice of field recordings.

This is about the concepts of nature and ecology and the "deep" and the "dark" ecological philosophy.

For my discussion around the contested concept of "Nature" I refer to Spinoza (Næss, 1976), (Nadler, 2012), Whitehead (Stengers, 2011), (Latour, 2004b) and Morton (Morton, 2007). Spinoza rejects any bifurcation nature, God and humans. Whitehead sees nature as an infinite process of change, and emphasis that without awareness to its risk may be at the pain of death, while Latour and Morton criticizes the notion of Nature as romantic, transcendental and purified.

I will bring in Næss' "deep ecology" (Næss, 1993/2012) and Morton's "dark ecology" (Morton, 2007). "Deep ecology" tends to emphasize the unity and sometimes spirituality of our relationship to nature, while "dark ecology" emphasizes our vulnerability and coming tragedy of human species, and I will discuss their implications for my work.

Nature experience and ecological awareness

I will develop my approach around four issues that are relevant for my fieldwork.

The first is the primacy of perception. I will relate to Whitehead's empiricism and his claim that "perception is our foothold to reality". This is the emphasis that the world we live in are perceivable; and experience is to experience something out there, external. This means that what happens around us is not just about imagination; it may have direct impact, and lack of awareness could be "at the pain of death". That there is a link between sensory perception and reality is a central for my practice and discussion of field recording as tools of awareness.

The second is the tension between positions on intuition and affect on one side and consciousness and cognition, and I will discuss how this tension is included and expressed in my practical works in section 3.

I will refer to Bergson's concept of intuition (Bergson & Andison, 2002), (Lawlor & Moulard, 2012) and Massumi's emphasis on affect (Massumi, 2002). I will argue that the environment affects us more than we are conscious of, and cognition is not a precondition for this.

Morton claims that the romantic idea of immersion with "Nature" is an attempt to dissolve the human subject, which is neither possible nor desirable. He considers the sense of distance between the subject and his/ her surroundings as a way to recognize our human condition of dependency and vulnerability on our environment. I will explore this position in my research.

The third issue is experience as embodied practice. This is about how I experience nature, or this mountain wilderness, in a more practical way. Ingold claims that we experience our environment depending on what we do there, and, from this follows practices like walking, building and creating, and in this case, field recording, influence how we perceive the environment.

Ingold emphasizes that experience is multisensory which means that what we see influence what we and how we hear, and vice versa. On the other hand, to use a more concrete example, a hill feels quite different depending on whether we walk up or down. A wind sounds different whether I freeze on my feet or not.

Experience of nature includes both embodied and sensory experiences of pleasure and pain, and it includes existential reflections about issues of life and beauty and vulnerability and death. And I will discuss what implications these approaches have for ecological awareness.

Soundscape, acoustic ecology and recording technology

In this section, I will discuss how the various issues of experience influence understanding of how we hear and listen.

I will discuss the concepts of sound, soundscape and acoustic ecology, and I will discuss how these relates the discussions above about nature and "deep" and "dark" ecology. My main influences are Schafer (Schafer, 1977/1994), Truax (Truax, 2001) and LaBelle (LaBelle, 2008).

And I will discuss what implications the different kinds of listening practices have on the way I practice my field recordings.

I will consider various approaches to listening, (Schafer, 1977/1994), (Westerkamp, 2010), (Westerkamp, 2001), (Truax, 2001), (Oliveros, 2005) and connect these to the approaches above. These topics include sounds and listing according to phenomenological vs. sociological approaches, various types and concepts of listening, like background listening, listening in search, inclusive and exclusive listening and internal and external listening.

Listening depends on perspective, movement and task, and listening is a skill that we can enhance by conscious attention and practice. However, I emphasis is that what we hear depends on what happens to us, not only on our listening skills. This may sound obvious, but I think it needs to be stated.

There will be a short section discussing the impact of recording technology on experience of sound, drawing on theories of technology where I will refer to Latour (Latour, 2004a), Ingold (Ingold, 2013a) and Sterne (Sterne, 2003), among others. Example of claims about recording technology is that they are transducers or mediators of sound that they may disturb or divert attention away from direct sensory experience. The position here is, within certain conditions, that recording technology enhances sound and makes them available for us in such a way that we can consider them extension to be of our senses.

Finally, I consider what it takes for the practice of field recording to evoke ecological awareness.

Cha. 3. On creative artworks, postproduction and sonic artwork

The project is about production of sonic and audio-visual artworks that express and communicate a range of experiences on this site. In this chapter, I will account of my process of postproduction and my artworks. I will discuss these in relation to other artists and their artworks, and I will discuss them in relation to literature on theories on ecological art and ecological awareness.

3.1. My process of postproduction and my artworks

My aim is to produce artworks that evoke ecological awareness. Through my artworks, I seek to mediate this environment in various seasons and weather conditions, and my presence in it through my tasks, in particular the body / nature intersection, and, expressions and reflections of being exposed to nature.

In this section, will make a detailed account for my postproduction, the techniques that I use and the artworks. The focus is on the relationship between my experience in the field; my process and choices of postproduction; and, how I seek to evoke this in an audience.

While I will also use visual material, these artworks are mainly in the tradition of acoustic ecology and soundscape composition. I will justify my artistic choices and discuss why do I think that my work enhance ecological awareness.

3.2. Commentaries and discussions on sonic artworks

In this section, I will present sonic artworks and the artists that influence my works, and consider my works in relation to approaches to art, creativity and soundscape compositions.

Other artists and their works

Here I will account for and discuss my works in relations to other sound artists and theoretical frameworks.

I am inspired and influenced by several sound artists and practitioners, and among them Westerkamp, Chris Watson, Jana Windern, Annea Lockwood, David Dunn and John Drever.

I will comment on their works, and on how and why my artworks are similar or different from theirs. This may be because they may have different ideas or aim, they may work with different type of environment and they may use different practice and skills.

I will account for what tradition I am working within and the similarities and distinction of my artwork in relation to others.

Literature on art and sonic artwork production

In this section, I will discuss my creative process and my artworks in relation to issues of affect and consciousness, and in relation to the tradition of soundscape composition.

I will discuss my artworks in relation to theories of art as practice and craft, where I will refer to Ingold in particular (Ingold, 2013a). He portrays art production as practical work that takes time, presence, attention and skill. Skills develop during the process of attentive work and the knowledge gradually becomes embodied through hands and feet. Art is to connect to and go into dialogue with the material, to find what it affords and create from what is there.

And I will discuss my artwork, and the various layers within them, in relation to the claim that human consciousness as the source of creativity, which is the position of Morton (Morton, 2007). He claims that art derives from the negotiation between the external impacts and internal responds. We sense a distance between our inner self and external reality, and art is about the impossible mission to bridge this gap.

Then I will discuss my work in relation to the art of soundscape composition, as discussed by Truax (Truax, 2010) and LaBelle (LaBelle, 2008), Westerkamp (Westerkamp, 2002) and Drever (Drever, 2002). In short, it means to apply the artist's own experience of an environment and reproduce and express it in such a way that is recognizable for the audience. And this is an aim for these artworks in this research.

Cha. 4. Conclusion and final comments.

In this final section, I will make a summary of my process, artwork and findings, and also reflect on the methodology of practice led research. I will discuss what it takes for the practice

of field recording to evoke ecological awareness, and reflect on methods and values for the production of artworks that expand the field of Sonic Art.

6. Time line for completion

Summer and autumn 2014

I will be able to work on this research topic until October.

I will

- upgrade
- study more literature and writings on art
- get more acquainted with the practice and artworks of other artist
- produce artworks.
- Make a fieldwork trip in late August (hoping for rain and fog).

Spring 2015:

This spring depends on my working conditions.

My first and main focus will be to produce and finish the final artworks. I will make the final trip of fieldwork in late May/ early June to explore and record the snow melting. I will keep logs and diaries during this process and keep developing my blog on my website.

I will write up the Phd during spring and summer and I aim to deliver by mid-September 2015.

If my work condition is not good, I will need another year.

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Appendix

Transcript from the video Mountain Lady / Nature Love

TB: Tine Blom; SN: Siri Næss

TB: What is nature love for you?

SN: It is as when there is something you are fond of, you will try to be close to it and spend as

much time with it as possible, but first and primarily you want to take care of it, support it and

protect it against attacks and destruction. Caring for nature is that I consider it as something

that has value in itself and not only something that is useful for me. Yes."

I both like to be alone and to be with others. It is not important that I have anyone with me

when I go walking, but I like that also. It is rather that when I walk with friends, I prefer that

we don't talk too much. I like that there is somebody there, I don't have anything against that,

but I prefer that we don't talk too much because it becomes easily a talk about things that has

nothing to do with this particular walk.

In addition to that, I am walking and the body moves do I look around. Sometimes I think it is

very nice and other times I don't think so much about it, but I think it means a lot to me that

there are something around me that I appreciate, that is think is beautiful.

It is unbelievably still and fine right now, I feel tempted to take a look - shall we do that? Or

is it a bit stupid to quit right now? Shall I go out to take a look? It is tempting to use this time,

think if it continues - think how wonderful it would have been if we could have a still day, so

we can be outside for a while?

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Transcript of Report on field recording

I came up a couple of days ago. Fantastic, beautiful weather. A paradise, except for my extremely heavy backpack with recording equipment. I made it up in the evening. Long, blue, dark shadows. And the next day it was blowing and blowing and blowing and blowing. And it was a very ...happened to be so bright cold day. Yesterday it was also the same, but I began to start recording, it was not that easy. All this fumbling.

1.05 min This is what I call nature. It is what I feel is much bigger and stronger, I feel quite risky. It is a bit beyond the comfort zone, actually quite a bit beyond the comfort zone. It is not risky, as long as I know what I am doing. I went up in beautiful weather, as I said, had it been wind against I might not have come up. Luck. So I don't know if I should try that luck again. It is hard, icy. It is so hard that skiing is a bit ... the skis don't stick to the ice, so I need some rubber under, and so I use that.

2.12 As you maybe feel, I am not very enthusiastic. It is like getting to the limit. It is beautiful to look at, but it is hard to be in, unless I have this shelter. It is like I run into my shelter all the time, I'd rather be in my shelter. Hot and cosy and calm, not into this icy wind.

Åh, så deilig. Hør så deilig. Åh, hør på dette her. (Oh, how delightful, listen how delightful, oh, listen to this.)

- 3.13 I don't mean to complain, but I feel a bit vulnerable, here I sit. I should have felt on top of the world, I should have, something people think that just getting up here is top of the world. It is the top of the world, the blue, the white, but it is not.... it is a bit risky, yes. I could say lonely, but that it not main thing. It is more that... there is all these details you have to consider. Then I do the recordings, and the recordings are so much detailed, like the windshield and the white balance, and the focus, and my tripod is not the best, so the camera might fall in the wind. Yes, here I am sitting and complaining, but I am freezing actually. I am a bit freeze.
- 4.45 The place gives me joy and sorrow. ... there is something, some people say you can't have low thoughts here, I think my thoughts go up and down, high and low, all kinds. For me, I can just feel what I feel when I am here, it is a combination of joy and fear, I must admit. The forces are so strong and I feel so vulnerable, the hills are high and I am not the main sporty person. It is evening, it is how it looked when I came up here a couple of days ago. It is getting bluer and bluer.
- 5.50 Well, what you see? All the white here is ice, and it is water, it just happen to be cold, it all comes from the mountain and will leave again in the spring. The lake down there is a bit empty, deep frozen, no fish there.
- 6.35 It is so colorful. I choose this time because it get more golden when the sun goes down. It is another world in a way, but the point is that it is kind of the macro world. We are kind of hiding from this part; it is too cold and icy for us. But it is beautiful, gives high thoughts. I think about... I have always had this dream of communicating it, it seems to be difficult, this is

what I try with all this equipment, it influences my life here so strongly that in away my relationship to the place is changing. It is not a place to let go anymore; it is a place to ... I have to bring something back from. It is not enough to be here, I have to bring something back.

8.05 But it gives this connection anyway, I try to connect to the place, I need some days, also I need some days with my equipment, to get acquainted with the equipment. I think I wish I could be here with one more person, one more nice person, not one nor ten, it would be a little bit more soft in the stay, a bit more sharing responsibilities, thoughts, may a bit more warmth. But it is better to be here alone than to be in a crowd. So I have this ambivalence after a while. I come back to this kind of rule, this place where nothing else counts, than staying warm.

9.12 I am sitting on a sealskin bag; that was a good idea, because the other stone I was sitting on made me feel all up in the spine of coldness. Now it feels good.

9.40 The question then, is this a place to be yourself? That is a good question. Anyway it is a core ... a core thing of keeping warm, keeping calm, letting the mind flow.

10.05 Tomorrow morning I will go down, tomorrow morning. I am a little bit worried; I don't have to be worried, because it has never ever been a problem to go down. But it is about the big rucksack, and the ice. I will be fine, I am curious about what I am going to bring with me home

10.40 I will be back in a couple of weeks, with my aunt, everything might look different then, will be interesting to see. I will show you what it looks in a couple of weeks. Whoever you are.

12.00 For a while now it just getting more and more golden, I love these blue colors, actually these are my favorite colours, blue and white and grey and some brown. I don't know... it is not so much brown here, some brown up in the stones.

12.50 And it is beautiful day, a little bit wind. Looking at people down the hill, soon they will be up, at least in an hour there will be people here.

I am quite, I could say, exhausted by this feeling that all these surroundings, and all these things I am in the middle of, just can't be captured in a frame. It can't be captured in a video frame either. The recordings are limitations. So how do I communicate.. It is also this demand to communicate, or desire to communicate, which is also a bit disturbing, because I know I cannot, like I cant make it. I can tell, I can't share, I can't share. And if I share, that means that if someone comes here with me, they are going to see something different, feel something different, hear something different. It is like it is an impossible mission, an impossible quest.

14.30 Because the good thing about a photograph is that it is a moment. And the next moment I can...it can follow my attention different ways. For my attention is jumping and different things happen that captures my attention and I can lead... put the lens towards that. But for example, I can't photograph the cold. I talk about that all the time. I can't photograph the cold. A photograph looks similar even if it is minus five or minus fifteen. It looks almost similar if it is

wind or not.

15.30 Because sometimes, if there is no loose snow, if there has been wind that kind of wiped away all the loose snow, you can't just see any traces of the wind, you just feel it. So if you take a photograph, if I take a photograph or many photographs out in minus 15 and windy, I just can't find it again on a photograph when I look at it. And then, there it is the idea of ethnography; I am trying to do an ethnography of being in the mountain, of me being in the mountain. Self-ethnography. But things happen all the time. And if I shall record everything I do... it will be a kind of meta-reflection. I do something, and everything.. and I think, oh, I should record this, oh, I should record this.

16.25 Now we have just been emptying the toilet bucket. Which is big thing. It is a big thing and a small thing. It means to walk out in that area where we know that when the snow is gone, it is just loads of .. a stone spree, loads of stones, so when the water melts, the snow melts, it will fall down between those stones and not make any big disturbances neither for people or animals or plants. Besides, toilet buckets is nutrition up here, for plants.

17.15 So we walked out, dug a whole, through the icy snow, under the ice surface, the snow is like crystals. So I recorded that, sound-record that, with a spade, yes, with spade, yes, making that hole, and filling in the stuff, emptying the bucket there and emptying the whole.. filling it up again. Nobody knows, nobody sees, it is gone by the spring, gone with the spring. So I recorded that. Took some photographs with my aunt with a spade. Digging the hole, but how much, how much of ..but how can I explain those things without words, I don't know. 18.25 19.10 *Skal jeg fortsette? Skal vi se om det er nok? Mmm, litt mer...* (Shall I continue? Shall we see if it is enough? Uhm, a bit more...)

19.30 So I went up in the hill last night, trying to do the sunset. I decided to take a photograph every half a minute and record the sunset, the sun going down. After a while I discovered that it would be a much better frame by turning the camera north, towards the+ mountainside. So that the setting sun would shine on that mountainside with making the shadows blue and turquois colour, and ..breams are golden and ..the sun gradually turning into night. I will try that tonight again, in that direction.

20.30 Then last night I tried to do the moonlight. It was fantastic. The shoots took 30 seconds exposure, which was... it was ok, it was good, it worked, still I got this uneasiness that I did not get the right shot. I really.. or in other words, I did not really get this feeling of communicating this grandness of the moon over the mountains. It wasn't that cold. But I just keep... 20.25 Ok, I started this morning, at about quarter past six, I started photographing the sunrise, then the wind was tougher, it was colder, I was freezing, I was one hour and twenty minutes, taking a photograph every 30 sec. It was ok, but it maybe was not the right frame, I always have this feeling that it was not the right frame. Because standing there for more than... almost one and half hour, I see all these things around me, and I reflect on all these things around me, and I think about looking other places, and I see that I should do it differently and I am freezing on my feet and I am freezing on my hands and this is an experience that I would like to communicate but I can't because when I just decided the frame and one photograph every 30 sec., and without being able to change my mind, because if I do, the whole series would be ... it won't work. It is strange thing with all these small details that kind of interrupting or disturbing or whatever. I am trying to do something that is impossible. So it is all doing about

different ways to do the impossible.

23.00 I follow people, see then down there, coming up, slowly, striving, with skis and dogs, soon they will be here. I don't think I shall say anything more.

23.30 *Hoohoo* ... *Kommer det tilbake? Haha Der ser jeg ravnene, egentlig. Der ser jeg ravnene.* (Hoohoo...Does it return? Haha There I see the ravens, actually. There I see the ravens.)

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Nature, wilderness and ecological awareness: Exploration, experience and the creation of audio-visual artworks of a mountain.

Sammendrag

Dette er et praksis-basert forskningsprosjekt i Lydkunst (Sonic Art) og målet er å lage en lydmiljøkomposisjon og audiovisuelle kunstneriske arbeider om natur og villmark. Målet er å utvikle og uttrykke økologisk bevissthet.

I dette prosjektet er ikke naturen transcendent, abstrakt eller romantisk, men heller de konkrete og fysiske kreftene i geologi og topografi og atmosfæren eller været. Villmark er det potensielt risikofylte miljøet som er annerledes enn det urbane, storbyen og andre menneskelagde miljøer.

Økologi er om naturens ubegrensede, uendelige sammenhenger og gjensidige avhengighetsrelasjoner, og økologisk bevissthet handler ikke om noe spirituelt, men om erfaringen av å være en del av og sårbar i forhold til naturen.

Forskningsfeltet er Hallingskarvet; det er stor endring mellom årstidene, det er værutsatt og det har derfor ingen permanent besetting. Jeg utforsker hvordan jeg opplever dette miljøet ved aktiviteter som å gå på tur og på ski, svømme og gjennom aktiv lytting («sound-walking»). Jeg bruker på opptaksteknologi som redskap til å skjerpe oppmerksomheten, og jeg bruker praksisen og logistikken til feltarbeid og feltopptak som en måte å utforske og erfare naturen.

Naturerfaring inkluderer kroppslige og sanselige erfaringer, og det inkluderer eksistensielle refleksjoner om liv og skjønnhet, sårbarhet og død. Forskningsutbytte inkluderer audiovisuelle kunstneriske arbeider som kan uttrykke disse erfaringene og som kan skape økologisk bevissthet.

Disse kunstneriske arbeidene vil være i tradisjonene akustisk økologi og lydmiljøkomposisjoner. De formidler miljøet i ulike årstider og vær, og de kommuniserer min sanseerfaring gjennom de oppgavene jeg utfører, grensesnittet mellom kropp og natur, og uttrykk og refleksjoner om å være eksponert for naturen.

Teoretisk og filosofisk påvirkning er blant annet Spinoza, Whitehead, Næss og Morton, Bergson, Massumi og Ingold. Påvirkning fra lydstudier og lydkunst kommer fra blant annet Schafer, Truax, Drever, Westerkamp og Lockwood.

Emneord: Kunstnerisk utviklingsarbeid, økologisk bevissthet, lydmiljø, lydkunst

Abstract

This is a practice based research project in Sonic Art and the aim is to produce soundscape compositions and audio-visual artworks about nature and wilderness.

I am interested in those basic conditions for human existence that are beyond the social. I am interested in environments that are not moulded by humans and in the relationship to the nonhuman. The aim is to evoke and express ecological awareness, to myself as an artist, and to different publics.

In my research, nature is not transcendent, abstract or romantic, but refers to the concrete and physical forces of geology, topography and atmosphere or weather. Wilderness is the potentially risky environment that is distinct from urban, metropolitan and manufactured environments. Ecology is about nature's unbounded and infinite connections and interdependencies. I argue that ecological awareness is not about spirituality, but about conscious and subconscious experience of being part of and vulnerable to processes of nature.

The research site is the Hallingskarvet mountain range in Norway; it has a broad range of seasonal change, it is weather exposed and therefore no permanent settlement. I situate myself and explore the experience of this environment through practical activities like walking, skiing, swimming and sound-walking. I use recording technology as tools of awareness and I see the practice and logistics of field recordings as a way to explore and experience nature.

One of the research outputs is to produce audio-visual artworks that express these experiences and evoke ecological awareness. Experience of nature includes embodied and sensory experiences of pleasure and pain, and it includes existential reflections about issues of life and beauty and vulnerability and death.

The artworks will be in the tradition of acoustic ecology and soundscape composition. These works communicate this environment in various seasons and weather conditions, and they communicate my presence in it through my tasks, the body / nature intersection, and, expressions and reflections of being exposed to nature.

Theoretical and philosophical influences are among others Spinoza, Whitehead, Næss and Morton, Bergson, Massumi and Ingold. Influences from sound studies and sonic art are Schafer, Truax, Drever, Westerkamp and Lockwood.

Keywords: Practice based research, Audio-visual artworks, ecological awareness, sonic art.

Foreword

The Department of Music at Goldsmiths College, University of London accepted this report as upgrade from MPhil to Ph.D. student in Sonic Art in October 2014. It is based on three years part time of study and audio-visual productions about Hallingskarvet in Norway. The portfolio for this project is on the website www.tineblom.net/mountain project.

Thanks to Lillehammer College and Goldsmiths College for support.

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Nature, wilderness and ecological awareness: Exploration, experience and the creation of audio-visual artworks of a mountain

1. Introduction

Practice based research

This is a research project in acoustic ecology and it is inspired by ecological philosophy. I seek to evoke ecological awareness through the practical presence and physical exposure to wilderness. I am an artist who is interested in the practice and culture of field recording and how recording technology may function as tools of awareness. I am producing soundscape compositions and audio-visual artwork where I explore how the presence of the subject/ artist in the artwork is a way to evoke ecological awareness.

The site and my wilderness experience

The research site is at Tvergasteinstjørnet at the Hallingskarvet mountain range, which is located about the geographical centre of southern Norway. The site is about 1500 m above sea level and two-three hours uphill walking distance from society's infrastructure like railway, roads, shops and electricity.

The area has Arctic climate and is strongly exposed to the winds from the Atlantic Ocean that sweeps along the east-west-directed mountain range. These strong and cold winds make the area potentially dangerous. It is also vulnerable to erosion due to the thin layer of organic material (plants) and short summers give slow growth for recovery. In this area, where time is cyclic with seasonal and daily rhythms, I consider the weather condition as an historical constant that set restraints on human activity. Therefore, I consider this site as "wilderness".

My relationship to the site began through my family. My first trip was particularly traumatic; I was about the age of 18, it was mid-winter, dark, loose snow and increasing wind. I had no more strength and was thinking about whether life was worth living after all. Then my uncle put a rope around my chest; I kept stumbling on my skis and he finally pulled me up into the shelter.

However, I have also experienced the beauty of the site, the joy of its infinity, the relief of being released from social demands and chains, for a while, and the existential freedom and clarity of mind after some days in wilderness.

I have been there frequently during the last ten years and made sound recordings, photographs and videos.

My background in a mountainous site and winter-country has for the better and the worse put its flavour on my sense of life that has impact on my research practice. For me, the need for humbleness towards nature's forces has always been obvious and beyond discussions, as I have experienced this as a matter of life and death.

Broadly speaking, people in urban areas do not tend to share this sense of the obvious. "Nature" has become a rhetorical word with contested meanings. For many, it is mainly associated with luxury and leisure, like an exotic place to go during holidays, or an arena for personal challenge.

These different backgrounds are a challenge for communication; what nature implies and what others associate with it seldom resonate with my own experience; and I feel that my sense of it disappear in mediation.

I am interested in ecological awareness that is about physical reality; human presence is physical and the forces of nature and wilderness has impact on the human body. This means to take a non-anthropocentric or non-human perspective and to be aware of that the atmosphere, species and materials are interconnected. Humans are part of this, and are dependent, vulnerable and mortal in a very concrete, sensory way. I criticise a kind of ecological awareness that is abstract ideology and romanticism, and, I will also express a slight critique of internal oriented listening practices: sometimes I cannot choose not to be aware, for example when the wind blows strongly.

From this follows the urge to inquire into the ontology of nature, into nature experience, ecological awareness and into ways of mediation. And this is a quest in the sense that it is a process of search for a knowledge that can only be approximate.

In order to get to know more of nature and ecological awareness, I need to go beyond its cultural and linguistic representations. Therefore, I will use audio-visual ways to explore and mediate nature, which means that I also need to inquire into techniques and impacts of recording technology.

I am aware that I have chosen a broader view than is conventional in research. This is so because these are broad topics. The project can be understood as a search for the "indisciplinary", that is a space between disciplines that cannot be confined or restricted by any of

them (Cocker, 2008). This includes seeking knowledge and meaning as a continuous experimental process of phenomenological encounter and reflection, without any final truth or solution.

The project is also interdisciplinary in the sense of a process of wandering between and through disciplines; I need to draw on and make connections between the metaphysical philosophy via natural science to social science and art (and possibly, back again).

Research topics and questions

Following from this, a number of issues and questions have emerged.

The first is about nature and wilderness, experience and ecological awareness. What is nature and wilderness, and what should we do to experience this in such a way that it enhances ecological awareness?

I am interested in practices that open up for experiences of even more textured, subtle and changing surroundings. I am interested in experiences of vastness and vulnerability. In addition, I am interested in the distinction between words and practices. An example is the sensory difference between reading about the river Thames or looking at it and that of swimming in it (Deakin & Holmes, 1999), and the implications of this difference.

The second is about recording technology as tools of awareness. How can I use recording technology to experience nature and evoke ecological awareness? What impact does the practicalities of field recordings have on experience of nature, and how does nature let itself felt through my tools and practice?

The third topic is about mediation: How do I evoke ecological awareness through sonic and audio-visual art? What content and form of multimedia artwork enables me to mediate nature and the experience and sense of being wilderness?

2. Methodology and method

This is a practice led research inquiry into how to experience, evoke and communicate ecological awareness, using the methods of immersion into mountain wilderness, the practice of field recording and through production of audio-visual artwork.

Methodology: practice based research

The methodology is practice led research. This includes in(ter)-disciplinary, auto-ethnography and the process of art creation. First, I will account for some assumptions about the ontology and epistemology and the three types of knowing that is the basis for this methodology.

Ontology and epistemology

Gray in her *Inquiry into practice: developing appropriate research strategies* (Gray, 1996) emphasis that practice led research is a pluralist approach and multi-method technique that are driven by the requirements of practice and the creative dynamism of the artwork.

Such research is qualitative and naturalistic and "real world research". It's ontological foundation is that what we explore out there is real and that real world experiences and practice are complex. And it is based on the epistemology that the practitioner is the researcher that identify researchable problems and respond through practice, and this implies subjectivity, involvement, reflexivity and interaction with the research material.

In practice led research, knowledge is negotiated; it is context bound and a result of personal construction. All "mistakes" is revealed and acknowledged for the sake of methodological transparency. This means that what happens during time, like changes, decision, events and epiphanies should be accounted for in the final report, and that the research elements are embodied within and visualized by the artworks.

Three types of knowledge

The book *Practice as Research in Arts: Principles, Protocols, Pedagogies, Resistances* (Nelson, 2013) is a theoretical and practical account of practice led methodology. Nelson emphasises that practice led research is composed by the process of creative interaction between what is categorised as three distinctly different types of knowledge.

The first is "tacit knowledge" (Polanyi, 1966/2009), which is embodied, haptic and intuitive, or what you know without verbal articulation. Examples are musicians playing an instrument, or a photographer that "smells light" and thereby sets aperture and shutter speed intuitively. This is about visions, embodiment and performance.

The next type of knowledge is critical reflection or "how professionals think" (Schön, 1983)

about their own practice. This is the type of knowledge a practitioner develops when he or she, through verbal articulation, seeks to make his/her embodied knowledge less tacit. However, such articulation can never give a complete account of embodied knowledge.

The third type of knowledge is non-fiction written sources of the academy, or which is the sources of classical research. This is what he calls "knowledge from outside". We can also add fiction, literature, and the study of other artists and their artworks (Leavy, 2009).

The point is that such research is an interactive process where these types of knowledge challenge and stimulate the drive towards more knowledge and creativity. For example, creating a particular artwork both requires and leads to development of skills; this process is the source of critical reflection and articulation, and these reflections may challenge established academic knowledge on the subject. Alternatively, reading about a topic and studying similar works and artists may stimulate new ideas and visions about one's own personal practice and release an artist from his/ her own stagnating habits and ways of working.

In short, practice based research methodology means to put more focus on the process of making rather than on the final art product, which is just a stage on the way towards further development.

The handling with material of artworks or performance art develops a particular kind of knowledge (Bolt, 2007). Those who practice an art will have an experience, and thereby a knowledge that cannot be accessed without this practice. This new knowledge can challenge existing theories. This means that artists, through their practice, can extend the existing domains of knowledge through reflection on what occurs in practice.

Inter- and in-disciplinary

In relation of practice led research, the interdisciplinary relates to the theoretical, logical and abstract type of knowledge gained through studies of books and internet-resources.

Interdisciplinary research is of several types (Cocker, 2008). A way to understand it as a process of wandering between and through disciplines with an open mind, translating and find analogies between concepts and approaches. The concept of wandering refers to knowledge

seeking and meaning making as a continuous experimental process without any final truth, goal or solution.

This can also be understood as a search for "in-disciplinarity", that is a space between disciplines that cannot be confined by any of them.

As such, the project will be in-disciplinary in the sense of being in a process of phenomenological encounter (tacit knowledge) and critical reflection, and it is interdisciplinary in the sense of drawing insights from various disciplines on various stages of the project.

Methods

The methods for this practice led research project are immersion into wilderness, field recordings and creative audio-visual artwork-productions; it is log keeping and production of a website and it is studies and commentaries on literature and artworks.

Auto-ethnography, immersion and practices

Auto-ethnography is a way to strengthen the connection between "tacit" and "reflective" knowledge. This makes the development of my sensibility and capacity of self-reflection into a research tool.

Process theory states that knowledge is in flux because reality is flux (Whitehead, Griffin, & Sherburne, 1979). Here I will explore and record how this wilderness is in flux; the forms in the landscape that these processes and forces produced; the rhythm between movement and stillness; and how this is a flux towards ecological awareness.

The method is to return to this site in various seasons and to expose myself to various kinds of weather. I will experiment with practices like walking, skiing and swimming in order to explore and experience wilderness in a sensory way.

Ways to experience nature is through movement, like walking, skiing and swimming, sometimes beyond comfort. These practices give different types of experiences because they are different ways to relate to the landscape.

Walking enables sensory relationship to the ground, like hard or soft, steep or flat, dry or swampy, rugged or smooth. When I walk in nature, I need to step, jump and balance; the body

will feel like flowing, or it will resist and ache. And walking is a way to travel through the landscape and continually to discover new perspectives.

Skiing enables movement during winter season. It is another way to move the body that demands some level of skill of tools and balance. Experience of skiing depends of the type of snow: it may be icy, powdered, grainy, shaped by wind, bumpy or wet, all of which influence the smoothness and rhythm of movement.

Swimming in a mountain lake is the "ultimate" body exposure, and temperature is essential. Regarding that the aim of awareness, I cannot choose *not* to be aware when I swim in a mountain lake.

Field recordings

The art of field recordings is about technology and about logistics and practice, and all of these have triggered debates.

Recording technology

I will use recording technology as tools of awareness, being aware of debates, critiques and preconditions for this.

In sound studies, as in other disciplines, some argue that there a direct phenomenological link between sounds and experience of sound (Merleau-Ponty, Bergson, Olivero, LaBelle), while others argue that there is always an element of social construction in how we sense (Sterne, 2003). (See more about these topics in sections 5.3.1.)

This also counts for debates on recording technology. One position is that all technologies are mediators in the sense that they have an independent impact on processes and practices (Latour & Porter, 1993), (Latour, 1987). Following from this, Sterne argues that recording technologies transform and transduce sounds in such a way that there is no direct link between the sound we hear with our ears and the sounds we record with our equipment. What we hear with our ears in the field is not the same as what we hear when we use our headphones or listen to loudspeakers in a studio That we think we hear the same thing is a misunderstanding due to successful commercial propaganda towards consumers, according to Sterne (Sterne, 2003).

No matter, recording technology has impact of on how we experience sound. Microphones select sounds in a different way than our human ear, both due to the distinction between

mechanical and organic sensitivity, and because how we listen will influence what we pay attention to and what we choose to record.

This is two-edged: recording technology may have captured sounds that I did not pay attention to while recording; it may enhance them, bring them closer and sometimes make those sounds accessible that I otherwise could not hear. However, it is also so that what I record and bring with me home may not correspond to my experience in the field. This is because wilderness experience is multisensory, embodied and existential which is not possible fully to capture in recordings.

It is this dilemma, tension or gap between "the more than" and "the less than" the real life experience that are central for the use of recording technology as method of this research.

Recording technology is a kind tool of awareness of what is there and the gap of experience, it as a way to engage with and tune into wilderness, still without mistaking the recordings for reality.

The practice and logistics of field recording

I will practice field recording with an attitude of discovery, similar to sound-walking (Drever, 2009b; Westerkamp, 2010), differing only by the indirect and technological mediation of sounds. The practice of field recording may stimulate different kinds of listening, depending on type of microphone and the use of headphones.

I also consider technological fumbling or "mistakes", whether about choice of microphones or lack of windshields and skills or flat batteries as part of the experience and discovery of forces of wilderness. Recording technology is part of networks of things in the industrial society, they depend on a very particular range of temperature, and they depend on infrastructure like electricity, which are altogether a very concrete way to set the practical impact of wilderness in relief.

And field recording is a practical task that influences how I relate to my surroundings and what I aim for when I am in the field.

Also, the logistics of the research, that is, the practice of field recordings in this site, implies exposure to the forces of nature in a very concrete and physical way. It is about the physicality of distance and weight. That the recording equipment has to be carried on the back for three hours uphill is a clear experience of geography, topography and gravity and how it

makes impact on the body. The weather of the site while field working is also a direct physical experience of the range from beauty and comfort to pain and threat. It ranges from rain, roaring winds, snow, ice and fog to sun and complete stillness (yes!). This does not only produce stillness and particular sounds, but also particular physical and emotional responses and more humble attitude than mastery and conquest.

In my research, I will explore how the practice of field recording in this site has the potential of enhancing ecological awareness. It may enhance awareness of what happens in the field, and how what happens relate to larger processes in space and time. This differs from dreaming and imaginaries in the sense that practice in this site has direct, physical impact: it matters and it may be dangerous. And this is what I aim to research and express through my audio-visual works.

In short, field recording as research method is to obtain recording equipment and develop skills for using it, it is to practice field recordings and explore how the technology works, or not works, as tools for ecological awareness, and let the practice and tools resonate with and record the movements and stillness of nature. During this process, I will create and produce knowledge through audio-visual artwork.

Log-keeping, blogging and website

Auto-ethnographic method also includes the writing of diaries and logs, production of website and the process of presenting works in progress and blogging about them.

Log-keeping

Log-keeping is to make detailed description of the research process through written note-taking and/ or recordings of what happens, and what I do, sense and think while I am in the site, and also elsewhere at different points in time.

These logs serves to document the connection between practice and ideas, and the development from unarticulated sensations to more textured and elaborated thoughts, and how what happens to me demands attention and decisions regarding the progress of the project.

I reflect on how practices influence my experience. I focus on process, skills, tools, perception and how I resonance with the landscape and weather. I account for my movements and paths in the landscape; for thoughts, imaginations and junctions regarding my project; and these perceptions, sensations and emotions that altogether lay the ground for my final visual- and soundscape composition.

This way I account for what happens in the landscape and weather-world, and how I need to improvise to create an audio-visual account of this quest. And I bring with me back home these embodied memories, perspectives on nature, notes and logs and recordings and create my knowledge in an audio-visual way.

Blogging and website

Web logs or blogs are used as learning spaces in higher education (Williams & Jacobs, 2004), and blogging can be used as a tool for personal and professional development in PhD research (Ward, 2006). They belong to Nelson's second kind of knowledge, that is category of critical reflection of the reflective practitioner (Nelson, 2013), (Schön, 1983) (See section on Methodology).

Blogs provide spaces for storage of thoughts, works and other information. They are a kind of personal diaries of processes and stages of the development of students and their research projects.

Such blogs serve as a site of communication and interaction with other students and supervisors. Blogging involves emotional engagement and it is social in the sense that it has the capacity to engage people in collaborative activity, knowledge sharing, reflection and debate.

I have developed a website for this research project, where I keep uploading works and works-in-progress. This is a tool and method for communication and feedback, and a way to present and articulate the progress of the project. I also want to communicate with fellow students for mutual feedback and support.

Literature studies and commentaries

Literature and making commentaries are the third kind of knowledge of practice les research, as described by Nelson (Nelson, 2013) (See section on methodology above).

I compare and reflect on my experiences, my knowledge and my artworks in relation to literature of the relevant topics. This means that I will not produce as literature review chapter as such, but make commentaries on literature in relation to the relevant chapters.

As a method, these literatures inform, stimulate, challenge and thereby contribute to development of my own experiences, positions and ideas about my artworks.

This research is according to the premises of phenomenology, and here, my personal experience what I have done and what I have sensed is a source of knowledge. I claim that when I sense something, it is not just because of my internal imagination, but because there something is going on out there that happens to me.

However, literature may provide different and broader frames of interpretation. When returning to the mountain site, these literatures may have influence how and to what I pay attention, and my studies of literatures may also make me interpret my recordings and what they afford, in a different way.

Yet another method is to create audio-visual artworks, and this is the topic of the following chapter.

3. Artwork practice

This chapter is about artworks. The first part is about my own process and works and my thoughts and plans for further works. The next section is about how the artworks of other artists inspire and differ from my creative project.

3.1. My artworks and portfolio

I am working with a particular site that I am acquainted with and will keep returning. The site is in constant flux; events and happenings are always new. My particular experiences, understandings and intentions are changing, and my skills and techniques of postproduction develop through the research process.

In my works, I am representing the wilderness that I am immersed, how I am immersed in it, and, I express and reflect on my position in it.

The artworks are about this particular mountain and my sense of being there. There are three components, first, a kind of "eco-mimesis" (see section 5.3.2.), that is a textured - although impossible - account of how nature unfolds through changes of weather, seasons and scenery.

Second is the intersection and resonance between the body and environment or how my body is physically interacting with it. This includes the sounds of practices like skiing, swimming and walking on various grounds. The third component is subjective reflections while being there, including emotional responses, expressions and talk about the experience of presence, the sense of distance and of non-mastery.

The fieldwork is physically challenging in the sense that I go to there in various seasons and weather. Applying recording technology under such conditions is an additional challenge of technical skills. The fieldwork motivates me to challenge myself by exposing myself beyond the comfort zone. That is, why should I expose myself to icy winds if it had not been for the promise of interesting field recordings?

I am making different kind of artworks. I make soundscape compositions of the site, with its winds, water, snow, stones etc. I indicate my presence through the sounds of my intersection with environment, through body sounds, expressions and words.

Some of these compositions are more similar to a radio documentary when my voice becomes the driving force of the narrative.

And I use visuals like videos and photographs. Change of colours through seasons and weather conditions is difficult to mediate through sound. The visuals add another dimension and contribute to a more vivid multisensory experience that helps to bring the audience into the site. In order to give attention to the soundscape and to encourage listening, I do generally use photographs rather than moving images, or I use "moving stills", that is long takes with slight movement in for example grass, snow or brooks.

I start the postproduction by register time, content, technical quality and relevance/ significance of the recordings for both the sounds and visuals, and I listen and search to what the material affords.

When I work in my studio, I am trying to stay connected to my experience of the site, and this has tended to have priority to the perspective of the audience until now. As my creative productions evolve, I will need to be more conscious about the audience perspective. My development will be to be more conscious about the gap between what I think I am mediating and that of the receptions of the audience.

The portfolio

I have uploaded the portfolio of my main works on the website tineblom.net/mountain project. These are:

2011

- Sound and sensations of seasonal change at Hallingskarvet mountain range: video made of photographs and sounds, 10.47 min

2012

- Winter winds: video and sound 8.15 min
- Mountain lady / Nature love: video with voice, 3.24 min
- A day inside, soundscape composition/ narrative without voice, 7.26 min
- Trembling stonewall, sound recording with contact microphone, 2.55 min

2014

- Easter winds: video with photographs and sounds incl. some voice, 9.26 min
- September ice/ Joys of cracking, video with sound and written text, 7.34 min
- Report on field recording: photographs + radio documentary/ narrative with voice 25.15
 min

Here I will comment on the video "Sound and Sensations of Seasonal Change at Hallingskarvet mountain range"; the installation "Nature beyond Culture" which consists of four works; and then I make a short commentary on the sound piece "Report on field recording".

Sounds and sensations of seasonal change

This was my first work ever that included sound, and it is the first work of this project.

It aims to show how the light and weather continually changes the colour and texture of the landscape, that every kind of movement makes sound, and it indicates how small people are in this landscape.

It consists of sound and a series of still images. As Barthes described in his book Camera Lucida (Barthes, 1993), stills are frozen moments in time; and in contrast to the narrative drive of moving images, stills encourage conscious, personal reflection and contemplation.

Here I use stills to encourage detailed and in tuned listening. Sounds are surrounding and penetrating, they evoke the sense of being embedded and immersed, and here, they drive the narrative. We hear people's (or my, more precisely) presence in the sounds; some sounds are without corresponding images, for example can we hear the sound of people (me) walking, bathing and breathing without seeing them (me). The aim is to encourage the active imagination of the viewer/listener.

I recorded the sounds of my footsteps when I walked on various types of grounds – snow, stone and marshland and so on. I discovered how recording soundscape was a way to explore the site and this way I became aware of how sounds are an integral part of the mountains. For example, first I was annoyed about the roar from the mountain that I felt was interfering with my recordings, until I discovered that the roar was particular loud during the snow melting in springtime and after heavy rain. I also discovered silence; I think that a mountain landscape without wind and covered with silk snow must be the most silent place in the world.

I presented the video on the International Visual Sociology Association (ivsa) conference in Bologna in August 2011 and on seminars in Visual Sociology and Studio Practice in Music at Goldsmiths College in fall 2011. And it is on my website.

The work presents the site and contains most of the topics of this research. These are the character and impact of weather and seasonal change on stones, water and snow, on plants, animals and humans. The artworks that follow are variations of these, more in depth, more experimental and enactments, and technical and artistic improvements. For example, in my latest works, I experiment more with moving images, voice and reflections.

Nature beyond culture Installation

What I mean by "Nature beyond culture" is that nature is more than culture, that human culture is embedded within nature and therefore that it cannot fully represent or comprehend it.

The aims of this installation were to explore and communicate the existence of nature beyond culture through practices of engagement with the mountain in sensory and embodied way.

It consists of four works + photographs and I presented them as installations at the Engaging tactics at Goldsmiths in April 2012 and at the IUAES conference in Manchester in August 2013.

The videos were "Winter winds" (8 min) and "Mountain lady" (3 ½ min), and the sound installations were "Day and night inside" (7 ½) and sound from inside the stonewall on a windy day (looped / continuous). In addition, there were four A3 photographs and two A4.

Aims and intentions

The aims were (i) to communicate the issues of nature beyond culture and experiences of a mountain environment; (ii) to develop skills and experiments of making an installation that engage the public; and, (iii) the opportunity for feedback and to explore and understand variations in audience responses.

The theoretical topics were culture-nature relations in social theory; the sensory and bodily engagement as a way of knowing; memory and attachment to place; and the impact of personal experiences and cultural background on the responses.

Logistics and practicalities

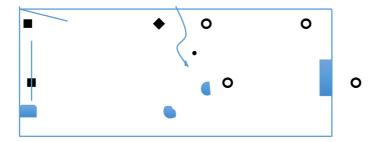
Making an installation was a grand lesson in logistics and technological issues of artwork. Here I learned that artwork is about *work*, not just ideas, and, that I better learn as much as possible about these technologies myself. And it is about planning and foresight, which is mainly developed through practice. It is an example of learning by committing myself to a task I not yet have the skills to implement.

Practical supporters of the project were Alan Stanley, Britt Hatzius and Ian Stonehouse, without which this installation would have been impossible.

The following is an account of the logistics, technicalities and the fumbles of making the installation.

The installation space

The installation was in Ben Pimlott Building 3/4 at Goldsmiths Collage.



- Stereo loudspeakers for video screen of "Winter winds"
 - Video on wall and DVD equipment
 - Projector in the ceiling
- OFour loudspeakers for sound installation "A day and night inside"
- Table for computer and MOTU interface for "A day and night inside"
- ◆□Table with video with headphones for Mountain lady".
- Movable wall with two A3 photographs on both sides
 - Headphones on small table for "Wind inside stonewall".
- Concrete column with two A4 photographs

Artworks, equipment and technical issues

There were four main pieces of artwork, in addition to photographs.

Video: Winter winds at Hallingskarvet

The Winter winds video was on a DVD that were presented with a projector and two loudspeakers in stereo. It was 8 minutes long and went continuously (looped).

I recorded the video footage and most of the sounds on 3-6th of April-12, and some of the sound recordings on earlier trips. The software was IMovie-11, and I got support and advice from Brit Hatzius.

The burning of the DVD became a problem. The source file was 1920* 1080 pixels, while neither of the software iDVD nor Toast Titanium allowed more than 720*576 pixels, which resulted in reduced quality for the installation. I used several hours on Sunday evening and Monday morning trying to solve this problem, but to no avail.

Video Mountain lady

The Mountain Lady video was also on a DVD of 720*576 pixels. It was looped and went continuously. The video was presented on small screen and with two headphones that was borrowed from the Media Equipment Centre (MUC). In addition, I bought a stereo jack splitter that made possible to attach the two headphones.

The interview was made in Norwegian and had English subtitles. The software was IMovie-11, and I got support and advice from Brit Hatzius.

Sound story of Day and night inside

The sound story Day and night inside was 7 ½ minutes long, it was looped and went continuously. This artwork was the most technically complex.

It was composed of recordings from several trips from the last years. I made the recordings with several types of recording equipment, but I used mostly my own Zoom H4n with omnidirectional stereo microphone. The composition also included contact microphone recordings of sound of walls, ceilings and floors.

I used the softwares Audacity and ProTools. It was presented with my computer that was connected to MoTU-interface borrowed from MusTech and four loudspeakers borrowed from Electronic Music Studio (EMS).

Alan Stanley and a music technician brought and mounted of the equipment, and Ian Stonehouse connected the program file on ProTools to the MoTU and the four loudspeakers.

Sound from inside stone wall

The fourth artwork of the installation was the sound of inside a stonewall in wind. I recorded it with two contact microphones and it was looped.

I presented in on a (cheap) MP3-player and with a stereo jack splitter and two headphones. These were put on a small table were the MP3player was attached with sticky "Velcro" dots. I used Audacity software for cropping away the handling noise from the recordings.

The photographs

I presented six photographs, four A3 and two A4 that I had printed on my home printer in Lillehammer during Easter. I used Photoshop software. They were glued to each side of the movable wall with blue tack.

One of them were directly connected the Mountain Lady interview, picturing her in the mountains; two others were connected to the sound from inside the stonewall, picturing the stonewall and blowing snow. I made all of these photographs in early April.

I made the three others, one A3 and the two A4's on earlier trips. The A3 were two photographs of skiers, one was a man sitting on a chair in the snow reading a book on a snowy day, the other were books in the snow.

Comments and afterthoughts

Sequential or simultaneous time?

The sounds from the "Winter wind" video and the "Day and night inside" represented "outside" and "inside" respectively. They came from different parts of the room but shared the same space.

The first part of the day I presented them in sequences, that is, I turned them on and off so that the listener/viewer could focus their attention on one of them at the time.

Then came an Austrian art student that suggested that I should turn them on at the same time.

This made the distinction between outside and inside depending how you were located in space.

So I did this the rest of the day.

By presenting them in sequences, as I did in the first part, I needed to guide the listener/viewer and explain to them where to start and where to move on next. The good side of this was to help them grasp the sound installation as narrative.

By turning on all the sounds at the same time, space became more important than time. They could experience the change of the sounds by how they moved around. This meant that they would experience it as a sound composition in space rather than a narrative through time.

I did the same change with the Mountain Lady video. In the beginning, I wanted the viewers to sit down to watch it from the beginning, but later I did not interfere, after all, it was only 3 ½ minutes and looped so they could easily see it twice, if they wanted.

Feedback and more fumbles

I got only positive feedback; there was "nothing wrong" with any of the pieces. Some said that the space was not ideal for the winter winds video. It was not dark enough to make it sharp and the video projector was not in focus. This came in addition to the low quality of the DVD, but it seemed to be that this was my worry and not the worry of others. One commented that the sounds from the four loudspeakers were too loud so that it intruded the headphone sound of wind-in-the-stonewall.

And two said that the Mountain lady video was too short, they were triggered and wanted to know more about her. And I was criticized for the title. However, I was not able to change it, since I had messed up the connections between my source files and my IMovie software on my computer and external hard disks. Later, I renamed it Mountain Lady/ Nature love on my Vimeo upload.

Report on field recording

The sound composition "Report on field recording" is mainly composed of recordings made on two trips in March 2013 and is that my latest work. This is about wintertime, I am alone in the mountains, feeling a bit cold, lost and lonely, and here I am telling about what I see, hear, feel and think while I am making the field recording. I speak in English, and I speak into the microphone as if this were people. See the transcript in the Appendix.

It is basically composed of three field-recording sessions on three different days. I have shortened the recordings, while I have not added any voice. I have added a few sounds recorded on other trips, like the fire and the camera crash.

3.2. Artworks of this project

I aim to develop a comprehensive portfolio about this site.

I will go deeper into some of the seasonal and weather conditions that were touched upon in the "Sound and sensations" video, possibly similar to the video "September Ice / Joys of cracking".

Examples are works about various types of stone grounds and water in the depth of the rockery; a work about rain and fog, another about snow melting in the spring, and a piece about sitting outside and reading, and possibly one about swimming.

I will compose another soundscape documentary about practices and reflections, possibly including voices and practices of others.

I will experiment with various mixes of the three "layers" of representation, that of "ecomimesis", body/nature intersection, and verbal reflections and storytelling.

I will experiment with various types of aesthetics and poetry. Here, the aim of poetry is to evoke the gap between consciousness and what is /not/ revealed by the audio-visual recordings (Leavy, 2009, p. 63 ff), (Morton, 2007).

I will keep developing my skills and sensibility of audio recordings and put even more emphasis on sound.

And I will experiment with various ways to immerse the camera with the elements, ex. waterproof bag for drops on the lens.

I will continue to explore my archive of those recordings that I have already made, in addition to making more trips to the site.

I will not plan the recordings beforehand; rather let them develop from the weather, who I am with; what happens and my emotional and physical condition. Still, I hope for another trip with rain and fog.

I aim to make a final installation and to publish the works on my website.

3.3. Other artists and works of sonic art

My artworks have emerged within Sonic Art practice and I will reflected upon these in the light of other sound artists. Here follow some short comments on how my works relate and differs to a slight selection of sound artists and their works. My sources are, among others, Lane and

Carlyle's In the field (Lane & Carlyle, 2013), LaBelle's Background Noise (LaBelle, 2008) and various web resources.

Nature documentaries

Nature Documentaries are works between the natural sciences and art where the artists record sounds of biotopes and species that we do not have access to in our everyday urban lives. They aim for the species and environments "to speak for themselves", their compositions have very little sound processing in the postproduction, and they do not put themselves or other humans into their work.

Examples here are recordings and works of sites like the deep sea and inside seashores and soil, and using particular microphones to do so. Examples are Jana Winderen and some of David Dunn's works.

Jana Winderen

Jana Winderen is interested in the external world; in the natural environment and to raise consciousness about ecological issues. Her focus is mainly the sounds in the depth of the ocean where people don't have access.

She find field recordings more interesting than studio-work, and uses it as a tool of discovery of the external world. She does not want to use recordings used by others, because she wants to be acquainted with the place and to communicate that experience. And she does not want to manipulate the recordings that she says is an issue about respect for other species. Still she wants them to be clear, but there is no clear borderline between "cleaning" and "manipulation".

Since she is working with inaccessible spaces and species, it makes sense that she does not want herself in the recordings; humans are not at the depths of the oceans; and she wants focus on what is there, the content, not on herself listening.

David Dunn

David Dunn's work and practice is engaging directly with science when he explores how animals, in particular beetles, orient themselves and communicate with sound, and, then he aims to compose sounds that are able to disturb these animal's behaviour. I have been listening to "Listening to what we cannot hear", "Sounds of light in trees, and his works on Beetles.

My works are inspired by Winderen's and Dunn's topic and skill of these nature recordings, however, I add the dimension of human experience.

Radio documentaries

Radio documentaries put a narrator and thereby human consciousness at centre stage. Examples are Glen Gould's "The idea of North" (Gould, 1967), which is about imaginaries and drives of people in North America towards north of Canada. In some ways, this radio documentary reflects Morton's claim that consciousness in itself produce a sense of distance: people search but the gap between themselves and their environment still exist. (See more about Morton below in section on experience).

This work is inspiring while it differs from mine in the sense that it is anthropocentric and is all about ideas, while mine seek to convey characteristics of wilderness and particular embodied and sensory practices of immersion and exposure.

Soundscape compositions of sites and environments

Soundscape compositions are those that seek to convey the soundscape of particular places, mixing the sounds of humans and non-humans.

The artist seeks to reproduce soundscapes of for example, rivers, beaches and culture landscapes. Examples are works by Annea Lockwood and Hildegard Westerkamp. They tend to mix sounds of nature with voices of people, thereby making composition of social experiences in nature environments.

Annea Lockwood

Annea Lockwood is a sound artist and composer from New Zealand who has produced artworks for more than half a century. Her background education is in music and composition.

Among her broad range of compositions, those of interest here are her recordings and compositions of the sound maps of Hudson and Danube rivers where she seeks to reproduce soundscape of sites along the rivers towards their estuaries.

Lockwood considers how humans are part of the environment, and in her work, she adds sounds of the human environment and human voices in various languages.

Here is a quote about her work

"Aim is not to document the rivers, but to record them for the special state of mind and body that the sounds of moving water create when one listens to the complexity of rhythms and pitches. By manipulating, re-contextualizing, and framing the common elements that form the fabric of our lives, Lockwood opens our ears, our eyes, and ourselves to worlds of beauty that resonate from the surface to the depths of our beings".

(http://depthome.brooklyn.cuny.edu/isam/Newsletter%20F04/lockwood04.htm)

In other words, she is interested in the beauty of nature and spiritual and psychological resonance of a natural environment and the poetic potential of sound. This differs from my works by my more practical, physical and sometimes threatening type of nature.

Hildegard Westerkamp

Hildegard Westerkamp participated in the World Soundscape project from the 1970's, and what interests me in particular is her values and accounts for how she works in the field and her process of postproduction.

For her, recordings in the field became another way of listening and new sounds to listen to that differed from music. This was a constant process of discovery and learning of what went on outside, and this way she developed interest for perceptual and sensual kinds of knowledge.

And she was interested in the difference between the recording experience and the actual recording results. Good experiences could give bad recordings and vice versa, and when listening afterwards, she could hear things you did not notice when you were there.

She frequently uses her own voice, which becomes a mediator between the environment and the audience, filling out what they otherwise could not know (Lane & Carlyle, 2013, pp. 109-121). She emphasis that there is a complex and fine balance between the voice of the recorded environment and that of the composer.

An example of her work is Kit Beach Soundwalk is a composition about the acoustic realms of the beach and its small animals like barnacles. This is a world of "of high frequencies, inner space and dreams." (http://www.sfu.ca/~westerka/program_notes/kits.html). Another example of her work is "At the Edge of Wilderness" which is a soundscape composition combined with photographs (Westerkamp & Debeugny, 2013).

These are similar to how I feel about her works in general: they are beautiful artworks, but also too aesthetic, soft and internally oriented. I may exaggerate a bit, but this kind of Nature is beautiful and vulnerable, it is there for us to discover so we can enhance our sensibility and cultivate our spirit.

John Drever

John Drever's works are too broad for me to account for here. I will just want to mention that I bought the CD Phonographies in 2006 that was what inspired me to start sound recording. From this followed my first work with sound, the "Sound and Sensations of Seasonal Change". I now enjoy Peregrinations and Hippocampus.

Found sound, digitally processed on location

Antye Greie

Antye Greie has been involved in electronic music and composition since the 1990's. She records, writes and performs music in remote locations. The main topic of her works is emotions of field recordings, which she explores and express through digital processing. My interest here are her works with field recording of remote places. An example is the Kilipsjærvi/ Bioart society project of 2011, where she is processing field recordings. (http://kilpisjarvi.poemproducer.com)

She connects digital music and wilderness, and digital life with remote places in a way that dissolves any distinctions between nature-culture. Her aim is not to convey the sense of a particular place, but to convey the emotions of sounds, wherever she record them. She does not aim to bring the listener back to the place of recording, but rather to use the sounds in further elaboration.

She tends to do the postproduction simultaneously as the field recording by processing them through for example software of Max/MSP.

A way she presents her works is by performances on site, and sometimes streaming or sending them directly on the internet while performing. She presents her website, http://antyegreie.com and http://poemproducer.com.

I find it interesting how she works with Northern environments, still both her aims and the way she works with digital processing differs from mine.

. . .

I situate my practice within the field of work of soundscape compositions. These are inspiring sound artists, although my works differ from theirs in the sense that I work with a particular rough and risky environment, I let myself be exposed and my works are thereby less aesthetic and more external oriented.

4. Research topics, theoretical framework and critical texts.

The research topics are about notions of nature, wilderness and soundscape and about experience and listening. And it is about art as articulation and communication, which connects to issues of materials and technologies, creative orientations and practices like soundscape compositions.

For each of these areas, I will account for theoretical approaches and concepts, followed by more in depth commentary on the philosophical framework and critical texts. Here I draw on several authors because of their insight into the particular areas of concern.

After the main sections, I will make a short summary and account for how I use them in my research.

4.1. Nature, wilderness and soundscape

This section starts with the topic of nature, wilderness and ecology, followed by commentaries on texts and debates from various disciplines. The second part of this section is about ontological approaches to sound, acoustic ecology and soundscape.

4.1.1. Nature, wilderness and ecology

Topic and framework

Philosophers and scientists from a range of disciplines, theoretical approaches and empirical studies share the critique of the idea that humans control nature.

The philosophical foundation is that humans are part of nature, and that nature is both the source of life and of death, as the "deep" and "dark" ecologies, emphasis, respectively. I will draw on Spinoza's unitary approach to nature (Nadler, 2012), Whitehead's process theory (Stengers, 2011; Whitehead, 1964; Whitehead et al., 1979), the ecological philosophies of

Næss (Næss, 1993/2012) and Morton (Morton, 2007), and also on Ingold's works about perception of environment (Ingold, 2000, 2011).

Several writers discourage the use of the concept of nature because they think it is too "purified" and transcendent (Latour, 2004b), too abstract (Ingold, 2000) and connected to the romantic tradition and consumerism (Morton, 2007). Even though nature and wilderness are contested notions, I will use the concepts here, because this research is about specifically Norwegian wilderness, and nature is more frequently used and has a concrete meaning in Norwegian culture¹. There is a concrete and shared experience that nature presses itself upon us physically through the seasons and weather, in such a way that our society and personal lives will be at risk if we don't adapt. Nature sets conditions for human society, and therefore, to avoid the concept in this project does not make sense in terms of the practices I pursue and their reception as artworks and field recordings.

The concept of ecology is an integrated part of the concept of nature², but ecology directs attention to the interconnections and interdependency of processes and forces, of geology and atmosphere and of plants and animals, including humans.

The point here is that nature and our environment is physically real, present and has impact upon us; and that "everything is connected to everything". And since human sensibility and attention is limited, there is always more out there than we can sense and more to discover.

Literature commentaries

This section comments on texts from metaphysics, natural science and social science. Metaphysics articulates the core orientation and assumptions of the project, which are naturalistic, holistic and ecological. Natural sciences tend to have nature as their primary field of study, and the works presented here resonates with theses metaphysical approaches, they share concerns about human relationship to nature, and they resonate with some of the sonic art debates that I will engage in.

² Even though Morton recommends ecology without nature.

¹ Examples are (Dahle et al., 2010), (Næss, 1976), (Næss, 1993/2012), (Tellnes, 2003), (Vetlesen, 2010), (Witoszek, 1998).

Metaphysics and ecological philosophy

Metaphysics is concerned with the basic principles and grounds on nature. Its method is philosophical speculation, and the aims are to construct holistic worldviews with consistent conceptual framework.

Here, I will shortly present the metaphysics of nature of Spinoza and Whitehead; the similarities and distinctions between them and what is relevant for this project.

Spinoza (1632-1677) in his main work Ethics (Spinoza, Spinoza, & Curley, 1996) dissolves the dichotomies of God-Nature, human and non-human and mind-body. Monism is at the core of his philosophy where he merges the concepts God and Nature. Nature or God is universal, unified and indivisible, it includes everything and there is nothing outside of it.

There is no distinction between metaphysical and empirical in his way of thinking. Nature is essence and substance, both abstract and concrete, multi-layered and with multiple modes or appearances. He uses the concept of psychophysical parallelism, which means that for every physical state there is also a mental state. This includes not only mind-body, but also whole nature and the planet.

The process philosophy of Alfred North Whitehead (1861-1947) contradicts the idea that substance is the essence of nature. In the work "Process and Reality" (Whitehead et al., 1979) he presents his process philosophy³ which gives ontological priority to change and movement over substance or essence. According to this philosophy, to study substance is to consider the processes that produced it, and what process of change it will (or may) undergo. In other words, what we need to explain is how and why things are stable, rather than how and why they change.

Whitehead's nature is an infinite process of becoming. Nature or reality is a series of singular events and simultaneous flows of forces and energy that is continually changing although not always so fast that we may be aware of them. It is never complete, but continually surpassing itself. This process philosophy is a core idea of this project.

He opposes the distinction between mind and body. And he criticises distinction between primary and secondary qualities; that is between those aspects of nature that can be quantified like weight

³ For a short to-the-point presentation, see the video "Process philosophy explained" on http://www.youtube.com/watch?v=-Q6cDp0C-I8) (Cobb, 2010).

and speed versus those that cannot, like colour, smell and taste, which was invented by Galileo and Locke (Latour, 2008, p. 12-13).

It is not so, he argues, that what can be quantified is in nature and what cannot is in the mind. From here Whitehead develops his concept of nature as "what we are aware of in perception" (Stengers, 2011, p. 38). That we can experience nature is another core idea of this project, and I will discuss his concepts of awareness, perception and attention in his theory of nature in the section 5.2.1 on experience.

Another of Whitehead's central points is that nature is always capable of retort. Nature is risky and you can only ignore nature at your peril; those that do not pay attention will not survive. There are forces out there that we sometimes have to obey; there are things that you can only ignore at the pain of death.

And, yet this thing that we cannot ignore requires reminding of. We live in sheltered areas so that our attention can be elsewhere. The two natural science approaches in the following section also deal with these issues.

Comparing these philosophers, we find that none of them believes in teleology in the sense that nature has any intention or final cause. They merge metaphysics and the empirical, which means that nature is concrete and possible to sense.

They reject the bifurcation of nature. They insist on unity and the all-inclusiveness of nature and human's position within in it. Also, their refusal to make the cut between mind and matter resonates with several works that I will discuss later in this section.

Ecological philosophy

Næss' Ecology, Society and Lifestyle (Næss, 1976) and his "The deep ecological movement: some philosophical aspects" (Næss, 1993/2012) is ecological philosophy inspired by Spinoza's emphasis on the unity of human and non-humans, God and Nature.

These works are about the relationship between humans and other species on earth and the impact of human society on environment and he criticizes the "shallow ecology", that is the ideology that the ecological crisis can be solved through technological development and economic growth.

Næss calls for an "egalitarian policy of the biosphere". Life on earth has intrinsic value; independent on the value for humans, and humans has no right to exploit other forms of life. He calls for change of values and lifestyle that appreciate the quality of life rather than adhering to

increasingly economic growth, and for the "awareness of the profound difference between bigness and greatness" (Næss, 1993/2012, p. 86).

Næss developed the body of thoughts in these works during the 70's and now we may consider them too "soft". That humans are not in control, that nature are more than humanity, and has the capacity to strike back are experiences that I will explore in this practice led research.

In *Ecology without nature*. *Rethinking Environmental Aesthetics* (Morton, 2007), Morton suggests a "dark ecology" rather than "deep ecology".

He rejects the notion of nature as purified, harmonic, beautiful and benign. He rejects both the concepts of anthropocentrism and biocentrism because "everything is connected to everything" and there is no such thing as a centre. And he criticises the idea of environment, which tends to refer to a general ambiance and which is an aesthetic approach.

Rather than a deep ecologist searching for our unity with all things, Morton calls for our realisation that we are distinct, mortal and vulnerable beings, dependent on other humans, species, materials and climate.

He argues that we are surrounded by particular people, species, materials, air and water which all have their own independent existence, independent on the perceiver, and calls us to accept what is different from us, what we don't like, whether it is humans, species or our waste, in short, accept our own and other's subjectivity and distinctiveness.

He proposes the concept of a dark ecology that is deeper that "deep ecology". "Dark ecology" is the realisation that what we do always has consequences; that our human species is about to destroy the conditions of which we are dependent, and to realize this is the source of sorrow and the sense of uncanny.

In my research, I will draw both on "deep" and "dark" ecologies where nature is both source of life and pleasure and it is the source of pain and death.

Even though I will not reject the concept of nature, I will use the concept without any transcendental or romantic notions, that is those concrete, physical forces and processes that humans do not control, like for example winds in the mountains. And the concept of "Wilderness" has a quite precise meaning of geographical distance from society's infrastructure of roads and shops, together with the occasional quite strong climatic forces.

Natural science

Here I will present the concept of nature that is embedded in the theories of Gaia (J. E. Lovelock, 2005) and the Anthropocene (Crutzen, Steffen, Williams, & Zalaciewicz, 2010). Both of them postulate that humans are about to take over the world, but we are not in control.

The Gaia theory postulates that the Earth is an organic whole, in the sense that physical, chemical and biological processes have mutual impact on each other. In the geo-historical time of the human species, these processes have been balanced in a way that sustain an atmosphere suited for humans, but are now changing in a way that threatens life on earth as we know it (J. Lovelock, 2009).

Paul J. Crutzen labels our present geological epoch as that of the "Anthropocene", which is the period where the human species have taken over the planet and are dominating other species. Human beings are now the most influential natural force, "nature" is fenced in and "wildlife" is like our domestic animals.

A reason to worry is that we are changing the atmospheric composition of the planet and thereby undermining our own existence. "The Anthropocene represents a new phase in the history of the Earth, when natural forces and human forces became intertwined, so that the fate of one determines the fate of the other." (op. cit. p. 2231).

The theory has a tension between dominance and control. It says that humans today are dominating everything and influencing everything, but by doing that we are about to destroy the conditions for our lives.

There is an illusion of dominance. Humans cannot be dominating earth because our existence and our experience only happen as *part of* nature. Nature is always capable of a retort; therefore, it is beyond control.

Both these works consider planet Earth as a single entity or "spaceship" in orbit around the sun, influenced only by the sun and the moon. Nature has "laws" or regularities, but these are only partly predictable because of their infinite complexities. And they are not controllable.

These theories inspire this project in several ways. Geological history both conditions and affords human production and performance, however, human activity and settlement is within a limited (geo-) historical time and space, and within a limited range of natural conditions. This means not too windy, not too cold or too warm, or too wet or too dry.

Also, they emphasise how nature and culture⁴ are intertwined, which resonate with the social science approaches of the next section. However, the perspective of the anthropocene is from inside human society and out. This project is like an inversion since its perspective is to go to its margin and explore how nature lets itself felt outside the territory of human settlement.

Social science

The social sciences tend to be highly critical to the concept of nature. Their concerns are the intersection between nature and culture and not nature as such; and the ways they approach this intersection reflect their discipline and theoretical agendas.

I structure the social science approaches and authors that I present here according to critique of nature as abstraction; nature as social construction and discourse; nature as environment; nature as geographical space and biology, and nature as networks and entanglements.

Nature as abstraction

There is a strong social science critique of the concept of nature as abstract, transcendent and pure and this critique calls for an immanently, empirical, situated and hybrid concept of nature.

Latour is a strong opponent to the concept of nature, and his "We have never been modern" (Latour & Porter, 1993) is dedicated to this critique. What he calls "The Modern Constitution" is the framework of thought that according to him has guided the development of science in the 19th and 20th centuries.

This "Constitution" guarantees that "Nature" is transcendent and surpasses us indefinitely. This is the idea that, "It is not men who make Nature; Nature has always existed and has always already been there; we are only discovering its secrets" (op. cit. p.30). At this point Latour expresses a head-on critique of Spinoza's Nature-God, while he resonates with him in his call for a concept of nature that is immanent, that is concrete, physical and present.

According to Latour, another core and false assumption is that it is possible to make an analytical distinction between the concepts of Nature and Society. In reality there is no clear-cut distinction between them, he argues; everybody knows this, therefore, we have never been modern, but scientific discourse still evolve around these purified concepts.

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⁴ I choose to use the concept of culture as reference to humans and human society. Culture includes aspects of society, but they are not identical, among other things, because society may also include assemblages of non-humans.

His concept of *hybrid* refers to what is in the intersection between nature and society: any tools of science are hybrids between nature and society, so are any scientific knowledge about nature.

Latour's project is to criticise the way that the nature sciences produce knowledge; they should admit that the "Laws of Nature" that they discover in their laboratories are just the outcome of the setting. He argues that they use the abstract concept of Nature as a tool of power. For him, and for most of social science authors, nature is immanent and hybrid, and in his *Politics of Nature* (Latour, 2004b), he suggests to get rid of the concept once and for all.

This leads to a central point in this project. Yes, the position here is that nature is immanent, empirical and situated, but it is not always a hybrid. Analysis based on the postulation that nature is a hybrid exclude the possibility that there are natural forces that exist independent of humans. This is what this research is about.

Nature as social construction and as enactment

Another social science approach is to analyse how the discourse on nature varies according to historical context, social position and interests.

"Contested Natures" (Macnaughten & Urry, 1998) is about the various ways that nature is socially constructed and represented. Its topic is how writings and practices vary with culture and class in Britain, particularly since 18th century.

During this period, social and economic development changed the British landscape, and the authors make a social and political motivated analysis of how various groups of institutions, walkers, writers and artists represent the landscape.

This approach puts society and its settlements at the centre stage and contrasting itself to "nature" as only the barren land at the margins. This kind of nature is arena for explorations during the last centuries, and both literature and visual media is representing it as if thoroughly controlled.

Nature as space and biology

Geography looks at nature-culture relations in the landscape and across and within bodies. There is no nature-culture distinction because society penetrates both landscapes and biological matter.

Whatmore's *Hybrid Geographies*. *Natures, Cultures, Spaces* (Whatmore, 1999) combines approaches from Geography, Science and Technology Studies (STS) and Non-representational

theory. She is inspired by several of the authors like Whitehead, Bergson Merleau-Ponty, Latour, Ingold and Thrift.

She studies the intersection between nature and society as space and as biology or bodies, and applies theories of corporality and embodied practices. She considers knowledge practices of everyday life. She relates to affect, sensations and in habits that are engaged in "thinking through the body" which includes "the knowhow, tacit skills and bodily apprehension through which everyday life goes on" (op. cit. p. 5-6).

Whatmore criticizes the notion of nature and wilderness as a space outside of society. Social life and nature are heterogeneous entanglements and humans are part of a "more-than-human" world. Humans and non-humans are entangled into each other's lives to such an extent that we cannot say where one ends and the other begins.

She writes about wilderness management, treatment and experience of (being) wild animals; and about genetic resources and GM foods and relational ethics. She inquires into "things in the making", that is the process of how things happens. Her method is to "flesh out" the topological conception of wildlife by making textured narratives or virtual journeys about for example, the way wild creatures are caught up within networks and the technological reach of society.

So, how does this connect to this project? Whatmore writes as if from within the period of the anthropocene where humans have taken over the world (Crutzen et al., 2010). Her aim is to show how nature is incorporated into to fabric of social life and thereby her project is not concerned about the nature beyond.

That nature is missed out the very moment it is caught into a conceptual framework is a position in the following section on experience. Whatmore is also aware of this, and particularly the approaches that point towards body, affect and awareness are central for this project.

Thrift is another geographer and in his book *Non-representational theory* (Thrift, 2008), he takes nature into account in several ways. He states that "Nature is astonishingly prolific, able to produce infinite variation and exquisite adaptation, and abundantly and unremittingly cruel. Nature does not take sides" (op. cit. p.25). This position resonates with Whitehead's postulation of nature as the infinite and potentially threatening, and with the idea of this project that there is nature beyond culture.

Thrift supports the argument that humans are part of nature by referring to our drives and impulses that is outside our comprehension; this is an argument that has similarities with Freud's concept of the subconscious and it leads to the concept of affect.

Thrift's discussion of nature is mainly about how we experience it. I will discuss more about non-representational theory in the section on experience.

Nature as sensory relational environment

Social scientists tend to prefer the concept of environment before nature. This is because they consider "nature" as too abstract and contested, and because "environment" includes both culture and nature.

Ingold in his *Perception of the Environment* (Ingold, 2000) and *Being Alive* (Ingold, 2011) criticises the concept of nature for being too crude. People who live in nature, like hunters and gatherers, have no similar concept because they are embedded in it and thereby need more nuanced concepts. He argues that only those who have no relationship to it refer to "nature"; it indicates distance to the reality that we perceive, as if we are outside of our environment. And, according to Ingold, it indicates a "global perspective", which is someone's attempt to speak for all of us, while hiding their position and their agenda. There is no such thing as a global perspective because we cannot view the world from outside of it⁵ (Ingold, 2011, p.96).

Ingold emphasises that all relationships and perceptions are situated, and that the environment is the relational field in which we inhabit, move and perceive. We should not conceive of environments as passive, "taken-for-granted" background of which we do not need to pay attention in everyday life. They are "alive" in the sense that they are constituted by dynamic entities with particular trajectories or lines, as described in *Lines: a brief history* (Ingold & Dawson, 2007). Environments are material and they are happening to us and with us. In this sense, the concept of "environmentalisation" is the process of problematizing how people are part of the happening of our environment (Marres, 2012. p. 22).

Here I will use "nature" as what is non-manufactured material and atmospheric. I will use environments when I aim to include the human practice and relations. This means that not all nature is environment, for example the society of octopuses in deeper sea-beds, and not all

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⁵ However, astronauts may have something interesting to tell.

environments are nature, like for example indoor office environments (even though they depend on air and water).

Nature as networks and entanglements

Michael Callon, John Law and Latour developed the conceptual framework for the Actor-Network Theory (ANT). Here I will refer to Latour, who developed his approach to ANT in his Science in Action (Latour, 1987), elaborated it further in "We Have Never Been Modern" (Latour & Porter, 1993) and in "Reassembling the Social" (Latour, 2007).

According to ANT it is the networks of connections, that is, the on-going performances of relationships that constitutes society. To analyse society means to make empirical accounts of the networks of relations.

From this follows that there is no clear distinction between macro and micro level of society, in the sense that general "macro" processes will be possible to identify as having impact on "micro" levels, and that it is all the network activity on "micro" level constitute "macro".

This has also impact on how we understand time and space. Considering space as constituted by the on-going performance of social networks, these networks are not only local, they have external connections, and this means that it is difficult to make a distinction between where a space ends and another begins.

Also, ANT brings non-humans into the analysis of social networks. Humans and non-humans interact all the time and non-humans have impact on relationships between humans. Latour introduces the concept of "actant" that in principle gives non-humans equal status as humans in a network. Agency is distributed and not necessarily intentional, which means that what happens depends of several "actants" and is not necessarily intended, nor can be controlled.

My interest here is how I can use ANT to study nature beyond culture. It has similarities with ecological thinking in the way it brings to the foreground the dynamic connections and relationship between species and materials. Will it make sense to use ANT on networks where no humans participate?

In this practice led research, I will analyse a site where the non-humans are the main forces and processes to such an extent that humans are not in control. We are not even needed. It is the dynamic interactions of winds, water, stones and plants that produce this site; their "networking"

goes on without humans, while we can participate by exposure and immersion. However, the challenge is that the complexity is infinite, since where does the wind, or the water, begin and end?

4.1.2. Sound, soundscape and acoustic ecology

Topic and framework

Sounds are inseparable part of nature, and regarding the ontology sounds, I will draw on Truax (Truax, 2001) and LaBelle (LaBelle, 2008). In short, a sound is a vibration that moves from a source, happening or event, and it is moulded by the space it travels through and also adds other sounds on its way.

The concepts of Soundscape and Acoustic ecology derive in particular from Schafer (Schafer, 1977/1994), and emphasis the interconnection between all that happens around us, and how we perceive it. Practicing acoustic ecology is about tracing, listening and trying to make sense of what happens in our environment. Soundscape is a condition of an environment, as we hear it, while soundscape composition is the attempt to reproduce and express this experience.

Literature commentaries

I will comment on text about ontology of sound, the concepts of acoustic ecology and soundscape.

Ontology of sound

Sounds are physical and mechanical vibrations in media, like air, water or other materials. These vibrations are physical energy that affects human and non-human materials, like the body.

Truax, in his conference lecture "Composing music with the Environment" (Truax, 2010) decribes the character of sound through space or volume. There is space or volume *within* the sound (ex. structural richness and temporal richness).

And there is volume in the space that produce reverbations, so the sound we hear includes the volume of the space it travels through. All frequencies travel equally fast, but reverbs from walls and objects in space arrive later. This "reverberant tail" tells us about the shape, size and quality of the space is such a way that we sound has its space included.

In other words, sound is shaped by the space through which it moves, but the volume of sound and the volume of space make so that we cannot easily separate between the cause or source of the space and the space of sound.

I will take as point of departure that the vibrations of sound are modes of (mountain) nature that exist with or without human awareness. The physicality of sound is relevant in my research in the sense that it is external to humans. By enhanced listening, more become available for us, which is the topic of section 5.2.2.

Acoustic ecology and soundscape

The concept of soundscape refers to our auditory relationship to the environment and derives from Schafer's *The Soundscape: Our Sonic Environment and the Tuning of the World* (Schafer, 1977/1994). The field of acoustic ecology is the study and representation of sounds of natural environment, and Schafer's concept of soundscape is any acoustic field of study. Such studies mainly deal with the connections between sound and place, listening and social meaning, and the connection between representation, sensibility and creativity of soundscape composition.

Schafer's sensibility is influenced by ecological ethics, in the sense that he values natural and harmonius sounds above the cacophony of mechanical sounds of urban life. These ideals are not necessarily shared by later users of the concept.

In the *The World's Soundscape Project's Handbook of acoustic ecology* (World Soundscape & Truax, 1978), what is central about the concept of soundscape is how it is perceived and understood, and as such depends on the relationship between individuals and the environment.

The concept of is also used in natural sciences beyond the antropocentric perspective. The article "Soundscape Ecology: The Science of Sound in the Landscape (Pijanowski et al., 2011) use sounds of landscapes and animals consider sounds as integral part of the ecology of an area, through which one can analyse environmental characteristics, relationship between species and the impact of human produced sounds. The article is yet another example of how to explore our external reality through sound, and that soundscapes are more than a matter of human aestethetics.

Sound perspectives and inside / outside.

In her article "Speaking from inside the soundscape" (Westerkampf, 2001), Westerkamp argues that we are always in interaction with the soundscape from the inside, in sense of space; it is not an object that we can study from the outside. Here, she resonates with the argument that

positions are always embodied and situated (Stengers, 2011), (Thrift 2008); that we are within an environment (Ingold 2000). According to them all, the soundscape is an integral part of the social setting where our experience is influenced by other factors as well.

Kelman in his *Rethinking the Soundscape* (Kelman, 2010) show how the term is used in various ways; some authors focus on locally produced or mediated music; others on how various communities attach meaning to sounds. For example, Truax also include soundscapes of "artificial environments", like musical compositions and other mediated sounds.

4.1.3. Summary and relevance

All of the authors presented above reject the idea of bifurcation of nature.

Spinoza's concept of nature is where everything is connected and nothing is outside. Whitehead's concept of nature is based on process theory where everything is the continually and infinite forging and dissolution of relationships. They reject the bifurcation of nature into body – mind, nature – culture and primary and secondary qualities.

The natural scientists Lovelock and Crutzon argue that the whole planet is a biosphere of which we are dependent, and that we influence it without being in control of the consequences.

Social science authors presented here also criticise the bifurcation of nature, however in different ways. They refuse any principled distinction between humans, non-humans and things, and calls for social research to include "more-than-human". They seek to dissolve the distinctions between inside/ outside and otherness, and argue that description and analysis is always situated, and should start from an immersed position. From this follows arguments about social constructions and politics of representation, which leads attention to what the concept of nature means for various social groups.

In order to go beyond studies of linguistic representations of nature, several of these authors argue that we should study nature or rather the environment as a relational field. The environment is produced, and therefore should be studied, as a process of lines or trajectories, which merges issues of ontology and epistemology.

Following the rejection of bifurcation of nature, sound is integral, real and physical and should therefore not be analysed as something separate. And the concept of soundscape and acoustic ecology should necessarily be considered as anthropocentric, in the sense that sounds and

vibrations from landscapes, atmospheres and species exist without the existence of humans.

In the following, I will use the concept of soundscape both as an integral part of nature, and, as something that I enter into depending on where I locate myself. It is there without me, but through my movements, I also contribute and participate in the soundscape.

Nature is something I am inside, while wilderness, regarding the state of our planet today, is more about a particular geographical / atmospheric condition where I feel forces of nature more directly, and that I can enter in order to explore and to be exposed. This also counts for the soundscape.

4.2. Experience, embodiment and listening

What I mean by nature beyond culture requires an interrogation into the concept of experience, which is central both to the concept of nature and to technology as exploratory tool. If it is so that "nature is what we are aware of in perception", as Whitehead claims, then tools that enhance perception should also enable experience of nature.

I am interested in how can experience be not an exit from nature where experience moves us away from nature, but how can we engage with experience as an exit into nature. So, the topic of this section is how various disciplines and authors approach this issue.

Then follows a short interrogation into approaches to listening in sound studies.

4.2.1. On consciousness, embodiment and practice

Topic and framework

Some basic concerns and works on experience that are relevant for this project are Bergson's intuition vs. intellect (Lawlor & Moulard, 2012), Massumi's emphasis on affect (Massumi, 2002) and Merleau-Ponty's phenomenology (Merleau-Ponty, 1966). They emphasises that we experience more than we are conscious of and thereby tune down the role of cognition.

In contrast, Morton (Morton, 2007) emphasis that consciousness is a particular human characteristics, for the better or the worse; it is central for how the human subject understand his/her surroundings, but consciousness also maintains a sense of distance. Therefore, he criticises the idea of a kind of pre-conscious immersion with nature, both as possibility and as value.

This practice led research emphasises the importance of practice, embodiment and tasks for how we experience nature. Here I draw on Thrift (Thrift, 2008) and Ingold (Ingold & Dawson, 2007), (Ingold & Vergunst, 2008), among others.

These approaches create a tension. On one hand, as biological creatures we are inseparable parts of nature, and on the other, our subjectivity maintains a sense of distance to our surroundings. I will seek to express and explore this tension in the practical artworks.

Literature commentaries

Intuition, intellect and language

This section will discuss the distinctions between intellect, sensations, affect and awareness and the limitations of language. I will shortly present how positions of Spinoza, Bergson, Whitehead and Massumi inform this project. And I will end this section with Morton and his defence for consciousness and language in artworks about nature.

Spinoza (1632-1677) in his *Ethics* makes a distinction between three kinds of ideas or knowledge (Spinoza et al., 1996), (Naess, 1975), (Nadler, 2012). The first is what he considers as random experience of sensory images and perceptions that give partial and confused knowledge. The second kind of knowledge is Reason that includes the ability to situate objects in all of their causal connections, and shows how and *why* they are.

The third kind of knowledge is intuition that takes all what is known by Reason and grasps it in a single act of the mind. Reason sees things under the aspect of eternity (*sub specie aeternitatis*) that is, abstracted from time and place, and apprehend them in their causal relationship to the "eternal laws of nature". He thinks that intellectual love of Nature (and God) is our understanding of the universe, and it is our happiness and our wellbeing.

Spinoza's theory of affect starts by situating humans in the midst of the universal laws of Nature. Similar to other beings, humans strive to exist or persevere our essence of being, as far as we can by our own power. An affect is this change in our power of existence, for better or for worse. When we are affected in a way that supports and strengthens our being, we feel joy, and when we are affected in a way that weakens us, we feel sad or afraid.

Bergson (1859-1941) in his *The Creative Mind. An introduction to metaphysics* (Bergson & Andison, 2002) makes a distinction between intuition and intellectual thinking as types of knowledge that give access to different sides of reality.

Intuition is unconscious or pre-cognitive knowledge that connects us to our environment. Bergson's intuition differs from Spinoza's in the sense that it experiences reality as duration, in the continuous flow of reality, as an unbroken and smooth stretch of time – it is the sense of what is about to happen, as described in his *Time and free will* (Bergson, 2001).

Intuition consists of entering into the thing, rather than go around it from the outside. This "entering into" gives absolute knowledge. It does not represent its knowledge; it acts it. Intuition is always an intuition of the reality "out there" (Lawlor & Moulard, 2012).

Intelligence is conscious, conceptual and analytical knowledge that relates to form. Such knowledge treats everything mechanically and consists in dividing or reconstructing things by means of synthesising perspectives, disconnected from what was perceived in the first place.

Whitehead's (1861-1947) main works are *The concept of nature* (Whitehead, 1964) and *Process and reality* (Whitehead et al., 1979). His concept of nature is what we know instinctively or is aware of in perception. Nature is infinite, and the more attentive and aware we are, the more of nature we will have access to and more can be learned (Stengers, 2011, p. 69).

Experience is "foothold" to reality; there are things "out there" that captures our attention; we cannot be aware of something that does not exist. What we experience belongs to what we are aware of (Stengers, 2011, p. 64).

However, our awareness will always come from different positions; it is biased, partial and will never encompass it all. We all have a particular position in time and space that gives us different focus for the act of awareness - we may call it "locus standi", standpoint, situated, perspective, or "point of view" (POV).

The variation of standpoints is not what you and I decide inside our minds: it depends on what happens to us, but the way we interpret it is not given (op. cit. p. 65).

Whitehead opposes the bifurcation between nature in our awareness and the nature that is the cause of awareness (op.cit. p. 38). Therefore, we cannot distinguish "what" we know from "how" we know it; what we know merges with the method and position of knowing. There is always such-and-such a way of knowing.

Reality is what happens; a "happening" is an occasion of experience, and an event is what happens during a particular period in time. There are some events which exact the death penalty for inattention

(Whitehead, 1964, p. 187-188), and humans will not survive unless we are attuned and attentive to our conditions for survival (Stengers, 2011, p. 62).

Whitehead states that "The sense organs testify to the importance of paying due attention to nature, *on pain of death*". Sensual experiences are sources of knowledge of nature that are critical for our existence. And all our senses are sources of knowledge. The body is not what explains but what testifies (op. cit. p.69), and therefore, concrete embodied experience is the touchstone that puts reality to the test (op. cit. p.48). For example, if I hit a stone with my toes, the pain is the proof that there is reality outside of my body.

To some extent, Whitehead's positions inform this research. His philosophy is never to go beyond usual experience but rather to transform it, to make what usually "goes without saying" matter (op.cit. p.46). For him, experience is a way to find an exit *into* nature. This is contradictory to Kant's metaphysics where experience is subjective and do not give us access to reality, and it contrasts Spinoza's position that sensory perception as confused knowledge.

Massumi (1956-) in his *Parables for the Virtual* (Massumi, 2002) discusses the connection between nature or reality, affect, sensations, body and language.

Affect is the full impact of reality upon us, that we somehow respond to, or store in our bodies. It is the connection between us, the past and, the becoming of reality. "The excess" is that which affects us that do not reach consciousness.

The body is the route to affect; it feels through movement, and it "thinks" and makes decisions before it has reached the conscious mind. The body doesn't just absorb particular sensory stimulations; it infolds contexts, it infolds situated volitions and cognitions (op.cit. p.30). And it is affected in such a way that makes it a kind of "recording device", or a carrier or storage of experience.

Bergson, Whitehead and Massumi argue that abstraction and simplification is restricted knowledge and from this follows their critique of language as a way to access reality or nature.

Language divides the continuity of duration into sections and intervals. When the conscious mind has translated the affect into words, then the singular experience is simplified and reduced. Through language, affect is categorised as personal emotions, captured into systems of discourse and thereby made socially available and sharable. The excess has disappeared on the way, it is "lost in translation" while at the same time it is stored as memory in the individual body.

The question then is to what kinds of knowing can connect with those parts of empirical reality that language leave out. This is a central challenge in this quest for nature and I will discuss this through the project.

In his Ecology without nature (Morton, 2007) Morton emphasises the importance of human consciousness in how we relate to our surroundings. He criticizes the aim of immersion in order to go into a higher spiritual unity with the supposedly harmonic nature.

He refers to Descartes and puts emphasis on individual consciousness and subjectivity, and he claims that these are what keep us aware of our distinctiveness in relation to what surrounds us. Maintaining our subjectivity is the only way that we can relate to our vulnerability and the consequences of what we do for others and ourselves. It cannot and should not be dissolved because it is this uncanny sense of distance or gap between our surroundings and us that makes us humans in this world and aware of our life conditions and vulnerability. This sense of distance is also the precondition for openness and search. We should strive to bridge this gap, but we will never succeed. Subjectivity and consciousness closely relate to language, and this has impact for how he considers the role of language in art.

Phenomenology

Phenomenology is a strong tradition in experience of environment. *Maurice Merleau-Ponty* (1908-1961) developed phenomenology from Edmund Husserl (1859-1938) and his main work is *Phenomenology of Perception* (1946/66) (Merleau-Ponty, 1966). Perception is the primary form of contact between consciousness and the world; it is embodied and pre-conscious. And perception is active and constitutive: we experience through our involvement in the world (Tranøy, 2011).

Merleau-Ponty criticizes the idea that the external reality is objectively given; any perception of the world is only partial. He refuses to make a distinction between the perceiving body and the world that it perceives. He argues that the world and the body are intertwined and mutually engaged, and thereby he dissolves the distinction between object and subject.

"(S)ince the living body is (...) stitched into the fabric of the world, our perception of the world is no more, and no less, than the world's perception of itself – in and through us." (Quoted from Ingold, 2011, p. 12).

Ingold is influenced by Merleau-Ponty, and I discuss his works elsewhere. Here follows a short presentation of some interdisciplinary works that are inspired by the phenomenology.

Abram's *The spell of the sensuous* (Abram, 1996) and *Becoming an Animal* (Abram, 2010) take Husserl's and Merleau-Ponty's phenomenology as point of departure and makes the quest to experience of nature into experiments and enactments in a way that makes nature become "alive".

These books take a strong position against language; however, in order to write books, we need to translate our embodied engagement and sensory experience into written language, and interpret them as stories. The books are about enactment of these ideas and relationships and reveal the surplus of experience that sensory engagement can afford. However, there is not a much reflection on the limitations, partiality or structural preconditions for such experiences.

Bachelard's *The poetics of space* (Bachelard & Jolas, 1994) is about phenomenology or lived experience of architecture in everyday lives. He introduces the concept of "topo-analysis" which is about the study of the sites of our intimate lives. The argument is that the way we experience spaces in houses resonates with our intimate inner, mental landscapes. The author criticizes analytical language and expresses these experiences partly through philosophical reflection, and partly through expressions of poets and poetry.

These authors focuses on modes of sensory experience and relationships to our more-than-human environment that tend to be under-communicated both in our everyday lives, and in this sense, they inspire this practice based.

Biophilia hypothesis

The Biophilia hypothesis is an approach to human relationship to nature that derives from evolutionary theory of the natural sciences. The *Biophilia hypothesis* (Kellert and Wilson 1993) argues that humans are animals that developed in green forests and fields. The hypothesis is that this is the reason why being in such environment tend to relieve tension and fills us up with energy, and explains the quest for attuning into the larger and living environment of which we are a part.

Hessen in his book "*Natur – hva skal vi med den*?" (Nature – what shall we use that for?) (Hessen, 2008) refers to the Biophilia hypothesis when he argues that there is biological component, not only cultural, in why people tend to be drawn to nature. He describes his own sensory and existential satisfaction with being in forests and mountain in various weather conditions.

Demographic growth and consumption lifestyle leads to extinction of other species and ecosystems, of which we have shared destiny. This threatens the life of future generations of humans. Now the larger share of the world's population lives in cities, and people have little direct sensory experience with

uncultivated green fields and forests. Nature has become an abstract; it does not exist or is inaccessible for them and there is lack of consciousness about how we depend on it.

Another work on this vein is *The last child in the wood* (Louv, 2010). Nature has always been a source for sensory nourishment, Louv argues. The book introduces the concept of "nature deficit disorder" and is about the mental and physical cost for new generations of not having direct sensory experience with nature.

These works informs this inquire into experience of nature. I want to experiment with how I can present experience of nature for city-dwellers to make in a less abstract manner. I want to focus on the connection between people's bodies and physical actions in the way they interact with the environment. However, I will also keep in mind that nature is not always benign, which is another side of nature experience.

Post-representational theories

In the following section, I will present social science approaches to experience of environment, followed by experience as embodied practice and performance, and approaches to sensitization and awareness

Concept of environment

Thrift's in his book *Non-Representational theory* (Thrift, 2008) are in tune with the authors above in their emphasis on space, embodiment, affect and practice as the sources of experience of an environment.

His connects his approach to human experience and perception to the concepts of environment and space, among others. An environment is the circumstances within which we live; we are part of it, make and influence it; and we are made and influenced by it. Environments have always multiple scales; they are not just local "here and now", rather, they are extended in time and space.

Environments are extended in time in the sense that they are produced by practices of the past and expectations for the future (cmp. Bergson's *longue durée*). And they are extended in space in the sense that they may be part of networks and connections from a broader space (cmp. Latour's ANT below). Perception is not a matter of being near or distant since distant networks may penetrate what is near; and local practices may have distant effects. Therefore, he recommends a non-hierarchical approach to space.

Thrift also bases his approach on Bergson's and Whitehead's process theory. Space is always in a process of becoming: it is produced by continually changing configurations of actors, material entities, processes and practices in everyday life. This is also in tune with Lefebvre's "*Production of space*" (Lefebvre, 1991) and Soja's "*Thirdspace*" (Soja, 1996).

Spaces are entangled, and production and perception of spaces are distributed among actors. Therefore, the experience of an individual cannot comprehend space. An enriched and textured account of an environment or space needs to adhere to multiple "voices" and trajectories, whether human or non-human.

Embodiment

Several social science authors supports the idea that perception is embodied and depends on practice.

Experience is perception that develops through embodied practice in an environment (Ingold, 2000), (Ingold & Dawson, 2007), *Ways of walking* (Ingold & Vergunst, 2008), (Ingold, 2011) and Thrift 2008). Movement is sensory experience and makes us continually change our perspectives, in a literal sense. We sense different things because the space we are moving through keep changing, among other things because we experience it from different positions.

We perceive the environment through our whole body. Most of our responds to our environment are unconscious; we make nearly all intentions and decisions before they reach our consciousness, and nearly all actions are reactions to other actions. And perception is multisensory which means that it is a synthesis of all our senses and that no single sense has priority.

Ingold, and Thrift, emphasizes that perception is a function of movement and that wayfaring is the fundamental mode by which we inhabit the earth.

"We perceive (...) from a path of observation, a continuous itinerary of movement. Locomotion, not cognition, must be the starting point for perceptual activity" (Ingold, 2011, 45-46).

Thrift (Thrift, 2008, p. 8) recommends that environments and social life should best be studied through practices, which he defines as "material bodies of work and styles that have gained enough stability over time".

However, he is not interested in the conscious point of view (POV) of the subject, like Ingold. Thrift argues that practices are not the properties of actors as individuals, but of the practices themselves. Individual actions are part of networks of practices, and these practices will fall out of use as the networks change.

For him, conscious attention depends on the intensity of the activity, not on the subject. What we *do* produce thought, particularly those activities that increase the intensity of our relationship to the environment.

Ben Anderson (2010) in his *Taking-place: Non-representational theory and geography*, argues that the this non-individual or subjective approach is inspired by Walter Benjamin's *Arcades Project* (Benjamin & Tiedemann, 1999) which Anderson describes as

"mobile, embodied, geo-historical specific sensuous way of knowing. It is not the individual's, experience, but rather "modes and moments of subjectification as they emerge across an abstracted collective of habits and gestures, speed and slowness (...)" (op. cit.p10).

Therefore, in this project, the interest is in on-going practices of being in nature, where focus is on attention to the spaces, environments, happenings and networks of which I am part, and to which I respond with attention and actions.

Sensitisation and awareness

In this section, I will account for Latour's social theory of sensitivity and for Ingold's critique.

Latour is a founder of the STS tradition and emphasises experience is as social process that develops in the dynamics between articulation, representation and communication. He argues that we experience reality through the networks that we are part of, and to learn to be affected or sensitized is a matter of learning. Without it, the world's abundance of sensory stimuli is not available for us or remains meaningless.

In his article "*How to talk about the body*" (Latour, 2004a) he articulates his approach to sensitization and learning by the example of the training of salesmen in the industrial branch of perfume manufacturing.

A sensitized body gives access to a differentiated sensuous world. The increased sensitization of the body makes us register the world in a new way. Acquiring a sensitized body produces at once a sensory medium *and* a sensitive world. The point for Latour is that sensory categories are standardized. This has similarities to social construction theory.

In contrast to Latour, in his *Being Alive*, Ingold (Ingold, 2011) argues that there may be other circumstances where learning to be sensitized is more like an open discovery of a field rather than sensibility according to conventions.

Ingold adds skill to the dimension of engagement and the quality of attention. Perception depends on attentive engagement with what we do, with our intention and our practice. Engagement is to be

attuned and responsive to the task as it enfolds. This engagement has developmental effect on the producer as a conscious being.

In other words, sensory awareness is not a matter of learning and transfer of sensory conventions; rather it depends on practice. And practice is not only "doing", it has another quality in the form of involvement, engagement and attention.

4.2.2. The practice and art of listening

Topic and framework

Because there is always more out there than we can hear, a common theme in sound studies is how conscious attention and practice can enhance listening. Categories of listening are about attention and focus, like "listening in search" and "listening in readiness" (Truax, 2001) which is about "external listening". "Internal listening" or "deep listening" (Oliveros, 2005) is about "listening to ourselves listening" (Westerkamp in LaBelle, 2008), that is the reflections and chatter in our own minds that external sounds trigger is us.

And listening can be trained, for example by conscious "ear-cleaning" (Schafer) and by "sound-walking" (Drever, 2009b; Westerkamp, 2010).

Even though we are inside the sound in space, there is always a listening perspective. What we hear depends on where we are located when we listen, and where we move (LaBelle, 2008). Also what we do, our task and motivation, decide the relevance of sounds and thereby our focus of attention (Ingold, 2011).

A central point in my research is that what we hear depends on what happens to us; listening is a conscious act, yes, but sometimes we cannot choose *not* to listen. Sounds may be signals of warning of which we cannot ignore; the forces and movements that sounds derive from, have impact upon us in a different way than aesthetic pleasure.

Literature commentaries

Experience, sound-walks and listening

Listening is the concious experience of sound, and before accounting for various practices of listening, Truax's in his *Acoustic communication* (Truax, 2001) focuses on characteristics of sound, sound as communication, practices of listening and the impact of technology.

He argues that what we hear and how we listen are, among other things, influenced by the relationship between the soundswaves.

Sounds may be particular, distinguisable and potentially meaningful (high fidelity or "hi-fi"), or they may be merged in such a way that they are difficult to identify (low fidelity or "lo-fi"). Hi-fi environments tends to encourage listening, while lo-fi do not. This has impact on the practice of listening. And it has impact on our ability to hear the sounds that we produce by our own movements, which influence our sense of space (Truax, 2001, p. 23-24)

In other words, the sound qualities of the site influence the way we listen. When we move from a site to another, we can shift our level of sensitivity and thereby adjust to different sound intensity or noise levels (Truax, 2001, p. 15-16).

That both the sound level and the quality of sound matters is the topic of Sara Mainland's *The book of Silence* (2009). She makes a textured elaboration of how noise impacts everyday life, and reports from an experiment in silent living in Scotland. Silence partly depends on geographical distance and social disentanglements from urban everyday life, which also helps to slow down the chatter of the mind.

Regarding this research, I expect that this mountain site encourage listening; there is no need to block out sounds and there are few sounds typical for urban environment.

Experiences are multisensory

Ingold's "Four objections to the concept of soundscape" (Cha. 11 in Ingold, 2011) takes embodiment and emplacement as point of departure for his list of critiques of the concept of soundscape.

He argues that the world we are part of is not sliced up according to human senses, and what we sense is always a selection of what is out there.

He compares sound to light, not to vision. Similar to light waves, sound is mechanical waves through a medium. As such, the soundscape is a phenomenon of experience, that is, our immersion in the world. Sound is not the object, but the medium of our perception. It is what we hear *in*.

Light and sounds are mediums in which we exists, and therefore they are inseperable, because we experience environment in a multisensory way. The senses influence each other; they are not isolated and therefore add information to each other. People experience the environment through

several sensory interfaces where sound is one of them; how we hear sounds cannot be distinguished from the other ways that we sense our environment, like vision and touch.

These objections are hardly controversial. They resonate with Spinoza and Whitehead and their concept of nature, with Westerkamp (2001) and her argument that we hear sounds from our position inside these mediums (mostly air), and with the works of Truax and Drever (more about this below).

In the following, I use the concept of soundscape in a way that resonates with Schafer's original intention of tuning of the environment. I am not concerned with any moral or spiritual aspect of the concept because I search beyond the anthropocentric or human perspective.

Schafer calls for tuning in to the experience of the particular place. This is is also the intention of my research and is central for the discussion of soundscape composition. In short, I take as a point of departure that there is more out there than I am able to grasp, which I am curious.

Listening as cognition, attention and skill

Truax's communicational theory of listening is to study sound in relation to meanings or cognitive processes (Truax, 2001, p. 11). Listening is about cognitive processing, intention, attention and skill.

Truax suggests various categories of listening, ranged according to levels of attention.

"Listening-in-readiness" is when we listen to sounds that gives direct relevant information about what happens. Listening is about detection of change; and attention depends on whether variation in sound content brings forth new information (op.cit. p. 18-19). For example, we may listen to the monotonous rain, but after a while we will turn our attention elsewhere.

Another type of listening is "background listening". Not all sounds in an environment are relevant at a particular time. Sounds are stored in our memory and bodies; listening depends on associations being buildt up over time, so that familiar sounds can be identified. We may not be conscious about a particular sound before it is gone (Truax, 2001, p. 22).

"Listening in search" is to listen *for* something. This is to constantly seek for, and consciously try to distinguish a sound among others, and is the ability to focus on one sound to the exclusion of others. This means that listening also is a skill that must be practiced.

"Sublimial perception" is yet another type of listening which is beyond Communicational theory (Truax, 2001, p. 25). These are sounds or rather vibrations, that the body only registres unconsciously. This resonates with Massumi's concept of affect (Massumi, 2002) discussed in the section of experience.

"Reduced listening" is to listen to the sound itself as a kind of music, rather than seeking to identify its source and meaning which listening to soundscape is about.

Pauline Olivero's "Deep Listening" (Oliveros, 2005) adds the internal dimension of listening. Such listening includes the sounds and voices of our mental processes, and she wants us to pay attention to how external sounds trigger and intermingle with our internal voices. Deep listening is a practice and attention intended for experiencing heightened and expanded awareness of the sound/silence continuum.

Listening and the practice of sound-walking

This brings us to the practice of soundwalking, which is the practice of listening directly to the environment, exploring what the naked ear hear, unmediated by recording equipment.

Soundwalking is a practice of "tuning into the world".

Drever's article *Soundwalking: Aural Excursion into the Everyday* (Drever, 2009a) is about the history, theoretical approaches and modes of soundwalking. Soundwalking is any walk outside where the intention is to listen to the environment in "a state of readiness for attentive unprejudiced listening". He describes soundwalking as listening for the sake of sonorous engagement and "orchastration. Listening with the intention of "orchestration" is to consciously choose between what we want to be our foreground and background sounds, and stop listening to what we experience as noise.

In her Lecture "What is a Soundwalk?" (Westerkamp, 2010), sound-walking is a way of being aware of ourselves. She recommend to "Listening to oneself listening", the kind of metalistening where we pay attention our own inner dialogue, reflections and associations of the soundscape, similar to Olivero's Deep Listening.

More important than revealing relationships within the acoustic environment is to be aware of the relationships between experiences and the acoustic, social place, and it reveals to us the special poetics of place. As such, Westerkamp is concerned with spirituality, and how our imagination and memory process alter what we hear.

Other literatures

These works on listening and communication puts humans at centre stage. Julie Cruikshank's *Do Glaciers' listen?* (2005) is about aboriginal people's knowledge of mountains and glaciers in Alaska and their encounters with colonial powers. They considered the glaciers as sentient, animate and able to respond to human behaviour, which is contrary to viewing them as resource for human progress. This bring to the foreground modes of sensory experience and relationships to our more-than-human environment that tend to be under-communicated both in our everyday lives and in research, and in this sense they inspire this research.

No matter, the enhancement of listening, through soundwalking or otherwise, is abaout sensitisation and is a way to enhance awareness of nature.

4.2.3. Summary and relevance

The philosophers presented here consider cognition and reason to have limited access to experience.

Spinoza's concept of intuition is an extension of reason towards more integrated knowledge. Bergson, Whitehead and Massumi consider intuition or awareness to have direct access to nature, even though it is always temporal, situated and partial.

The concept of affect is experience that is not yet conscious. Spinoza's affect indicates of our ability to preserve ourselves in the world. We feel joy when we are strengthened and sad when we are weakened. Massumi follows Bergson, and, for Massumi, affect is the direct connection to nature, and it infolds into our bodies and becomes embodied.

For these philosophers is awareness prior to thought. Direct access to nature is lost when we translate it into language and into socially categorised sensations.

The biophilia hypothesis of natural science claims that humans are animals that are drawn to green fields and forest because this was the environment of our evolution.

Merleau-Ponty in his phenomenology emphasis that we cannot make a distinction between the perceiving body and the world that it perceives; rather they are intertwined and mutually engaged. This has inspired several authors, and those presented here seek to connect to their environment through a heightened state of presence and sensory awareness. However, they tend not to problematize the social and cultural preconditions for such awareness.

The social science authors that I have presented in this section support the positions that experience is situated, which means that it depends on your social position and where you are situated. They also share the position that language sorts and filters sensory experience into predefined social categories that also structure the experience. Their particular interest in the representation of experience puts the source of our experience, for example our natural environments, into the background.

An alternative position promoted by non-representational theory is that experience is outcome of what happens, practices and performance. Sensitisation to an environment depends on intensity of the activity. This is the position that nature or environment lets itself felt as embodied, affective experience.

Regarding this project's aim of enhancing ecological awareness, I draw on both "deep" and "dark" ecology (Næss, 1993/2012), (Morton, 2007). Not only is ecological awareness about complexity and variation of our surroundings; it is also about how we are part of, dependent on and vulnerable to the nature we are in the midst of. Nature and wilderness in particular, is a matter of life and death, not just about aesthetic pleasure and subjective refinement.

Listening depends on qualities of the environment (ex. resonance) and qualities of the sound (ex. high and low fidelity). And listening depends on attention and skill, and sound-walking is a way to practice listening. I am less interested in "deep listening" as such, rather, I may use such listening as a way to explore and tune in to what goes on around me.

In my research, I am attentive to how seasonal change and weather changes the sound qualities of the site, and how my practices influence what I hear and contribute to sound-making.

4.3. Materiality, creativity and soundscape composition

This section has three subsections; about issues and approaches to materials and tools, to creativity and skill and then more directly to sound and artwork.

4.3.1. Materiality, technology and recording technology

Topic and framework

This project depends on tools, and therefore, the concepts, issues and debates regarding materiality and the use of tools that have implications for our understanding of recording technology and the issue of transparency of this research.

Tools are mediators (Latour & Porter, 1993), that is, they influence the practices and the outcomes in which they are used; they are part of networks of things, which means that a tool depends on another tool and a particular infrastructure for it to function the way we want (Thrift, 2008), and the also influence the sensory experience of the user (Vetlesen, 2012).

These issues resonate with the debates in sound studies about recording technologies as transducers, and the issue of transparency, and they touch upon this endeavour to access and communicate wilderness through recording technology.

Literature commentaries

Here follows a short presentation of some central authors and texts.

Mediators, Intermediators and Quasi-objects ... and transducers

Latour analyses the relationship between nature and society by drawing attention to how objects and things interfere with, and conditions, social life.

He distinguishes between things as "intermediators" and "mediators" of social processes. "Intermediators" are things that transport, transfer or transmit energy between Nature and Society without influencing any of them.

A" mediator" or "quasi-objects", however influences both the entities between which it is mediating, and, the content of its mediation (Latour & Porter, 1993, p. 77). The quasi-objects are simultaneously physical matter and social, and they thereby belong both to nature, to the collective and to discourse. Latour has designed the concept in order to highlight that things are concrete, socially connected and effective; and they enable us to trace networks (op.cit. 89.)

In this practice led research, the concepts of mediators and intermediators are relevant in the issue of transparency of recording equipment.

Society of things, Networks and Entanglements

Field recording are at the heart of acoustic ecology, and recording technology are material object at the heart of field recording. Material objects are part of networks, and both our everyday lives and the practice of field recordings are entangled with tools.

In his non-representational theory (Thrift, 2008) Thrift discuss how things are part of a "society of things" in the sense that they are part of larger groups and connections. They are not individual, isolated objects, but classes of things produced and consumed and thrown away; as such they may be part of global networks of production, consumption and waste.

This has impact on how he understands the use of tools. Tools exist within a network of relays. They are connected to other tools, for example a table connects to a chair; a headphone and a microphone connect to a recorder. A chain of tools may be vulnerable, and, since a chain is never stronger than the weakest link, a lack of or breakdown of one single device may interfere with or disable a full line of practice.

And tools are part of local and global material networks; they must be transported, which again depend on infrastructure.

High vs. low technology

Næss' in his *Ecology, Society and Lifestyle* (Næss, 1976) and Vetlesen in *Technology, Nature* and *Ethics* (Vetlesen, 2012) claim that type of tools have impact on our experience and suggest a distinction between low vs. high technology.

Different types of tools influence the degree of attention to nature; some types of tools distracts us by drawing attention to the handling of the tools themselves rather than to our aim of using them and the environment we are part of.

Næss` critique of "high" technology is based on how it makes people and societies entangled into loops of networks, which, according to him, redirects attention, resources and time away from intrinsic values and local concerns; these entanglements make people struggle to keep up the pace of technological change without any particular goal. In line with this, such technology tends to be so demanding on skills and re-education that all focus is kept on the tools and their

functioning, to such a degree that the tool-user's goals, that they were supposed to be used for, is lost (Næss, 1976, p. 111-114).

Vetlesen (Vetlesen, 2012) follows Næss´ argument and discuss how various types of tools directs or diverts us from nature. He refers to the example of the wood cutter´s axe and the embodied attention and skills involved in the process of cutting down a tree, compared to that of a man inside the vehicle of a wood cutting machine, where the physical and attentive demands are drawn and limited to virtual screens and buttons.

Næss's and Vetlesen's critique resonates with Marx' concept of alienation from the *Capital* (Marx & Engels) and *Estranged Labour* (Marx, 2004). Among (a lot of) other things, Marx discusses the preconditions for tools to be human extensions that empower their users, in contrast to how they become barriers that alienate them.

The position here is that whether tools directs or diverts people from nature depends of the setting and we cannot answer this on a general basis. However, I will explore these interesting postulations in this research. Are "high technology" barriers in these conditions, or is it possible to use technological advance equipment like electronic recording as tools of awareness? If so, what are the preconditions?

Recording technology as tools of awareness

Schizophonia, transducers and transparency

Schafer's concept of *schizophonia* refers to the split between the sound and its original source ("their natural socket"). On the site of the soundscape are the original sounds and tied to the mechanism and the characteristics of the space and that produced them. In contrast, electroacoustically reproduced sounds are mobile copies that may be restated at other times and places (Schafer, 1977/1994, p. 272)

How to deal with this split is a central issue in debates on soundscape composition, and the issue of transparency is about the relevance, meaning and technological conditions for this split.

This split connects to Schafer's normative position, which is not shared by LaBelle and others. First this because the sound we hear are not necessarily similar to "the original socket", since the space it travels through, and the sound of other events are added on the way. And second, what is

added on the way and during its presentation offers a kind of opportunity for audience to create their own meanings (ref. LaBelle). This is similar to Walter Benjamin's position on mechanical reproduction of artworks (Benjamin et al., 2008) that it undermines any fixed meanings and liberates the audience for independent and creative interpretation. However, this contradict the intensions of soundscape, which I will return to below.

The third issue is about technology, in Latour's terminology (Latour & Porter, 1993), this is about whether recording technology like microphones are mediators or intermediators.

Sterne in his *The Audible Past: Cultural Origins of Sound Reproduction* (Sterne, 2003) argues that the development of sound recording technologies and practices of sound (re-) production were part of the industrial revolution and thereby capitalism with its market economy and consumerism.

He analyses sound in relation to social practices and meaning and how sound technologies and sound (re-) productions were socially constructed in advertising. He argues that advertising portray sound (re-) productions as "real" in order to challenge people's scepticism and make them attractive as consumers, but in fact, they are social constructions and industrial products.

Basically, Sterne writes about sound reproduction as studio art, the role of sound reproductions and mediations for the relationship between people, and performances for the sake of reproduction.

He emphasises that recording technology are transducers, or mediators in Latour's terms. They don't transfer a sound from a place to another but do something to them on their way.

What we record is not the same thing as we hear. He rejects that there is such a thing as "truth" or presence in reproduced sound, for example, that there is a natural relationship between a "sound and its natural socket" as I will return to in the section on soundscape below.

He criticizes a notion of "authenticity" that exists prior to its reproduction because in the case of studio art and art performances, he argues that the "original" is reproduced for the sake of reproduction, and therefore had not existed without the copy.

However, he accepts a notion of authenticity that refers to the intensity or consistency of the listening experience. This is a claim about effect and affect, and thereby of subjective and psychological "truth".

Most of the approaches of the Audible Past are not particularly relevant for my work. I am not doing studio art, and the sounds that I record exist prior to me recording them and I am not interested in market value or consumer goods.

I short, microphones do something to the sound, and the argument goes that what comes in, for example the soundwaves produced by a brook, is not identical to the soundwaves that we hear through our recorders and loudspeakers.) It is only so through our imagination.

My aim is to use recording technology as tools of discovery; and, to reproduce my own and my technologies' experiences of mountains environment. This means that what is relevant for my project is his point about the "authenticity" as referring to subjective truth. Am I able to communicate this experience to the audience? This is also a matter of skill.

The practice of field recording

In the book "In the field. The Art of Field Recording" (Lane & Carlyle, 2013), the authors conduct interviews with eighteen sound artists about their motivation, practice, artworks and experiences with field recordings and sonic art. I will refer to this below when I discuss the particular artists.

Westerkamp in her *Speaking from Inside the Soundscape* (Westerkampf, 2001) discusses practices and issues of field recordings and compare listening with or without recording technology. To listen through the microphone alters the recording and listening practice in several ways. Microphones differ from the ear in the sense that they do not pay attention selectively according to meaning and relevance. They select according to frequences and intensity, distance and scope and through various mediums (air, water, material), all depending on type and quality of the microphone.

She refers to listening through headphones as being in a "bubble". Within this "bubble", listening causes a shift in perception in the sense that sounds become closer to the ear and are often amplified. They become tools of awareness by enhancing attention during the listening process.

However, headphones disconnect our ears from the environment and reduce sensitivity to distance and ability to localise sounds⁶. Also, we become separated from our social company because we hear differently than them.

When we do fieldrecordings, the listening experiences through our ears and through the different types of microphones give us various sonic input and awareness that altogether influence sense of place. Therefore, these various listening practices are of equal importance. There will be more about Westerkamp's accounts of field recordings in the next section.

Summary and relevance

Approaches to materiality and technology reveal some ironic and practical issues that contribute to put my wilderness experience into relief in a practical way.

Recording technologies are part of "families of things" which cannot function without each other. Each part, for example a battery, are nodes in networks of particular practices, and thereby preconditions for such practices.

They are entangled into social networks that may be part of global networks. They are consumer goods that depend on infrastructure like transport and electricity, and thereby produced for contrary circumstances than wilderness.

And recording technology influences my experience. I cannot separate the way I use these tools from the practice and the outcome of our task. Sense experience and knowledge that I gain from a microphone also depends on the microphone, in addition to what happens around me.

That I use "high" technology as a tool for ecological awareness is a challenge against the positions of Næss and Vetlesen. Here I will explore what are the preconditions for the use of recording technology in a way that expands, rather than restricts, awareness.

⁶ This point is relevant for Whitehead's warning that lack of attention maybe at "the pain of death"; by potentially blocking our attention to increasing winds, slippery rolling stones or stepping into a brook.

4.3.2. Consciousness and skills

Topic and framework

Ingold (Ingold, 2013a), (Ingold, 2013b) and Morton (Morton, 2007) have in common their emphasis on consciousness and attention for human experience and creativity.

<u>Ingold</u> emphasise that creativity is about craft, skill, and technology and about the conscious attentive connection to materials the craftsman / artist is working with. He claims that "skilled practice involves developmental embodied responsiveness" (Ingold, 2011). Here, this means that handling recording technology is a skill to be developed through practice, and that working with the raw material of the sound recordings is about creative skills and attentive connection with what these materials afford and.

In his Ecology without Nature (Morton, 2007), Morton considers consciousness as a main human characteristic. Consciousness is the reflection and expression of individual subjectivity and identity, which also means that our consciousness maintains the sense of distance between the self and the surroundings that we cannot dissolve. This sense of distance creates tensions within us, and this is the source of creativity. Morton argues that art derives from the creative negotiation between the external impacts and the internal, conscious response.

He criticizes the striving for "ecomimesis", that is to produce descriptions or "documents" that are most similar to nature as possible. Nature cannot be copied because it will always be bigger than us. We are in it and therefore cannot contain it. Even more details will not fill the gap between nature and our consciousness. Therefore, he recommends including in the artwork the reflections of the conscious subject on his/her sense of distance.

In this project I combine the "ecomimesis", that is somehow to share with the audience what it is that I experience, and I reflect on this through expressions and reflections in the field.

Skill and craftsmanship are central issues of art-production and practical field recording, even though they are often under-communicated and taken for granted. In this project, I account for my "mistakes" and fumbles, the process of developing my skill; and how this process stimulates new thoughts about my topics and developments of my artwork.

In particular, I draw on Ingold's work on creativity and "thinking through making", as a journey created through the intermingling of consciousness and materiality (Ingold, 2011), (Ingold, 2013b).

Here follows a bit more in depth presentations of these concepts and literatures.

Literature commentaries

In his Ecology without nature (Morton, 2007) Morton criticizes some basic concepts and notions in environmental art and literature.

Romantic literature and art tend to apply a concept of nature that is transcendental and aesthetic. He argues that Hegel's idea of "the beautiful soul" has an aesthetic relationship to its surroundings that is somehow independent or unaffected and thereby distant to the demands of everyday life, and it has a romantic idea of full immersion nature.

"Ecomimesis" is a strategy of art for coming closer to nature. It is based on the assumption that we will sense more of nature when we produce more detailed and textured descriptions that "look alike". In some sense, "ecomimesis" resembles the illusion that "documentation", for example by photographs, speaks for itself.

"Nature Writing" tends to be part of this strategy. It is the process and product of writing a detailed report of a subject's experiences while being in nature. Examples are that "while I am sitting here, I see such and such", and "now I am telling you that such and such happens around me".

Even though a writer may strive for "ecomimesis", he or she is unable to dissolve the distance and distinction between the individual subject and the object of nature. Morton argues that Nature Writing tend to emphasises and increase this distance, and presents a profound critique of Abram's works (Abram, 1996), (Abram, 2010), present in the section on phenomenology above.

Therefore, rejecting the strategies of ecomimesis and immersion, he calls for an art that expresses the subjects' sense of distance to her surroundings, as a search without closure.

Summing up, Morton rejects the idea of a transcendental nature, the idea of a general environment, the idea and value of "the beautiful soul" and immersion into nature, and the idea that ecomimesis brings us closer to "nature".

In his When ANT meets SPIDER: social theory for arthropods (Ingold, 2011, pp. 89-94), Ingold argues that Skilled Practice Involves Embodied Responsiveness. This means that skills become

part of the bodies' way to respond to materials and situations; they imply attention and consciousness and needs time to develop.

In the lecture Thinking through making (Ingold, 2013b) Ingold talks about creation of artefacts, and argues against the position that a process of creation starts with an idea about form in the mind of a person or genius, which is then projected into a material. He argues that creations are outcomes of processes where consciousness and the body (ex. hands) intermingle with materials and form it through the interactive sensory process of the encounter. Materials are resistant and ideas develop along the way, through the way the material responds to how you handle it.

"... making ..is .. an inherently mindful activity in which the forms of things are ever-emergent from the correspondence of sensory awareness and material flows in a process of life.....the maker – operating within a field of forces that cut across any divisions between body and environment - is caught between the anticipatory reach of the imagination and the frictional drag of materials."

Ingold argues that ideas and artefacts are cast-offs of the process of encounter with materials.

This is relevant for this project in the sense that my artworks and my ideas develops from my practice on several stages, among them, the practice of walking in the mountain environment, the practice of field recording and the process of postproduction with the recorded material. Further development of the artworks and of my thoughts, ideas and theory are outcomes of further practice.

That one cannot always make a distinction between the tool, the tool-user and the creative practice and skill is a claim from his book *Making* (Ingold, 2013a). Here, he focuses on the quality of our engagement and involvement with the tools. He argues that whether tools empower the user depends on embodied skill and craftsmanship, and our capacity to correspond with the material we are working with (Ingold, 2013a, p. 7).

Animals, including humans, have the capacity of sensitivity, attention and intention, which are preconditions for the use of tools.

Ingold's theory of skill is about embodiment and becoming: agency does not depend on aforethought or planning; rather, the skill of using tools depend and develop through on a conscious process of embodied practice.

He makes a distinction between knowledge about, which derives from a study of other people's writings or practice, and knowledge from the inside, which is from within attentive and creative

practice (Ingold, 2013a). This distinction resonates with Bergson's distinction between intellect and intuition and their different access to reality (Bergson & Andison, 2002) which was discussed in the section on experience and metaphysics.

Altogether, being in and adapting to natural environment depends on tool use⁷; a person's skill are embodied and develops through time and repetition; and from this follows individuals' capacity for adaption, and that tool use needs to develop through time.

And it means that the handling of recording equipment is an embodied skill. The question is whether we can develop this skill to such an extent that we need no conscious attention for handling it and thereby enables fully attention to nature. This is relevant for the discussion of recording technology as tools of awareness.

4.3.3. Soundscape composition as method and art production

Topic and framework

The aim of soundscape compositions is to enhance our understanding of the world, in a way that have impacts on the way we listen in our everyday lives. The composer's knowledge of the environmental and psychological context influences the shape of the composition. And the aim is that the listeners should be able to recognize the source material and that his / her knowledge of environmental and psychological context should be invoked (Truax, 2010).

This tradition inspires my work and what I am try to do. Here follows commentaries on some relevant concepts and literatures.

Literature commentaries

Drever describe the character of soundscape compositions in his article *Soundscape* composition: The convergence of ethnography and acousmatic music (Drever, 2002). Soundscape compositions are characterised by the composer's and listener's knowledge of the sound source and its cultural and environmental context.

Drever argues that the practice of soundscape composition is similar to ethnography; the composer is like an engaged, embodied ethnographer that engages in research, focus on fieldwork primarily through sensous experience and seeks to evoke and communicate the sense

⁷ Another thing is that there are limits to adaption, no matter skills. For example, we cannot stand up straight in any kinds of winds, and in this sense, embodied skill is about foresight and prevention.

and meaning of a place through composition with electronic recordings from that particular environment (Drever, 2002, p. 22-24).

Westerkamp (Westerkamp, 2002) in her *Linking Soundscape Composition and Acoustic Ecology* accounts for soundscape composition and the practice of field recordings in more details. For her, soundscape composition is an extention of the field of acoustic ecology. Following the ethical tradition of Schafer, she argues that it is an aim to raise awareness of ecological issues through enhanced attention to sound.

The way she accounts for the practice of field recordings resonates with Whitehead's and Bergson's process philosophy that reality is a series of singular events, and, is in tune with Barthes in his *Camera Lucida* (Barthes, 1993) presents his theory of photography as capturing slice of time and space "that was but is not longer".

"Each new recording will create a totally new piece as it is nothing more than a specific moment in time, an excerpt and detail of a place with its very own sound characteristic. It can only speak specifically of the moment and that place, not in general terms." Westekamp (2002)

For Westerkamp, the value and intention of the soundscape composition is to communicate a sense of place, in order to enhance awareness.

"But paradoxically, that specific moment and place can contain all the ingredients, out of which a meaningful language can emerge that adresses soundscape and listening issues."

"Its essence is the artistic sonic transmission of meaning about place, time, environment and listening perception." (Westerkamp 2002)

In other words, the kind of soundscape compositions that she recommends are those where the intention is to keep in touch with the experience of the environment.

This informs the method and aim of this project: Field recording as a method means to explore and immerse into mountain nature; to develop knowledge through a process of embodied, sensory engagement, and to report and produce a media artwork that resonates and mediates the experience of this place.

She accounts for the method in more detail: a soundscape composition is the outcome of the composer's social background and relationship to place; what happens in the setting; and, what the recordings afford.

The social background of the composer includes relationship to the place and listening and composition skills. These influence the selection of sound sources, microphone type and placement and the experience she aims to transmit in the artwork.

The experience and recordings depends on what happens in the setting at the particular point in time. Settings change with season, weather and time of the day together with the social situation and our practice.

The composer needs to relate to the materials of the field recordings as representations of experienced place and lived time. The composition develops through the composer's "dialogue" with the recorded material. The recordings may be altered and filtered during the postproduction. Altogether, the composition process is the outcome of the interaction between sensitivity to the place and setting; to what the material affords, and the sound processing tools.

Westerkamp recommend that the sound composer should do both the field work and the composition, as long as the aim is to evoke the particularity of the place at a particular time, to articulate the composer's sense of the place, and to reveal meanings of the sounds and draw the listener inside these meanings. This means that we need to transmit precise information and knowledge about our intentions and time and place of the recording, we must demystify the technological processes.

In "Seeking Ursound. Hildegard Westerkamp, Steve Peters, and the Soundscape"" (Cha. 13 in LaBelle, 2008), LaBelle comments on assumptions about recording technology, the contradition between ideals and realities of the practice of acoustic ecology, soundscape and field recording, and about soundscape compositions.

Here he states that audio recordings are as the heart of acoustic ecology, which relies upon recording technology's referential character to fully mimic and embody "real" sound. Acoustic ecology seems to have a nostalgia for "primary sound" or "Ursound", the search for spirituality and inner harmony and immersion with the natural world, and that there is a tension in soundscape compositions between the scientific and search for the real, and that of cultural creativity and production. For him, acoustic ecology and soundscape compositions are sources to explore the problematic of cultural production that aims for the real. He has this interest in common with Morton (Morton, 2007).

4.3.4. Summary and relevance

Sounds are modes of nature; they are physical vibrations through mediums produced by movements and exist with or without people being aware. What people hear and the meaning they attach to it constitutes the soundscape of an environment. Listening is cognitive and intentional and influenced by skill and practice, and sound waves can affect us unconsciously.

Field recordings are a way to explore and engage with the environment. The use of recording technology depends on skill, and I can use them as tools of awareness in the sense that they may enhance attention to particular sounds. The practice of field recording also influence the social setting.

In tune with other approaches presented above, our experience of sounds of nature are "footholds to reality", still, they are no less partial and situated. Recording technology influence the sounds we hear through them by for example their various ways to filter frequencies.

Recorded sounds are not fully transparent in the sense that they are not comprehensive imprints of experienced sounds. However, experienced sounds are also filtered in the sense that ravens and lemmings hear different frequency range than humans.

Soundscape composition can be considered a method that connects the sounds of what happens in the setting, the composer's relationship and sensibility of place, the type of recording technology and listening and composition skills. The outcome or media product is an artwork that aims to evoke a sense of place.

Recording technologies are tools of awareness in the sense that they enhance my awareness of the site I am in. This implies that these tools make me absorbed, and engaged with listening.

However, recording technology is also like a basket, that is a tool for collecting raw material for postproduction and thereby communication outside of the site. This means that ideas about postproduction and audience may influence how I experience my fieldwork. I may have made up my mind beforehand of what I shall record, and I may evaluate the sounds according to what I think that the audience will like⁸.

Anyhow, there will always be a distance between what I experience in the field, and what I think that I record, and the collections of recordings that I bring with me home. This is also about this sense of distance, which the main challenge of postproduction.

⁸ Luckily, each trip to the site is always different due to light, weather and season; so I cannot be fully plan what to record.

Regarding my practice of fieldwork, I draw on experiences of others, for example as is expressed "In the Field. The art of field recording" (Lane & Carlyle, 2013) and "Speaking from Inside the Soundscape" (Westerkamp, 2001).

In this practice led research, I seek to make an audio-visual work that explore and express different sides of nature, wilderness and my subjective relationship too it. I seek to express how small and vulnerable we are in relation to the bigger forces of nature, and I use my tools and develop my skills to do so.

5. Chapter outline

Here follows the chapter outline of the written dissertation. In the first chapter is the present of the project, the second chapter is about the practice of field work, the fourth is about postproduction and artworks, and fourth is findings, final discussions and conclusion.

Cha 1. Introduction

Presentation

This is a practice led research project in Sonic Art and the aim is to produce soundscape compositions and audio-visual artworks about nature and wilderness that enhance and express an ecological awareness.

The research is to explore a particular mountain environment in Norway, and what it reveals about experience of nature, human condition and vulnerability

The research site and the background story

• Site of the fieldwork

The project site is Hallingskarvet mountain range in Norway, which is weather exposed, has a broad range of seasonal change and is distant from society's infrastructure.

• The background story of my relationship to the site

I have a personal relationship to this place from my youth, and that I have developed in particular the last ten years.

• The initial experiences of field recordings of sounds, photographs and videos

I will account for my first experiences of photography and sound recordings in this site and reflect on the use of sonic and visual art for expression of nature experiences.

Core concepts and research inquires

The core concepts are nature, wilderness, ecology, soundscape, acoustic ecology and ecological awareness. The core inquiries is about experience of nature and wilderness, about field recording and about sonic and audio-visual artworks. Here I suggest research questions:

• What is nature and wilderness, and how do embodied practices enhance ecological awareness?

- How can I use recording technology to experience nature and enhance ecological awareness? What impact does the practicalities of field recordings have on experience of nature, and how does nature let itself felt through my tools and practice?
- How do I evoke ecological awareness in sonic and audio-visual art? What content and form of multimedia artwork enables me to mediate and evoke nature and the experience and sense of being wilderness?

Cha. 2. The practice of field-recording

I am inquiring into the use of field recording and recording technology as a way to explore this mountain site and my experiences of being within it.

This chapter is about field recording as a practice and tool of awareness. The first part is about my own practice, the next part is reflection and discussion of my experiences and practice in relation to that of other artists and in relation to literature on the topic.

2.1. My fieldwork practice

In this section, I will make a detailed textual auto-ethnographic account of my practices and experiences on the site. The sources of this writing are my memory and fieldwork logs and diaries. I will also account for my experiences and practice through sound recordings and visual material.

I will reflect on how my practices and the weather are forming my experiences and the relationship between these experiences and what I find in the audio-visual material.

2.2. Discussions on field recording

In this section, I discuss my own fieldwork experiences in relation to that of other artists and literature on the issue. And I will discuss these in relation to literature on nature and wilderness, experience and listening, and acoustic ecology and ecological awareness.

The section is about recording technology as tools of awareness and the logistics and practice of field recordings as a way to explore and experience nature.

The practice of field recordings of other sound artists

I will discuss my own fieldwork experience in relation to other sound artists' accounts of their practices of field recording. These issues include their relationship to their recording technologies and logistics of field recording as a practical, concrete and physical way to

experience nature. And they include field recording as a kind of sound-walk with emphasis on movement and on conscious listening; the impact of the planned and imagined artwork and an imagined audience on the experience of being present in nature, and the choice of sounds to record.

Nature, ecological philosophy, acoustic ecology and the practice of field recording

I will discuss my fieldwork experiences in relation to literature on nature, experience and listening. I will start with short commentaries on some of my works followed by discussion of how this informs my own experiences.

Nature, wilderness and ecological awareness

Here I will inquire into the particular kind of nature experience that I get through my fieldwork.

Nature, wilderness and ecological philosophy

This section focuses on philosophical theories about nature and nature experience; about concrete engagement with mountain wilderness, and how this relates to the experience and practice of field recordings.

This is about the concepts of nature and ecology and the "deep" and the "dark" ecological philosophy.

For my discussion around the contested concept of "Nature" I refer to Spinoza (Næss, 1976), (Nadler, 2012), Whitehead (Stengers, 2011), (Latour, 2004b) and Morton (Morton, 2007). Spinoza rejects any bifurcation nature, God and humans. Whitehead sees nature as an infinite process of change, and emphasis that without awareness to its risk may be at the pain of death, while Latour and Morton criticizes the notion of Nature as romantic, transcendental and purified.

I will bring in Næss´ "deep ecology" (Næss, 1993/2012) and Morton´s "dark ecology" (Morton, 2007). "Deep ecology" tends to emphasize the unity and sometimes spirituality of our relationship to nature, while "dark ecology" emphasizes our vulnerability and coming tragedy of human species, and I will discuss their implications for my work.

Nature experience and ecological awareness

I will develop my approach around four issues that are relevant for my fieldwork.

The first is the primacy of perception. I will relate to Whitehead's empiricism and his claim that "perception is our foothold to reality". This is the emphasis that the world we live in are perceivable; and experience is to experience something out there, external. This means that what happens around us is not just about imagination; it may have direct impact, and lack of awareness could be "at the pain of death". That there is a link between sensory perception and reality is a central for my practice and discussion of field recording as tools of awareness.

The second is the tension between positions on intuition and affect on one side and consciousness and cognition, and I will discuss how this tension is included and expressed in my practical works in section 3.

I will refer to Bergson's concept of intuition (Bergson & Andison, 2002), (Lawlor & Moulard, 2012) and Massumi's emphasis on affect (Massumi, 2002). I will argue that the environment affects us more than we are conscious of, and cognition is not a precondition for this.

Morton claims that the romantic idea of immersion with "Nature" is an attempt to dissolve the human subject, which is neither possible nor desirable. He considers the sense of distance between the subject and his/ her surroundings as a way to recognize our human condition of dependency and vulnerability on our environment. I will explore this position in my research.

The third issue is experience as embodied practice. This is about how I experience nature, or this mountain wilderness, in a more practical way. Ingold claims that we experience our environment depending on what we do there, and, from this follows practices like walking, building and creating, and in this case, field recording, influence how we perceive the environment.

Ingold emphasizes that experience is multisensory which means that what we see influence what we and how we hear, and vice versa. On the other hand, to use a more concrete example, a hill feels quite different depending on whether we walk up or down. A wind sounds different whether I freeze on my feet or not.

Experience of nature includes both embodied and sensory experiences of pleasure and pain, and it includes existential reflections about issues of life and beauty and vulnerability and death. And I will discuss what implications these approaches have for ecological awareness.

Soundscape, acoustic ecology and recording technology

In this section, I will discuss how the various issues of experience influence understanding of how we hear and listen.

I will discuss the concepts of sound, soundscape and acoustic ecology, and I will discuss how these relates the discussions above about nature and "deep" and "dark" ecology. My main influences are Schafer (Schafer, 1977/1994), Truax (Truax, 2001) and LaBelle (LaBelle, 2008).

And I will discuss what implications the different kinds of listening practices have on the way I practice my field recordings.

I will consider various approaches to listening, (Schafer, 1977/1994), (Westerkamp, 2010), (Westerkamp, 2001), (Truax, 2001), (Oliveros, 2005) and connect these to the approaches above. These topics include sounds and listing according to phenomenological vs. sociological approaches, various types and concepts of listening, like background listening, listening in search, inclusive and exclusive listening and internal and external listening.

Listening depends on perspective, movement and task, and listening is a skill that we can enhance by conscious attention and practice. However, I emphasis is that what we hear depends on what happens to us, not only on our listening skills. This may sound obvious, but I think it needs to be stated.

There will be a short section discussing the impact of recording technology on experience of sound, drawing on theories of technology where I will refer to Latour (Latour, 2004a), Ingold (Ingold, 2013a) and Sterne (Sterne, 2003), among others. Example of claims about recording technology is that they are transducers or mediators of sound that they may disturb or divert attention away from direct sensory experience. The position here is, within certain conditions, that recording technology enhances sound and makes them available for us in such a way that we can consider them extension to be of our senses.

Finally, I consider what it takes for the practice of field recording to evoke ecological awareness.

Cha. 3. On creative artworks, postproduction and sonic artwork

The project is about production of sonic and audio-visual artworks that express and communicate a range of experiences on this site. In this chapter, I will account of my process of postproduction and my artworks. I will discuss these in relation to other artists and their artworks, and I will discuss them in relation to literature on theories on ecological art and ecological awareness.

3.1. My process of postproduction and my artworks

My aim is to produce artworks that evoke ecological awareness. Through my artworks, I seek to mediate this environment in various seasons and weather conditions, and my presence in it through my tasks, in particular the body / nature intersection, and, expressions and reflections of being exposed to nature.

In this section, will make a detailed account for my postproduction, the techniques that I use and the artworks. The focus is on the relationship between my experience in the field; my process and choices of postproduction; and, how I seek to evoke this in an audience.

While I will also use visual material, these artworks are mainly in the tradition of acoustic ecology and soundscape composition. I will justify my artistic choices and discuss why do I think that my work enhance ecological awareness.

3.2. Commentaries and discussions on sonic artworks

In this section, I will present sonic artworks and the artists that influence my works, and consider my works in relation to approaches to art, creativity and soundscape compositions.

Other artists and their works

Here I will account for and discuss my works in relations to other sound artists and theoretical frameworks.

I am inspired and influenced by several sound artists and practitioners, and among them Westerkamp, Chris Watson, Jana Windern, Annea Lockwood, David Dunn and John Drever.

I will comment on their works, and on how and why my artworks are similar or different from theirs. This may be because they may have different ideas or aim, they may work with different type of environment and they may use different practice and skills.

I will account for what tradition I am working within and the similarities and distinction of my artwork in relation to others.

Literature on art and sonic artwork production

In this section, I will discuss my creative process and my artworks in relation to issues of affect and consciousness, and in relation to the tradition of soundscape composition.

I will discuss my artworks in relation to theories of art as practice and craft, where I will refer to Ingold in particular (Ingold, 2013a). He portrays art production as practical work that takes time, presence, attention and skill. Skills develop during the process of attentive work and the knowledge gradually becomes embodied through hands and feet. Art is to connect to and go into dialogue with the material, to find what it affords and create from what is there.

And I will discuss my artwork, and the various layers within them, in relation to the claim that human consciousness as the source of creativity, which is the position of Morton (Morton, 2007). He claims that art derives from the negotiation between the external impacts and internal responds. We sense a distance between our inner self and external reality, and art is about the impossible mission to bridge this gap.

Then I will discuss my work in relation to the art of soundscape composition, as discussed by Truax (Truax, 2010) and LaBelle (LaBelle, 2008), Westerkamp (Westerkamp, 2002) and Drever (Drever, 2002). In short, it means to apply the artist's own experience of an environment and reproduce and express it in such a way that is recognizable for the audience. And this is an aim for these artworks in this research.

Cha. 4. Conclusion and final comments.

In this final section, I will make a summary of my process, artwork and findings, and also reflect on the methodology of practice led research. I will discuss what it takes for the practice of field recording to evoke ecological awareness, and reflect on methods and values for the production of artworks that expand the field of Sonic Art.

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Appendix

Transcript from the video Mountain Lady / Nature Love

TB: Tine Blom; SN: Siri Næss

TB: What is nature love for you?

SN: It is as when there is something you are fond of, you will try to be close to it and spend as much time with it as possible, but first and primarily you want to take care of it, support it and protect it against attacks and destruction. Caring for nature is that I consider it as something

that has value in itself and not only something that is useful for me. Yes."

I both like to be alone and to be with others. It is not important that I have anyone with me when I go walking, but I like that also. It is rather that when I walk with friends, I prefer that we don't talk too much. I like that there is somebody there, I don't have anything against that, but I prefer that we don't talk too much because it becomes easily a talk about things that has

nothing to do with this particular walk.

In addition to that, I am walking and the body moves do I look around. Sometimes I think it is very nice and other times I don't think so much about it, but I think it means a lot to me that

there are something around me that I appreciate, that is think is beautiful.

It is unbelievably still and fine right now, I feel tempted to take a look - shall we do that? Or is it a bit stupid to quit right now? Shall I go out to take a look? It is tempting to use this time,

think if it continues - think how wonderful it would have been if we could have a still day, so

we can be outside for a while?

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Transcript of Report on field recording

Part 1.

I came up a couple of days ago. Fantastic, beautiful weather. A paradise, except for my extremely heavy backpack with recording equipment. I made it up in the evening. Long, blue, dark shadows. And the next day it was blowing and blowing and blowing and blowing. And it was a very ...happened to be so bright cold day. Yesterday it was also the same, but I began to start recording, it was not that easy. All this fumbling.

- 1.05 min This is what I call nature. It is what I feel is much bigger and stronger, I feel quite risky. It is a bit beyond the comfort zone, actually quite a bit beyond the comfort zone. It is not risky, as long as I know what I am doing. I went up in beautiful weather, as I said, had it been wind against I might not have come up. Luck. So I don't know if I should try that luck again. It is hard, icy. It is so hard that skiing is a bit ... the skis don't stick to the ice, so I need some rubber under, and so I use that.
- 2.12 As you maybe feel, I am not very enthusiastic. It is like getting to the limit. It is beautiful to look at, but it is hard to be in, unless I have this shelter. It is like I run into my shelter all the time, I'd rather be in my shelter. Hot and cosy and calm, not into this icy wind.

Åh, så deilig. Hør så deilig. Åh, hør på dette her. (Oh, how delightful, listen how delightful, oh, listen to this.)

- 3.13 I don't mean to complain, but I feel a bit vulnerable, here I sit. I should have felt on top of the world, I should have, something people think that just getting up here is top of the world. It is the top of the world, the blue, the white, but it is not.... it is a bit risky, yes. I could say lonely, but that it not main thing. It is more that... there is all these details you have to consider. Then I do the recordings, and the recordings are so much detailed, like the windshield and the white balance, and the focus, and my tripod is not the best, so the camera might fall in the wind. Yes, here I am sitting and complaining, but I am freezing actually. I am a bit freeze.
- 4.45 The place gives me joy and sorrow. ... there is something, some people say you can't have low thoughts here, I think my thoughts go up and down, high and low, all kinds. For me, I can just feel what I feel when I am here, it is a combination of joy and fear, I must admit. The forces are so strong and I feel so vulnerable, the hills are high and I am not the main sporty person. It is evening, it is how it looked when I came up here a couple of days ago. It is getting bluer and bluer.
- 5.50 Well, what you see? All the white here is ice, and it is water, it just happen to be cold, it all comes from the mountain and will leave again in the spring. The lake down there is a bit empty, deep frozen, no fish there.
- 6.35 It is so colorful. I choose this time because it get more golden when the sun goes down. It is another world in a way, but the point is that it is kind of the macro world. We are kind of hiding from this part; it is too cold and icy for us. But it is beautiful, gives high thoughts. I

think about... I have always had this dream of communicating it, it seems to be difficult, this is what I try with all this equipment, it influences my life here so strongly that in away my relationship to the place is changing. It is not a place to let go anymore; it is a place to ... I have to bring something back from. It is not enough to be here, I have to bring something back.

8.05 But it gives this connection anyway, I try to connect to the place, I need some days, also I need some days with my equipment, to get acquainted with the equipment. I think I wish I could be here with one more person, one more nice person, not one nor ten, it would be a little bit more soft in the stay, a bit more sharing responsibilities, thoughts, may a bit more warmth. But it is better to be here alone than to be in a crowd. So I have this ambivalence after a while. I come back to this kind of rule, this place where nothing else counts, than staying warm.

9.12 I am sitting on a sealskin bag; that was a good idea, because the other stone I was sitting on made me feel all up in the spine of coldness. Now it feels good.

9.40 The question then, is this a place to be yourself? That is a good question. Anyway it is a core ... a core thing of keeping warm, keeping calm, letting the mind flow.

10.05 Tomorrow morning I will go down, tomorrow morning. I am a little bit worried; I don't have to be worried, because it has never ever been a problem to go down. But it is about the big rucksack, and the ice. I will be fine, I am curious about what I am going to bring with me home.

10.40 I will be back in a couple of weeks, with my aunt, everything might look different then, will be interesting to see. I will show you what it looks in a couple of weeks. Whoever you are.

12.00 For a while now it just getting more and more golden, I love these blue colors, actually these are my favorite colours, blue and white and grey and some brown. I don't know... it is not so much brown here, some brown up in the stones.

Part2

It is beautiful day, a little bit wind. Looking at people down the hill, soon they will be up, at least in an hour there will be people here.

I am quite, I could say, exhausted by this feeling that all these surroundings, and all these things I am in the middle of, just can't be captured in a frame. It can't be captured in a video frame either. The recordings are limitations. So how do I communicate.. It is also this demand to communicate, or desire to communicate, which is also a bit disturbing, because I know I cannot, like I cant make it. I can tell, I can't share, I can't share. And if I share, that means that if someone comes here with me, they are going to see something different, feel something different, hear something different. It is like it is an impossible mission, an impossible quest.

1.40 Because the good thing about a photograph is that it is a moment. And the next moment I can...it can follow my attention different ways. For my attention is jumping and different things happen that captures my attention and I can lead... put the lens towards that. But for example, I

can't photograph the cold. I talk about that all the time. I can't photograph the cold. A photograph looks similar even if it is minus five or minus fifteen. It looks almost similar if it is wind or not.

3.00 Because sometimes, if there is no loose snow, if there has been wind that kind of wiped away all the loose snow, you can't just see any traces of the wind, you just feel it. So if you take a photograph, if I take a photograph or many photographs out in minus 15 and windy, I just can't find it again on a photograph when I look at it. And then, there it is the idea of ethnography; I am trying to do an ethnography of being in the mountain, of me being in the mountain. Self-ethnography. But things happen all the time. And if I shall record everything I do... it will be a kind of meta-reflection. I do something, and everything.. and I think, oh, I should record this, oh, I should record this.

3.55 Now we have just been emptying the toilet bucket. Which is big thing. It is a big thing and a small thing. It means to walk out in that area where we know that when the snow is gone, it is just loads of .. a stone spree, loads of stones, so when the water melts, the snow melts, it will fall down between those stones and not make any big disturbances neither for people or animals or plants. Besides, toilet buckets is nutrition up here, for plants.

4.45 So we walked out, dug a whole, through the icy snow, under the ice surface, the snow is like crystals. So I recorded that, sound-record that, with a spade, yes, with spade, yes, making that hole, and filling in the stuff, emptying the bucket there and emptying the whole.. filling it up again. Nobody knows, nobody sees, it is gone by the spring, gone with the spring. So I recorded that. Took some photographs with my aunt with a spade. Digging the hole, but how much, how much of ..but how can I explain those things without words, I don't know. 18.25 6.40 *Skal jeg fortsette? Skal vi se om det er nok? Mmm, litt mer...* (Shall I continue? Shall we see if it is enough? Uhm, a bit more...)

7.00 So I went up in the hill last night, trying to do the sunset. I decided to take a photograph every half a minute and record the sunset, the sun going down. After a while I discovered that it would be a much better frame by turning the camera north, towards the+ mountainside. So that the setting sun would shine on that mountainside with making the shadows blue and turquois colour, and ..breams are golden and ..the sun gradually turning into night. I will try that tonight again, in that direction.

8.00 Then last night I tried to do the moonlight. It was fantastic. The shoots took 30 seconds exposure, which was... it was ok, it was good, it worked, still I got this uneasiness that I did not get the right shot. I really.. or in other words, I did not really get this feeling of communicating this grandness of the moon over the mountains. It wasn't that cold. But I just keep..

8.55 Ok, I started this morning, at about quarter past six, I started photographing the sunrise, then the wind was tougher, it was colder, I was freezing, I was one hour and twenty minutes, taking a photograph every 30 sec. It was ok, but it maybe was not the right frame, I always have this feeling that it was not the right frame. Because standing there for more than... almost one and half hour, I see all these things around me, and I reflect on all these things around me, and I think about looking other places, and I see that I should do it differently and I am freezing on my feet and I am freezing on my hands and this is an experience that I would like to communicate but I can't because when I just decided the frame and one photograph every 30 sec., and without being able to change my mind, because if I do, the whole series would be ...

it won't work. It is strange thing with all these small details that kind of interrupting or disturbing or whatever. I am trying to do something that is impossible. So it is all doing about different ways to do the impossible.

10.30 I follow people, see then down there, coming up, slowly, striving, with skis and dogs, soon they will be here. I don't think I shall say anything more.

11.00 Hoohoo ... Kommer det tilbake? Haha Der ser jeg ravnene, egentlig. Der ser jeg ravnene. (Hoohoo...Does it return? Haha There I see the ravens, actually. There I see the ravens.)

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