

Making art for sustainability?

A qualitative study about identifying artists'
 perspective on the relationship between
 environmental art and sustainable development

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Abstract

Environmental art is increasingly becoming a medium to address environmental challenges and studies have shown that the art form offers many opportunities when included within work of sustainable development. This study has investigated artists motivations to pursue environmental art and asked whether artists believe that art can contribute to sustainable development. This project was achieved using a qualitative approach and cross-sectional design, through semi-structured interviews with ten artists working with environmental art in different parts of the world. The theoretical framework consisted of theories describing artists' motivations to pursue art and environmental art, as well as motivations of environmental activists. Results showed that artists are motivated to pursue environmental art for several reasons, some of these reasons relates to the same motivational factors among environmental activists. The artists also lined that their own connection to nature was a big motivation for pursuing environmental art. Nine out of ten artists agreed that art can contribute to sustainable development, and one artist questioned whether any development can be sustainable.

The conclusion of this study is that artists' main motivation to pursue environmental art derives from a response to environmental concerns in society and the world of today, out of a belief that art offers other kinds of opportunities to reflect on environmental concerns than normally communicated environmental information.

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Appendix 1: Presentation of artists

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1. Introduction

Environmental degradation is rapidly increasing and there is a need for a transformational shift in how humans interact with the Earth (Higgins-Desbiolles 2018). The current generation has the last opportunity to influence climate change and prevent global average temperature from increasing beyond 1,5 °C (Carrington 2018). Several scientists have studied the approach of how art connected to sustainability can provide a broader perspective of thinking and develop new ways of understanding the interconnectedness of the world (Casazza, Ferrari, Gengyuan & Ulgiati 2017). Many authors in the sustainable development field also argues that it is necessary to have a transdisciplinary and holistic approach to solve sustainability concerns (Ibid; Marks, Chandler & Baldwin 2014; Schröder 2018). Ernst, Esche & Erbslöh (2014) argue that art is working within the core of system change and can therefore directly influence human behavior. Humans have always used art to create a sense of meaning and imagination beyond their everyday life, both by creating and enjoying art (Logé, Peñaloza & Guintcheva 2010). In some ancient traditions and indigenous cultures, art was used to communicate practices on living in harmony with nature (Kulnieks et al. 2016). Today, art with environmental messages are increasing worldwide and climate change are becoming a new genre within different art forms, examples of this is climate fiction and trash art (P1 Kultur 2018). Art offers opportunities to communicate in a universal language which makes it accessible for a wider audience. Where a scientific article might struggle to get the public's attention; art can support people in connecting with climate issues and help them to grasp what a raised sea level or extreme weather changes actually means.

Environmental art

Environmental art was developed during the 1960's as a way of capturing the ecological environment through a conceptual framework (Marks, Chandler & Baldwin 2014). Since then and as sustainability is becoming increasingly important in society, contemporary artists of today often use climate change and sustainability concerns in their work (Dunaway 2009). Environmental art is a term for different kinds of art addressing climate change and environmental challenges, which include definitions such as *land art, earth art, eco art* and *sustainable art* (Thornes 2008). Environmental art can also explore the relationship between humans and nature and are often constructed in nature (Ibid).

Research on art and sustainable development implies that art has great potential to work as a medium for a more sustainable world. Results from scientific research show that art has possibilities to reestablish the link between humans and nature that has been disconnected through modern life (Curtis 2009; Milbourne, 2014; Kulnieks et al. 2016). Art can open spaces to question current behaviors and imbedded ways of thinking, foster pro-environmental behavior by creating intense emotions and offer practical experiences (Kollmuss & Agyeman 2002; Marks, Chandler & Baldwin 2014; Ernst, Esche & Erbslöh 2016; Blasch & Turner 2016; Casazza et al. 2017; Brunner 2018). Art speaks in a universal language and can reach out to a

wider audience, identify knowledge that is overlooked by ordinary research and decrease the gap of knowledge between scientists and other parties (Curtis 2011; Curtis, Reid & Ballard 2012; Casazza et al. 2017; Rivera et al. 2018). Art can promote creative thinking, new ways of seeing the world and offer different kinds of solutions (Ingram 2014; Brunner 2018; Perovich 2018). However, environmental art has also been up for criticism. Nelson (2014) points out that the art world has the role of portraying current events and debates in society but often they do not themselves live up to the standards they are criticizing. Many environmental artists have been questioned about not producing sustainable art (Thornes 2008). Several scientists also believe that environmental art should be based on science so as not to communicate inaccurate information with danger turning into propaganda, racism or support other forms of troubling agendas (Perovich 2018).

Environmental art is often pursued through portraying the *sublime* within natural disasters, to make people connect to the greatness and horror of climate change (Nurmis 2016). Philosopher Immanuel Kant who phrased the term 'sublime' within artworks described it as an antipole to beauty, something that can only arise through harmless natural phenomenon which creates a terrifying sense of superiority (Danius, Sjöholm och Wallenstein 2012). If beauty is about shape and tranquility, the sublime is about the enormous, diffuse and dissonant. The sublime has a moral purpose in the way that it shows the difference between humans as sensual natural beings, subject to the laws of causality, and humans as sensuous beings, equipped with freedom. The sublime is about experiencing and achieving insight on worldly issues (Ibid). Nurmis (2016) relates this to the sublime *apocalypse* in artworks of today, in that artists "who photograph receding glaciers or majestic Antarctic icescapes believe they are sending the same signal, urging viewers to look at what we stand to lose forever if we don't do something about climate change" (Nurmis 2016, p. 509). However, it is hard to know how people are relating to the artworks since the sublime is not putting them in actual danger, which can create a reaction that "a catastrophe might happen, and it would be very terrible, though it probably won't affect me" (Ibid). Sublime images of climate change and environmental degradation can also provoke a sense of hopelessness within people. Sontag (1993) did question early on if these images actually are contributing with environmental awareness or just confirming something that people already know. Milbourne (2014) argues that if these pictures are to make a change, they need to create a willingness that force people to question their own way of living and consumption behavior, instead of just feeling hopeless and sympathetic for the people living in these environments.

Motivations of environmental art and environmentalism

Many people are concerned about environmental issues and are engaged in environmental actions towards a more sustainable world, though not everyone makes it their main occupation and pursuit in life. Many studies have tried to determine what variables are related to motivations of artists and environmental art. Several studies (Towse 2001; Elias & Berg-Cross 2009; Brook 2013; Lindemann 2013) have shown that "personal reward, passion for the art form, social status, pride, strong inner drive or the ability to have autonomy over daily

activities" (Daniel & Johnstone 2017, p. 1017) are by far the most motivating factors for artists. Another motivational factor is that artists often experience a compulsion to pursue art from an *inner calling* which they are willingly forced to act upon (Menger 2006; Harrington & Chin-Newman 2017). This can relate to the self-actualization theory which proposes that people are driven to "develop and fully express their potentials, including their creative potentials" (Harrington & Chin-Newman 2017, p. 448). Maslow himself expressed the concept as "a musician must make music, an artist must paint, a poet must write if he is to be ultimately at peace with himself. What a man can be he must be. He must be true to his own nature. This need we may call selfactualization" (Maslow 1970, p. 46).

A study by Capstick, Hemstock & Senikula (2018) on climate change communication through art showed that artists motivation to pursue environmental art derives from their experienced knowledge of climate change. The artists' had a strong conviction that art was the correct medium to address issues of climate change, not in a lecturing way but to create different understandings of climate change and enable reflections from other perspectives, as well as "to express and use emotion, and to connect with people and ideas in ways that formal, scientific communication could not" (Ibid, p. 335).

Artists pursuing environmental art are sometimes involved in activism and art projects that address environmental concerns often include aims of education or activism (Capstick, Hemstock & Senikula 2018). Though, artists inspired by climate change and other environmental concerns do not often want to be defined as an activist or an environmental artist (Nurmis 2016). This can be an influence from the art world's previous, and in some instances current, view on environmental concerns as not fitting into the identity of fine arts (Ibid). According to Nurmis (2016), artists' have separated themselves from the intentions of activists who pursue environmental art to steer people in a certain direction. Artists' intentions are rather to address people's emotions, to create reflection and meditations which can lead to engagement towards the environment (Ibid).

Theories on environmental activism show that a typical environmental activist is a person who engages in environmental action on large scale and can be defined as a citizen engaged in environmentalist movements, is acting on a specific environmental issue (Drezner 1989; Syme, Beven & Sumner 1993), is connecting strongly to social groups (Kelly 1993) and has an urge to influence pro-environmental behaviors within people and institutions (Manzo & Weinstein 1987). From theories around the motivation of environmental activists, external influences are an important factor to bring forth pro-environmental behavior within an individual: "This influence is the social context, in terms of values and norms" (Molinario et al. 2019, p. 5). Many studies have investigated the relationship between environmental activism and childhood/adolescence memories which has shown that environmental experiences of an individual, such as camping, hiking and being around animals, has a strong connection to a purposive relationship towards nature. Later on, that relationship enforces the adult's inclination to act towards the environment (Wells & Lekies 2006; Molinario et al., 2019; Matsuba & Pratt 2013). Other studies have focused on personal qualities of individuals who pursue environmental activism and found that higher level of education, environmental

knowledge and personal driving forces are characteristics for environmental activists (Scopelli et al. 2018; Molinario et al. 2019).

Results from a study by Chantal, Pelletier and Hunsley (1998) showed that a typical environmental activist is a person that is more sensitive towards information about environmental concerns in society and who believe it is important that people are protected from the health risks generated from those concerns. The more a person of this type is sensitive towards health risks regarding to environment concerns, the more that person is motivated to act towards the environment (Ibid). The theory of planned behaviour related to environmental activism shows that individuals that pursue such activism are motivated by a greater environmental concern (Fielding, McDonald & Louis 2008). When these individuals engage in behaviours of activism there is a "development of an activist identity. In this way, it is identity that becomes the strongest and most proximal determinant of intentions" (Ibid, p. 324). An environmental activist also seems to possess explicit knowledge of environmental concerns which make them feel competent to act on that knowledge, as well as a belief that these actions can make a change in society (Ibid).

Molinario et al. (2019) applied the Significant Quest Theory (SQT) to investigate the motivation of environmental activists and concluded that the search for significance in life can lead to a strong commitment towards environmental actions. The more intense the search for significance is, the more likely people are to involve themselves in serious environmental actions. According to Kruglanski et al. (2009; 2014), significance in life can derive from experiencing trauma, personal deprivations and frustrating incidents. In the case of environmental activists, people who have "experienced a natural disaster or who live in a polluted place are likely to experience a loss of significance" (Molinario 2019, p. 24).

Beautiful and moral actions

Norwegian environmental philosopher, Arne Naess, was influenced by the philosophy of Kant on theories on what motivates people to act on certain causes (van Boeckel 2013). Kant argued that actions can derive from either a sense of moral or beauty. A moral action is something that is motivated from moral obligation; it is derived from a will to do what is perceived as a duty to do the right thing. A beautiful action on the other hand, is a motivation to act from a feeling to do the right thing, the act is in line with moral duty, but it does not derive from an urge to act in the faith of duty. Acting morally can generate a sense of conflict within individuals, because they act solely on what is forced upon them, but at the same time people are pleased that they were able to perform the correct duty. A beautiful action creates a sense of joy since the individual is following a temptation to act on what intuitively feels right. Kant argued that beautiful actions are normally performed by women, to act out of compassion, while men normally act out of nobleness which derives from morality. (Naess 1993)

Naess (1993; 1994) argues that environmentalists, either individuals or organizations, go through three different stages while pursuing actions: an urge towards the *usefulness* to act on

environmental concerns; an emphasis on *acting morally*; and an encouragement to form specific attitudes, something that Kant defines as *inclination*. The ecological crisis that the world is facing brings forth a moral obligation to act in faith of nature, but it can also generate an inclination to act on what feels like the natural thing to do. The inclination appears when people can start identifying and relate to the importance of the act, which can form a habit, instead of the moral duty to act which usually does not lead to a habit. Naess relates this thinking to our current school system which teaches children and adults to rely on established information provided by scientific research, and not much space remains for people to participate and connect with the surroundings for themselves. (Naess 1993; Naess 1994) Which ecologically speaking leads to a disconnection to the natural surroundings. With beautiful actions, people can learn to identify themselves with humans, animals and nature and see everything as part of one, which creates an inclination to protect the earth:

An invitation to act beautifully, to beautiful acts rather than talk about them, to organize society with all this in mind, may lead to a recognition and acclamation of such acts, and be a decisive factor that at last will decrease unsustainability (Naess 1993, p. 71).

Environmental art from the artists' perspective

Artists pursuing environmental art are using a variety of different mediums. Giannachi (2012) have researched strategies for environmental art and found three approaches that artists use while pursuing art of this category:

- 1. Representations emphasizing visualization and communication
- 2. Performance environments emphasizing immersion and experience
- 3. Interventions emphasizing mitigation and behavioral change (Giannachi 2012, p. 125).

Giannachi argues that these approaches have contributed to valuable and efficient artworks which impact aesthetic, political and social constructs. Representations can be considered the most common medium for art practices, such as drawings, photography and other forms of artistic expressions which are two-dimensional (Nurmis 2016). Representations in environmental art often portray interpretations of environmental degradation and effects of climate change, where artists are imagining a nearby future, and try to draw attention "to the dystopian future that climate change is generating" (Giannachi 2012, p. 127). While doing this, artists often uses icons of climate change, for example portraits of pollution from industries, polar bears and glaciers melting (Ibid). Performance environments can be defined as threedimensional installations, often viewed in museums, where the audience is invited to experience the actual object, for example a block of ice as in Olafur Eliasson's Ice Watch, to 'awaken' create greater reflection around environmental concerns 2016). Interventions often take place in public spaces where artists try to reach people that are normally not exposed to environmental art, as well as not normally engaged in museum visits.

Interventions often try to motivate people to take action while presenting an opportunity to experience natural surroundings in other ways (Ibid).

Bullot (2014) emphasized that "environmental artists might often be faced with the difficult task of having to address an environmental crisis without having adequate knowledge to adjudicate the complex scientific and social conflicts this crisis generates" (p. 512). This brings forth questions of how artists experience working with different kinds of scientific information concerning environmental sustainability. Not many studies explore artists' perspectives of working with environmental art, as well as artists' perspectives on the research of sustainable development. The aim of this study, therefore, is to gain insight into artists motivations to pursue environmental art, and whether those motivations are connected to the research of sustainable development. The overall objective of the study, then, is to understand why artists are working with environmental art.

I hypothesize is that artists feel positively towards art's ability to create reflection on environmental concerns in society. My research questions are therefore:

What is the main motivation for artists working with environmental art? Do artists think that environmental art can contribute to sustainable development?

2. Method

In this study, environmental art is examined as a specific art category with its own elements and specific attributes towards the environment and the relationship between humans and nature. A cross-sectional design was considered most appropriate since the study is exploring the variation of different artists' perceptions about creating environmental art, which is to be considered a study of different cases (Bryman & Bell 2011, p. 54). The study was undertaken by a qualitative approach through semi-structured interviews, since it can provide with in-depth knowledge of the subject and offer important insights which might not have appeared through use of a quantitative approach.

Sampling strategy

Environmental art is defined as any art that explores the environment and nature-human interactions (Thornes 2008) and therefore, the population of artists working within this area cannot be measured through a specific index. Because of this, the sampling was conducted by reaching out to artists working with any kind of environmental concerns or relationship between humans and nature.

The grouping of artists was identified using two approaches. The first was to conduct extensive research online to gain knowledge of which artists work within this field. Google was used as a search engine and search phrases included words such as 'environmental artist', 'eco artist', 'sustainable artist', 'ecological artist' and 'nature artist'. Artists can be difficult to contact since if their work is successful, they are well known and exclusive from the public. From an interview with the Modern Museum of Art in Stockholm I learned that artists often do not want to categorize themselves as environmental artists since it can put limitations on their work (Hillström 2019). The second approach, therefore, was to contact relevant persons within the art world and science department to gain access to specific artists working with environmental concerns, a variation of snowball sampling (Bryman & Bell 2011, p. 192). All of these artists were then contacted, and the sample was implemented by selecting ten of the artists who were interested in participating. Guest, Bunce & Johnson (2006) suggest that the number of qualitative participants in a study depends on the expertise of the respondents. Fewer expert interviewees can provide a similar or higher level of quality information than participants with less knowledge of the subject (Guest, Bunce & Johnson 2006). For this study, all artists can be considered experts in their field since the study's focus is about how they for themselves are working with art and sustainable development. Ten interviews can therefore be considered a sufficient number of respondents.

Sampling Unit

The ten artists that were selected for this study (Appendix 1), are currently based in Sweden, Germany, United States, Poland and France, and most of them work both nationally and internationally. Seven out of ten interviewed artists work full time with their artistry and have their own studios. Three of the artists have other occupations beside their artistry, for example working as teachers in sustainability, art-making and photography. Nine of ten artists gave consent to use their full name within quotations in this study. One artist will therefore be referred to as "anonymous artist".

Interviews

The data collection was made through semi-structured interviews, which were chosen since it provided a framework for collecting similar data and at the same time leaving space for questions appearing during the interview. Questions were prepared through a manual (Appendix 2) and all participants were asked the same questions, though if some responses were short, further questions were asked to prompt additional detail.

Sinding and Aronson (2003) emphasized that interviews are seen as an ideal approach to gain in-depth knowledge of a research area. Still, interviews can have consequences such as creating vulnerability when respondents expose their personal thoughts and feelings; "at one extreme, interviews allegedly empower, generate self-awareness, or offer a kind of therapeutic release for interviewees; at the other, they draw reproach for feigning intimacy with, and then abandoning, the people they engage" (p. 95). Therefore, it was important to work in line with ethical considerations within the line of social science research, such as not cause any harm to participants, conduct informed consent and confidentiality towards their responses (Bryman & Bell 2011 p. 122f). It was also important to create a comfortable setting during the interviews so the participants could feel relaxed, I also tried to stay as neutral as possible to not affect their answers in any way. Since the participants were located in different parts of the world, the interviews were conducted through Skype, something that can have affected the responses. In two interviews it was harder to create a comfortable setting due to some sound difficulties.

Analysis

The data collection was recorded and transcribed using specific information that was gathered from the interviews, such as relevant words or expressions regarding the participants perception of working with environmental art. Through a parallel process of data collection and processing of empirical findings, environmental art was examined using theories regarding motivations for artists and environmental activists to test the hypothesis. One of the challenges with qualitative research is the question of subjective and objective interpretation (Cunliffe 2011). Since qualitative research is about subjective interpretation in some form, even though an objective approach is the aim, the matter of *truth* is always questionable. However, Cunliffe (2011) points

out that we should not dismiss subjective and interpretative research as irrelevant but rather see research as a craftwork where researchers are "...being open and responsive to the possibilities of experience, people, ideas, materials and processes, and understanding and enacting the relationship between our metatheoretical position, our methods, our theorizing, and their practical consequences" (2011, p. 667). To accomplish an open approach to the empirical findings, the analysis used a balance of subjective and objective interpretation.

Methodological criticism

Although artists' motivations are the main focus in this study, it is also necessary to recognize that motivations might be unconscious (Davies 2013), which is sometimes difficult to determine while analyzing the results. Artists' might also be motivated by values they do not feel comfortable sharing. This study will not consider these aspects, but it is a relevant angle to bring forth.

Since the research method is qualitative, the matter of validity, reliability and replicability is not as measurable as in quantitative research. However, those terms can be transformed into more relevant criteria such as credibility, transferability, dependability and confirmability when it comes to qualitative research (Bryman & Bell 2011, p. 395). Since this study is exploring the phenomenon of environmental art and not a single organization or person, the transferability can be considered high because the results can be applied to similar forms of artistic combinations. Credibility, dependability and confirmability can also be considered high since the research is undertaken through good practice, accurate auditing and in good faith (Ibid, p. 396f).

3. Results and Discussion

Given the value of adding context to qualitative interview results, I have opted to combine the results and discussion sections of this thesis to improve the reader's comprehension of my research outcomes. In this section, results from interviews with the artists are presented through different perspectives of their motivations to pursue environmental art. These perspectives are analyzed and discussed throughout the text from the theoretical framework on what is motivating artists to pursue environmental art and motivational factors for environmental activists.

Motivations to pursue environmental art

On the question of why the artists had chosen artistry as their occupation, six artists described that it was not an option since it was "meant to be that way". Pursuing art as a main occupation often strives from an 'inner calling', to be true to one's nature (Menger 2006; Harrington & Chin-Newman 2017), which in Maslow's theory will lead to 'selfactualization' (Maslow 1970), when individuals find motivation to develop their full potential. One motivational factor for why artists are engaged in art can therefore be out of an urge to create deeper values within themselves. On the question of why the artists engage in environmental art, seven artists replied that their motivation arises from a reaction to the environmental challenges that the world is facing, such as global warming due to unsustainable practices of overproduction- and consumption. Seven artists in this study were convinced that art has the power to communicate in other ways. Something that is confirmed by Capstick, Hemstock & Senikula (2018), who found that environmental artists perceived art as the correct medium to address environmental concerns, since art can create reflection and offer other perspectives than normally communicated. Nils-Erik Norrby expressed that "art can make it easier to digest information in another way than reading a thesis. Media reporting is often quite negative, and these's are usually hard to read and time consuming, art remains to the big public as a more radical way to express". Lisa Simpson expressed the importance of humor and playfulness within the artwork which is one of her driving forces: "music to me is a kind of imaginary and abstract space, which can trigger thoughts and ideas in people and let them draw their own conclusions. That is why I feel performing is such an interesting way of communicating".

Six artists responded that they pursue environmental art because of their own connection to and love of nature, which has drawn them to explore the relationship between humans and nature in their art. Several studies on environmental activism show that a connection to nature, sometimes achieved early in life, instills motivation within individuals to protect the earth (Wells & Lekies 2006; Molinario et al., 2019; Matsuba & Pratt 2013). This motivation also seems present within the six artists pursuing environmental art. Trinidad Carrillo explained that "if I tell a certain story and are carrying my love for Earth with me and putting it there while doing so, I can hopefully share it and make a difference".

Two of the artists' responded that they grew up in unsustainable areas; one artist grew up in a coal industry city in Poland which inspired her to explore how nature has been affected by the pollution of industries: "I spent my childhood in post-industrial landscapes. It's interesting for me since the Anthropocene and the post-industrial landscapes is the only nature which I really know". Holly Keasey also expressed that her upbringing might have affected her choice to work on environmental concerns: "I grew up on a university research farm and it's just recently I realized how much it has affected me because I was around a lot of agricultural experiments, kind of learned that some parts of agricultural business is not so nice to see". Results from a study by Capstick, Hemstock & Senikula (2018) showed that experienced knowledge of environmental degradation is one motivational factor why artists are engaging in environmental art. Significance in life can also be a motivational factor why activists are engaged in environmental movements (Molinario et al. 2019). According to Kruglianski et al. (2009; 2014), experiences of environmental degradation in early life, such as living in polluted places, can be a driving force for environmental activism later in life. Something that could be a motivational factor for the two artists mentioned, who also explained that they are both engaged in environmental activist groups beside from their artistry.

Five of the artists were hesitant towards whether a transition to a more sustainable mindset in the world is possible, Newton Harrison took it even further and explained that he doubted a change is possible at all: "I don't think we (humans) can change, I think we are heading for disaster. My driving force is to do good things, to create works of great scale. So that after the catastrophe has happened, there will be working models". Keasey had a more positive viewpoint and explained that: "the main reason I do art is because I think it can enhance social change. I guess I'm just really interested in what art can do, not as a tool as such, but as a practice. It is something that can be transformative".

The practice of environmental art

Through different mediums, the artists explained that they are trying to create connection and reflection around the environment, a certain location or a specific environmental concern. Jan van Boeckel is pursuing this through drawing landscapes, both himself and in participatory art projects, which he explains as a process of re-connecting oneself to nature: "When the art starts talking to you as a vehicle or motion of express, you start to identify yourself with that place, which may have environmental consequences to act on those places". Five of the artists explained that they are creating environmental art through participatory art projects within local communities; four artists are working with artworks on large scale around both urban and rural development and planning. This connects to Giannachi's (2012) model of environmental art strategies – representations, performance environments and interventions were all present in the artists' works, though, the most frequently mentioned strategies were representations through photography, and interventions. An interesting observation was that the artists' who were most convinced that environmental art can make a change in society were the ones working with interventions, where they performed artworks in public spaces. Some in community development projects and others in public venues. Interventions are also the medium in

Giannachi's model that score the highest level of engagement to motivate people to take action (Giannachi 2012). This might explain why the artists working with interventions perceived it as something that can make a change.

Two of the artists responded that they are working with images of climate change through photography to problematize worldly issues. This relates to Kant's theory on the sublime within artworks, to portray natural disasters that create an overpowering sensation and respect for natural phenomena's within individuals (Danius, Sjöholm och Wallenstein 2012). Though, since these images are presented frequently in society and might be too far from people's natural environments, they might lose their ability to influence and make a difference (Nurmis 2016). This can work against artists intentions with their artworks; instead of creating reflection, it can lead to a sense of hopelessness that can make people unwilling to receive that information. In Giannachi's model, representations have the lowest level of engagement, its aim is to create a perception of the problem, not to motivate action (Giannachi 2012). This is something that did not correspond to how the artists in this study perceived the effect of their artworks.

Activism and education are frequently included in environmental art (Capstick, Hemstock & Senikula 2018) and still, artists' do not often want to name their work as activism (Nurmis 2016). Five artists stated that they are not working with goals, and that they are questioning phenomenon rather than pursuing answers through their artwork; Ulf Lundin expressed that "I think it's quite problematic to have a goal, it's easy to become more of an activist than an artist". This relates to Nurmis (2016), who explain that artists often want to separate themselves from activists because of an unwillingness to steer people in one direction. Similarly to this study, many of the artists saw activism as going in the opposite direction from art-making; Claudius Schultze expressed that "I'm strongly convinced that art becomes boring when it starts being activistic. I try to prevent pointing fingers but instead to ask questions, finding different vantage points where people can start to reflect instead of me providing with answers". van Boeckel provided with an explanation of Naess's moral and beautiful actions, which is used as a theoretical framework in this study, and voiced that environmental movements might be "stressing too much towards moral actions, of course they have good reasons to do that, but for people it gets a bit one sided, they may perceive it as too much negativity and to be pushed in a certain direction. Too little attention is led to the beauty of the relationship to a place or a landscape". My experience was that most artists shared the view of van Boeckel; that beautiful actions are favored over morality. However, one artist expressed that it was important to educate people and to "try and get them to think differently". This that can be considered as an urge to make people act in faith of duty, to perform the 'right thing' (Naess 1993), instead of enabling an opportunity for people to achieve their own motivation to act in faith of beauty. Beautiful and moral actions can sometimes be hard to navigate through. While some artists are acting out of beauty from their own love and connection for nature, it can be difficult to not steer people in a certain direction. When both artists and activists are questioning society's way of living, it is hard to acknowledge if the audience and the public are achieving that information in a moral or beautiful way, independent of what the original intention was. Society is also based on structures that lie within moral boundaries (Naess 1993; Naess 1994), and it is important to acknowledge that artists are also affected by those structures. To urge people to act beautifully is a fine intention but can be difficult to achieve when sustainable practices also are difficult to navigate through.

Environmental activism is often perceived in a bad sense, as confirmed by five artists. Still, Lundin brought up an activist art project which he imagined could open others up to reflection and said: "Now I contradict myself, but I guess that's okay. So, maybe activism art can achieve those values as well, the beautiful thing about art is that it is a free space and can contain a lot of different things". This supports the suggestion that environmental art and activism often strive towards the same goals, to create reflection around environmental concerns, and it can be difficult to separate them as different areas of practice. The contemporary art world has not considered environmental art as 'fine art' (Nurmis 2016), which might be one factor as to why artists want to separate themselves from the appearance of activism as well.

The definition of environmental artist

On the question of whether the artists perceive themselves as environmental artists, five of the interviewed artists responded that they include themselves within that description. Norrby explained that he sees himself as an environmental artist since he is "driven by a will to describe the surrounding environment, both the present and remains from the past". Two of the artists perceived themselves as environmental activists collaborating with activist groups beside from their own artmaking. As mentioned earlier, others were concerned about not being labelled as an activist since they did not believe that activist art is the right way to pursue artistic work. Two of the artists were confused about the definition of 'environmental artist' and were therefore unwilling to define themselves as being one. Keasey explained that her work includes all three pillars of sustainability which made her unwilling to constrain herself to be merely an environmental artist since it is "more interesting how they all are linked together, not just one".

One artist expressed the importance of being environmentally friendly while creating environmental art, which led that artist to be unwilling to be perceived as an environmental artist. Carrillo explained her thoughts around her choices of environmentally friendly artistic materials: "For me that is such a problematic thing, like the cost of materials, where the material is going afterwards, how much material that is becoming waste and so on. I stopped using aluminum, but then I realized that every material is doing harm in some way". The question of environmentally friendly art is something that many artists have been criticized for (Thornes 2008). It is a difficult topic to navigate through, artists might act out of beautiful intentions, but many artists are also performing their works all over world which means they travel far in airplanes that pollute the environment. This is a concern for many environmentalist workers, and it can be argued that work in faith of doing good can afford some pollution along the way for the cause of achieving something greater. However, the environmental impact of any practice is important to acknowledge.

Perspectives around the audience

Six of the artists do think about who their audience is, though many artists responded that it is difficult to know how the audience is affected by the artworks. The artists working with participatory art projects which include workshops and discussions had more reflections around audience responses towards their artworks. Those artists noted that audience members had started reflecting on their own consuming behaviors and saw emotional responses related to a connection to nature, as well as triggering childhood memories. Through van Boeckel's participatory art projects, he has experienced that "people are very moved, in tears, with this process. Because it's not somebody feeding them information about the experience, but a recognition that they carry that wisdom within themselves".

Four of the artists were concerned about exhibiting their art in public venues to reach a wider audience. As earlier mentioned, Nurmis (2016) argue that environmental art is sometimes not accepted as 'fine art' within the art world. This can be a reason why artists working with environmental art seeks audiences other than those who normally inhabit conventional art spaces. One artist has also experienced that the art world can be exclusive and therefore "it's important to look for new solutions on how artists can be visible. If we are to talk about real problems, I think it's good to be outside of this 'bubble'". Keasey has experienced positive responses towards her environmental art but expresses that: "it's probably more positive responses outside of the art world then from inside the art world".

On the question of how the artists perceived the effect of their artworks, four artists said it was hard to answer, while five artists believed that their art could affect people towards a more environmentally friendly state of mind. Schultze expressed that: "I don't think that a single artwork could change the opinion of a person, but it can be yet another stone in that direction. Something that adds to the opinion forming process". Sara Lindström on the other hand finds that her audience is already environmentally aware and seeks her art since they "want to be inspired".

Sustainable development

Eight of the artists were familiar with the sustainable development goals provided by the United Nations, but not many have implemented them in their artwork. However, two of the artists are planning to and are engaged with the Sustainable Development Goals; Keasey was invited along with a group of artists to explore how to work with the goals from an art perspective which has resulted in an ongoing artist network. She expressed: "I think it's a really important part of sustainable development, artworks need to be situated as an aspect of development, how art and culture can be seen as integral to sustainability in terms of what culture can do to critical reflection. I'm really interested in how it can be embedded into a kind of maintained sustainable mindset". Norrby also expressed that he has started reflecting on how to include the goals in an upcoming art project, to approach some of the goals he disagrees with.

One question that was brought up by Harrison was if any sustainable development is possible at all. Harrison has found that most sustainable development projects are working from an economic and capitalistic perspective which he thinks are troubling: "If we are discussing anything we need to question if we can develop anything on the expense of the life web. Now we are creating our own extinction. I don't see how we can develop; I think we have to dedevelop". Schultze expressed a similar viewpoint and was concerned about the technologyoriented solutions: "I believe that the change has to be more direct and immediate in a way, it's not about inventing something that will fix everything. The first thing has to be to stop harming the environment". Society is built upon production and consumption, which in many ways can be problematic when development projects are in line within that same structure. Sustainability is increasingly becoming a norm in society and many organizations and authoritative institutions are implementing sustainability into their work. This can support developing and implementing best practices, but since sustainability is complex and often difficult to navigate through, these practices can also create more harm than positive outcomes. At the same time, it is difficult to imagine our society heading towards 'de-development' without being forced to do so from a global natural disaster or economic collapse.

Art and the practice of sustainability

All artists interviewed agreed that art is an important tool for working with sustainability, though, four of the artists were hesitant to define art as a tool and perceived it more as a medium or a different kind of language. Keasey expressed that: "I think art can contribute to sustainability in different ways, it can either be educational to make people and communities understand, or it can develop new ideas on how we might approach the future differently. It can also critique; we have to question something to move forward. Or it can change mindsets, impose questions that is really useful". Simpson agreed, but was more doubtful about the impact of art by itself: "I don't know if art is a way to change the (fashion) industry, but to me it's a tool to create awareness and to start discussions with people, and that is perhaps one artistic strategy in the fight for environmental change".

Five artists also believed that art can create new ways of working with sustainability; van Boeckel expressed that art can reframe the discourses around sustainability and said: "we need to think in new ways, and we need to find ways to live with uncertainty in this chaos. I think art is very much equipped to help us in that direction". Many of the other artists were hesitant regarding what a new way of living could entail, and Schultze phrased that idea thusly: "I don't think there has to be many new ways, we already know that we can't consume more than we produce, and consume more than the earth is producing for us". New practices of sustainability might be difficult to imagine, still there are many successful studies around different solutions to sustainability using arts-based approaches (Ingram 2014; Brunner 2018; Perovich 2018). Environmental art is increasingly becoming a medium to address environmental challenges and are using more reflective, imaginary and playful approaches to sustainability than other

environmental work areas. This could increase opportunities for other ways of working with sustainability and sustainable development.

Art and scientific research

Six of the artists have been doing and are pursuing scientific research in addition to their artmaking, Harrison is a retired Professor Emeritus at the University of California and van Boeckel is a Senior lecturer at the Academy of Arts and Design in Gothenburg. Schultze and the anonymous artist are both PhD students in Photography. Norrby has a bachelor's degree in Biology and Keasey in Environmental Philosophy. According to Scopelli et al. (2018) and Molinario et al. (2019), higher education is often present for people engaged in activism. This seem to apply to artists engaged in environmental art as well, since six out of ten artists interviewed have achieved higher degrees of education. Seven of the interviewed artists are including scientific research in their artistry and do believe it is important that environmental art is based on science, but they also expressed that art needs to be a free element and not constrained by rules. Two of the artists suggested that collaboration with scientists and other experts in the field contributed to knowledge and other perspectives, something Keasey experienced both ways: "I can never dream of learning all that scientific knowledge, as well as they can't learn all the art practices because they are not trained, so it's good to work together".

However, two artists expressed that scientists not often are open to artistic approaches towards their scientific studies, such that the artists' experience was that scientists rather want their science to be communicated and not put in another perspective. Capstick, Hemstock & Senikula (2018) argues that artists want to complement scientific research in a way that connects it to people's' emotions rather than their rational side. This relates to the interviewed artists notion of what role art can have for scientific research. In addition to this, van Boeckel expressed that the creativity which leads to scientific revelations originates from a space of imagination and that "people like Einstein have affirmed this; how much creativity is based on things from dreams and fantasies". Something that also was mentioned were the fact that science is so incorporated in society today so to be able to reach people it is necessary to base artworks on scientific data to achieve credibility. Collaboration and transparency are often mentioned as a necessary means to achieve accurate sustainability practices (Casazza et al. 2017; Marks, Chandler & Baldwin 2014; Schröder 2018). Many scientists also believe that environmental art should be based on science to avoid communicating inaccurate information (Perovich 2018). It appears that scientific research and artistic practices could contribute to the field of sustainable development when implemented in a balanced approach.

Artists' contribution to environmental sustainability

On the question of how the artists think they are contributing to environmental sustainability, eight artists responded that they want to inspire and create reflection around nature and environmental concerns. The artists mentioned that they can offer possibilities to see things in

another light and have experiences that they are not accustomed to, which in turn can lead to a "multiplier effect" and create a shift. Lindström expressed that "I want to believe that my photographs are inspiring people to be outside and to come in contact with nature, which can lead to a willingness to preserve the natural places that are left". Five of the artists' mentioned was that they pursue environmental art both to inspire and develop discussions in society, but also for themselves to reflect on sustainability. Five of the artists expressed that artists' work might not be the foremost relevant means to achieve sustainability, but that the artist can be a "piece of the puzzle". Harrison on the other hand had a more optimistic view and expressed that "I actually think that the artist way may be our way out of the crisis, because we improvise, and we behave a lot like nature, in the sense that everything that lives improvises its existence all the time".

4. Conclusion

This study has tried to investigate artists motivations to pursue environmental art and artists perspective on sustainable development. The research questions were: "What is the main motivation for artists working with environmental art? Do artists think that environmental art can contribute to sustainable development?" The conclusion of this study is that:

- Artists' main motivation to pursue environmental art derives from a response to
 environmental concerns in society, out of a conviction that art is an effective medium
 to offer different kinds of reflection around these concerns. Artists motivation also
 derives from their own interest in environmental challenges as well as their connection
 and love for nature.
- The artists are familiar with the concept of Sustainable Development and the Sustainable Development Goals provided by the United Nations, and most of them do believe that art can contribute to sustainable development. A few initiatives to work with the concept of sustainable development have been and might be initiated. However, they also questioned the concept of sustainable development overall, asking whether any development can be sustainable.

The hypothesis of this study was that artists feel positively about art's ability to create reflection on environmental concerns in society, which was proven to be correct. The main assumption was that artists main contribution to environmental sustainability is that they, through their art-making, can offer different kinds of reflections than other types of mediums such as science and journalism.

Future research and the Future

For the future, research on environmental art and sustainable development should investigate further possibilities to implement arts-based approaches to sustainable development projects. Research should also focus on collaboration between artists and environmental scientists and explore how they can contribute from each other. Regarding motivations of environmental artists and activists, an interesting approach would be to make a comparative study of artists and activists to see if their motivations are as separate as many are experiencing. From another perspective, it is also interesting to explore the audience response to environmental art, something that many studies have tried to, but also investigate how different art approaches influences people differently.

Art is fundamentally a force that should not be boundaried and can be viewed as contrary to science in the sense that it is abstract, imaginative and emotional. If environmental art is limited

to science, we might lose some of the benefits that art can provide to sustainable development. However, since artists pursuing environmental art often work in the same field as scientists in sustainable development, collaboration between artists and scientists could offer many opportunities for both parties. Collaboration could lead to a deeper understanding of each other's expertise and create new possibilities to communicate and reflect on scientific knowledge, as well as arts role in that field.

References

- 1. Blasch & Turner. 2016. Environmental art, prior knowledge about climate change, and carbon offsets. *Journal of Environmental Studies and Science* 6 (4): 691-705. DOI: 10.1007/s13412-015-0243-y.
- 2. Brook, S. 2013. Social Inertia and the Field of Creative Labour. *Journal of Sociology* 49 (2–3): 309–24. DOI: 10.1177/1440783313481531.
- 3. Brunner, E.A. 2018. Contemporary Environmental Art in China: Portraying Progress, Politics, and Ecosystems. Environmental Communication 12 (3): 402-413. DOI: 10.1080/17524032.2016.1269822.
- 4. Bryman, A. & Bell, E. 2011. *Business Research Methods*. 3rd ed. Oxford: Oxford University Press.
- 5. Carrington, D. 2018. 'We are the last generation that can stop climate change' UN summit. Dec 3. https://www.theguardian.com/environment/2018/dec/03/we-are-last-generation-that-can-stop-climate-change-un-summit (Retrieved 17/01/2019).
- 6. Capstick, S., Hemstock, S. & Senikula, R. 2018. Perspectives of artist–practitioners on the communication of climate change in the Pacific. *International Journal of Climate Change Strategies and Management* 10 (2): 323-339. DOI: 10.1108/IJCCSM-03-2017-0058.
- 7. Casazza, M., Ferrari, C., Gengyuan, L. & Ulgiati, S. 2017. 'Hope for a Celestial City A Triptych': A musical composition for sustainability and cleaner productions for the Jing-Jin-Ji region, China. *Journal of Cleaner Production* 140 (01): 1893-1902. DOI: 10.1016/j.jclepro.2016.09.087.
- 8. Cunliffe, A.L. 2011. Crafting Qualitative Research: Morgan and Smircich 30 Years On. *Organizational Research Methods* 14 (4): 647-673. DOI: 10.1177/1094428110373658.
- 9. Curtis, D. J. 2009. Creating inspiration: the role of the arts in creating empathy for ecological restoration. *Ecological Management & Restoration* 10 (3):174-184. http://dx.doi.org/10.1111/j.1442-8903.2009.00487.x.
- 10. Curtis, D., Reid, N., & Ballard, G. 2012. Communicating ecology through art: What scientists think. *Ecology and Society* 17 (2). DOI: 10.5751/ES-04670-170203.
- 11. Danius, S, Sjöholm, C. & Wallenstein, S-O. 2012. *Aisthetis: Estetikens Idéhistoria, Del 1*. Stockholm: Stiftelsen Bokförlaget Thales.
- 12. Davies, S. 2013. Artists' intentions and artwork meanings: Some complications. *The Behavioral and Brain Sciences* 36 (2): 138-139. DOI: 10.1017/S0140525X12001598.
- 13. Daniel, R. & Johnstone, R. 2017. Becoming an artist: exploring the motivations of undergraduate students at a regional Australian University. *Studies in Higher Education* 42 (6): 1015-1031. DOI: 10.1080/03075079.2015.1075196.
- 14. Drezner, M. 1989. Changing energy end-use patterns as a means of reducing global warming trends. *Journal of Environmental Education* 21 (2): 41-46. DOI: 10.1080/00958964.1990.9941930.
- 15. Dunaway, F. 2009. Seeing global warming: Contemporary art and the fate of the planet. *Environmental History* 14 (1): 9-31. DOI: 10.1093/envhis/14.1.9.
- 16. Elias, D., & Berg-Cross, L. 2009. An Exploration of Motivations of Fine Art Students in Relation to Mental and Physical Well-Being. *Journal of College Student Psychotherapy* 23 (4): 228–238. DOI: 10.1080/87568220903163850.
- 17. Ernst, D., Esche, C. & Erbslöh, U. 2016. The art museum as lab to re-calibrate values towards sustainable development. *Journal of Cleaner Production* 135 (11): 1446-1460. DOI: 10.1016/j.jclepro.2016.06.196.
- 18. Fielding, K.S., McDonald, R. & Louis, W.R. 2008. Theory of planned behaviour, identity and intentions to engage in environmental activism. *Journal of Environmental Psychology* 28 (4): 318-326. DOI: 10.1016/j.jenvp.2008.03.003.
- 19. Giannachi G. 2012. Representing, performing and mitigating climate change in contemporary art practice. *Leonardo* 45 (2): 124-135. DOI: 10.1162/LEON_a_00278.

- 20. Guest, G., Bunce, A. & Johnson, L. 2006. How Many Interviews Are Enough? An Experiment With Data Saturation and Variability. *Sociological Abstracts* 18 (1): 59-82. DOI: 10.1177/1525822X05279903.
- 21. Harrington, D.M. & Chin-Newman, C.S. 2017. Conscoious Motivations of Adolescent Visual Artists and Creative Writers: Similarities and Differences. *Creative Research Journal* 29 (4): 442-451. DOI: 10.1080/10400419.2017.1378270.
- 22. Higgins-Desbiolles, F. 2018. Sustainable tourism: Sustaining tourism or something more?. *Tourism Management Perspectives* 25: 157-160. DOI: 10.1016/j.tmp.2017.11.017.
- 23. Hillström, Y. Personal observation. Moderna Muséet Stockholm, 25/02/2019.
- 24. Ingram, M. 2014. Washing urban water: diplomacy in environmental art in the Bronx, New York City. *Gender, Place & Culture* 21 (1): 105-122. DOI: 10.1080/0966369X.2013.769429.
- 25. Kelly, C. 1993. Group identification, intergroup perceptions and collective action. *European Review of Social Psychology* 4 (1): 59-83. DOI: 10.1080/14792779343000022.
- 26. Kollmuss, A., & Agyeman, J. 2002. Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour. *Environmental Education Research* 8 (3): 239-260. DOI: http://dx.doi.org/10.1080/13504620220145401.
- 27. Kruglanski, A. W., Gelfald, M., Belangér, J. J., Sheveland, A., Hetiarachchi, M., & Gunaratna, R. 2014. The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Advances in Political Psychology* 35 (S1): 69-93. DOI: 10.1111/pops.12163
- 28. Kruglanski, A. W., Chen, X., Dechesne, M., Fishman, S., & Orehek, E. 2009. Fully committed: Suicide bombers' motivation and the quest for personal significance. *Political Psychology* 30 (3): 331-557. DOI: 10.1111/j.1467-9221.2009.00698.x.
- 29. Kulnieks, A., Longboat, D., Sheridan, J. & Young, K. 2016. Oral History Education and Poetic Inquiry: Developing ecologically sustainable literacies through language arts curriculum. *Our Schools, Our Selves* 25 (2): 127-134.
- 30. Lindemann, D. 2013. What Happens to Artistic Aspirants Who do not 'Succeed'? A Research Note from the Strategic National Arts Alumni Project. *Work and Occupations* 40 (4): 465–80. DOI: 10.1177/0730888413502059.
- 31. Logé, G., Peñaloza, L. & Guintcheva, G. 2010. On the Impossibility of Sustainable Development Without Culture: The Gaze on Art and Perspectives on a Cultural Approach to Marketing. EDHEC Business School.
- 32. Manzo, L.C. & Weinstein, N.D. 1987. Behavioral commitment to environmental protection: A study of active and nonactive members of the Sierra Club. *Environment and Behavior* 19 (6): 673-694. DOI: 10.1177/0013916587196002.
- 33. Marks, M., Chandler L. & Baldwin, C. 2014. Re-imagining the environment: using an environmental art festival to encourage pro-environmental behaviour and a sense of place. *Local Environment* 21 (3): 310-329. DOI: 10.1080/13549839.2014.958984.
- 34. Maslow, A. H. 1970. Motivation and Personality. 2nd ed.. New York: Harper & Row.
- 35. Matsuba, M. K., & Pratt, M. W. 2013. The making of an environmental activist: A developmental psychological perspective. *New Directions for Child and Adolescent Development*, 142: 59-74. DOI: 10.1002/cad.20049.
- 36. Menger, P-M. 2006. Artistic Labor Markets: Contingent Work, Excess Supply and Occupational Risk Management. In *Handbook of the Economics of Art and Culture*, edited by V. Ginsburgh and D. Throsby, 765–811. Amsterdam: Elsevier.
- 37. Milbourne. 2014. African photographers and the look of (un)sustainability in the African landscape. *Africa Today* 61 (1): 115-140. DOI: 10.2979/africatoday.61.1.115.
- 38. Molinario et al. 2019. Motivations to Act for the Protection of Nature Biodiversity and the Environment: A Matter of "Significance". *Environment and Behavior*. DOI: 10.1177/0013916518824376.
- 39. Naess, A. 1993. Beautiful action. It's Function in the Ecological Crisis. *Environmental Values* 2 (1): 67-71. DOI: 10.3197/096327193776679972.
- 40. Naess, A. 1994. Culture and Environment. Sociological Abstracts 20 (1): 143-149.

- 41. Nelson, R. 2014. *The artworld and the paradox of sustainability*. Artlink. Dec. https://www.artlink.com.au/articles/4244/the-artworld-and-the-paradox-of-sustainability/ (Retrieved 18/01/2019).
- 42. Nurmis, J. 2016. Visual climate change art 2005–2015: discourse and practice. *Wiley Interdisciplinary Reviews: Climate Change* 7 (4): 501-516. DOI: 10.1002/wcc.400.
- 43. *P1 Kultur*. 2018 Klimatet tar plats i skönlitteraturen. [Radio Program]. Producer Eskil Krogh Larsson. Sveriges Radio. Dec 4, 13:05.
- 44. Perovich, L.J. 2018. Environmental art: A path to civic progress in a time of policy retreat in the United States. *Cogent Art & Humanities* 5 (1). DOI: https://doi.org/10.1080/23311983.2018.1523269.
- 45. Rivera-Lopez, F., Wickson, F. & Hausner, V.H. 2018. FindingCreativeVoice: Applying Artsbased Research in the Context of Biodiversity Conservation. Sustainability 10 (6): 1778. DOI: https://doi.org/10.3390/su10061778.
- 46. Schröder, A. 2018. Aesthetic strategies to explore beyond the models of sustainable development: An analysis of Lisa Simpson's Musical Sewing. *Sustainable Development* 26 (2): 182-189. DOI: 10.1002/sd.1729.
- 47. Sinding, C. & Aronson, J. 2003. Exposing failures, unsettling accommodations: tensions in interview practice. *Sociological Abstracts* 3 (1): 95-117. DOI: 10.1177/1468794103003001770.
- 48. Sontag, S. 1993. Regarding the Pain of Others. New York: Picador.
- 49. Syme, G.J., Beven, C.E. & Sumner, N.R. 1993. Motivation for reported involvement in local wetland preservation: The roles of knowledge, disposition, problem assessment, and arousal. *Environment and Behavior* 25 (4): 586-606. DOI: 10.1177/0013916593254003.
- 50. The Harrison Studio. 2019. *Helen and Newton*. https://theharrisonstudio.net/ (Retreived 20/05/2019).
- 51. Thornes, J.E. 2008. A Rough Guide to Environmental Art. *Annual Review of Environment and Resources* 33 (1): 391-411. DOI: 10.1146/annurev.environ.31.042605.134920.
- 52. Towse, R. 2001. Partly for the Money: Rewards and Incentives to Artists. *Kyklos* 54 (2–3): 473–490. DOI: 10.1111/1467-6435.00165.
- 53. van Boeckel, J. 2013. At the Heart of Art and Earth. *Environmental Education Research* 21 (5): 801-802. DOI: 10.1080/13504622.2014.959474.
- 54. Wells, N. M., & Lekies, K. S. 2006. Nature and the life course: Pathways from childhood nature experiences to adult environmentalism. *Children Youth and Environments* 16 (1): 1-24.

Appendix 1: Presentation of artists

Below follows a presentation of the ten artists interviewed for this study.

Claudius Schultze

A global artist and researcher based in Germany, mainly working with photography, and interested in the societal consequences of nature and technology. Schultze have published different books around this subject, the latest book from 2017 is exploring European landscapes from a perspective of climate change and natural disasters.

Holly Keasey

An artist currently based in Sweden, using different mediums to perform environmental art, and works mainly with site specific art projects within local communities. Keasey are currently working with an exhibition in Stockholm called 'Mossutställningar' regarding sustainable urban development.

Jan van Boeckel

An artist-educator, filmmaker and anthropologist currently based in Sweden. van Boeckel is a member of an international research group on arts-based environmental education. His own artistry goes towards 'wild paintings', which he pursues both himself and as a lecturer to others, to paint natural surroundings as a way of reconnecting oneself to nature.

Lisa Simpson

An artist and seamstresses currently based in Germany. Since 2003, Simpson has performed globally with her sewing machine, creating music while doing up-cycling on stage, transforming the audience's old clothes into new items. Simpson is engaged in questioning contemporary consumption habits and to bring forth discussions on sustainability.

Newton Harrison

An artist and retired Professor Emeritus, based in the United States, and one of the worlds earliest environmental artists. Together with Helen Mayor Harrison, he created 'The Harrison Studio', a leading organization in the eco-art movement working with scientists and urban planners to "uncover ideas and solutions which support biodiversity and community development" (The Harrison Studio 2019).

Nils-Erik Norrby

A biologist and artist based in Sweden, working with different materials to address questions of consumption, and highlight materials that is often not payed attention to in society. Norrby also work with time perspectives to view how consumption has changed over centuries.

Sara Lindström

A travel and outdoor lifestyle photographer currently based in France. In 2016, Lindström won the title 'Environmental Photographer of the Year'. Lindström are mainly interested in

mountains, adventures and wild terrains, and want to include more environmental art into her photography.

Trinidad Carrillo

A photographer based in Sweden, engaged in environmental concerns but are not pursuing environmental art as a main focus of interest. Carrillo is interested in metamorphosis and through her art she is visualizing the relationship between humans and places through both imagination and reality, to open doors for new perspectives.

Ulf Lundin

A photographer based in Sweden working both with commercial photography and artmaking. Lundins recent project 'The Monument' are reflecting on an old garbage heap in Stockholm, which have received attention in terms of perspectives around nature and culture within urban areas.

Anonymous artist

Based in Poland, working with photography combined with other media. The artist define herself as an 'eco feminist artist' and her work includes perspectives of the environment, nature and contemporary issues of climate change.

Appendix 2: Interview questions

Introduction

This thesis is about identifying artists' perspective on the relationship between environmental art and sustainable development. This interview will be recorded, and you have the opportunity to disengage in the study at any time and for any reason.

Initiative questions

- 1. Where do you work and live?
- 2. Why did you become an artist?
- 3. Do you engage in your artistry full time or do you have another occupation as well?
- 4. How long have you been engaged in creating art?
- 5. What is your main motivation for creating art?
- 6. Do you work nationally and/or internationally?

Environmental art

- 7. Why do you work with environmental art?
- 8. How long have you worked with environmental art?
- 9. How do you work with environmental art? What materials and objects do you use?
- 10. How much of your artistry goes towards environmental art?
- 11. Do you perceive yourself as an environmental artist? Why/why not?
- 12. Do you think about who your audience are? If so, how do you think your environmental art is affecting people?
- 13. Have you received any response of your environmental art from your audience?
- 14. Do you work with social and economic aspects of sustainability as well?

Art and sustainable development

- 15. Are you familiar with the Sustainable Development Goals provided by the United Nations? If so, have you implemented some of them in your work?
- 16. Do you think art is an important tool for working with sustainability?
- 17. Do you think art can create new ways of working with sustainability? If so, how?
- 18. Do you base your environmental art on an interpretation of scientific research?
- 19. How do you think you are contributing to environmental sustainability as an artist?