

At the Heart of Art and Earth

An Exploration of Practices in
Arts-Based Environmental Education

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The ordinary man, who lives with men, and sees Nature only in as far as she has reference to himself, is seldom aware of this problematic and uncanny relationship. He sees the surface of things, which he and his like have created through the centuries, and likes to believe that the whole earth is concerned with him because a field can be cultivated, a forest thinned, a river made navigable. His eye focused almost entirely on men, sees Nature also, but incidentally, as something obvious and actual that must be exploited as much as possible.

Children see Nature differently; solitary children in particular, who grow up amongst adults, foregather with her by a kind of like-mindedness and life within her, like the smaller animals, entirely at one with the happenings of forest and sky and in innocent, obvious harmony with them. But just because of this, there comes later for youth and maiden that lonely period filled with deep, trembling melancholy, when they feel unutterably forlorn, just at the time of their physical maturing; when they feel that the things and events in Nature have no longer and their fellow men have not yet, any sympathy for them. Spring comes, even when they are sad, the roses bloom, and the nights are full of nightingales, even though they would like to die.... And, on the other hand, they see people, equally strange to them and unconcerned, with their business, their cares, their successes and joys, and they do not understand it. And finally, some of them make up their minds and join these people in order to share their work and their fate, to be useful, to be helpful ... whilst the others, unwilling to leave the Nature they have lost, go in pursuit of her and try now, consciously and by the use of their concentrated will, to come as near to her again as they were in their childhood without knowing it. It will be understood that the latter are artists: poets or painters, composers or architects, fundamentally lonely spirits who, in turning to Nature, put the eternal above the transitory ... and who, since they cannot persuade Nature to concern herself with them, see their task to be the understanding of Nature, so that they may take their place somewhere in her great design. And the whole of humanity comes nearer to Nature in these isolated and lonely ones. It is not the least and is, perhaps, the peculiar value of art, that it is the medium in which man and landscape, form and world, meet and find one another.

Rainer Maria Rilke (1902/1965)

Dedicated to Meri-Helga Mantere

Abstract

In today's technological world, human intertwinement with the rest of nature has been severely diminished. In our digital culture, many people hardly have any direct experience of and sense of connection with "the real" of the natural world. The author assumes that when we want to find ways to mend this gap, arts-based environmental education (AEE) can play a meaningful role. In AEE, artmaking is regarded as itself a way of potentially gaining new understandings about our natural environment.

As a reflective practitioner, the author facilitated three different AEE activities, at several times and at diverse locations. On basis of his observations, memories, written notes, audio-visual recordings and interviews with participants, teachers and informed outsiders, he interpreted the experiences both of participants and himself. To this end he employed interpretative phenomenological analysis paired with autoethnography.

The artmaking activities researched here aimed to bring about a shift in focus. Participants were encouraged to approach natural phenomena not head-on, but in an indirect way. Moreover, the artmaking process aspired to heighten their awareness to the presence of their embodied self at a certain place. The research questions that the author poses in this study are: (1) What is distinctive in the process of the AEE activities that I facilitate?; (2) Which specific competencies can be identified for a facilitator of AEE activities?; and (3) Does participating in the AEE activities that I facilitate enhance the ability of participants to have a direct experience of feeling connected to the natural world?

In this explorative study, the author identifies facilitated estrangement through participating in AEE as an important catalyst when aiming to evoke such instances of transformative learning. In undergoing such moments, participants grope their way in a new liminal space. Artmaking can create favorable conditions for this to happen through its defamiliarizing effect which takes participants away from merely acting according to habit (on "autopilot"). The open-ended structure of the artmaking activities contributed to the creation of a learning arena in which emergent properties could become manifest. Thus, participants could potentially experience a sense of wonder and begin to acquire new understandings – a form of knowing that the author calls "rudimentary cognition." The research further suggests that a facilitator should be able to bear witness to and hold the space for whatever enfolds in this encounter with artistic process in AEE. He or she must walk the tightrope between control and non-interfering.

The analysis of the impacts of the AEE activities that were facilitated leads the author to conclude that it is doubtful whether these in and of themselves caused participants to experience the natural environment in demonstrable new and deep ways. He asserts that most of their awareness was focused on the internal level of their own embodied presence; engagement with place, the location where the AEE activity was performed, seemed secondary. The findings show that AEE activities first and fore-

most help bring about the ignition and augmentation of the participants' fascination and curiosity, centered in an increased awareness of their own body and its interactions with the natural world.

The present study can be seen as a contribution to efforts of envisaging innovative forms of sustainable education that challenge the way we have distanced ourselves from the more-than-human world.

Acknowledgements

The seed for this research project was planted more than a decade ago, in July 2001, at Capellagården, on the Swedish island of Öland in the Baltic Sea. Capellagården is a school of arts and crafts and in its library I found the book *Power of Images*. In it is an article by Finnish art teacher Meri-Helga Mantere, entitled “Ecology, Environmental Education and Art Teaching.” Here, for the first time, I came across the insight that art education can play an important role in a more holistic conceptualization of arts-based environmental education. I was immediately struck by the innovative synthesis of these two (hitherto regarded as almost completely separate) fields. I contacted the author and we developed a correspondence. Some time later, in the autumn of 2003, I traveled to Finland and visited Mantere and got a cursory understanding of the innovative ways in which the two pedagogical fields were brought together in this Nordic country. At that occasion I also met Professor Juha Varto at the University of Art and Design (TaiK) in Helsinki, which later became part of the new Aalto University. Both strongly encouraged me to pursue a doctorate degree in researching this new field, as, up until that point, nobody had taken up this subject on a postgraduate level. Eventually, the research proposal that I wrote was accepted and in 2006 I gratefully received research grants from both the Finnish Cultural Foundation and CIMO, which allowed me to move to Helsinki part of the year to start my research. In 2008, I was employed for nearly four years as research fellow at the School of Art and Design at Aalto University.

Now, standing at the other side of the research undertaking and having come near to its completion, I want to express my deep gratitude for the unceasing support and insightful assistance I received from my supervisors: Juha Varto of the School of Arts, Design and Architecture of Aalto University in Helsinki, Finland; Edvin Østergaard of the Norwegian University of Life Sciences (UMB) in Ås, Norway; and, in the first phase, Timo Jokela of the University of Lapland in Rovaniemi, Finland. Parallel to this, the help of Meri-Helga Mantere and of Pirkko Pohjakallio (Aalto University) – each in their own unique and meaningful ways – has been invaluable to bring this project to its completion. Much encouragement I received along the way from two colleagues of Østergaard, respectively Linda Jolly and Aksel Hugo. Both took the time to read and comment very thoughtfully on earlier versions of this thesis. I want to thank you all for the enormous backing you have provided me and for your relentless faith in the value of this project. Here I also thank Erling Krogh and Astrid Sinnes of UMB for their thoughtful comments during two subsequent review seminars. In the final stage leading up to this present work, the quality of the manuscript was assessed by pre-examiners Mary-Jeanne Barrett (University of Saskatchewan, Canada) and Carl Leggo (University of British Columbia, also Canada). I am grateful for their dedicated efforts and for the thoroughness of their assessments.

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formed a research group on arts-based environmental education. (In time I learned, that by a remarkable twist of fate, it was probably Pohjakallio who left a copy of *Power of Images* in the library of Capellagården when she visited the place many years before.) Thanks to my colleagues for jointly taking this theme up with me and providing an academic institutional frame for research. I benefited much from the exchange of ideas and practices and our lively discussions.

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Preface

Can learners connect to nature in new ways through the practice of artmaking? This thesis is the result of a comprehensive exploration of this overarching theme. Commonly, in environmental education and education for sustainable development – at least to the extent that I am familiar with them – those elements that could be regarded as being arts-inspired are likely to be treated as “merely” forms of play. Typically, the artmaking element, *when and if* practiced, is employed to loosen up the participants, after which more serious elements of learning can then follow – that is to say, those that *actually* seem to matter. Most environmental educators that I have worked with seem less inclined to practice forms of education which are more open-ended, participatory and constructivist in orientation.

If this generalization of the state of affairs is accurate, then one can question what the impact of such teaching is on learners. Does it really reach them in their hearts and minds? Do participants acquire new knowledge and understandings? And in cases they do come to a more apt comprehension of ecological relationships, does this then also lead to a change of attitude, and concomitantly, a change of behavior, as is often assumed, or at least hoped for, by environmental educators? I am skeptical of this taken-for-granted three stages model (acquisition of knowledge → change of attitude → change of behavior) as a conduit to education for sustainability. Partly this doubt is based on a mistrust of the assumed cause and effect relationship between learning and acting (cf. Grün, 1996; Russell, 1999; Sobel, 2008). In my view, our actions in the world are steered by a complex mix of factors, and of many of these we are unconscious. But the skepticism is based even more on a diagnosis of the situation in our postmodern – or even *post-normal* – era,¹ with its predominance of the virtual world and technology-mediated experience. Educators report that the attention span of today’s students is extremely short. Fast-paced imagery and constantly refreshed information on our video and computer screens – in film, in games, in music clips, in text messages – seem to make the “real” world in comparison hopelessly slow (Mander, 1986). The prevailing educational approaches seem to lag behind the developments and are wholly inadequate to connect to a generation that is accustomed, if not addicted, to receiving continuously updated electronic and virtual communication (cf. Davidson & Goldberg, 2009; Wals, 2010). New research suggests that teenagers’ brains are being digitally “re-wired.” We seem less able to focus and deeply analyze materials. Some scholars maintain that the Internet is changing our brains, impacting the way we memorize, process information and think in general. (Bowers, 2000; Carr, 2010; Mitchell, 2010; Zimbardo, 2010).

¹ For Arjen Wals and Peter Blaze Corcocoan, the implication of our current “unsustainability crisis” is that we live in “post-normal times” (the term is from Funtowicz & Ravetz, 1993), in which “conventional routines and systems no longer seem to work effectively” (2012, p. 27).

There are environmental educators who apparently adhere to the maxim that “if you cannot beat them, join them” and suggest that nature guides should devise and actively promote video games or organize viewings of the most spectacular and high-pace nature documentaries to offer a viable alternative to all the other seductive material that the virtual world is offering them.² But in my view attempts such as these are doomed to fail as it is most likely that subsequent encounters with “non-virtual” nature will inevitably be perceived as dull and unexciting. It has been my own experience that only if one takes the time to be in an attentive state without distractions (e.g. by sitting on a tree trunk in the forest in silence for a certain length of time), that one’s sensitivity may start to get in sync with other creatures. It is as if these first need to get used to your presence before they cautiously start to allow themselves to be seen or heard. Also, the slow extension of the state of being in the presence of silence seems to expand my awareness to what is happening around me. To dwell in such receptivity takes effort and time, and is at odds with most people’s usual mode of being in suburban and urban areas, with their traffic, noises, screens, etc. which require an almost continual alertness to new trunks of information that come our way.

One of the challenges for educators in today’s world, in my view, is to be able to oscillate between a desire not to expropriate the experiences of learners, and at the same time to find a frame of reference that is radically different from the status quo in education and the (virtual) realities that we are so often immersed in. If there is indeed a need for change, it may be not the best course to start out from the situation that defines and maintains the state of affairs as it is. As Einstein once said, we cannot solve our problems with the same mindset that created them. Or, to put it differently, if we use the *old* mindset, we will be doing new things in old ways.

These considerations fueled my interest to see what happens if one were to take a radically different approach to environmental education, turning prevailing practices, as it were, “upside down.” This could for example mean that instead of starting pursuits in environmental education from a science-informed angle, grounded in biology and physics, one could also set out to see what occurs if one facilitates a learning process in and about nature that starts from an open-ended, *arts*-based approach. Further, one might also ask, what happens, if one regards artistic practice not as an aide to learning, but as constituting *in itself* a form of coming to an understanding of the world? This research project, then, can be understood as an effort to explore in what way learners can connect to the natural environment through practicing art.

In the course of my research I became more and more convinced that education is not a neutral “black box.” It does not suffice to see it as merely a means towards reaching a higher goal like creating a more sustainable earth; such a pursuit, in our present society, fails to underscore that our current education is itself part of the problem – not external to it. When I cursorily overview some of the current practices in the modern

² A case in point is the app *Ranger Rick’s Tree House* (“designed exclusively for the iPad”), which is reviewed by Mary Burnette (2012) on the website of America’s *National Wildlife Federation*.

world, my impression is that in most schools, logocentric approaches to science education predominate; in many prevailing pedagogical orientations, learners are expected to learn a curriculum taken from a pre-established body of knowledge. Dahlin, Østergaard and Hugo (2009) speak of “cognitionism” as the one-sided emphasis on abstract models and purely conceptual cognition in much of today’s science education.

An alternative to this approach may perhaps be found in an arts-inspired or arts-based “re-invention” of environmental education. Such an orientation may challenge the “top-down” view of the passing over of information from teacher (or guide) to student, and allows for a radical open-endedness in the educational process. A form of artmaking which specifically aims to facilitate such (re)connection to the natural world has been conceptualized as “arts-based environmental education” (Mantere, 1995a; van Boeckel, 2006; 2009). One of its characteristics is that it encourages participants to develop a receptive attitude to and engage in new ways with the nonhuman environment. Learners are encouraged to approach the earth afresh through art, e.g. by looking at a plant, animal or landscape as if we see them for the first time in our lives. In this, the participant is encouraged to immerse herself in nature, which could entail seeking the kind of empathic regard or sense of wonder that radical environmental philosophers have sponsored (e.g. Naess, 1976/1989; Matthews, 1991; Abram, 1996a).

One of the epistemological foundations that could inform such an alternative approach is the Deweyan view that in *any* learning activity, it is important to first establish a direct felt contact between the learner and the items of his or her learning – in short, to facilitate “first hand” experiences. Dewey (1910) succinctly summarizes his view as follows: “Only by wrestling with the conditions of the problem at hand, seeking and finding his own solution (not in isolation but in correspondence with the teacher and other pupils) does one learn” (p. 188). It seems imperative that the learner is somehow able to keep at a distance (or at least suspend for some time) commonly held expectations and anticipations of ways in which the world is to be understood. In an educational setting, it may mean that a facilitator develops and cultivates an ability to foster an attentive openness among the learners, which allows participants to feel safe and at ease when moving about in uncharted terrain. I would argue that this state is one of the fundamental characteristics of an artistic process, and of an artist’s way of knowing.

Though Dewey and many pedagogues have maintained that one learns in a deeper way about our natural environment when such learning is based in direct sensory experience, such encounters are exceedingly rare in our modern era (Louv, 2005; Sobel, 2008). My suggestion here is that if we want to find ways to reconnect humans – and especially children – to nature, arts-based activities can play an important role in this. The overall question that guides this dissertation is: what happens when participants in so-called arts-based environmental education try to connect to nature through art? In the modern Western world, this interface of art education and environmental education has not been developed far and reflections on its merits have only just begun. Part of the reason for this is the paradigmatic straightjacket that each respective field has put on its practitioners and on scholars of the pedago-

gies that are implemented. In this, “the art of looking sideways” (Fletcher, 2001) has not been particularly encouraged thus far.

The collected bits and pieces in this dissertation come from all kinds of places: sometimes from far away, sometimes from a distance in time. Adhering to its auto-ethnographic nature, I have also deliberately included parts of my personal biography. I have attempted to weave these composite materials together into a new unity, somewhat like the assembled twigs and feathers and mosses in a bird’s nest. As Tim Ingold keenly remarked, there is no relationship between these things to start off with. What the bird has done, as a go-between amongst all these, is to bring them together, “letting them, so-to-speak, sympathize with one another so that that form emerges” (T. Ingold, personal communication, September 24, 2012). Another term that has been employed to refer to such a myriad, heterogeneous, bricolage-like structure is that of a *rhizome* (Deleuze & Guattari, 1980/2004), which, in contrast to the metaphor of a hierarchical tree of knowledge, has no beginning or end, but “is always in the middle, between things, interbeing” (p. 27). I present and interpret my data with multiple (and non-hierarchic) entry and exit points; it is the internal relationships that are important and any one piece of text can be connected to other parts of this dissertation in more than one way.

Sometimes I provide quotations from uncommon sources such as from novels, poems, bits of interviews in documentary films, articles in newspapers, attended lectures, or from personal communications with my interlocutors. Such a presentation may easily be taken as an indication of laziness or as expressive of a researcher being caught in the so-called fallen-bookcase-syndrome, whereby an avalanche of second hand quotations is cast at the reader to mask a lack of one’s own contributions and research results. Appreciating it as such, however, would be missing the point, I would argue, of why this diversity of sources is brought together in this way. For part of my reason for opting for such an approach is because I believe that in some of the more direct utterings of artists and authors – e.g. in the condensed rendering of their reflections which are not yet processed, sealed and guarded – their views often can unfold in a more primary way. Their thoughts can attain a conciseness or pointedness which may lack in more distanced scholarly presentations by the same person concerned. I have found that they allow me to get a better grasp of what triggers and motivates people at the level of the undercurrents to their orientation (of which they themselves may be only partly conscious).

Together, these expressions, coupled with my observations of which I have kept track in my research journal, constitute my personal “storied knowledge” – that is, my own idiosyncratic meaning-making of the diversity of insights contained in the stories I had the privilege of attending to. It is a mosaic of the things that struck me as meaningful, that stood out and I have noted or remembered as I went along in my explorations. I now nonlinearly bring these to bear, groping my way forward in finding a form that does justice to the ideas presented in this thesis.

This thesis has the following structure. In **Part I**, I try to elucidate key elements of the historical process that gave rise to our current disconnection from nature. I

examine ways in which art education and the study of nature were brought together historically and introduce the contemporary field of arts-based environmental education. In **Part II**, I present my research questions and the methodology used in seeking answers to these. **Part III** comprises my empirical data, which are analyzed and interpreted in **Part IV**. In the final part, **Part V**, I move to a more theoretical and speculative level of reflection, whereby I try to provide hints of a possibly emerging AEE pedagogy.

PART I

1. The last still to have known such things

This thesis brings together art and environmental education. Its meaning is at the interface of these, or, as the title suggests, at the heart of art and earth. It looks specifically at the practice of arts-based environmental education, and it assumes that this approach has meaning in our current era. The obvious question is why this bringing together and possible bridging of perspectives and approaches would be desirable. In order to underpin the relevance of this undertaking, I start by sketching what I take to be one of the most pressing ecological issues we face today: the problem of the growing disconnection between humans and nature, and I situate this theme in a wider cultural and historical context. The lack of nature in the lives of today's wired generation confronts us with the critical challenge to find ways to heal the broken bond with the natural world. The wider framework in which I discuss this "nature gap" is an examination of how "the real," and then most specifically the real of our natural environment, has become objectified and "robbed of its aura." A key transformative turn was what has been called the process of disenchantment of the world. Gradually, nature has moved to the periphery of our consciousness and seems to have become both irrelevant and unattainable in much of the prevailing modern and post-modern discourse.

1.1 The sustainability crisis

If Your Kids Are Awake, They're Probably Online. With that title, an alarming report appeared in the *New York Times* in January 2010. According to a study of the Kaiser Family, average young Americans now spend practically every waking minute – except for the time in school – using a smart phone, computer, television or other electronic device. Moreover, kids between 8 and 18 spend 7,5 hours a day with such devices, and that doesn't count the 1,5 hours that youth spend texting and 0,5 hour they talk on their

cell phones (Lewin, 2010). The last few years have seen a surge of articles and books on the lack of connection between children and nature. In this, Richard Louv's (2005) bestselling *Last Child in the Woods* has been instrumental. Its subtitle, "Saving our children from nature-deficit disorder," has introduced a new affliction into the world. Though not an existing medical diagnosis, as the author himself underlines,³ the term has entered the public debate on health and children. In December 2012, I googled the exact phrase "nature-deficit disorder" and came up with about 220,000 hits. To Louv, nature-deficit disorder describes the human costs of alienation from nature, and he mentions the following effects: diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses.

Play Again, a documentary film directed by Tonje Schei (2010), thematizes the huge cultural shift we are undergoing, of children spending more time in the virtual world than the natural world. As the flyer of the film suggests, "One generation from now most people in the U.S. will have spent more time in the virtual world than in nature." The film investigates what we are missing when we are behind screens, and how this will impact our children, our society, and eventually, our planet. *Play Again* bombards the viewer with disturbing statistics. We learn that children in the United States spend ninety percent of their time indoors. Of a whole year, teens spend five months in front of screens. In one week, children spend 3.5 minutes in meaningful conversation with their parents and 1,680 minutes watching television.

In densely populated countries like the Netherlands, the situation is particularly alarming: a study carried out in 2005 found that only 17 percent of the children between 8 and 18 years respond that they like to be in nature. Many have never even been inside a nature reserve (YoungMentality, 2005). One would perhaps assume that the situation is different in countries where there is still abundance of nature left. However, the nature gap seems to be present there as well. Riitta Heikkinen (2002), for example, reports on a survey among schoolchildren in Finland which found that they are unable to identify even the most common tree species. Alarmed by this finding, the educational authorities have launched extensive campaigns to re-establish the lost link between the Finnish people and their forests.

Researchers Patricia Zaradic and Oliver Pergams (2007) have studied the trend away from interactions with nature and the concurrent rise in the use of electronic entertainment media. To them, this trend represents evidence of a fundamental shift from biophilia, which they define as "the innate tendency to focus on life and lifelike processes," to videophilia. Videophilia is their term for the new human tendency to focus on sedentary activities involving electronic media. Confirming the disturbing statistics presented in *Play Again*, Zaradic and Pergams report that children living in the United States spend on average only 30 minutes of unstructured time outdoors each week.

³ As Louv (2005) points out, the term is "by no means a medical diagnosis, but it does offer a way to think about the problem and the possibilities..." (p. 10).

In effect, today most people in Western countries, and especially children, have little to no direct contact with nature. Richard Louv substantiates this claim in several ways. Here are just two which catch the eye because they are indicative of the enormity of the transformation that seems underway. In 2002, says Louv, a British study discovered that the average eight-year-old was better able to identify characters from the Japanese card trading game *Pokémon* than native species in the community where they lived: "Pikachu, Metapod, and Wigglytuff were names more familiar to them than otter, beetle, and oak tree" (Louv, 2005, p. 33). And he reports that a 1991 American study of three generations of nine-year-olds found that the boundaries of children's lives are growing tighter with the day: between 1970 and 1990 the radius around the home where children were allowed to stray on their own had shrunk to a ninth of what it had been in 1970. Individual statements are perhaps even more startling. Louv quotes a six-grader who discloses that he wants to remain inside the house, because "that's where all the electric outlets are" (ibid., p. 10). In a similar vein, Peter Fimrite (2007) of the *San Francisco Chronicle*, in a feature article on the detachment of children from the natural world, quotes a teenager saying that in Yosemite and other national parks "the only thing you look at is the trees, the grass and the sky." The boy finds the experience of going to the shopping mall far more exhilarating.

Today, children and young people lack possibilities and seem less and less able to learn about earth first hand through their own actions in it. Most impressions come to them "second hand" by representations provided by others – with major consequences. Environmental psychologists such as Louise Chawla underline the importance of learning about the world first hand through one's own actions in it, rather than through the versions in which others represent it. At such moments of secondary experience, the richness of information is radically reduced. Referring to the work of Edward Reed, Chawla speaks of "the necessity of experience." Primary or first-hand experiences expose people to endless possibilities for learning, including the making of creative new discoveries. Outdoors especially, a person encounters a dynamic and multi-sensory flow of diversely structured information. Here, "people form personal relationships and place attachments, drawing motivation to protect the places and people they love and gaining competencies to do so" (p. 67).

However, the reality is that in today's world both children and adults spend many hours behind computer and other screens; glued to their mobile devices they are continuously bombarded with new, fresh information. To be able to cope with this, new habits are acquired such as multitasking and the ability to divide our focus between several things at once, which has been termed "continuous partial attention," motivated from a desire not to miss *anything* (Stone, 2005).⁴ In its wake, new anxieties

⁴ Continuous partial attention is different from multi-tasking, according to Linda Stone (2005): "The two are differentiated by the impulse that motivates them. When we multi-task, we are motivated by a desire to be more productive and more efficient. We're often doing things that are automatic, that require very little cognitive processing.... To pay continuous partial attention is to pay partial attention – *continuously*. It is motivated by a desire to be a *live node* on the network."

manifest themselves such as FOMO, the “fear of missing out” (Wortham, 2011), if we don’t manage to keep up all the time.

One wonders what the consequences are of these developments. There are some indications that our relationship to the natural world will be deeply altered. Geneticist David Suzuki, a science broadcaster for Canadian Television, makes the following observation in *Play Again* regarding the importance of time (a theme that will be taken up in this dissertation as well): “The greatest challenge we face with the information revolution, and the fact that that’s where children are spending their time, is that they don’t learn the most important thing, and that is that *nature needs time* to reveal her secrets” (emphasis added).

A quarter-century ago, Jerry Mander, author of *Four Arguments for the Elimination of Television*, gave the following explanation for the lack of appeal of nature to people in the information age:

When you are watching TV, all this information is moving very quickly; it is a very hyperactive kind of imagery. We have images constantly fractured. In fact, you are living in a universe that, from a perceptual point of view, is impossibly fast. Then you turn the set off after a while, and you are just in the room again. The room is not moving around; it is not cutting forward and backward in time. There are no cartoons appearing in front of you, there is no music and dancing, there are no products moving about, there is no exciting news from the world, there are no stories being told – it’s just the room.

Then you go outside, let’s say into nature. Nature is *really* slow. I mean you cannot see the blade of grass growing. To experience nature requires being very slow; very tuned in. It requires perceptual systems which are very calm. And my belief is that the more that people are involved in this fast information ... the more their perceptual experiences are living at the speed of the media. They are unable any longer to deal with the quiet of ordinary life. Americans cannot perceive things that are slow anymore.... What is basically happening is that they have been wiped out as perceptual creatures. (Mander, cited in Groenier, 1986)

Now, with the seduction of computer and video games *next* to the appeal of TV, nature has become even more “boring” – or worse: *irrelevant* – to youngsters. Blaming this situation solely on the attractiveness of sitting behind TV or computer screens – though this certainly constitutes one important factor – would be too simple. Louv mentions other factors that come into play such as an exaggerated fear of the dangers of being out in nature (what he calls “the Bogeyman syndrome”), worries about liability issues, and the unchecked spread of urban sprawl into natural areas. Underneath these phenomena, however, there may be a more profound cultural transformation taking place.

According to Arjen Wals (2010), Dutch professor of Social Learning and Sustainable Development, we are currently faced with a “sustainability crisis” (consisting of, among many other trends, the loss of nature, environmental degradation,

natural resource depletion), which has become a systemic crisis in the way we live on this planet. The increased frequency of un-natural disasters related to shifting weather patterns, rapid decline of biodiversity, and so on, are warning signals of “the urgency, systemic nature, magnitude, uncertainty, ambiguity, complexity as well as the moral and ethical underpinnings of the sustainability challenge.” Of course, Wals is not the first to point out that the ecological crisis is in fact a dynamic and systemic interplay of converging trends (cf. for example Bateson, 1980, and Sterling, 2003). To meet this challenge, we are faced with something environmental educators and environmental psychologists have long known, Wals goes on to say, and that is that merely raising *awareness* about the seriousness of the state of the planet is no assurance for a change in behavior or a change in values. In fact it may even prove to be counterproductive: it has been shown, he says, that just raising knowledge and awareness *without* providing energizing visions and concrete practices that show that there are more sustainable alternatives will lead to feelings of apathy and powerlessness. It is for this reason that Wals suggests that the nature of the sustainability crisis, which is characterized among other things by high levels of complexity and uncertainty, brings along “that people will need to develop capacities and qualities that will allow them to contribute to alternative behaviors, lifestyles and systems both individually and collectively” (Wals, 2010, p. 21).

The transformation we are manifesting, of which this sustainability crisis is one aspect, may be just the latest stage in a historical process that has been unfolding for centuries. In the rest of this chapter, I will explore how the gap between us and nature has grown, and how we have come to deal more and more with technology-mediated or secondary/second-hand experience.

1.2 The disenchantment of the world

In 1918, in his lecture “Science as a Vocation,” German economist and sociologist Max Weber coined the concept of the disenchantment of the world (*die Entzauberung der Welt*). With that, he put his finger on a progressive removal of mind, or spirit, from phenomenal appearances. The hallmark of modern consciousness, as Morris Berman (1981) explains Weber, is that it recognizes no element of mind in the so-called inert objects that surround us. It assumes “the existence of a world ‘out there’ independent of human thought, which is ‘in here’” (p. 69). In his lecture, Weber had summarized the developments that led to the bourgeois-capitalist society in the Early Modern Period. He described how the modernization of the economy and society from a feudal and traditional mode of production led to the industrial society in which we still find ourselves today. Key elements in the process are increased intellectualization, rationalization and mechanization. These mean, he says

that principally there are no mysterious incalculable forces that come into play, but rather that one can, in principle, master all things by calculation.

This means that the world is disenchanted. One need no longer have recourse to magical means in order to master or implore the spirits, as did the savage, for whom such mysterious powers existed. Technical means and calculations perform the service. This above all is what intellectualization means. (Weber, 1922/1991, p. 139)

It is important to realize that Weber saw scientific progress as just a fraction – albeit the most important fraction – in a process of intellectualization which humanity had in fact been undergoing for thousands of years (ibid., p. 138). Fundamentally, as a result of the process of disenchantment, gradually a split arose between what we know and what we feel.

Others point at the rise of Christianity as the major instigator of disenchantment. Professor Lynn White, Jr., in an often-anthologized article that was first published in 1967, famously traced the roots of the ecological crisis to the rupture brought about by early Christians. White claims that in Antiquity every tree, spring, stream, and hill had its own *genius loci*, its guardian spirit. As Stephan Wilson (2000) explains, there was a force in *all* things – animate as well as (what we would regard as) inanimate: water, trees, rocks, substances, and even in words. And things mutually influenced each other. There were also human and supra- or extra-human beings, who exercised power of different kinds and at different levels: saints, witches, ghosts, spirits and less palpable entities. Though these spirits were accessible to men, they were also very unlike men; centaurs, fauns, and mermaids show their ambivalence. White elucidates that before one would cut a tree, mined a mountain, or dammed a brook, one needed to soothe the spirit in charge of that place and keep it placated. Only after pagan animism was eradicated by Christianity was it possible to exploit nature in a mood of indifference to the feelings of natural objects (White, 1967).



Figure 1: A clash of worldviews

Figure 1 is a graphic depiction of one of such decisive moments that changed Western people's relationship to the natural environment. On this wood engraving by F. L. von Maydell (1842), we see German missionaries felling down a sacred tree of the Estonians. In despair, the latter expect their final hour has come. The drawing is based on a story in the 13th century *Chronicle of Henry*, describing the destruction of the sacred grove at Ebavere Hill. Of course, the sky didn't fall and the native Estonians had no other choice than to give in to a God with superior power.

In *The Death of Nature*, Carolyn Merchant (1980) contends that nature could only be raped, when it was made exanimate. Merchant tells us that prior to the Enlightenment, nature was conceived of as the benevolent mother of all things. The Scientific Revolution rationalized and dissected nature to disclose all her secrets. Nature was re-imaged as cold and uncaring matter, made of unfeeling, unmoving atoms. As Merchant said in a more recent interview:

[I]f nature is dead, and humans are external, humans are engineers, and the image appears of God as a mathematician and engineer. Then people can manipulate and manage nature, without having to propitiate nature, and without nature retaliating.... [T]he mechanistic worldview, which has become the dominant view of industrial capitalism ... is a framework that gives permission to exploit and dominate nature. The results are seen in the ecological crisis. (Merchant, cited in Schoch, 2002)

1.3 Porous self and buffered self

In his monumental *A Secular Age*, Canadian philosopher Charles Taylor (2007) makes a clarifying distinction between what he calls the porous self and the buffered self. Taylor asks himself what big change was brought about in the course of five-hundred years: “Why was it virtually impossible not to believe in God in, say, 1500 in our Western society, while in 2000 many of us find this not only easy, but even inescapable?” (p. 25). There were many features in the medieval worldview that made the presence of God seemingly undeniable. Taylor mentions three: first, the natural world they lived in testified to divine purpose and action. Its order and design bespeaks creation and the great events in the natural order (storms, droughts, floods, plagues) were seen as acts of God; second, God was implicated in the very existence of society (“one could not but encounter God everywhere”), and third, people lived in an “enchanted” world. Attempting to explain what he meant with his notion of disenchantment of the world, Weber (1922/1991) added that “[p]recisely the ultimate and most sublime values have retreated from public life either into the transcendental realm of mystic life or into the brotherliness of direct and personal human relations” (p. 155). To Taylor, Weber’s term of disenchantment is an apt description of our modern condition. Before, people saw human beings as moving around amidst a field of spirits. With science and humanism winning more space, a new sense of the self and its place in the cosmos could develop. This self was not conceived of as being open and porous and vulnerable to a world of spirits and powers, but as being (what Taylor calls) “buffered” (2007, p. 27). Taylor is quick to add, however, that it took more than disenchantment to produce the buffered self; an additional precondition was that humans had confidence in their own powers of moral ordering.

As moderns, we tend to understand ourselves to a large extent through our conceptualization of the trajectory that brought us to where we presently find ourselves, says Taylor. Part of this is a sense of that we have succeeded in overcoming a previous condition. Thus, he suggests, we are widely aware of living in a “disenchanted” universe. Using this word implies that we hold that the universe once indeed was enchanted. Moreover, each one of us as we grew up has had to take on the disciplines of disenchantment. This is for example demonstrated in cases where we reproach each other for our failings in this regard, and accuse each other of “magical” thinking, of indulging in “myth,” of giving way to “fantasy.” In the world that we live in today, “the only locus of thoughts, feelings, spiritual élan is what we call minds; the only minds in the cosmos are those of humans … and minds are bounded, so that these thoughts, feelings, etc., are situated ‘within’ them” (*ibid.*, p. 30). This circumstance allows us the possibility of introspective self-awareness.⁵

⁵ Taylor (2007) is keen to point out that this doesn’t mean that everything within the mind is capable of being brought to this awareness. Some of its elements, he suggests, are so deep that we can never bring them to consciousness. This is the inner space of “inward” thoughts and emotions that are hidden or that have been repressed. It is important to note here as well, by way of side-remark, that scholars like Bateson (1972; 1980), Abram (1996) and several others are highly critical of attributing the faculty of mind exclusively to humans.

In the enchanted world, by contrast, meanings were *not* in the human mind. Here the line between personal agency and impersonal force was not at all clearly drawn; there is a high degree of permeability. Taylor illustrates this by referring to the phenomenon of relics. Relics were thought to bring about cures or they could be causing curses on people who stole or mishandled them. Both cures and curses were seen as emanating from them, and as such they were true loci of power. Taylor summarizes this distinction this way:

[I]n this world, there was a whole gamut of forces, ranging ... from super-agents like Satan himself, forever plotting to encompass our damnation, down to minor demons, like spirits of the wood, which are almost indistinguishable from the loci they inhabit, and ending in magic potions which bring sickness or death.... [T]he enchanted world, in contrast to our universe of buffered selves and "minds," shows a perplexing absence of certain boundaries which seem to us essential.

So in the pre-modern world, meanings are not only in the minds, but can reside in things, in various kinds of extra-human but intra-cosmic subjects. (ibid., p. 33)

For us moderns, the meaning of things, Taylor explains, *only* comes into existence as the world impinges on our body and mind. We are affected by the world and this may cause a change in our bodily chemistry, producing feelings of, say, euphoria or depression. Thus, to us, meaning is endogenous. But in the enchanted world, the meaning exists already outside of us, prior to contact; it can take us over, we can be caught in its field of force. It comes on us from the outside. The implications of this contrast of perspectives are vast. Because once meanings are not exclusively in the mind and we can fall under their spell, then we think of this meaning as including us, even possibly penetrating us: "We are in a kind of space defined by this influence. The meaning can no longer be placed simply within; but nor can it be located exclusively without. Rather it is in a kind of interspace which straddles what for us is a clear boundary" (ibid., p. 35). It is because of this boundary that Taylor develops this metaphor of a self being porous. For the modern, buffered self, the possibility exists of taking a distance from, disengaging from everything outside the mind. However, for the porous self, the source of powerful emotions is outside the mind: "the very notion that there is a clear boundary, allowing us to define an inner base area, grounded in which we can disengage from the rest, has no sense" (p. 38). The porous self is vulnerable to spirits, demons, and cosmic forces. Along with this go certain fears which at times can grip it. For us moderns the boundary acts as a buffer: things beyond don't need to get to me. As such, Taylor contends, this self can see itself as invulnerable and as master of the meanings of things for it. It is a self that has been taken out of the world of the kind of fears such as those that are portrayed in some of the paintings of Hieronymus Bosch.

In the context of my discussion of the supposed growth of the distance to the natural world, the following observation of Taylor is particularly interesting. He points

out that perhaps the clearest sign of the transformation in our world is that in our current epoch, many people look back to the world of the porous self with nostalgia. The creation of a thick emotional boundary between us and the cosmos is felt to be a loss and many of us aim to try to recover some measure of this lost feeling. A second aspect of this is that the buffered self can strive to disengage from whatever is beyond the boundary. The modern subject can aim to give its own autonomous order to its life: “The absence of fear can be not just enjoyed, but seen as an opportunity for self-control or self-direction” (p. 39).

All in all, the transition implies a deep change in our life-world and in what Taylor calls our “background sense of reality.” In short, the way the earth is imagined has changed. Taylor identifies this as a shift from cosmos to universe. In this process, we have moved from an earth which is encompassed within certain bounds and static, to one which feels infinite, and which continues to evolve (Taylor speaks of a breaking of the cosmos into “deep time” and, with Pascal, into “infinite space”). In the move from the cosmic idea to a disenchanted universe, something was eliminated along the way, Taylor claims, and that was mystery.

For the buffered self, it seems given and self-evident that all our thoughts and feelings must be in the minds and are distinct from the “outer” earth. The idea of spirits, moral forces, causal powers with a purposive bent becomes, as Taylor puts it, “close to incomprehensible” (p. 539). The modern buffered identity can engage in a process of self-examination, and explore an inner realm of thought and feeling. As Taylor summarizes, “This frontier of self-exploration has grown, through various spiritual disciplines of self-examination … to the point where we now conceive of ourselves as having inner depths. We might even say that the depths which were previously located in the cosmos, the enchanted earth, are now more readily placed within. Where earlier people spoke of possession by evil spirits, we think of mental illness” (pp. 539-540).

In our discussion of the growing distance between us and the natural earth, Taylor’s sharp distinction between the porous and buffered self is clarifying. Only after having gone through the process of disenchantment can we truly delve down into the inner levels of the mind: the meaning-making is conceived of as an endogenous process. And only then we can feel the growth of a distance between us and the cosmos as a loss, and we can start to long back with nostalgia to a by-gone golden age when humans and nature supposedly lived in harmony. Though I find Taylor’s analysis convincing and well-substantiated, I wonder if he doesn’t create a too sharp dichotomy between two ways of relating to the world. To me, it seems that there is still a lingering residue among many moderns of magical or “enchanted” thinking, which is for example expressed through our reference for the marvels of technology. But I also think the distinction between forces operating from the outside (exogenous) and those stemming from the self-conscious modern mind itself (endogenous) is too black and white. Conceptualizations of a constant interchange, an intertwining between self and the flesh of the world (cf. Merleau-Ponty), are in my view more fit to describe what is in fact going on between humans and their enveloping and inner environments.

1.4 The loss of the aura

German critic Walter Benjamin was one of the first to grasp what it meant that technology as a means came in between us and our experience of the surrounding world. More precisely, he understood how the making of copies of objects that once were unique by means of machines dramatically affects the meanings that these objects convey to us. In his seminal essay “The Work of Art in the Age of Mechanical Reproduction,” that first appeared in 1936, Benjamin analyzed the impact of print, photographic and cinematographic modes of (“mechanical”) reproduction on how we relate to art. In the context of my discussion of the growing divide between humans and nature, I will discuss Benjamin’s analysis here at some length, for his observations regarding how the human relationship to art has changed pertain as well, in my view, to a wider range of ways in which we relate to the world.

Before the invention of the camera and the printing press, the singularity of every work of art was part of the uniqueness of the place where it resided. It could never be seen at two places at the same time. As John Berger (1972/1986) explains, “When the camera reproduces a painting, it destroys the uniqueness of its image.” As a result, its meaning changes fundamentally: “its meaning multiplies and fragments into many meanings” (p. 19). Prior to when these means were available to humanity, it was of course already possible to make a copy, a reproduction, of an artwork. But there was always a shortcoming; even the most perfect reproduction lacks one element: “its presence in time and space, its unique existence at the place where it happens to be” (Benjamin, 1969, p. 224). Benjamin held that what withers in the age of mechanical reproduction is the aura of the work of art: “the technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions it substitutes a plurality of copies for a unique existence.” After having introduced the concept of aura with reference to historical objects, Benjamin goes on to talk about the aura of natural ones: “We define the aura of the latter as the unique phenomenon of a distance, however close it may be. If, while resting on a summer afternoon, you follow with your eyes a mountain range on the horizon or a branch which casts its shadow over you, you experience the aura of those mountains, of that branch” (p. 225). Similarly, writes Benjamin, a painter maintains in his work a natural distance from reality. This respect for distance common to both natural perception and painting is overturned by the new technologies of mass reproduction. In his time, Benjamin noted a “decay of the aura.” This decay is caused by the circumstance that the masses aim to bring things “closer” to them, *coupled* with their “bent toward overcoming the uniqueness of every reality by accepting its reproduction.” The image as seen by “the unarmed eye” differs fundamentally from the mechanically reproduced images in newspapers, photos and film. The first type of image is still unique whereas the latter become transitory.

Benjamin’s central argument, says Jerry Mander (1978), is that *all* technical reproduction of art, nature, and the human image deletes the aura. Before the age of mechanical reproduction, art objects did not exist in a context outside of their original

use. Aura, argued Benjamin, is tied to presence: there can be no replica of it. Mander explains: "Mechanical reproduction of images is the great equalizer. When you reproduce any image of anything that formerly had aura (or life), the effect is to dislocate the image from the aura, leaving only the image. At this point, the image is neutral; it has no greater inherent power than commodities" (p. 286). The uniqueness of the original, says Berger (1972/1986), now lies in it being *the original of a reproduction*: "It is no longer what its image shows that strikes one as unique; its first meaning is no longer to be found in what it says, but in what it is" (p. 21). The disconnection of humans and art from their auras through mechanical reproduction, Benjamin argued, causes art as well as humans and nature to lose their grounding, their meaning in time and place. The meaning of for example paintings is no longer attached to them: their meaning becomes transmittable; in short, it becomes information. The consequences are immense. Mander (1978) outlines some of these: "The disconnection from inherent meaning, which would be visible if image, object and context were still merged, leads to a similarly disconnected aesthetics in which all uses for images are equal. All meaning in art and also human acts becomes only what is invested in them, there is no inherent meaning in anything" (p. 288). Reproduced paintings, like all information, have to hold their own against all the other information being continuously transmitted. Moreover, as Berger (1972/1986) points out, a reproduction, as well as making its own references to the image of its original, becomes *itself* the reference point for other images: "the meaning of an image is changed according to what one sees immediately beside it or what comes immediately after it" (p. 29). For him there is no reason to be nostalgic about the consequence that artworks have ceased to be holy relics. They will never re-become what they were before the age of mechanical reproduction:

Original paintings are silent and still in a sense that information never is. Even a reproduction hung on a wall is not comparable in this respect for in the original the silence and stillness permeate the actual material, the paint, in which one follows the traces of the painter's immediate gestures. This has the effect of closing the distance in time between the painting of the picture and one's own act of looking at it. In this special sense all paintings are contemporary. (p. 31)

Benjamin regarded the decay of the aura in fact as a positive development. The aspect of its mechanical reproducibility freed art from its cultic fundament, and the appearance of her autonomy perished. Berger (1972/1986) subscribes to this view, but has an open eye to the double-faced quality of the transformation. The modern means of reproduction have destroyed the authority of art and removed it from being situated in a sacred or magical place: "For the first time ever, images of art have become ephemeral, ubiquitous, insubstantial, available, valueless, free" (p. 32). One could add that all these dimensions interplay at once and are hard, if not impossible, to set apart.

From the destruction of the aura, I now want to take this interpretation of the way a reproduction changes the original beyond its effect on singular works of art and

look more widely at how modernity changed and still fundamentally alters how we relate to the earth of which we are part. In a letter that Rainer Maria Rilke wrote in 1925 to his Polish translator, he pondered on how one, through one's poetry, converts that which is perceived through the senses into thought, language, and memory. In the age of technological modernity something in the order of things and the status of objects has changed fundamentally:

Even for our grandparents, a “house,” a “well,” a familiar tower, their very clothes, their coat, were infinitely more, infinitely more intimate; almost everything a vessel in which they found the human and added to the store of the human. Now ... empty indifferent things are pouring across, sham things, *dummy life* . . . A house, [now], an ... apple or a grapevine ... has *nothing* in common with the house, the fruit, the grape into which went the hopes and reflections of our forefathers . . . Live things, things lived and conscient of us, are running out and can no longer be replaced. *We are perhaps the last still to have known such things.* (pp. 374-375)

Heidegger (1950/1971) comments on this as follows, “The formless formations of technological production interpose themselves.... Things that once grew now wither quickly away. They can no longer pierce through the objectification to show their own” (p. 284). For Rilke himself the recourse lies in a fervent transformation of the visible but perishable things around us. He saw it as the task of artists “to imprint this provisional earth so deeply, so patiently and passionately in ourselves,” so that its reality would be able to arise in us again “invisibly.” Thus, he added, “[w]e are the bees of the invisible” (*ibid.*).

In *The Question Concerning Technology*, Heidegger (1953/1982) presents his famous example of the hydroelectric dam in the river Rhine, which changes the quality of the river. Heidegger speaks of “enframing” (*Ge-stell*), a way of thinking that turns nature into nothing more than an exploitable resource, available to human ends. The hydroelectric plant dams up the Rhine so that it can supply the hydraulic pressure that powers the machines that produce electricity. In other words, the hydroelectric plant turns the Rhine into a “waterpower supplier.” By “challenging” the Rhine to reveal itself as an energy source, the hydroelectric plant transforms it into what Heidegger (1982) calls a “standing-reserve” (*Bestand*). The standing-reserve is something that “is ordered to stand by, to be immediately on hand, indeed to stand there just so that it may be on call for a further ordering” (p. 17). In other words, the standing-reserve is a supply or store of resources ready for human use. Because the standing-reserve is created in order to meet the needs and desires of humans, it exists solely at the mercy of the human consumer; and because of this it lacks its own dignity (Gauthier, 2004). Things are not even regarded as objects, because their only important quality has become their readiness for use, explains Heidegger's translator William Lovitt (1982): “nothing is allowed to appear as it is in itself” (p. xxix).

The sense of loss that comes across in Rilke's lamentations on “things lived and conscient of us” that are running out and in Heidegger's comment on the “mon-

strousness" of transforming the Rhine into a "waterpower supplier," can be discarded as a sense of nostalgia that is of little use, as change is inevitable: in its place new sensibilities will arise in an ever-proceeding and continuing process of human development. Epistemologically, we are faced with the problem – once we have moved over to the new sensibility – whether we are still truly able to appreciate – or even less so, understand – the "old" sensibility.

According to French sociologist Jacques Ellul (1989), the crisis that we are facing in our times entails the transition, not from one form of society and power to another, but to a new environment, the technological environment. In his view, the present change of environment is much more fundamental than anything that humans have experienced for the last five thousand years. Ellul points at the problem of "denaturalization." Living in today's world, we are out of direct contact with the realities of earth and water. Instead we deal with the reality of technical objects and instruments that more and more constitute our environment. The process of denaturalization is so overwhelming and complete that our contact with the natural elements is almost exclusively mediated by techniques, or by what Ellul calls, the technological system. The relationship between nature and the artificial has been reversed, has been thrown into disorder, says Ellul (1980), and we have to situate ourselves in relationship to this, what he calls "unbelievable reversal" (p. 275). Here is how he describes the rupture:

The religious and the sacred that we have chased out of nature are now transferred to objects. Be it noted that the transfer is not quite the same. We originally related our religious feelings to our natural environment. The tree, the fountain, the wind, the animal were the focus. We invested them with a formidable greatness and they became sacred. But the things that compose our human environment now play this role. We ourselves have not changed. We still relate our sense of the sacred to what constitutes our environment. We adore and use with joy and fear that which forms our environment, making sacrifice to it. It is the environment that has changed. But how far we are from the famous *Entzauberung der Welt*: there isn't any "disenchantment of the world": It is simply that the world we now know bears no relation to the human world which up to half a century ago seemed to be eternal. (Ellul, 1990, p. 121)

Living among omnipresent digital images, with our social media, our electronic gadgets and screens – if the aura of natural phenomena perhaps isn't fully destroyed, it does seem rather inaccessible to us. Is seeking reconnection with nature then not a Romantic dream?

"We live in a world where there is more and more information, and less and less meaning." With this famous statement French sociologist Jean Baudrillard (1981/2010, p. 79) pointedly diagnosed our current predicament. In the last quarter of the 20th century, Baudrillard, as one of the early postmodern thinkers, had started to focus his attention on the relationship between real and simulated. From now on, he asserted, "we will live in a world without originals" (1989, p. 189). A key term for Baudrillard

is *simulacrum*, which stems from the Latin and means “image,” “semblance” or “likeness.” As William Pawlett (2007) explains, for Baudrillard there are *only* images and behind these images there are more images; “there is no point at which the final illusion is stripped away to reveal … *reality*” (p. 71). What is more, the whole concept of “illusion” itself is no longer of use for Baudrillard (1983a), for it assumes some notion of “the real” to contradict: “simulation corresponds to a short-circuit of reality and to its reduplication by signs [I]t is always a false problem to want to restore the truth beneath the simulacrum” (p. 48). The images serve no other purpose than to camouflage *that there is no longer any real available*. For Baudrillard, the repetitive structure of simulacra – the reproduction of “copies” which have no original – “marks our object world with an unreality and a free-floating absence of “the referent” (Jameson, 1979, p. 131).

What evolves is a sham world. The difference between illusion and the real has imploded. Simulation for Baudrillard involves more than “make believe.” Someone can pretend that he or she is sick and lie in a bed and suggest being ill. But someone who *simulates* sickness in the end causes the symptoms of the sickness on him- or herself. Pretense leaves the reality principle intact: the difference – though hidden – is clear; but with simulation, the difference between real and unreal, reality and imaginary, is at stake. By way of example, one may ask: is the person simulating sickness *really* ill or not, for she surely is showing “real” symptoms.

Though “reality” for Baudrillard is an unattainable illusion, its virtual amplification is not. Another key term in his discourse is *hyperreality*. Hyperreality, “the more real than real” or “truer than true” refers to an inability of consciousness to distinguish fantasy from reality, or, even more radical, to differentiate between the simulation and something which never really existed in the first place (Baudrillard, 1981/2010). The real does not yield in favor of the imaginary, but for this hyperreal. This process of “hyperrealization of the real” seems to be irreversible, Baudrillard (2000) suggests, for in essence it is Weber’s process of rationalization becoming exponential and chaotic. The world we live in has been replaced by a copy world, in which we seek simulated stimuli and nothing more.

For us an untenable hypothesis: that it may be possible to communicate *outside the medium of meaning*, that the very intensity of communication may be proportional to the reabsorption of meaning and to its collapse. For it is not meaning or the increase of meaning which gives tremendous pleasure, but its neutralization which fascinates.... And not by some death drive, which implies that life is still on the side of meaning, but quite simply by defiance, by an allergy to reference, to the message, to the code and to every category of the linguistic enterprise, by a repudiation of all this in favor of imploding the sign in fascination (no longer any signifier or signified: absorption of the poles of signification). None of the guardians of meaning can understand this: the whole morality of meaning rises up against fascination. (Baudrillard, 1983b, pp. 36-37)

Thus, Baudrillard has located fascination *beyond* meaning; it results from the neutralization and implosion of meaning. Baudrillard draws an analogy with a fable by Jorge Luis Borges (from his *On Exactitude in Science*). In this story there is a society of cartographers that created a map of a nameless empire that was so detailed that it covered the very things it was designed to represent, at 1:1 scale. The actual map grew or shrunk as the empire itself conquered or lost territory. The perfect map that *is* the territory. When the empire falls to pieces, the map fades into the landscape. At that point there is neither the representation nor the real remaining, just the hyperreal: “Henceforth, it is the map that precedes the territory – precession of simulacra – it is the map that engenders the territory and if we were to revive the fable today, it would be the territory whose shreds are slowly rotting across the map.”⁶

In *Simulacra and Simulation*, Baudrillard (1981/2010) provides an illuminating example of the problem that simulation brings forth by calling the story of *Lascaux II* to mind, the exact replica of the original cave with prehistoric wall paintings in southern France. With the argument that thus the original would be saved, visitors were no longer allowed to enter the Lascaux cave. (Their breathing had started to ruin the artworks on the walls.) The replica was constructed five hundred meters away from it. Baudrillard points out that henceforth, people could see the authentic Lascaux only by glancing through a peephole, before visiting the reconstituted whole. “It is possible that the memory of the original grottoes is itself stamped in the mind of future generations, but from now on there is no longer any difference: the duplication suffices to render both artificial” (p. 9). The simulation artificially prevents or restricts access to the real thing by replacing it. It makes it better, more desirable, more beautiful, less dangerous, etc. and often this is done with the justification that the real original thing is thus preserved. Thus both the real and the simulation are made artificial, in that the real has become inaccessible. Why do tourists come *en masse* to a replica cave that is only a few meters away from the real cave? From my own personal experience in the mid 1990s, I know that visitors enter the replica with such an attitude of reference – only a limited amount of people are allowed to be in the artificial cave together, for their expiration fumes may impact the *copied* murals; one is not allowed to take pictures, no loud talking, et cetera – that perhaps at some point we need a *Lascaux III* to protect the copy of the copy, and at that point the original cave may have lost its relevance or its location may be forgotten.

In a similar vein, Baudrillard (1981/2010) famously argued that the fake world of Disneyland is neither true nor false, but that it is set up in order to rejuvenate the fiction of the real, thus saving the reality principle: “Disneyland is presented as imaginary in order to make us believe that the rest is real, whereas all of Los Angeles and the America that surrounds it are no longer real, but belong to the hyperreal order and to the order of simulation” (p. 12).

⁶ This subject, of the relation of map to territory, is a theme that is also taken up by Gregory Bateson, who famously insisted (though originally coined by Alfred Korzybski), that “the map is not the territory” (1972, p. 449) For Bateson, however, these domains can still be told apart; essential to him is that map and territory refer to different logical types, which should not be mixed up.

Now one might ask, *suppose* Baudrillard is right, is it then a *problem* that the real is no longer accessible? In an essay in *Science*, which was published already in 1973, the author, Martin Krieger, rhetorically asked, "What's Wrong with Plastic Trees?" American cultural ecologist Paul Shepard (1995) takes up the challenge to answer this question in an article with the graphic title "Virtually Hunting Reality in the Forests of Simulacra." For him, plastic trees are more than a practical simulation, for what they communicate is that the trees they represent are *themselves* but surfaces: "Their primal defect is that one can still recognize plastic, but it is only a matter of time and technology until they achieve virtual reality, indistinguishable from the older retinal and tactile sensa. They are becoming *acceptable* configurations" (p. 24, emphasis added). Shepard adds, tongue in cheek: "No doubt we can invent electronic hats and suits into which we may put our heads or crawl, which will reduce the need even more for an ersatz mock-up like the diorama.... As the art of simulacrum becomes more convincing, its fallout enters our bodies and heads with unknown consequences" (p. 25). In Shepard's view, the question about plastic trees assumes that nature is mainly of interest as spectacle. One conceives of the tree as separate of the rest of its organic and inorganic surroundings – a pure form. He fears that the more we are capable of making plastic trees appear like natural trees, the more they cause us to surrender our perception of *any* plant to the abstract eye: "Place and function are exhausted in their appearance. The philosophy of disengagement certifies whatever meanings we attach to these treelike forms – and to trees themselves. The vacuum of essential meaning implies that there really is no meaning" (ibid.).

An environment of such pure forms and appearances is reminiscent of another of Baudrillard's key terms, which is obscenity, a phenomenon which occurs, as Marc LaFountain (2008) explains, when there is a "perpetual engendering of the same by the same." This happens when the simulation produced by signs refers only to itself. Though this argument resonates well with Baudrillard's observations, for Shepard – in contrast to the French thinker – this gives rise to great concern. Baudrillard seems to resign to the new situation in which it is no longer possible to differentiate the body from the signs that simulate it. Obscenity, then, resides for him in a condition of transparency where the lived body is no longer visible in the play of simulation, and the simulation itself becomes excessively visible. In Baudrillard's (1983/1990) own words: "...things visible do not come to an end in obscurity and silence – instead they fade into the more visible than visible: obscenity" (p. 11). For Baudrillard, the cultural forecast is bleak. There is no longer a staging of scenes, no spectacle, no mirror, no image or representation. They are all eradicated in obscenity: "The obscene is what does away with every mirror, every look, every image" (1983c, p. 130). By consequence, "the body, landscape and time all progressively disappear as scenes" (p. 129). As sociologist Anthony King explains, a scene, for Baudrillard, constitutes a representation and therefore a scene is still linked to reality. Because of this, the scene can still be interpreted and compared to something else. But, for example with television screens, this is no longer the case. "The screen amounts to the end of all interpretation" (King, 1998, p. 49). There is no longer a scene where the subject-object

opposition can be played. Television, the media, are not able to create a new scene, Baudrillard says to Dutch interviewer Iris Lutz: "It is *ob-scene*, beyond the scene, the end of the scene. Obscene does not mean that something was hidden that is now made visible, no, it means that something first had a scene and subsequently has left it" (Baudrillard, cited by Iris Lutz, 1984).

It is no longer then the traditional obscenity of what is hidden, repressed, forbidden or obscure; on the contrary, it is the obscenity of the visible, of the all-too-visible, of the more-visible-than-the-visible. It is the obscenity of what no longer has any secret, of what dissolves completely in information and communication. The obscene puts an end to every representation: "all secrets, spaces and scenes abolished" (Baudrillard, 1983c, p. 131).

Conversely, that what is more *invisible* than the invisible, is for Baudrillard the secret: "[The] hypervisibility of things is also the imminence of their end, the sign of the apocalypse... If all enigmas are resolved, the stars go out. If everything secret is returned to the visible (and more than to the visible: to obscene obviousness), if all illusion is returned to transparency, then heaven becomes indifferent to the earth" (Baudrillard, 1983/1990, p. 55).

Several years before Baudrillard, Marshall McLuhan (1964) coined the famous slogan "the medium is the message," by which he pointed to the symbiotic relationship by which the medium influences how the message is perceived. As Baudrillard understands the phrase, McLuhan meant that *all* subject matter (the message) is absorbed by the single dominant form of the medium. The true message of the media are the media themselves – it is no longer the contents but the form that matters. He takes McLuhan's statement to its ultimate consequence: The medium is the message does not merely mean the end of the message, but the end of the medium. For Baudrillard (1981/2010), there are no more media existing in the literal sense of the term (i.e. mediating between one state of reality and another). He evokes the image of a gigantic downfall, a rupture or collapse or what he calls "implosion." An implosion not simply of the message in the medium, but of the medium in the real in a kind of hyperreal cloud of gas, "where the very definition and distinctive action of the medium is irrecoverably lost":

...this is what implosion signifies. The absorption of one pole into another, the short-circuiting between poles of every differential system of meaning, the erasure of distinct terms and oppositions, including that of the medium and of the real – thus the impossibility of any mediation, of any dialectical intervention between the two or from one to the other. Circularity of all media effects.... One must envisage this critical but original situation at its very limit: it is the only one left us. It is useless to dream of revolution through content, useless to dream of a revelation through form, because the medium and the real are now in a single nebula whose truth is indecipherable. (pp. 82-83)

The impression one gets from Baudrillard is that we can leave aside all hope that we can bring about change in the current order, we can only resort to seduction and play with appearances rather than engaging in direct, first hand experience of the world. We have moved beyond the point of no return. In his *The Fatal Strategies*, he quotes the Bulgarian-born novelist and Nobel Laureate Elias Canetti:

A tormenting thought: as of a certain point, history was no longer *real*. Without noticing it, all mankind suddenly left reality; everything happening since then was supposedly not true; but we supposedly didn't notice. Our task would now be to find that point, and as long as we didn't have it, we would be forced to abide in our present destruction. (Canetti, cited in Baudrillard, 1988, p. 190)

At this “blind point,” nothing is either true or false any longer. This, to Baudrillard, seems to be our dilemma: by definition we cannot return to the past, to find the point because if we could we would be master of time. And added to that: how are we to prove that a history did exist before that point? At the same time, our current situation is also unacceptable. Some have indeed tried, says Baudrillard, to solve the dilemma by “discovering” the anti-point of Canetti. As if one would be able to down-shift and enter history, the real, the social “as a satellite that – after having been lost, returns to the earth’s atmosphere.”

1.5 “We liked the projection, because it was more real”

So, in our postmodern condition, with Baudrillard’s bleak views in mind, can we then still relate to and make sense of “real nature”? Or should we forget the idea before even starting? In the following, I want to suggest that there are at least three different perspectives on environmental education and learning about the natural world. The first stems from a worldview that regards the earth as animated and permeated with meaning and spirit. Here, the borders between self and environment are porous and not yet strictly defined apart. For this perspective I lean on a story about a primary school at an American Indian reservation by Native American author Leslie Silko. The second pertains to the level of higher education and stems from an urge to move away from abstract science education and to revive natural history, which has been declared dead. Here I provide the view of American nonfiction author and journalist Richard Louv. The third and last perspective entails an affectionate and unequivocal embrace of the possibilities of technology to render nature by virtual means. For this perspective I refer to a project report of experience at the secondary school level provided by Australian educationalist Anne Bamford. I am aware that I switch here between different levels in education. However, my intention is not to make comparisons as to the appropriateness of a certain curriculum at a certain age group, but to appreciate them for the dissimilar epistemological orientations they reveal about learning about the living world.

In the novel *Ceremony*, writer Leslie Silko (1977) tells the story of the quest of Tayo, a young Native American who returns to the Laguna Pueblo reservation in New Mexico. Having been a prisoner of the Japanese during World War II, he tries to find healing by seeking a reconnection to the Indian past and its traditions. At one point in the story, Tayo reflects on “the old time superstition” that the teachers at Indian school used to warn him about. In an effort to confront and make some sense of his present confused state of mind, Tayo looks back at the traditional way of relating to earth that he has learned to overcome in his path to adulthood. His memories go back to the first time in science class, when the teacher brought in a tubful of dead frogs, bloated with formaldehyde:

...the Navajos all left the room; the teacher said those old beliefs were stupid. The Jemez girl raised her hand and said the people always told the kids not to kill frogs, because the frogs would get angry and send so much rain there would be floods. The science teacher laughed loudly, for a long time; he even had to wipe tears from his eyes. “Look at these frogs,” he said, pointing at the discolored rubbery bodies and clouded eyes. “Do you think they could do anything? Where are all the floods? We dissect them in this class every year.”
(pp. 194-195)

What Silko makes clear is that Tayo’s present pathology to a large extent stems from the radical rupture he has made from this childhood way of living and thinking, which was informed by the sacred. Hence, the need for a ceremony, to heal and to seek some form of reconciliation between the disruptive effects of modernity and the enchanted universe in which he grew up.

In the second perspective, the need to reconnect with the direct experience of nature we had as children is paramount. Counter to the postmodern notion that reality is only a construct, Richard Louv (2005) advocates hands-on experiences of the living world. His *Last Child in the Woods* is a passionate plea for children having more direct contact with the real that nature offers. Louv would even go so far as to state that our society is teaching young people to *avoid* such direct experience. Louv’s comprehensive critique pertains to both primary and secondary education.

This particular example of Louv pertains to older learners than the Native American kids in science class; Louv deeply regrets the perishing of instructions in natural history in post-secondary education; in his assessment, education is becoming a more and more abstract phenomenon, as hands-on disciplines such as zoology give way to more theoretical and remunerative microbiology and genetic engineering. Louv quotes Robin Moore, the director of the US National Learning Initiative, who laments the replacing of primary experience of nature “by the secondary, vicarious, often distorted, dual sensory one-way experience of television and other electronic media” (Moore, cited in Louv, 2005, p. 65). Moore holds that the natural environment is the principal source of sensory stimulation, allowing the child to connect his or her exterior world to their interior, hidden, affective world. For this reason, he argues that

the freedom to explore and play with the outdoor environment through the senses – which continuously presents it with alternative choices for creative engagement – is essential for the healthy development of an interior life.

In a similar vein, naturalist and professor in marine biology Paul Dayton suggest that we must reinstate natural science courses in all our academic institutions. Only in that way can we insure that students experience nature first-hand. In his view, natural history has been “expelled from the ivory tower.” Students are thus denied the sense of wonder and the sense of place fundamental to the discipline. With Dayton, Louv argues that we need a rebirth of natural history in the academy. He quotes from a paper that Dayton wrote together with Enric Sala in which they warned that the current death of natural history means that we risk producing narrow-minded ecologists:

Naturalists are closer to poets than to engineers, and it is the intuition based on first-hand experience and common sense that produces the better leaps of thought. We should imprint on our students the importance of intuition, imagination, creativity, and iconoclasm, and prevent restricting them with the brain-cuffs of rigid assumption frames and techniques, if we are to revitalize an ecological science.... (Dayton & Sala, quoted in Louv, 2005, p. 222)

Dayton and Sala deplore the worrying development that currently some ecologists have never even seen the communities or populations they model and are unable to identify the species that dwell in it. “This is like having the illusion of conducting heart surgery without knowing what a real heart looks like,” they assert (Dayton & Sala, quoted in Louv, 2005, p. 221).

Another expert Louv calls upon to make his point is professor in neurology Frank Wilson. Learning comes from doing – especially from using our hands, Wilson argues, but in his view we are cutting off our hands to spite our brains. For Wilson this is clearly apparent in the context of instruction at medical schools. Here, teachers find that it is increasingly difficult to teach how a heart works as a pump:

...these students have so little real-world experience; they've never siphoned anything, never fixed a car, never worked on a fuel pump, may not even have hooked up a garden hose. For a whole generation of kids, direct experiences in the backyard, in the tool shed, in the fields and woods, has been replaced by indirect learning, through machines. These young people are smart, they grew up with computers, they were supposed to be superior – but now we know that something's missing. (Wilson, cited in Louv, 2005, p. 66)

Twenty-first century Western culture accepts the view that because of omnipresent technology we are awash in data, says Louv. But then he adds that in this information age, vital information is missing, for nature is about smelling, hearing, tasting, seeing. In the course of time, a slow but profound change took place in our

relationship to our natural environment, a deep shift in how we are able or not able to experience things – even if we have an embodied presence.

From these passionate and well-substantiated pleas for the facilitation of full-bodied experiences of the real-world in education, I now come to the third and last perspective that I want to present here. Next to *enacted* and *direct, embodied* relationships to nature, we can also conceive of a predominantly *virtual* relationship to the phenomena that we learn about. Here I look at the visionary view of Australian pedagogue Anne Bamford. As a specialist in the relation between culture and pedagogy, she published, in 2006, *The Wow Factor: Global research compendium on the impact of the arts in education*. Bamford has been recognized nationally and internationally for her research in arts, education, emerging literacies and visual communication. *The Wow Factor* has been published in five languages and distributed in more than 40 countries. In a lecture which she held in the Swedish city of Växjö in 2011, she speaks enthusiastically about the new project LIFE (“Learning In Future Education”) that aims to innovate science education through the implementation of 3D projection technology in eight European countries. The project, which has been developed in collaboration with companies such as Texas Instruments, Exxon and Acer, aims to determine the most effective type of 3D experience and to assess their impact on learning strategies and teaching processes. According to Bamford, the project caused marked improvement in learning: early data on the project suggest that there is a significant improvement in terms of knowledge-building and conceptual understanding on the part of pupil, compared to prior to their working with 3D projection. “It is not science fiction, it is happening now. What it means is that you can virtually project anything in a 3D form into your average class room, without needing anything in particular.” The content used in the project was the human body (she mentions the heart, the lungs, and the faculties of hearing, smell, and sight) and the target group were kids between 11 and 13 years of age. Bamford tells of a science teacher in Paris who started his science lessons on the human heart by showing a video in which a person suffers a heart attack. The kids had to come up with a theory of what had happened to him. To help them in their investigation, the class teacher had real sheep hearts on the tables which the kids had to dissect. He also had a plastic 3D model of the body at his disposal, with removable organs in it. However, with the help of 3D technology, he could project the heart virtually. When the children had their 3D glasses on, the heart appeared in huge format right in front of them. They could cause the 3D image to turn around, and they could even go inside and outside of it, Bamford reports. At the end of the lesson, Bamford, who attended the session, asked the children: “Now that you actually had three things that were 3D – you had the plastic model, the actual heart, and the projection – which one did you like the best?” And the kids responded, without exception: “We liked the projection, because it was more real.” For Anne Bamford this was an amazing thing, because the real (sheep) heart *was* very real, as she recalls. It was bleeding, and due to it being a rather hot day, one could even smell it. But for these young learners, the virtual heart was more real. What the kids were able to do, she says, was to see the *concept* of the heart in action;

they could follow the oxygen passing from the blood cells and they were able to take it apart and put it back together. Here she adds that there indeed was a problem with the sheep's heart, "because once they had cut it up, it was no longer a heart, so they could not put it back together again."

The enchantment of the new that the 3D technology evokes also speaks from the comments by children, teachers and parents on the whole experience. Bamford presents several of these, but I want to single out a few that are telling in this context. One child says that teachers just talk a lot and one inevitably tunes out at some point, but when one actually sees things, "it is there and suddenly it makes sense." Bamford calls attention to comments on realness versus the virtual; this aspect came up a lot, she reports. The kids remark often to Bamford that they want "to learn it real." As one child for example expounds, "There is a big difference between 2D and 3D, when you learn something, 2D is flat, but 3D has depth. It is real."

Similarly, teachers also embrace the new possibilities, according to Bamford. She quotes one of them saying: "The kids are into technology. We need something different in the classroom. It is more philosophical than just putting a computer in the classroom. Technology is not just about learning the content." Another one says: "The children's reaction was 'Wow!' They were moving their bodies and pointing and really into the 3D. Some felt a little uncomfortable the first time but then that seemed to pass quickly. Technology will change the view of life.... Education needs to be about the broad picture, including the children's feelings and the spiritual world."

The parents are just as enthusiastic: "It is so beautiful!" one says. "My child came home so excited. It is new and different. My daughter said 3D is good for us and she was very positive." And another adds approvingly, "I don't know if it is the 3D, but my son's favorite subject at school is science." Bamford sketches the future of education: "What it means in a practical sense is that we can have anything in the world virtually projected in our classroom."

If we now compare the three perspectives, we see that the first way of engaging with the living world concerns children growing up in an enchanted world where their traditional Native American culture doesn't allow them to make cuts in dead frogs. In Bamford's technology-mediated learning environment, the real of the dead heart also seems to move to the background and in that sense these points of view meet: *les extrêmes se touchent*. Louv and his fellow-promoters of directly felt experience of the earth underline the need of children to learn about life and death in nature, and they passionately plea for bringing the real – including dead hearts of animals – into the classroom. However, when children learn to dissect such hearts, they "cannot be put back together again," as Bamford rightly remarks. Here a paradox opens in the phenomenological desire to get back to "the things themselves." We cannot see the heart in action through the skin, but the alternative – the dissection of a dead heart – can only hint at its workings. Therefore, in my view it would be unwise to throw the baby out with the bathwater, to do away with 3D renderings of elements of the human body *because* they may cause us to move us away from the real. I believe there is pedagogical value in these new media tools, but we should be careful

not to lose that other component of creativity: the skill of imagination, of forming an image in the mind's eye. David Abram (1996a) conceives of imagination as an immanent attribute of the senses: "imagination is not a separate mental faculty (as we so often assume) but is rather the way the senses themselves have of throwing themselves beyond what is immediately given, in order to make tentative contact with the other sides of things that we do not sense directly, with the hidden or invisible aspects of the sensible" (p. 58). Furthermore, when studying the dissected heart of an animal, it seems important that neither teacher nor learners ignore the more spiritual aspect which is that this organ comes from what was once a living being with which we shared our circumambient universe.

1.6 Nurturing beautiful actions

In this chapter I have tried to outline how the distance between us moderns and the real of the natural world has gradually grown further and further, from the state of reverence with which our forefathers once approached a sacred tree, to the obscenity and "circularity of media effects" that characterizes our hyperreal world. Leaning on Baudrillard, Benjamin and others, I suggested that, at its core, the "nature gap" is our detachment from direct, unmediated experience. A cloud of virtual media has deprived us from an embodied access to natural phenomena; when we relate to nature it is more and more a "second-hand" experience. In today's world of simulation, we seem to have a diminished discriminatory ability of being capable to determine whether some things are perhaps "more real" than others. The constructed "reality" of simulation, or hyperreality, breaks with the idea of signs referring to the real reality behind the signs. Deconstructive postmodernism, holding sway in much of today's academia, insists that any attempts to uncover an ultimate reality have become futile (cf. Spretnak, 1983).

I don't share the view that the reality behind all of its simulations is inaccessible or even non-existent, and neither do I think that any grasp of it necessarily is our own (social) construction. In contrast to scholars like Timothy Morton (author of *Ecology without Nature*), I want to maintain that there is a domain of otherness of nature "out there," which, to us, is "so familiar, and yet so strange." Whether or not it is still appropriate to use the term nature will be one of the themes in the next chapter. Here, I have sketched the overarching context in which I set out my exploration to see if there are ways to facilitate participants to reconnect to nature in ways that are less dependent on second-hand experience, and thus perhaps enables a countervailing force of mindful attention in our "age of interruption" (Friedman, 2006).

We seem to have literally grown *out of touch* with the earth around us. American nature writer and lepidopterist Robert Michael Pyle (1993) asserts that one of the greatest causes of the ecological crisis is the state of personal alienation from nature in which many people live: "We lack a sense of intimacy with the living world. The extinction of experience implies a cycle of disaffection. The extinction of experience

sucks the life from the land, the intimacy from the connection" (p. 140). As we saw, this (not necessarily consciously noted) state-of-being, of living profoundly disconnected from nature, seems to be a trait shared by many people nowadays. With Pyle, I believe it may very well be one of the root causes for the ecological crisis that the earth is undergoing today and for the mood of indifference that many people seem to feel for it. It is hard to care for something that we no longer perceive as being constitutive to what makes us human.

This disparity is one of the underlying reasons that Norwegian eco-philosopher Arne Naess (1976/1989, 1993) called attention to Immanuel Kant's distinction between a beautiful act and a moral act. For the Enlightenment thinker, an act is moral if it is in accordance with one's ethical duty: one has a moral obligation to do something, and therefore one does it. More often than not, this may go against one's inclinations, that is, against what one would want to do. A beautiful act, in contrast, is an act where one acts *with* one's inclinations, one acts in a moral way because that is what one *wants* to do. For Naess, we can learn to identify with other humans, with animals and plants and even ecosystems, but this takes a process of spiritual and psychological maturation. As humans we can learn to see ourselves in these other creatures: in that way the latter become, as it were, part of our own being. By thus identifying with earth, we *want* to protect it and by doing so we are actually not acting *against* our inclinations. Naess believes that the desire to act beautifully – rather than merely morally – is something that can be nurtured already at a very early age. For adults this seems to be a more difficult thing to do, he feels. They may have to relearn the way children appreciate the things around them: "Children are more spontaneous in the sense that reflection and conventional views of things do not yet play such an enormous role. If we could be able to see a little bit more like children, we would gain very much. That's a very difficult re-development, to get into this state of children's inner life" (Naess, quoted in van Boeckel, 1995b, p. 10).

This, in a nutshell, is the overarching context of my research in the new territory of AEE: how can we, through art, evoke, ignite and eventually deepen the performance of beautiful actions towards nature, in a time of profound ecological crisis? One of my assumptions that caused me to undertake this present study, is that art practice can play a pivotal role in this. In contrast to postmodern dystopian views like the one of Baudrillard, who argues that we can no longer have access to the real (including real nature), I assume here that developing a connection to nature is still possible. Moreover, in my view such may be of critical importance if we want to encourage performance of the kind of beautiful actions that Naess sponsors, which necessarily stem from one's own inner voice. In that regard, I think, with Naess, that there is a danger in treating the concept of nature as being nothing more than yet another "social construction." Naess elaborates on this stance and points out what the consequences are when such a view is taken too rigidly:

You then end up saying: "Nature is without colors, even without shapes, and even without cause and effect. Because relations of cause and effect are some-

thing created by human, so there is nothing there – in short: there is *nothing* in nature in itself! You have no access to nature in itself." You see, you end up in complete nonsense.... Even in contemporary so-called postmodernism, nature is only a limiting thing, which you never can really see or appreciate. You appreciate only your own ways of thinking and feeling and you are completely determined by your culture, and so on. [In this line of thinking] protection of nature is a sham. There is something there, but you don't have any access to it. [This ultimately undermines] the belief in protection of nature as a fast undertaking for the next two centuries. (Naess, quoted in van Boeckel, 1995b, p. 12)

Through this study on artistically-oriented environmental education, I want to explore if learners are able to develop some form of a felt and direct connection with the reality of nature. However, I believe, with Louv and others, that in today's world efforts to rediscover and nourish our relationship with the natural world are impeded by the luring distractions offered by virtual reality. My presupposition is that when we reflect on ways to remedy the situation, we would do well to follow-up on Naess's urge to environmentalists to shift from promoting moral actions to fostering beautiful actions in relationship to the natural world. In this, I regard artistic practice with groups of participants as having a great and yet hardly charted potential.

2. Connecting art, education and the natural environment

*The business of art is to reveal the relation between
man and his circumambient universe at the
living moment.*

D.H. Lawrence (1925/1985)

Central in this study is the triangle that is formed by the mutual interrelations between art, pedagogy, and the space in which both are inevitably situated: the environment. In this chapter, I first look at the historic antecedents of the field of environmental education. From there I proceed with tracking the roots of the view that artistic practice can afford a deepening of our understanding of the living world. Subsequently, I examine the way both approaches were brought together in a single endeavor through arts-based environmental education and other forms of educating about (or with) nature through art.

I realize – before even starting – that exploring the question whether engaging in arts-based activities in a natural environment enhances one's ability to bond with the assumed “real” of nature makes me susceptible to the charge of being guided by a Romantic nostalgia for a lost initial unity. However, I am just as aware that an effective strategy to neutralize advocates of a reconnection with nature is to label them immediately as Romantics, with all of its pejorative connotations, so that one doesn't have to take them serious any longer. But rather than to opt here for the immediate Pavlovian response to the Romanticist charge by demonstrating how *contemporary*, in fact, such efforts are, I think it is more fruitful to investigate

a bit more in-depth whether there is indeed an affinity to Romanticism in such pursuits.

In fact, any history of both art education and environmental education would be incomplete without tracing some of its roots in the Romantic Movement. Characteristic to this highly influential movement in literature and art that was strongest during the late 18th and early 19th centuries was that its proponents aimed to make room for the expansion of human capacities and wanted to undo the restrictive grip in which systematic forms of empirical and rational cognition held the human psyche (Geuss, 2005). However, as Brandon Watson (2005) notes, it is too simplistic to discard the Romantic position as being anti-science. What its proponents opposed to, rather, was scientism, which destroys the wonder of the world through what Watson aptly typifies as “the Merely syndrome,” for which a rainbow is *merely* a refracted spectrum, animal behavior is *merely* genes and environment, the moon is *merely* a piece of rock in empty space: “On the Romantic view, the Merely syndrome is a pernicious attitude that involves continually missing the point. In the Romantic universe there is no such thing as ‘merely’: things are valued for what they are, and you can’t fully understand anything by reducing it down.” Rather than relying one-sidedly only on science and rationality, Romantics put their trust in the *added* dimensions that intuition, feeling and individuality can bring.⁷ It is in this context that for Goethe, Blake and other Romantics the power of the human imagination was one of the central preoccupations.

2.1 The idea of the child and the artist as pure interpreters of nature

Let me admit straight up that there is much in the Romantics’ lamentation about the loss of a felt connection to nature with which I can identify. They held that the truth of nature – its ultimate, underlying reality – is best apprehended or revealed by the child or the artist. Take for example Wordsworth’s *Ode to Immortality* (1820) in which he, with a tragic sense of the inevitable, regretted losing the clarity of vision he once had as a child: “*There was a time when meadow, grove and stream / The earth, and every common sight / To me did seem / Appareled in celestial light/ The glory and the freshness of a dream. / It is not now as it hath been of yore; – / Turn whereso’er I may / By night or day / The things which I have seen I now can see no more.*” Once we pass into adolescence, Wordsworth’s poem seems to express, we loose the sense of innocence and enthusiasm we had when we as young children were still obliviousy immersed in nature. Therefore, to Wordsworth, a child six years of age is superior to an adult in his or her appreciation of the beauty of nature; he addressed such a child

⁷ Wordsworth seems to have thematized the Merely syndrome in his mocking depiction of the character “Peter Bly”: *A primrose by the river’s brim / A yellow primrose was to him; / And It was nothing more.* Commenting on this poem, Gregory Bateson suggests that an alternative approach would be to meet the primrose with recognition and empathy, and by primarily asking the aesthetic question: “*How are you related to this creature? What pattern connects you to it?*” (1979, p. 9)

as a seer, prophet and philosopher in one: “*Thou best philosopher, who yet dost keep / Thy heritage, thou eye among the blind, / That, deaf and silent, read’st the eternal deep, / Haunted for ever by the eternal mind, – / Mighty prophet! Seer blest! / On whom those truths do rest, / Which we are toiling all our lives to find....*” (Wordsworth, cited in Givens, 2010, pp. 247-248)

Being adults, we now have to resort to art, several Romantics held, if we are to again truly appreciate and understand the workings of nature. Goethe for example held, that “Beauty is a manifestation of the secret laws of nature which, without art, would have remained hidden from us” (Goethe, cited in Nobel, p. 161). Moreover, “He to whom Nature has begun to reveal her open mystery comes to experience an irresistible yearning for her *most worthy* interpreter, namely for art” (Goethe, cited in Harrison, Wood & Gaiger, 1998, p. 75). And Friedrich Schelling (1775-1854) viewed art and science as complementary modes of inquiry. Aesthetic intuition offered an additional lens for understanding phenomena thereby illuminating that which science on its own could not. By uniting the unconscious and conscious, art, to Schelling, *was* a way of knowing; a way of moving to the ideal realm. For him the creative act was the highest of human achievements (Strauch-Nelson, 2012).

In the following, I will look more closely at these two primal and supposedly more pure interpreters of nature that the Romantics identified, respectively the child and the artist.

In her book *The Ecology of Imagination in Early Childhood*, Edith Cobb (1977/1993) studied the biographies of three hundred creative thinkers since the sixteenth century and found that each of them seemed to have had particular strong experiences of self and nature, and these experiences took place during a specific phase of their childhood. They were awakened to some new potential, and that awakening itself was caused by “an acute sensory response to the natural world” (p. 30). For this to happen, there seems to be a relatively short “window of opportunity” in a human’s life, according to Cobb: “There is a special period, the little-understood, prepubertal, halcyon, middle age of childhood, approximately from five or six to eleven or twelve ... when the natural world is experienced in some highly evocative way, producing in the child a sense of some profound continuity with natural processes....” (1959, p. 538). She held that this ecological sense of continuity with nature was not something mystical in its colloquial sense. Rather, she believed it was basically aesthetic and infused with a deep longing to know and to be. Cobb is not alone in this idea of demarcating a specific period in childhood in which this openness to the natural world is most strongly present.⁸ For my discussion here I find two aspects of Cobb’s “special period”

⁸ Joseph Chilton Pearce (1977/1992) in his *Magical Child*, for example, speaks of the period of the earth matrix, when the child, at an age between seven and eleven, functionally separates from direct dependence on its mother and is ready to move out to learn about the earth. And David Sobel (1996) points out that for children from eight to eleven, the geographical range expands rapidly beyond the house and yard. Their central focus becomes the “explorable landscape” (p. 12). In the period between ages twelve and fifteen, their maps continue to expand in scope, but they also become more abstract. Favorite places are now *out of* the woods, into town. Thus in that latter age group, the special window, allowing for strong and evocative experiences of the natural world, diminishes again.

particularly important. The first is that there must be something in the relationship between children of that age and nature that evokes such strong experiences – clearly there seems to be particular strong receptivity in humans during this period in their lives. The second is that this window of potentiality seems to shut itself when adolescence begins and we move to maturity. If this is the case can we then, as adults, still experience a sense of profound continuity with nature?

In the opening pages of this thesis I inserted a long quotation of Rainer Maria Rilke, in which he suggests that the tragedy of ordinary humans is that they only see the surface of things, as their eyes are focused almost entirely on other humans. Rilke contrasts this with what he observes among certain solitary children, who relate to nature in a special way. They feel “a kind of like-mindedness and life within her” and are “entirely at one with the happenings of forest and sky.” When these children grow up physically, he says, they enter a period of deep melancholy: they feel that nature no longer has sympathy for them. Some of these persons remain unwilling to leave the nature they have lost. Consciously and willfully, they try to come as near to her again as they were in their childhood *without knowing it* at that time. For Rilke, these latter people are artists: poets, painters, composers or architects. Because they cannot get nature to care for them, “they see their task to be the understanding of Nature so that they may take their place somewhere in her great design.” By doing so, they deliver a service to mankind, he believed. Through these isolated and lonely ones, all of humanity comes nearer to nature:

[T]he peculiar value of art, [is] that it is the medium in which man and landscape, form and world, meet and find one another. In actuality they live beside one another, scarcely knowing aught of one another, and in the picture, the piece of architecture, the symphony, in a word, in art, they seem to come together in a higher, prophetic truth, to rely upon one another, and it is as if, by completing one another, they become that perfect unity, which is the very essence of a work of art. (Rilke, 1902/1965)

With this, Rilke forges a direct link from early childhood – the period of middle childhood that Cobb talks about – to the mature life of the artist. The risk here is of course that the child is mystified as an Other, much along the same lines as was done in early anthropology, with native peoples in the European colonies. As Grant Crichfield (1978) has pointed out, the categories in which Romantic thinkers in the European primitivist tradition traditionally sought a (imaginary) ground to criticize the institutions and customs of their own society were the “natural child” (cf. Rousseau’s *Emile*); the “Noble Savage” (Montaigne), and the madman or lunatic (p. 835). In a similar vein, pedagogue Gunilla Dahlberg (1997/2007) remarks: “The image of the child as innocent and even a bit primitive has been intriguing for many centuries. It is a construction which contains both fear of the unknown – the chaotic and uncontrollable – and a form of sentimentalization, almost a utopian vision, where childhood is seen as the golden age. This is Rousseau’s child....” (p. 45).

Despite such reservations about adult constructions and appropriations of childhood and criticisms of a too simplistic “nature knows best” and anti-science orientation in the Romantic Movement, environmental education as it exists today is deeply indebted to the pioneering work of some of its members as will become more clear in the further course of this thesis. For the moment, this introduction was aimed to provide a fitting context before moving on, to how educators seek to enhance understanding of our environment in *our* day and age.

2.2 The dawning of environmental education

We have had half a century of environmental education and the world is getting worse.⁹ So far, there is little indication that a substantial amount of people in the modern industrial world are inclined to change their behavior in response to new scientific knowledge on such cumulative and synergetic ecological threats such as global warming, mass species extinction, deforestation, erosion of topsoil, et cetera. A key point of departure in this study is that the current ecological crisis urgently calls for a fundamental reorientation of our practices of teaching about the living world and how to live more sustainably in it. A major criticism of the kind of education about our natural environment as often practiced today is that it seems insufficiently capable of reaching the hearts and minds of the learners (cf. Russell, 1999; Sobel, 1996, 2008). Rather, fear and anxiety of environmental problems potentially turn it into a *counter*-productive activity, a phenomenon that David Sobel has termed “ecophobia” (2008, p. 146). A one-sided focus on the scope and magnitude of today’s array of environmental crises can cause feelings of personal inadequacy and even despair. The result can paradoxically be an even further detachment from nature. If reflection on the relation between humans and nature is seen as a limiting endeavor rather than something that can enrich one’s life, and if an ecological lifestyle is seen only as restriction and austerity, people will accept it only as a last resort.

In this section I will make an effort at tracing the history of the concept of environmental education (hereafter often abbreviated as EE). I distinguish it from the more narrowly defined fields of outdoor education and experiential learning, though I recognize that they have a lot in common. I proceed with discussing some of the contrasting ways in which interfaces of the basic concepts that guide this exploration, namely nature, art and education are employed in the current debate. I give an overview of some of the diverging viewpoints and articulate my own position.

A widely used definition of environmental education originates from the International Union for the Conservation of Nature (1970), in which reference is made to both the natural and cultural environment. IUCN underlines the importance of fostering a different attitude among learners:

⁹ I owe this line to the title of a book by psychologist James Hillman, *We've Had a Hundred Years of Psychotherapy - And the World's Getting Worse* (1992).

Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture and his bio-physical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behavior about issues concerning environmental quality. (IUCN, cited in Palmer, 1998, p. 7)

Joy Palmer found that the words “environment” and “education” do not appear to have been used in conjunction with each other until the mid-1960s (ibid., p. 4). EE was born within modernity, as a reaction to the impact of unbridled capitalism: it was mainly about resolving and preventing the problems caused by the impact of human activities on ecological systems. In the early years of its rise, in the 1970s, pedagogical models primarily focused on learning problem-solving and environmental management skills within the framework of science education. Its aim was to change the behavior of individuals.

To many educators at the time, however, EE represented, first of all, a continuation of naturalistic romanticism in which nature education through personal experience – of the environment as nature – was central (Sauvé, 1999). Undeniably, in its evolution, EE has incorporated significant influence of eighteenth-and nineteenth-century thinkers such as Goethe, Rousseau, Haeckel and Froebel (Palmer 1998).

This embedding also comes across in how EE is currently still conceptualized in North America. In a characteristic definition it is being referred to as “organized efforts to teach about how natural environments function and, particularly, how human beings can manage their behavior and ecosystems in order to live sustainably.”¹⁰ The immediate reference to natural environments – rather than to *any* type of environment, including the built and urban environment – may have to do with part of environmental education’s roots in the nature study movement, which had its strongest momentum in the United States in the late nineteenth and early twentieth century. One of its goals was to reconcile scientific investigation with spiritual and personal experiences gained from interaction with the natural world (cf. Armitage, 2009). Nature study was an attempt at “teaching children science” with the aim that they would “understand animal and plant life in environmental context” (Kohlstedt, 2010, p. 3). In section 2.6, I will look more in depth at this movement, which itself emerged from the naturalist tradition of the times.

Environmental education can be taught at all levels of education, from kindergarten through the post-secondary level and is particularly practiced as non-formal education or informal education. EE has crossover with the disciplines of outdoor education and experiential education. Outdoor education means learning “in” and “for” the outdoors. The curriculum is extended and enriched through outdoor experiences. Experiential learning (Kolb, 1984), closely related to this, is a process through

¹⁰ See, as just one of several cases in point, the online glossary of the Nevada Natural Resource Education Council: <http://www.nnrec.org/info/glossary.shtml>.

which a learner constructs knowledge, skill and value from direct experience (though this doesn't necessarily have to take place in an outside environment). This "learning by doing" can be understood as a process and method to deliver the ideas and skills associated with environmental education. Lucie Sauvé (1999) points out that from the 1980s onwards, EE gradually entered the postmodern era, with new offshoots such as *place-based education* (Orr, 1992; Sobel 2004) and *ecological (or eco-) literacy* (Orr, 1992; Barlow & Stone, 2005). Characteristic for the new "grassroots EE movement" is its emphasis on experiential and concrete knowledge which is held up against "scientific" knowledge (Sauvé, 1999, p. 14). In place-based education, for example, the students' local community is regarded one of the primary resources for learning and acquiring a "sense of place". Students should first have a grounding in an understanding of their surrounding environment before they move on to broader subjects. Place-based education is often hands-on and always related to something in the real world. It is clear that there exists a wide range of conceptions of what EE is, ranging from teaching of ecology or environmental sciences to a new kind of education that is based on the premise that "we ourselves are an environment" (cf. Sauvé, p. 15).

In Sauvé's view, EE has taken a step backwards in the wake of the official international discourse that followed the Brundtland Report (*Our Common Future*) in 1987 and the United Nations Conference on Environment and Development (better known as the *Earth Summit*) in Rio de Janeiro in 1992. Sustainable development became the new buzz word and education had to aim for that. In effect, EE was reduced to a tool as can already be seen in the array of titles that various endeavors were given: "education for sustainable development," "education for a sustainable future," or simply, "education for sustainability." According to Sauvé, the official discourse of education for sustainable development follows the rational-technological paradigm of education; it associates education with a "transfer of scientific and technological knowledge."¹¹ Rather than promoting critical thinking, it considers education as a means for placing human potential in the service of economic growth (Sauvé, 1999, p. 25). Stephen Sterling (2003), co-editor of *Education for Sustainability* (1996) argues the same. He identifies both in EE and in education for sustainable development a discourse that is "strongly instrumental" – at the expense of a reflection on the intrinsic value of learning and the nature of the learning and teaching experience itself (pp. 225-226). Early EE discourse, he maintains, was less overtly instrumental. Though there has been a huge explosion of interest in EE and training worldwide in the last decades, the results of all this work are "disappointing," Sterling concludes. The programs in the formal and non-formal sectors "have made some, but not a great deal of difference in society's views on behavior in relation to environment and sustainability issues" (p. 230).

Already in its early days, several theorists and practitioners of EE saw a need to dissociate EE practice from pedagogical practices that were centered on transmissive

¹¹ Constance Russell (1999) points at the same tendency within EE to privilege abstract scientific knowledge and textbook learning (p. 124).

models of teaching and traditional models of learning in which the learner was seen as a passive recipient of knowledge. Instead they advocated experiential, constructivist and student-centered pedagogies with a strong basis in first-hand experiences. Though this created many high expectations of the potential transformative pedagogical role of EE in society, there still is little research done on the actual achievements in this regard. The topic still needs to be researched in depth; it remains an uncharted area, as virtually no substantial empirical studies exploring the interrelationship between EE and creativity can be found (Daskola, Dimos & Kampylis, 2012). The challenge for EE thus still seems to remain how to engage learners beyond the instrumentalist orientation that is characteristic of much of the prevailing modes.

The scholars who have called for a radical reorientation of the prevailing practices in teaching about the natural environment and about ways in which we can live more sustainably make a long list by now. To highlight some of them, I list here, respectively, Rachel Carson (1965/1998); David Orr (1992); Gary Paul Nabhan & Stephen Trimble (1994); David Sobel (1996; 2008); Peter Kahn & Stephen Kellert (2002); Stephen Sterling (2003); Louise Chawla (2005); Richard Louv (2005); Michael Stone & Zenobia Barlow (2005); and Mary Jeanne Barrett (2007). The latter, for example states succinctly that already for several years, environmental educators have been arguing that the culture of schooling (with its common focus on cultural reproduction) is *antithetical* to environmental education. However, Barrett maintains that within this context these same environmental educators often suggest that EE does successfully occur in cases where there is a particularly passionate and motivated teacher who, against all odds and despite several barriers, maintains EE as a priority. In her research, Barrett found that even strong beliefs, significant skills, and an ideal program structure do not lead to the implementation of effective EE. On the contrary, her assessment is that “the privileging of the intellect in research and pedagogy may be making effective environmental education almost impossible” (Barrett, 2007).

It must be stressed that none of the aforementioned authors takes an anti-science stance. Their critique pertains to a scientific frame of reference in EE that is too one-sidedly positivist and reductionist, leaving little or no room for igniting a sense of wonder.

However, it may be countered that the very aspect of EE that it *tends* to be science-centered is what may trigger a sense of awe: for (as this argument goes) it is the feat of science that it is able to open the doors to previously unfathomed and unexplored universes both on a macro and micro scale (cf. Dawkins, 1998). Be that as it may, I grant that, ultimately, the claim that much of today's EE may be too science-centered should be made relative to a set of *a priori* formulated goals of such education, which could range from a basic level (e.g. of trying to raise the awareness of learners of the integrity of ecological systems and their biological knowledge in general), to much wider aims (such as aspiring to increase their understanding of the ecological crisis and encouraging actions to address it effectively, or making efforts to bridge the supposed “nature gap”). To a more encompassing scope of EE one could also add (and I will come back to this towards the end of this thesis) the objective of enhancing the

learners' abilities to handle ambiguity and uncertainty – conditions which our post-normal times (Funtowicz & Ravetz, 1993) seem to bring along more prominently than ever before. Here, however, I will refrain from performing such a rigorous assessment of the merits of EE as practiced today, thus leaving my characterization of it somewhat tentative and presumptuous.

Constance Russell (1999) states that much of EE theory and practice rests on the assumption that experiences can disrupt our stories (including the stories we tell ourselves about nature); it holds the idea that human disconnection from nature is a fundamental problem and that nature experience can foster caring, commitment, and action. Russell herself, however, questions the linearity between nature experience and transformed relationships between humans and nature (p. 127). She challenges declarations of educators and writers who treat nature experience as some sort of panacea. The problem here might be, she suggests, that nature experience is often seen to automatically contribute to environmental awareness, commitment, and action. Equating nature solely with wilderness and environmentalism exclusively with protection of nature may do a disservice to EE, limiting its potential. Environmental educators advocate many other forms of nature experience. However, the pristine nature experience, according to Russell, is often portrayed as the quintessential form to which other experiences are compared (p. 127).

2.3 Being both part of nature and standing outside of it

From the very outset, one of the stumbling blocks in this study is the aspect of environmental education as a “container concept.” My point of reference is the tradition of arts-based environmental education as it has been developed in Finland (most notably by Meri-Helga Mantere, Timo Jokela and others) and which pertains as much to the natural environment as to the built and urban environment. My conceptualization of EE here tends to be more limited in scope and runs parallel to Anglo-Saxon connotations of the concept; it strikes me that it is often used synonymously to outdoor or nature education.

To be sure, the concepts “environment” and “nature” have a long and complex history and several different meanings, depending on the person using the concept and the context in which the word is used. In *Aesthetics and Nature*, Glenn Parsons (2008) points out that in England, the word nature is very commonly used to contrast human civilization with the uninhabited regions of the Earth. Nature, when conceptualized in this sense, is a pristine refuge, a place to go to when we say “we go back to nature.” Essentially, nature, in this sense of the word, is “a place unmodified by humanity” and this idea has deep roots in Western culture. Acknowledging this, Parsons goes on to say that this concept of nature has received much criticism: “There simply is no place left on the planet that is unmodified by humanity” (p. 2). Even in the most remote wilderness areas, he says, we can see and hear traces of humanity’s presence. Airplanes and satellites come overhead and traces of pollutants are found in every corner of the earth. Parsons therefore opts for holding on to a meaning of nature which is narrower, e.g. the way John Stuart Mill

referred to nature, as that “what takes place without the agency, or without the voluntary and intentional agency of man” (Mill, cited in Parsons, 2008, p. 2). From such a vantage point, there is plenty of nature left. Mill’s concept of nature, however, has the disadvantage that it draws an arbitrary distinction between nature and the human world. Seeking a balance, Parsons holds that if we would do away with the concept of nature altogether, we would throw out the baby with the bath water, for he maintains that such would rob us from a very useful concept. One reason for clinging on to it is that we will still want to be able to assess ways in which human activities have an impact on for example animal migration patterns or the ocean’s currents. If we throw out the concept of “natural,” according to Parsons, we are left with no general way to refer to these processes.

Roy Ellen (1996) asserts that the view that nature is culturally construed and defined, and even “constructed,” has become a commonplace in anthropology and the history of ideas (and I would add that this occurred well beyond these domains of scholarship). But while the view of what it is exactly that constitutes nature varies cross-culturally between different populations and over time, Ellen suggests that in this multiplicity of conceptions of nature, three underlying cognitive propensities can be identified. The first he mentions, the “thinginess” of nature, is somewhat tautological. Humans have an inclination to identify natural kinds of things as being part of a whole that we call nature. But in this description Ellen already seems to take as a given that certain kinds of things *can* be identified as “natural.” The two other predispositions that he singles out are more to the point in my view and in the following I dwell on them more extensively. The second shared propensity for Ellen is the “otherness” of nature: in Western conceptions of nature, it is most clearly recognizable as that what is “out there.” Reminiscent of Mills’ definition of nature, it is that “what is not ourselves and ‘that which can take care of itself’” (p. 7). Recently, Timothy Morton (2010) has also scrutinized this same propensity, of regarding nature as something alien and alienated, as always being “over yonder,” and it leads him to the following observation: “Just like a reflection, we can never actually reach it and touch it and belong to it. Nature was an ideal image, a self-contained form suspended afar, shimmering and naked behind glass like an expensive painting” (p. 5). It will come as no surprise that Morton argues that we could well do away with the outdated concept of nature, hence the provocative title of one of his books, *Ecology Without Nature* (2007).

The use of the word nature somehow suggests that we can step out if it and look at it from a distance. In that respect it is remarkable that in many indigenous cultures there is no rigid separation between the world of human persons and that of non-human agencies and entities. In the view of American novelist Peter Matthiessen, who lived among several indigenous peoples across the globe and published extensively on his findings, we already set ourselves apart from it by using terms like “nature” or “wilderness”:

Many forms of behavior and ritual in indigenous cultures show the sense of connection the people feel with the world around them.... We can't consciously adopt Indian attitudes toward nature because traditional people don't *have*

any attitudes toward nature. They *are* nature. Wilderness is a false concept to them. They have no word for it. (Matthiessen, cited in White, p. 239)

The third and last cognitive propensity towards nature that Ellen (1996) lists is the conceptualization of nature as an essence. This attitude comes from the inclination humans apparently have to essentialize phenomena that we regard as vague or which are unknown to us. We do this, for example, when we contrast nature to nurture, or instinct to reason, or wildness to control. Such dichotomies not only serve us to locate things in the world but they also allow us to charge them subsequently with a moral weight, like when we say that something is unnatural (and thus, by implication, reprehensible). Ellen is keen to point out that nature and culture often cannot be resolved into a single dichotomy; the lines are not always that clearly drawn. For certain peoples, for example, there is no necessary link between “the natural world” and “human nature.”

An uncommon perspective on the nature-culture contrast is brought in by anthropologist Tim Ingold (1996). He argues that it is fairly easy to make the claim that “nature is a cultural construction,” but that it is far from unproblematic to ascertain what exactly is meant by it. To him, the claim is incoherent. Like for Matthiessen, his understanding of hunters and gatherers peoples has taught him that people in such cultures systematically reject the ontological dualism, so typical of much of Western thought and science, between nature and culture. They do not approach their environment as an external world of nature that has to be culturally “grasped”: “the separation of mind and nature has no place in their practice” (p. 120). Ingold urges us not to rest content with a too facile identification of the environment with “nature”: “the world can only be ‘nature’ for a being that does not belong there” (p. 117). In his view, the word “nature” implies the existence of something that one is *not* part of, something that one can “look upon like a detached scientist, from such a safe distance that it is easy to connive in the illusion that it is unaffected by his presence” (2000/2011, p. 20). To avoid the dichotomy, Ingold prefers the term environment, which to him is a relative term: it is always related to a being that is *in* its environment and cannot be separated from it. Furthermore, an environment can never be “complete”: it is formed by the beings that are in it and so are the beings formed by their environment, in a continual and never-ending process of growth or development. Ingold goes on to argue that the perception humans have of their environment is based on their acquisition of the skills needed for their direct engagement with whatever makes up this environment and which are both human and non-human, and animate and inanimate. This is not a process of enculturation but rather of enskilmment, according to Ingold. Where Morton takes issue with positioning nature as eternally being over yonder, Ingold underlines that there *must* be a physical world “out there,” beyond the multiple and intentional worlds of human subjects, for otherwise there would be nothing to build with or nobody to do the building: “Minds cannot subsist without bodies to house them, and bodies cannot subsist unless continually engaged in material and energetic exchanges with components of the environment” (p. 118). Mockingly, he contends that there are actually and commonly *two* versions of nature: “real natu-

ral" nature (the object of study for natural scientists) and "culturally perceived" nature (which he suggests is the object of study for anthropologists.) Ingold insists that we cannot really make a fruitful comparison between the intentional worlds of hunter-gatherers and those of Westerners on level terms, "since the primacy of Western ontology, the 'givenness' of nature and culture, is implicit in the very premises on which the comparative project is itself established" (p. 120). The danger lurks of an infinite regress: if the categories of nature and culture are *themselves* cultural constructs, then the culture that constructs those, on its turn, must be one as well. And the same counts for the culture that constructs *that* notion of culture, and so on. In a Baudrillardian vein, Ingold adds that at every stage of this regress, the reality of nature reappears as its representation, and as a consequence, "real' reality recedes as fast as it is approached" (*ibid.*).

In his *Last Child in the Woods*, Richard Louv (2005) also tries to come to terms with the usability of the word nature. Referring to Gary Snyder, he points out that we attach two meanings to the word. In its broadest interpretation, nature includes the material world and all of its objects and phenomena; by this definition, a machine, and even toxic waste, is part of nature. The other meaning is what we call "the outdoors." By this connotation, a man-made thing is not a part of nature, but apart from nature. Louv, however, looks for a definition which does not include *everything* as natural, nor, conversely, restricts nature to virgin forest. He discusses whether the concept of wilderness would be more fitting, in the sense in which poet John Milton refers to it, as "a wilderness of sweets." For Louv, Milton's usage of wilderness catches the condition of energy and richness that is so often found in wild systems. At the same time, however, he is aware of the fact that wilderness has also implied chaos, Eros, the unknown, realms of taboo, the habitat of both the ecstatic and the demonic. It is a place of archetypal power, teaching, and challenge. For this reason Louv chooses, with some reservations, to use of the word nature anyway, but then in a more general sense. For him it becomes an aggregate term meaning a kind of "natural wilderness," and encompassing, in Louv's view, biodiversity, abundance, and "related loose parts in a backyard or a rugged mountain ridge." He adds: "Most of all, nature is reflected in our capacity for wonder. *Nasci. To be born*" (pp. 8-9). Although we often see ourselves as separate from nature, to Louv humans are also part of that wildness.

In a similar vein, philosopher Arne Naess prefers to use the term "free nature" instead of terms like "ecosystem" or "wilderness." The reason he does this is because the notion of "free nature" – in contrast to abstract terms like ecosystem – tends to move one's heart. It is a place where we as children were able to do anything, where we could play, be with the trees and plants, and feel at home within that: "It's not only in gardens, but some untouched places, where as a child you could feel free and get to appreciate any plant, any thing around you. Every child should have an opportunity to be in free nature, even if it's a small patch, so they get this relation to non-humans - to the clouds, to any kind of vegetation, to the stones, to the cliffs, to anything" (Naess, cited in Angus, 1997). Naess holds that if one talks about "wilderness" in Europe, the term does not work because there is practically none left.

Irrespective of this circumstance, even in places where there *is* wilderness left, the very idea of “wilderness” seems to imply a radical division between humans and nature. The impression it gives is that nature can only be “pure” in the absence of humans (Toadvine, 2011). Historian William Cronon formulated the ultimate consequence of the dualism of humans versus wilderness as such: “if nature dies because we enter it, then the only way to save nature is to kill ourselves” (Cronon, cited in Toadvine, 2011, p. 50). The difficulty of designating what we mean by nature or wilderness stems for a major part from the lack of clarity of the place of humans within the larger scheme of things. Nature and environment are often – and certainly in mainstream popular discussions – regarded as realms that are separate, at distance, from the perceiving human being.

To side-trap the implicit Cartesian dualism of *Humans* (subject) versus *Nature* (object), some scholars have suggested using the concept of “the more-than-human-world” (e.g. Abram, 1996a). This term has the benefit that it does not pit humans against the environment they find themselves in. The idea is rather that there are two spheres, or gestalts, of which one is more inclusive – engulfing and encompassing the other one. Human beings are situated in the natural world – yet it exceeds them and meets them as other. Other authors (e.g. Cronon) prefer the term “nonhuman world,” thereby underlying the radical distinctness and otherness of those parts of nature that are not human. Neil Everden (1999) goes so far as to designate humans the status of “natural aliens.”

Ted Toadvine (2011) points out that the critique of the wilderness ideal and the “misplaced nostalgia for the lost purity of nature,” has caused the view, that all conceptions of nature are “socially constructed,” to be embraced by more and more people. Echoing Ingold’s point of the self-referentiality of this postmodern notion, Toadvine indicates that the implications of this are vast: “If our many concepts of nature – e.g., as pristine Eden, moral yardstick, nurturing mother, or radical other – are reflections of our own cultural context, then it is through history and cultural study rather than empiricism that we will learn to read nature’s book” (p. 50).

Summarizing, it seems that the whole notion of “nature” has not become obsolete, both for practical reasons – there is no longer any “pure” nature in which humans have not interfered – and for metaphysical reasons – humans and nature are so intertwined that the concept of nature is part of an overdue Cartesian dualism between *res cogitans* (mind) and *res extensa* (our body *plus* wider environment). My own position is, that while I can understand and underwrite some of the arguments that are put forward to reject use of the concept of nature, I still want to retain it in my writing – though not completely comfortably – and use it almost interchangeably here with terms like “the natural environment” or “the living world.” For to me the word nature expresses, much stronger than the word environment, a sense of Otherness, of a sphere being perpetually beyond our control and total apprehension. Nature is and will remain something that, to us, is “so familiar and yet so strange.” Isis Brook (2006) also seems to suggest that we have no choice really but to live with the dilemma: of both being part and standing outside of it, whether we now call it nature or environment:

Environment is not the inanimate background object against which we as subjects can act as separate beings. The reality of our situation is being environed, being engaged in an embrace, not as an optional extra – a lifestyle choice – but just how it is. We are a part of the world that thinks, but if the best we can think is always an “all or nothing” dichotomy then we need help. I think we need to resist both the intellectually indefensible notion that the world and us are an indistinguishable whole and the morally indefensible notion that the world is entirely separate from us and there for us to use, even if that use is “sustainable.” (pp. 361-362)

However, being a part of the world that is able to think, has come to mean – at least for many people in the Western part of that world – that the one-sided excellence of the logic, planning mind has come to stand in the way of more embodied engagement with our environs. It is here that art maybe can help us to open up to fresh ways of knowing and interacting with the more-than-human.

2.4 Art as our antennae to the world

“Art is one of man’s antennae stretched out to sense the world. It is a way of existing and of understanding one’s existence.... By sensitizing our perceptions, it makes us susceptible to new information, which may not necessarily come to us in the form of language.” In this way Finnish artist Osmo Rauhala (2003, p. 24) has tried to come to some expression of what art entails. Art activities offer a person unique, often non-cognitive ways of interpreting and signifying experiences in the world. They have a tendency to reach the sensory, perceptual, emotional, cognitive, symbolic and creative levels of human beings. Through the making and contemplation of art, a person’s ability enhances to get in closer touch with the inner levels of the psyche. At the same time, such activities feed and guide our sensibility for reality and life. They can sharpen and refine our perception and make us sensitive for the mystery of the things around us. Artistic flavor, says Meri-Helga Mantere, “comes from both delicate and rough beauty, sensuous experience, from surprises and awe, inner movement (emotion) of heart and soul.” Much of this, she adds, is not called art but is an aesthetic and spiritual quality of anyone’s life, and it can be enjoyed without burdening the environment (Mantere, 2004).

Through art, we can see and approach earth afresh. Art also has a capacity to stop us in our tracks. Art can throw us out of kilter, provoke us. It may catch us off-guard or hit us unexpectedly. This estrangement or defamiliarization is an important quality of art. It helps us to review and renew our understandings of everyday things and events which are so familiar to us that our perception of them has become routine. In that sense working with art encompasses a learning experience which is fundamentally open-ended. American cartoonist Scott Adams (1996) once put it like this: “Creativity is allowing yourself to make mistakes. Art is knowing which ones to keep.”

As Stephen Nachmanovitch (1990) beautifully elaborates, in musical improvisation one's "mistakes" can be one's most meaningful gifts. Finally, art can open us up to chaos, to the presence of contradiction, paradox and ambiguity, and this quality of art can be of great value in our current times.

I want to state right from the outset that my attention is primarily aimed at art as process, on the verb of artmaking rather than on the nouns of artwork and artist. In this dissertation, when I use the concept of "artistic process," I mean that every human being can participate meaningfully in some form of artistic activity; I try to shift the attention to the act of creating and releasing something new and meaningful into the world. Rather than referring to artmaking as exclusively coming forth from talent, skill or mastery, I use the rather basic and loose and common definition of art as the product or process of deliberately arranging symbolic elements in a way that influences and affects one or more of the senses, emotions, and intellect. If one understands art in this way, one can easily see, with environmental artist Joseph Beuys, that *everybody* is an artist. As Meri-Helga Mantere, explains, everybody has in potential the sensing, perceiving, feeling and thinking capacities that are needed. Her own experience as art therapist has proven to her again and again that everybody has expressive skills. We all have our unique touch, unique voice and unique way to move. Sir Herbert Read (1946) put it this way: "The aesthetic view of life is not confined to those who can create or appreciate works of art. It exists whenever natural senses play freely on the manifold phenomena of our world, and when life as a consequence is found to be full of felicity" (p. 123).

Thus understood, artmaking can take both the established artist and the first-time participant in a workshop by surprise. Ellen Dissanayake has written extensively about the connections between art and anthropology. She maintains that ever since the idea arose in the eighteenth century that there is a demarcated domain that can be designated as "art," the dominant idea in Western culture has been that art is "superfluous, an ornament or enhancement, pleasant enough but hardly necessary" (Dissanayake, quoted in Gablik, 1997, p. 38-39). Art was assigned to certain culturally sanctioned objects and aesthetic experience was idealized. In that way, the modern view of art, according to Dissanayake, is at odds with what she takes to be its biological and even evolutionary significance. For Dissanayake, art is as normal and natural in human evolution as is the use of language or tools. To her, what artists do is merely an intensification and exaggeration of what everyone does quite naturally. Dissanayake does not hesitate to consider art as "a universal behavior that characterizes our species." This behavior sets out – and this is her shorthand definition of art – "to [make] important things special" (*ibid.*, p. 43).

There is something specific, unique and irreducible about artistic process as a way of learning about and coming to new understandings of the world. Artmaking can be seen as a process of learning in itself. Herbert Read's (1943) notion of education *through* art implies an epistemology in which artistic or creative pedagogies can be applied to other fields of learning, including efforts to gain a deepened understanding of the natural environment. From what different artists tell us – from Paul Cézanne

in the late nineteenth century to Andy Goldsworthy in our time – we can learn some aspects of what it means to approach natural phenomena with an open mind through art, of what happens when one, in the encounter with the natural world, is able to lessen the influence of the controlling mind and “surrenders” oneself to process. A common thread in such accounts is that the artistic creation comes forth in and *through* its execution: it is not planned on beforehand, but, as it were, “stumbled upon.” Put differently, the person becomes a vessel or conduit through which a transpersonal force flows (Nachmanovitch, 1990, p. 32). Painter Paul Cézanne expressed it this way: “The Landscape becomes reflective, human, and thinks itself though me. I make it an object, let it project itself and endure within my painting ... I become the subjective consciousness of the landscape, and my painting becomes its objective consciousness” (Cézanne, quoted in Medina, 1995, p. 221). According to Galen Johnson (1993), Cézanne, in his landscape paintings, in effect presented us with a paradigm for pre-scientific perceptual experience of the earth; it was particularly this aspect of his art that caught Merleau-Ponty’s interest and was cause to much reflection on the phenomenology of painting, e.g. in his text *Cézanne’s Doubt* (1945/1993a).¹²

2.4.1 Creativity and receptivity

Surrender to an art-mediated experience of nature is not a passive affair. The deep and intertwining relationship between states of receptivity and creativity, craves a heightened and very tuned attention to the world. For, as the Romantics held, it is only to the extent that we are able to open ourselves to her, that nature reveals itself to us. The idea is expressed well in this poem of the Flemish poet Guido Gezelle (1830–1899):

When the soul is listening, all speaks a tongue that lives. Even the faintest whispering talks and soul-sound gives. All the rustling tree-leaves flutter and babble silvery and waves of pure streams murmur loud their ecstasy. Winds, meadows and clouds clear, white paths of God’s holy Feet, whisper all and tell us he deeply hidden word, so sweet. . . . When the soul is listening. . . (Gezelle, cited in Van Roosbroeck, 1919, p. 56)

¹² Merleau-Ponty contrives the quotation to “The landscape thinks itself in me ... and I am its consciousness.” He comments on it that “[n]othing could be farther from naturalism than this intuitive science. Art is not imitation.... It is a process of expression” (1945/1993a, p. 67). Cézanne himself describes it as a move from an initial practice of geometry when the artist’s makes his first sketches – the measurement of the earth – to nothing less than a *deliverance* brought about by color: “Color that expresses the radiance of the heart, that gives an outward form to the mystery of vision, that links earth and sun, the ideal and the real! An airy, colored logic suddenly ousting somber, stubborn geometry” (Cézanne, quoted in Gasquet, 1921/1991, p. 154). It is important to note here that we are presented – just as Merleau-Ponty – with Cézanne’s words through the lens of Joachim Gasquet (1921/1991) who published his memoir of conversations with his artist friend fifteen years after his death.

Gezelle approached every plant, stone and animal with brotherly love and respect. He taught us, in the words of his English translator Van Roosbroeck (1919), that nothing can be so new and fresh as the very objects we behold daily, “the very things which, tired of their humble appearance, we have neglected while hunting for strange and rare beauty in the limitless lands of imagination” (p. 56). Because Gezelle perceived, as Van Roosbroeck puts it, “the soul of things,” the phenomena in the world kept their original purity and beauty to him.

In Lewis Carroll’s classic *Through the Looking Glass*, Alice, the protagonist, is trying to find her way through the magical world she has stumbled upon at the other side of the mirror. In the second chapter, entitled “The Garden of Live Flowers,” she comes upon a large flower-bed, with a border of daisies, and a willow-tree growing in the middle. This is what happens:

“O Tiger-lily,” said Alice, addressing herself to one that was waving gracefully about in the wind, “I wish you could talk!”

“We *can* talk,” said the Tiger-lily: “when there’s anybody worth talking to.”¹³



Figure 2: Alice and the Tiger-lily
(From Lewis Carroll’s *Through the Looking Glass*)

13 Thanks to Erica Fielder, who alerted me to this quotation of Lewis Carroll.

Only by being fully attentive, we perceive clearly what is there, ready to “reveal itself.” In the film *Rivers and Tides* (2001) land art artist Andy Goldsworthy comments on a sculpture he has just completed at the rocky coast of Nova Scotia in Canada. He has used pale driftwood that is about to be carried away by the incoming tide of the sea. The tide creates whirlpools, and Goldsworthy feeds that motion into his art piece. At some point the installation of branches is lifted up and starts floating on the currents of the rising sea. We hear Goldsworthy give the following account:

It feels like it has been taken off into another plane, taken off into another world.... You feel as if you have touched the heart of the place. That's a way of understanding for me. *Seeing something you never saw before, that was always there, but that you were blind to.* There are moments when it is extraordinarily beautiful, when a piece of work happens that is. . . that are those moments that I just live for. (Goldsworthy, quoted in *Rivers and Tides* by Riedelsheimer, my transcript, emphasis added)

In such instances, it seems to me, a key relationship is at play between creativity and receptivity, to the extent that a greater receptivity towards our environment has a stimulating impact on our creative endeavors. And conversely, in a mirrored relationship, when a person's creativity is provoked, his or her receptivity to phenomena in the environment may be increased to the same extent. According to Stephen Nachmanovitch (1990), the creative and the receptive, making and sensing, “are a resonant pair, matching and answering each other” (p. 34).

I believe art practice thus has great value in efforts to “draw closer to nature” (London, 2003) because it encourages such an open orienting to the earth. In my view, such intertwining of (and shifting between) states of being creative and being receptive is characteristic of AEE, and, for that matter (as Dewey articulated), of any deep learning experience, and this is a theme that I will repeatedly revisit in the course of this thesis. In the following, I want to look a bit closer at what we encounter when we are more fully receptive to the natural world. Perhaps this comes most clearly across when we look at children's interactions with nature.

2.4.2 Loose parts and affordances

When a child finds an object such as a rock, a branch or a pine cone, or when it plays with sand, water or leaves, such materials seem to provide more opportunity for different kinds to play than standard play equipment. Found objects invite the child to test its creative and physical abilities. The term for such items is *loose parts*, which can be a variety of materials, both natural and created, and which can be used individually or in combination. Thus, they can take on the form of whatever is imagined (Fjørtoft, 2000; Belinda, 2007). The concept of loose parts was first coined as term by architect Simon Nicholson (1971), who carefully considered landscapes and

environments and the possibilities they offer. Nicholson was convinced that all humans are creative in one way or the other and the loose parts that were available in any given environment would empower their inventiveness. Many play experts and early childhood educators have since adapted the theory of loose parts. When playing with such loose objects, a child is in fact carefully considering the materials and environments it uses. These shattered and ready-at-hand elements create endless possibilities for creative engagement. For example, if a child picks up a rock and starts to play, most likely that rock can become anything the child wants it to be. The freedom provided invites the child to think about and choose how it wishes to use it. Loose parts are materials that can be moved, carried, combined, redesigned, lined up, and taken apart and put back together in multiple ways. This is how the relation between creativity and loose parts was conceived of by Nicholson: “In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it” (p. 30). A loose-parts toy is open-ended. A typical list of loose parts for a natural play area might include water, trees, bushes, flowers, and long grasses, a pond and the creatures within it, along with other living things, sand, places to sit in, on, under; structures that offer privacy and views. Go beyond that play area, to woods, fields, and streams, says Louv (2005), and the parts become looser and even more potent to the imagination.

A concept akin to that of loose parts is James Gibson’s notion of *affordances*. When we move through and perceive elements in a certain environment, we perceive also what they afford. Gibson (1979) defined the affordances of the environment at hand as that what it offers the animal (including the human animal) – that is, what it provides or furnishes, either to its good or to its detriment. These affordances, as Abram (1985) summarizes, “are the way specific regions of the environment directly address themselves to particular species or individuals. Thus, to a human, a maple tree may afford ‘looking at’ or ‘sitting against,’ while to a sparrow it affords ‘perching,’ and to a squirrel it affords ‘climbing’” (p. 99). Furthermore, these values, Dolores LaChapelle (1988) adds, are not found inside the minds of the animals. Rather, “they are ... a reciprocal interchange between the living intentions of any animal and the dynamic affordances of its world.... The psyche ... is a property of the ecosystem as a whole” (p. 108).

Tim Ingold (2000/2011) elucidates that Gibson’s understanding of this reciprocity comes forth from his conception of perception as an action that is not the achievement of a mind in a body, but of the organism as a whole in its environment. As such, it “is tantamount to the organism’s own exploratory movement through the world.” This, Ingold goes on to say, makes “mind” immanent in the network of sensory pathways that are set up by virtue of the perceiver’s immersion in his or her environment” (p. 3). Elsewhere in the same book he explains: “...the perceptual systems not only overlap in their functions, but are also subsumed under a total system of bodily orientation.... Looking, listening and touching, therefore, are not separate activities, they are just different facets of the same activity: that of the whole organism in its environment” (p. 261).

David Abram (1996a), in his *The Spell of the Sensuous*, makes the same point. The experiencing body, he points out, is not a self-enclosed object, but an open, incomplete entity. The senses are arranged in such a way that we have multiple ways of encountering and exploring the earth: listening, touching, seeing, tasting, and smelling:

[A]ll of these various powers or pathways continually open outward from the perceiving body, like different paths diverging from a forest. Yet my experience of the world is not fragmented; I do not commonly experience the visible appearance of the world as in any way separable from its audible aspect, or from the myriad textures that offer themselves to my touch. ... [Thus] my divergent senses meet up with each other in the surrounding world, converging and commingling in the things I perceive. We may think of the sensing body as a kind of open circuit that completes itself only in things, and in the world ... it is primarily through my engagement with what is not me that I effect the integration of my senses, and thereby experience my own unity and coherence. (p. 125)

In an interview that I held with Abram, I asked him how he – given his view as quoted above – would respond to Arne Naess's notion of a “wide identification” with the more-than-human world. Naess would encourage people to expand their customary self so that it would start to include more of the earth around us, thus nurturing an “ecological self” (Mathews, 1991). For Naess, such identification entails that one sees part of oneself in that with which one identifies. This is Abram's answer:

Art, at least sometimes, is borne of a more active interaction between oneself and the world. Rather than identifying with the enormity of nature, we have to allow that there is an *otherness* to the world around us. I am part of this world, but this earthly world exceeds me, it exceeds the human. It has aspects that are so strange and alien, and then the creations that we make are like creatures born almost out of a loving intercourse between oneself and that which one lends one's attention to. It seems to me that it is very hard to make love to a tree or to a hillside or a landscape if I feel that I *am* the landscape. Then somehow the Eros doesn't pulse between us. But if I feel like I am a part of the landscape, then I can so easily fall in love with other parts. (D. Abram, personal communication, November 11, 2010)

As I mentioned before, many indigenous peoples share the view that humans are an integral part of the land or landscape that sustains them, and from that perspective the dilemma between a too close identification with nature or losing the pulse of Eros is non-existent. A case in point is the way Saami scholar Ánde Somby (1995) conceptualizes the traditional chant of the Saami, the joik (or *yoik*, as he writes it). He claims that it is one of the oldest forms of music in Europe, and once an important part of their religious practices. The contrast Somby makes between the western European notion of singing and yoiking is instructive:

[O]ne does not yoik about someone or something, but one simply yoiks someone or something. In a manner of speaking, a yoik has no object. In fact, it is altogether impossible to envision yoik in terms of subject and object.... Even for the trained ear, it is difficult to hear the difference between an animal's yoik and a person's yoik. The reason is simply that people, animals and land are not as distinct in the Saami mind as in the western European mind. (Somby, 1995)

The difficulty, it seems to me, is how (or perhaps better: *if*) we, in our disenchanted world, can meaningfully re-find such an embodied relation to the land. As Ton Lemaire (1976) suggests, only moderns are able to recognize and to interpret a myth as *being* a myth. It is the “demythologization” that enabled such a modern understanding. The challenge is also contained in Elias Canetti's provocative thought of an imaginary point in time (see previous chapter) after which things ceased to be real, a point which we – exactly because we have moved beyond it – can never demarcate, according to Baudrillard.

In the same conversation with David Abram that I referred to above, he presented me with another way of looking at the affordances that objects in the environment offer us. The root of the word matter, he points out, is *mater*, and the old word is *matrix*, which means womb.

Matter is like the womb of all things. Then, matter [he knocks on a chair] – this stuff – is *inexhaustibly* strange. It is neither inert nor inanimate; it doesn't need some spirit to come from somewhere else into it to make it alive. It is already alive *if* we would allow it, if we would listen. And you *feel* some pulse that moves differently in each kind of material. (D. Abram, personal communication, November 11, 2010)

Abram doesn't believe that there is a chasm between things that are pure or natural, and other things that are artificial or technological. When somebody says that something isn't real nature, he explains, that person then also makes a cut in his or her own body: saying *yes* to some part of oneself but *no* to some other part. Abram illustrates this by pointing out that he is mindful of the fact that he arrived to the place where we meet by airplane, and that he writes on a computer. Yet, he holds that there is something alive in him, something wild in his person, which he can taste, feel, and choose to trust. This “something wild” is still breathing, or *dreaming*, in and with these man-made phenomena, even if it is hidden.

Everything I love in this world, like the forest, is filled with shadows; it's the *chiaroscuro*, the interplay of shadow and light. But the shadow is not an alternative to the light – it is made possible by light! It is necessary. If the land would not have shadows, it would be flat. Because it has shadows it's like the whole things stands up in depth, with some parts closer and some parts farther. So I am looking for a more full sense of “the good,” which has within

it room as well for shadow and grief. It seems that without the shadow, the world... maybe is pretty, but not beautiful. (D. Abram, personal communication, November 11, 2010)

Ultimately, for Abram, whenever there are these binary opposites, they tend to hide, or make invisible, the multiplicity and the rich differentiation of the world. For the philosopher and slight-of-hand magician, the “good-bad” logic (“wild nature good, technology bad”) just seems to be continuing the same mindset that created the mess we find ourselves in. For him, the word *discernment* is appropriate here: it is the ability to distinguish differences and different qualities of things. Because there are not just *two* primary qualities; those two dissolve into multiplicity, in many different qualities. “It’s recognizing that shadow is not the contrary of light but its necessary consequence.” Abram adds that what our animal body “knows,” in a profound sense, is much older and multiple than what consciously comes to the surface. “At the heart of matter is always something that is breathing; matter itself is alive – *every* part of it. Even the little bit of air here has its own life, which is different from the air that is over there in the room.”

David Abram’s view on how the open circuit of our sensing body commingles with the rest of matter in a thoroughly animated universe presents a radical rupture from how we moderns are used to conceive of our interaction with our environs, even in attempts that aim to remedy the disconnection between humans and nature, such as prevailing practices of environmental education. It seems that through our upbringing and education, we have grown out – or perhaps better formulated: have been educated out – of a felt relationship with the patterns that connect us to earth, rather than that our bond has been intensified. How this could happen, and how we may possibly *begin* to remedy the situation, is the subject of the next section.

2.5 Education: part of the problem or of the solution?

If education is the solution, what is the problem? David Orr, professor in Environmental Studies, opens his introduction to Stephen Sterling’s (2001) small booklet entitled *Sustainable Education: Re-visioning Learning and Change* with this pointed question. Most policy makers would conceive of education as primarily a means, a trajectory, to provide young people for careers in the global economy. By consequence, in many countries – like in the United States, Orr’s own country – the focus has been on performance standards and testing, to the expense of encouraging critical thinking, creativity and ecological awareness.

Almost three decades ago, philosopher Ivan Illich (1973) famously argued that “schooling” confuses teaching with learning. This is how he opens his book *Deschooling Society*:

Many students, especially those who are poor, intuitively know what the schools do for them. They school them to confuse process and substance.

Once these become blurred, a new logic is assumed: the more treatment there is, the better are the results; or, escalation leads to success. The pupil is thereby “schooled” to confuse teaching with learning, grade advancement with education, a diploma with competence, and fluency with the ability to say something new. His imagination is “schooled” to accept service in place of value. (p. 9)

Classroom attendance, says Illich, removes children from the everyday world and “plunges them into an environment far more primitive, magical, and deadly serious.” It is only by suspending the rules of ordinary reality that schools could create such an enclave, in which, as he sees it, the young are “physically incarcerated during many successive years” (p. 32).

Now it may be argued that schools have changed a lot since Illich made these observations. However, people like Sir Ken Robinson (2006) persist in making the same type of claims. In a TED lecture, entitled, “Ken Robinson says schools kill creativity,” he sketches a picture that verifies Illich’s dire condemnation of schooling:

What we do know is, if you’re not prepared to be wrong, you’ll never come up with anything original.... [B]y the time they get to be adults, most kids have lost that capacity. They have become frightened of being wrong.... We stigmatize mistakes. And we’re now running national education systems where mistakes are the worst thing you can make. And the result is that we are educating people out of their creative capacities. Picasso once said this. He said that all children are born artists. The problem is to remain an artist as we grow up. I believe this passionately, that we don’t grow into creativity, we grow out of it. Or rather, *we get educated out if it.* (emphasis added)

In standard schooling, with its drill-and-practice programs, it may be relatively easy to discern how teaching comes in the way of learning. In other forms of both formal and non-formal education, however, this phenomenon may be less obvious and harder to pinpoint. When a teacher sets the stage by determining the assignment and providing the materials that are to be used, it will be likely that he or she, by doing so, in effect steers towards certain (expected) outcomes, some of which spring forth from the very framing of the teaching itself – its setting, its procedures, the length of the time slot in a school day’s schedule, etc.

Gregory Bateson’s concept of “context markers” might be helpful when trying to grasp how such “implicit steering” may come about. Bateson found that organisms sometimes respond differently to the same signal if it is presented to them in a different context. He believed that this may be due to recognition of the particular context they have entered. By consequence, we can see that children for example tend to behave differently in the classroom, the school yard, or the family home. All these settings act as coded messages about appropriate responses (cf. Charlton, 2007). In 1973, the same year as Illich’s *Deschooling Society* appeared in print, Steward Brand conducted an extensive interview (for *Harper’s Weekly*) with Bateson, who, at

the time, was hardly known. One of the themes they take up is the “Madness of the Laboratory.” Bateson explains to Brand which particular kind of framing a laboratory experiment brings along:

[T]he experiment always puts a label on the context in which you are. You can't really experiment with people, not in the lab you can't. It's doubtful you can do it with dogs. You cannot induce a Pavlovian nervous breakdown – what do they call it, “experimental neurosis” – in an animal out in the field.”
 ... You got to have a lab [b]ecause the smell of the lab, the feel of the harness in which the animal stands, and all that, are context markers which say what sort of thing is going on in this situation. ... [S]uppose you've got an animal whose job in life is to turn over stones and eat the beetles under them. All right, one stone in ten is going to have a beetle under it. He cannot have a nervous breakdown because the other nine stones don't have beetles under them. But the lab can make him do that, you see. (Bateson, cited in Brand, 1973, p. 34)

Of course, the conditioning effect exerted by the context of a lab is not the same as what a classroom brings to bear on a student, but the artificiality of the educational setting – so different from being “out in the field” – may lend some substance to the comparison.

A specific kind of steering and purposiveness is operative in environmental education. Commonly it has as its explicit goal that the learning process (through the teaching of scientific knowledge stemming mostly from the natural sciences) ought to augment the inclination of learners to behave responsibly towards nature, now and in the future. This approach is often based on the (implicit and taken for granted) didactical triad of “knowledge,” “attitude” and “behavior”: Learning is perceived as a form of instruction in which the gaining of knowledge eventually will have an effect on the attitude of the student, which, on its turn, will lead – or so is hoped for – to a change of her or his behavior. The desired effect is that people start behaving in an ecologically more responsible and sustainable manner and actively act to protect and conserve the natural environment. In the documentary film *Play Again*, Charles Jordan, Chair of the Conversation Fund, makes this statement about future generations: “What they will not value, they will not protect. And what they will not protect, they will lose.”

However, even with good intentions, the goal of inducing desired behavior through imparting appropriate ecological knowledge may backfire. Here is the experience of Finnish art educator Sara Tobiasson (2007), working in primary education on the Åland Islands, which she shares in her blog:

Today one of the youngsters I get to borrow during the days sighed and said; “I'm so tired of saving the world. Can't we do something else for a change?”

... In the classes for biology and geography there has been one environmental problem after another that we have tried to understand and come up with a so-

lution for. Too many crises. And I see that the disasters that the Western civilization has built up are now thrown in the arms of the young generation. It rolls over them through every media, and it probably just makes them numb....

In the next part, Tobiasson tries to find a way out of this negative spiral.

After young J said he was tired of saving the world I realized we have to work the other way around. Through learning to stop and to give beauty time, one probably saves the world a little. We all influence each other in so many ways, and especially when one has the ability to share what's amazing and untamed in this world he or she plants a seed than can become a garden. (Tobiasson, cited in van Boeckel, 2009)

Tobiasson is not the only educator to argue that a top-down mode for conveying knowledge is not the preferred model of instruction, but that rather direct sensorial engagement with the earth should be the first concern. Rachel Carson (1965/1998) expressed this line of reasoning well:

I sincerely believe that for the child, and for the parent seeking to guide him, it is not half so important to *know* as to *feel*. If facts are the seeds that later produce knowledge and wisdom, then the emotions and the impressions of the senses are the fertile soil in which the seeds must grow. The years of early childhood are the time to prepare the soil. Once the emotions have been aroused – a sense of the beautiful, the excitement of the new and the unknown, a feeling of sympathy, pity, admiration or love – then we wish for knowledge about the object of our emotional response. (p. 56)

There are also critical views. Constance Russell (1999), for example, questions the linear thinking that starts with the belief that the environmental crisis has been caused by human disconnection from nature, and that thus the job of environmental educators is to provide nature experiences to heal this rift. She warns against treating nature experience as some sort of panacea. To her, it is part of the problem one seeks to address, to expect that nature experience would *automatically* contribute to environmental awareness, commitment and action.

But perhaps, in the end, it is our concept of education *itself* which is at the core of the problem.

2.5.1 Sustainable education

Stephen Sterling (2003), in his thesis “Whole systems thinking as a basis for paradigm change in education,” tries to outline why his approach to education is radically different from mainstream approaches. According to him, we are experiencing a change

in our “cultural root metaphor,” a shift from “mechanism” to “living systems” (p. 9). In Western scientific thought, he asserts, most emphasis is put on binary logic, analysis, distinctions and unidirectional causality, rather than pattern recognition, synthesis and feedback. To counter this one-sidedness, Sterling suggests that we need to think in a fundamentally different way about education, and therefore he opts for the new term of “sustainable education,” suggesting a need for a culture shift in educational thinking and practice *itself*, rather than working towards a form of “education for sustainability” which tends to put the emphasis on the *effects* of education. Because of this, Sterling makes a distinction between education as *subject* of change, and education as *agent* of change. Most mainstream education, in his view, sustains unsustainability – through uncritically reproducing norms, by fragmenting understanding, by sieving winners and losers, by recognizing only a narrow part of the spectrum of human ability and need, by an inability to explore alternatives, by rewarding dependency and conformity, and by servicing the consumerism. Mainstream education, he argues, is deeply influenced by the prevailing paradigm in society which sets the context within which education operates.

Sterling argues that our response to the effect of patterns of unsustainability on our current and future prospects should not be predicated only on the integration of sustainability into education, because this invites a limited and primarily adaptive response. He regards environmental education and education for sustainable development as systems of interest and overlapping subsystems within the larger context of education. However, if we were able to foster systemic and fundamental change in the dominant educational paradigm, says Sterling, then we might create more opportunities, so that EE can flourish further and influence the whole, rather than remain marginalized as it presently is. Eventually, in his view (to which I subscribe) there possibly would be no need for any separately identified EE altogether, as the whole of education would look different from its current state and would intrinsically accommodate for learning about our living environment.

2.5.2 Peripheral vision

With Sterling, Mary Catherine Bateson (1994) – Gregory Bateson’s oldest daughter – argues that in our prevailing understanding, education is too narrowly defined. In her view, most of our learning in life takes place *outside* the settings that are commonly labeled as educational, and it includes intuitive and empirical dimensions. The latter are often overlooked in customary approaches to education. Though she doesn’t deny the value of formal schooling, it needs to be complemented by learning from direct experience, and one of the most remarkable forms that she identifies is “peripheral vision.” The price we as society pay for our overvaluing of specialization and dedicating ourselves to one pursuit at a time is that this narrowly focused attention is likely to limit our learning. It impedes our ability to connect our different life experiences in a meaningful way. For example, the ability to confront a change in circumstances depends on

the extent to which one can see the change taking place. Sometimes, says Bateson, the change is directly visible, but at other times “it is apparent only to peripheral vision” (p. 6). At such instances, the meaning of the foreground is altered. In a rapidly changing world, it may very well be the case that essential themes are not clearly marked to us but rather visible only “out of the corner of the eye.” Even more, our trusted habits of attention and perception may blind us to what we need to know: “Resources we have relied on to shape our lives may turn out to be dangerous addictions or spin into new shapes as the earliest versions of emerging patterns” (p. 8). Mary Catherine Bateson suggests that, as an image, the spiral is a better metaphor for how we actually learn. “Spiral learning moves through complexity with partial understanding, allowing for later returns. For some people, what is ambiguous and not immediately applicable is discarded, while for others, much that is unclear is vaguely retained, taken in with peripheral vision for possible later clarification” (p. 31). In the past, she points out, memorization was a common form of learning; children would learn long passages of poetry and scripture by heart without understanding them. They could then spend the rest of their lives to “spiral back” to explore the meaning: “What was once barely intelligible may be deeply meaningful a second time. And a third” (*ibid.*).

A compelling illustration of this phenomenon is provided in Navarre Scott Momaday’s (1977) *House Made of Dawn*. Scott Momaday, a Kiowa-Cherokee who won the Pulitzer Prize for this novel, draws on his people’s oral traditions of storytelling and its concomitant aesthetic of reception. One character in the novel, Tosamah, revisits his youth in recurring flashbacks. Through his childhood experience with his grandmother, Tosamah has come to learn and realize how human life is controlled by the word:

My grandmother was a storyteller; she knew her way around words.... She told stories, and she taught me how to listen. I was a child and I listened.... [S]he taught me how to live among her words, how to listen and delight.... When that old Kiowa woman told me stories, I listened with only one ear. I was a child, and I took the words for granted. I did not know what all of them meant, but somehow I held on to them; I remember them, and I remember them now.... When she told me those old stories, something strange and good and powerful was going on. I was a child, and that old woman was asking me to come directly into the presence of her mind and spirit; she was taking hold of my imagination, giving me to share in the great fortune of her wonder and delight. She was asking me to go with her to the confrontation of something that was sacred and eternal. It was a timeless, timeless thing; nothing of her old age or of my childhood came between us. (p. 88)

What strikes me in this passage is that apparently the primal concern in the storytelling isn’t whether or not the child is able to pick up meanings while the story is actually being told; there seems to be a trust that meaning-making will extend over time, and latent meanings may become manifest from the periphery of attention, if and when the person concerned is receptive to and ready for them.

Like Sterling, Mary Catherine Bateson (1994) holds that our entire concept of education needs to be rethought, and with him she also insists that it is a mistake to try to reform the educational system *without* revising our sense of ourselves as learning beings. A fundamental aspect of such a pursuit would be to better understand the improvisational base of learning, and how we make sense of the world through stories and learn from experience.

This is how Barbara Hurd (2003) makes a similar argument about knowledge coming from the periphery in a natural environment like a bog or a swamp:

The moment you decide to stare down the periphery, it is no longer periphery. What might have been there either will overwhelm you or, more likely, will sink out of sight, melt back into the trees, retreat to the inaccessible reaches of memory.

The paradox is that to see clearly, you must learn to see obliquely. You must look ahead and, at the same time, widen your peripheral vision so that it extends not just in great arcs around your head, but over the edge, into the margins where the visible and the invisible, dreams and reality, land and water, emptiness and profusion mingle. The sublime is like poetry; it will not be caught or chased down. It exists at the edge of things, in the vast margins, like a wild animal. The trick is to learn how to wander there without intention, to float eye-to-eye with fringed orchids, to make your self available to what lives there, whether it is the rare bittern or a poem or the whole damp and water-lilled world. (p. 12)

Bateson, Scott Momaday and Hurd provide us, each in their own way, a glimpse of what a very different type of education could entail. Characteristic in it is that the phenomena are not approached head-on or presented to us in “bite-size chunks.” From where we are right now, embedded in and raised through the kind of educational system that still holds sway today, it is very difficult to envisage an alternative which is not in some way or the other a variation of what is at hand. But what seems safe to say is that in opening up to such peripheral vision, art could probably play a key role. In the following section I take a closer look at what education through art may entail.

2.5.3 Education through art

My own conception of art education is that it, in contrast to other forms of education (including EE), is not predisposed to prepare the soil for a set of outcomes that are given on beforehand. Artmaking as process is grounded in curiosity and is in a fundamental sense open-ended. Typically, it starts from not-knowing and it may end up in ambiguity and paradox. Art assignments often provoke, they challenge the artmaking learner, and the ensuing result often surprises both art teacher and student. In 1943,

Herbert Read caused as stir in the educational establishment with the publication *Education through Art*. “What I have in my own mind,” he said about his approach, “is a complete fusion of the two concepts, so that when I speak of art I mean an educational process, a process of upbringing; and when I speak of education I mean an artistic process, a process of self-creation” (Read, 1966, p. xxiii). He believed that expression in the arts provides a natural approach to academic subjects. Read held that without art experience, no one could properly open themselves up to the living earth. In fact much of it would remain hidden to them (Cannatella, 2007). Yet many education systems tend to place supposed core learning areas such as reading and writing, math, science and social studies above arts subjects. The latter have a low status; they are considered fun and enjoyable but not key learning areas (Burridge, 2003).

According to professor of education and art Elliot Eisner (1998), the problems we encounter in life are much like the problems encountered in the arts: “They are problems that seldom have a single correct solution; they are problems that are often subtle, occasionally ambiguous, and sometimes dilemma-like.... Life outside of school is seldom like school assignments – and hardly ever like a multiple-choice test” (p. 84). Eisner (2002) has provided a list of ten lessons that he believes the arts teach to children. In the following, I will refrain from presenting an exhaustive account and instead summarize some of these teachings below. Additionally, though Eisner focuses his attention on children, I believe his points hold for all age groups, and therefore, I refer to learners in general. One of the key benefits of the arts that Eisner identifies is that they teach learners to make good judgments about qualitative relationships, rather than to be able to provide correct answers. Related to this is his contention that the arts teach people that questions can have more than one answer. There are many ways to see and interpret the world, and art celebrates this multitude of perspectives. In complex forms of problem solving, purposes are seldom fixed, Eisner holds; rather, they tend to change with circumstances and opportunity. Learning in the arts requires the ability and willingness to surrender to the unanticipated possibilities of the work as it unfolds. Art constitutes a way of knowing that embraces more than can be expressed verbally. Words do not exhaust what we can know. The limits of our language, says Eisner, do not define the limits of our cognition. When persons are encouraged to put in words what they feel because of art they need to reach deeply in their poetic capacities to find the right words. The arts, in his view, enable us to have experiences we can have from no other source. And through such experiences we are encouraged to discover the range and variety of what we are capable of feeling.

Though the value of art in educational contexts may be undervalued and underdeveloped, there is also a pitfall of attributing too high expectations to its power. Many artists embrace the view that efforts to make the aesthetic experience in some way a vehicle for moral or ethical values ought to be rejected (cf. MacLagan, 2001), and art educators may revolt at the idea of “harnessing” art in an educational context (or *any* context for that matter), “forcing” the artistic process to give certain preconceived answers. Basically, so goes the argument, this amounts to an instrumentalist approach to the artistic process, which, in itself, ought to be fundamentally autonomous (“*l'art pour*

l'art"). At that, it is also to a large extent beyond our grasp. As David Maclagan (2001) asserts about visual art: we are more aware of the *effects* of painting (many of them subliminal) than of the processes that gave rise to them. It seems to be a defining characteristic of the Western mindset that in our culture we tend to focus more on facts (effects and outcomes), than on process. The creative process in itself remains largely a mystery.

When we now consider the contribution artistic practice can make in the context of deepening the participants' connection to the living earth, there are obvious challenges that spring forth. First of all, it is – in light of the cautious remarks above – not entirely inconceivable that artmaking as part of EE paradoxically has a *counter-productive* impact – that is to say, that it leads to an effect that turns out to be antithetical to the hopes and desires the proponents have invested in it. (And this may especially be the case when the *only* measure and frame of reference are the extent to which the endeavor has contributed to ecological sustainability). It is unlikely, but not impossible, that there are cases where there is *no* added value, or perhaps even a *negative* value, in encouraging artistic practices in the context of EE. This happens for example when the effect of partaking in the artistic activities is not an enhanced ecological sensibility and a concurrent augmentation of a fostering and caring attitude for the natural world, but the *opposite*: an attitude of indifference, or perhaps even the display of environmentally destructive behavior, given the fundamentally open outcome of creative processes. Whatever the case may be, there remains a relative foreignness of the domain of art to environmental education, and of the theme of nature to art education. This may cause the result of efforts to bring them together to be like a "cuckoo's egg" of a foreign element placed in the wrong nest, as it were. Similar to the unease on the part of some artmakers who fear that art suddenly has to be goal-oriented, environmental educators, conversely, may also have cold feet about engaging with the arts. One can expect that they are not readily motivated to engage in artistic activity with their students. They may conceive of art as a domain that is totally foreign to education about such seemingly straight-forward and clearly demarcated subjects as ecological integrity, biodiversity, natural history and natural selection.

2.6 Artmaking and nature study coming together

The name of the zoo of the city of Amsterdam is *Artis*. At some point during their formative years, many Dutch children learn that this name is derived from the old Latin aphorism *Natura Artis Magistra*, "Nature is the teacher of art." This could well be one of the earliest – in any case one of the most condensed – descriptions encapsulating the essence of what binds the triangle of art, environment and education together. The idea that art can help us to connect to and gain understanding of nature has a long history. Within the space and context of this thesis, it would be impossible to provide a comprehensive and exhaustive historic overview of how the bringing together of education in the arts and the experience and study of our natural environment was consciously conceived and came to be regarded as a worthwhile pursuit. Moreover, when attempt-

ing to trace such a genealogy of the field, one has to bear in mind that this will inescapably be a lineage that is drawn from a narrow Western ethnocentric perspective.¹⁴ In the following, I take a closer look at the condition of possibility, in the Western world, of intentionally bringing nature, art and education together in a triangle of mutually reinforcing relationships.

Tracking the nascence of the deliberate choice of educators to seek immersion of their pupils in nature so that they, through aesthetic experience, can gain specific and deeper understandings which orthodox scientific practice cannot offer, one is of course led to the Romantic Period. As mentioned earlier, Romanticism came to the scene in the late eighteenth century, with proponents such as Goethe, Blake, and the “father” of the movement, Jean-Jacques Rousseau (1712-1778). The latter’s book *Emile, or On Education* (1762) is of special importance here. Most educators acknowledge, according to Terence Dawson, that Rousseau can be credited with making enormous contributions to educational theory, among which his view that the objective of education is not to impart the presumed facts about a subject but to develop the child’s love for learning and its ability to learn about it in its own way (Dawson, 2008, p. 61). According to art historian Christopher Green, Rousseau gave drawing an epistemological function and presented it as a “way of progressively learning about the world.” Rousseau put emphasis on retaining an “infantile innocence of vision” into adulthood. Such a supposed uncorrupted and objective view of the world would allow a person a true grasp of the real, or so Rousseau believed (Green, in MacDonald, 2010, p. 118). Rousseau regarded children as great imitators, for they all try to draw. Therefore he would encourage a child to cultivate this art, in his own words, “not precisely for the art itself but for making his eye exact and his hand flexible” (Rousseau, 1762/1979, p. 143). To teach the child, Rousseau saw no use of a drawing master who would give him only imitations to imitate: “I want him to have no other master than nature” (ibid., p. 144). What he wanted to accomplish was that the child will “be able not so much to imitate objects as to *know* them” (ibid., emphasis added). This would be, in the first place, knowledge of “the true relations of size and shape which exist among animals, plants, and natural bodies.” It is nature that shows the way: “Do not give your pupil any kind of verbal lessons; he ought to receive them only from experience” (p. 92). Raised in this spirit, Rousseau held, a child will examine each new object he sees for a long time without saying anything (p. 169). When it then is presented by objects that raise its curiosity, his senses are aroused. “It is in man’s heart that the life of nature’s spectacle exists. To see it, one must feel it” (ibid.). As a rule, Rousseau held that adults should never substitute the sign for the thing, “for the sign absorbs the child’s attention and makes him forget the thing represented” (p. 170). For Goethe, who was profoundly influenced by Rousseau, there was “no surer way of connecting to the world than through art.” He held that once nature would begin to reveal her open mystery, the

¹⁴ As I have argued earlier, it is only when the relationship with nature has become problematic, that artistic activity can manifest itself as a possible way to address and perhaps overcome the lost bond. Similarly, in traditional indigenous cultures, art has not loosened itself as a separate and exclusive domain from the overall and integrated scheme of things that makes up the life-world of the people who are part of that culture.

attentive observer would start to feel an irresistible yearning for art, which he regarded as “her most worthy interpreter” (Goethe, cited in Harrison, Wood & Gaiger, 1998, p. 75). In chapter 3, I will revisit some of the Goethe’s contributions specifically. Here I will reconstruct how, by the end of the nineteenth century, pedagogues in nature studies drew inspiration from the pioneering work of their predecessors in the Romantic Movement, such as Rousseau, Goethe, Blake and several others.

One of the founding fathers of nature study was the Swiss naturalist and teacher Louis Agassiz, who moved to America in 1846. He would tell his students to go to nature and take the facts in their hands; they should see for themselves. His slogan was “Study nature, not books!” Another one, at whose influence I will look more closely in the following, was the German advocate for art and nature studies, Friedrich Froebel (1782-1852), who is best known as the inventor of the kindergarten and founder of the kindergarten movement in 1840. Froebel focused mainly, though not exclusively, on early childhood education. Wendy Strauch-Nelson (2012a, p. 60) regards Froebel as representative of a way of thinking about childhood that built upon the work of Rousseau. Like the French Romantic, Froebel insisted that experience is essential to learning. For Froebel, art was a powerful mode of inquiry. Drawing would improve the child’s sensory perceptions and nurture its development in ability to observe, focus attention and making connections. Strauch-Nelson states that the extent to which nature study was important to Froebel’s philosophy cannot be overemphasized: “He insisted that children interact with nature. Especially with growing plants and animals” (p. 61). To him, the study of nature was inseparable from drawing: the two informed each other. In his own words, “what a man tries to represent or do he begins to understand” (Froebel, quoted in Strauch-Nelson, *ibid.*). Strauch-Nelson surveyed early British and American nature study journals (from the first decade of the twentieth century) and in them, she found several examples of educators who combined nature study with artmaking activities. Examples are landscape sketches that were created and used to discuss the workings of the sea and the wind, or the collecting of autumn leaves and studying the distribution of their color. Defining this influence, Strauch-Nelson doesn’t hesitate to assert that both art education and nature study share a common ancestor in Froebel’s kindergarten (2012b, p. 33). Froebel believed that, through nature, children would learn not only the secrets of the world around them, but also about themselves and their unity with the world.

Margaret MacDonald points out that Froebel adhered to the principle of a child’s unfolding. He believed that education should be a process of drawing out the innate abilities of children through activities in play, drawing, song and myth-making. He did not want to call this an infant school, he stated, because he did not intend the children to be schooled (therefore his concept of a *kindergarten*, a children’s garden). Rather they should be “allowed under the gentlest treatment to unfold freely” (Froebel, cited in MacDonald, 2010, p. 122). In the theory of unfolding, a child develops from an original “whole.”

To educational philosopher John Dewey, however, Froebel’s conceptualization of development as a process of gradually making explicit and outward of what is

“wrapped up,” was overtly static. To him, it was wrong to see the development of a child as the unfolding of a ready-made latent principle: “A remote goal of complete unfoldedness … is something apart from direct experience and perception. So far as experience is concerned, it is empty; it represents a vague sentimental aspiration rather than anything which can be intelligently grasped and stated” (Dewey, cited *ibid.*, p. 123).¹⁵ Dewey, despite this criticism, acknowledged Froebel as an important influence on his own educational approach. Like his German predecessor, Dewey was a strong supporter of the nature study movement. Next to enhancing the student’s understanding of natural history, botany, and agriculture, it could also work to “cultivate a sympathetic understanding of the place of plants and animals in life and to develop emotional and aesthetic interest” (Dewey, cited in Minteer, 2006, p. 35). Nature study programs, and also school gardens, should build a deep appreciation for the natural world, through close observation and scientific study of plants, trees, and animals and through direct immersion of students in natural environments. Dewey didn’t have a narrowly positivist or materialist conception of science; its practice should allow myriad kinds of experience to flourish: “If the proper object of science is a mathematico-mechanical world (as the achievements of science have proved to be the case), then how can the objects of love, appreciation – whether sensory or ideal – and devotion be included within true reality?” (Dewey, quoted in Crane & Egan, 2009, p. 97). As Jeff Crane and Michael Egan point out, Dewey sought the reconciliation of aesthetic appreciation and scientific practice. In both, the direct experience of the world – learning by doing – was the keystone. In this thesis I will return repeatedly to Dewey’s views on experience and specifically his distinction between surrendering to and creative acting upon process.

In a very basic sense, one could argue that there is a contradiction contained in the word-pair formed by art and education. For art, as a pure form, as process, *resists* education. It is an unfolding, a manifestation, of an aesthetic experience. It was Kant who first asserted that aesthetic judgment can never be taught from one person to another. Education, on the other hand, always seems to involve a teacher-learner relationship. The act of teaching prepares the ground for the learning experience, but in doing so, it may, inadvertently and unwontedly, also cut the grass on that ground, before the feet of the learner-*in-potentia*. A young child, when given a pencil or brush, will draw or paint intuitively. With whatever is at hand it will create its own creative expression. On basis of such self-propelled and un-guided art expressions it seems reasonable that art education should follow a child’s “natural” way of expressing itself. This progressive view of education, that we should not force children to learn in a preset logical pattern, is in fact historically situated in the idea of Ernst Haeckel,

¹⁵ In the context of charting the history of practices of learning about nature through artistic practice I find this an important observation. Part of my own assumptions about basing environmental education in an open-ended artistic process rather than directing it as facilitator is grounded in a similar idea that something latent in the learner, something of which he or she is not or only partly conscious, can thus be made manifest. This in fact was one of the pillars on which my own interest in the field was prompted. I will return to this theme of open-endedness in art in-depth further on in this thesis.

as Margaret MacDonald shows, who held in 1867 that “ontology recapitulates phylogeny”: the natural development of the individual repeats the development of the species. Leaning on Stephen Jay Gould’s book *Ontogeny and Phylogeny*, MacDonald suggests that recapitulation became one of the strongest arguments for child-centered education. Reformers could now refer to the naturalistic argument that molding education to the child would amount to “following the course of its natural development” (Gould, cited in MacDonald, 2010, p. 121).¹⁶

Canadian Charles Dudley Gaitskell, in his *Arts and Crafts in Our Schools* (1949) provides one example of how these ideas were put into practice:

In the contemporary art programs at least in the elementary schools, we do not lay stress upon figure drawing, flower drawing, perspective, or color theory, as items of study in themselves.... Today it is believed that art education should be a form of thinking, and that an overemphasis of step by step teaching interferes greatly with the pupil’s thinking.... Patterns and pictures to copy can only confuse him. (Gaitskell, 1949, pp. 1, 4)

The Rousseauian inspiration, that the child itself guides its own learning, developed perhaps its strongest expression in the radical pedagogy of Reggio Emilia. Aimed at early childhood, it held that educators should first and foremost facilitate a child’s own creative probing. Shortly after the Second World War, on the other side of the ocean, in the Northern Italian city of Reggio Emilia, the young teacher Loris Malaguzzi joined forces with the parents of this region to provide child care for young children. The approach to learning that he founded came to be known as Reggio Emilia pedagogy and one of its focal points, as Malaguzzi wrote, was the image of the child who, right from the moment of birth, is so engaged in developing a relationship with the world and intent on experiencing things directly that he develops a complex system of abilities, learning strategies and ways of organizing relationships. For Carlina Rinaldi, a competent, active and critical child is fundamentally “challenging” by producing change and dynamic movement in the systems (family,

16 First in Germany, by the end of the nineteenth century, this theory was so popular, according to Gould, that it led to the development of recapitulatory curricula. Visiting American academics brought these back with them to their home country. Eventually these ideas also found their way to art education. English educationalist Sir Herbert Read, for example, in his *Art and Society* (1931) used Haeckel’s hypothesis (“[seeing] in the development of the individual a reflection of the development of the race”) to justify a particular pedagogical orientation that favored free expression in art teaching. For Read, the recapitulation theory was nothing less than “the genetic method in aesthetics” (Read, cited in MacDonald, 2010, p. 121). Although Haeckel’s specific form of recapitulation theory, that the development of an individual follows the same trajectory as the development over time of a species, genus, or group, is now discredited among biologists (Thomson, 1988) it had a strong influence on social and educational theories. MacDonald (2010) shows how the recapitulation theory, twinned with the theory of unfolding, became an evocative metaphor in early twentieth century ideas of educational reform: “The idea of unfolding was anchored in a humanistic belief in the inherent potential of human beings. As a developmental theory, it reflected the belief that growth and learning takes place in stages and that each stage of development is part of an integrated whole” (p. 121).

school, society) that it is involved in. Such a child is able “to assemble and disassemble possible realities, to construct metaphors and creative paradoxes, to construct his own symbols and codes while learning to decode the established symbols and codes.”

The notion of “the competent child” comes back time and again in the writings on Reggio Emilia’s pedagogical orientation. This competency manifests itself in its relating with the world. Within this relationship, children come to know the world and themselves. In Rinaldi’s (2006) own words:

I said a competent child. Competent because he has a body, a body that knows how to speak and listen, that gives him an identity and with which he identifies things. A body equipped with senses that can perceive the surrounding environment. A body that risks being increasingly estranged from cognitive processes if its cognitive potential is not recognized and enhanced. A body that is inseparable from the mind. (p. 92)

Rinaldi maintains that views of learning – even those expressed by Montessori, Dewey, Piaget, Vygotsky and Bruner – have been suffocated by denying the school access to the concept of “research.” It is taken to be exclusively part of the domain of scientific practice. The proponents of Reggio Emilia believe that a new concept of research can emerge if we legitimate the use of the term to describe “the cognitive tension that is created whenever authentic learning and knowledge-building processes take place.” In Reggio Emilia, a child is no longer considered as fragile and incapable. The attitude to the child is rather that it is seen as active, searching to grasp and understand life, drawing out meanings. Meaning-making is regarded as an ability which we carry with us in the world from birth. Loris Malaguzzi, the founder of Reggio Emilia, famously stated that “children are born with 100 languages and by the age of six they have lost 98 of them” (Malaguzzi, cited in Glazzard, 2010, p. 135). At another occasion, Malaguzzi created a poem, entitled “No way. The hundred *is* there.” Below I have forced the lines into one paragraph of sequential words:

The child is made of one hundred. The child has a hundred languages, a hundred hands, a hundred thoughts, a hundred ways of thinking, of playing, of speaking. A hundred, always a hundred ways of listening, of marveling of loving; a hundred joys for singing and understanding; a hundred worlds to discover, a hundred worlds to invent, a hundred worlds to dream. The child has a hundred languages (and a hundred hundred hundred more) but they steal ninety-nine. The school and the culture separate the head from the body. They tell the child: to think without hands, to do without head, to listen and not to speak, to understand without joy, to love and to marvel only at Easter and Christmas. They tell the child: to discover the world already there, and of the hundred they steal ninety-nine. They tell the child: that work and play, reality and fantasy, science and imagination, sky and earth, reason and dream, are things that do not belong together. And thus they tell the child that the hun-

dred is not there. The child says: No way. The hundred *is* there. (Malaguzzi, translated by Leila Gandini, 1998, p. 3; edited from poem to prose by me).

The Reggio theory of the hundred languages of childhood is often taken to refer to the different ways children represent, communicate and express their thinking through different media and symbolic systems. These range from mathematical and scientific languages to the many poetic or aesthetic languages that are expressed for example through the use of music, song, dance or photography.

When we enter the world we are for example born equipped with an extremely refined sensibility for perceiving color, says Vea Vecchi (2010, p. 31). At the same time, the brain must practice decoding, she says, as we do with other perceptive abilities. Otherwise we run the risk of being overwhelmed by impressions. It is important that the developing child encounters adequate contexts, for otherwise it loses opportunities for seeing and tasting the things around it. In Vecchi's view, today's culture tends to diminish a sense of wonder and to eliminate aesthetics, i.e. "the aesthetics of actions, of intelligent perceptions and of time and rhythm" which develops together with reasoning and emotion. Though the Reggio pedagogy is aimed at the preschool level (0-7 years), I believe their views on learner-centered approaches can be of value and serve to inspire learners at other age groups as well. The last years, there is a surge of interest in applying this innovative pedagogy also in the context of environmental education.¹⁷

With this (inevitably cursory) presentation of the Reggio Emilia approach I conclude this historic overview of how artmaking became integrated in nature study and other developing pedagogies aimed at enhancing the learner's understanding of its environment. In a way, we have come full circle to the conviction of Rousseau that it is nature that shows the way, with which I started this section: "Do not give your pupil any kind of verbal lessons; he ought to receive them only from experience."

2.7 The new field of arts-based environmental education (AEE)

This, then, is perhaps also the appropriate point to zoom in more closely on the one contemporary endeavor of bringing art and environmental education together in one undertaking in which I situate my own practice, and that is arts-based environmental education. The actual term (here often abbreviated as AEE) was first coined by Finnish art educator Meri-Helga Mantere in the 1990s. The newness of this approach, as I see it, resides in two essential characteristics. The first is that it refers to a specific kind of environmental education that *starts off* from an artistic approach. Different from other types of outdoor or environmental education which offer room for aes-

¹⁷ In April 2009, by way of example, an international conference on this theme took place in Östersund, Sweden, entitled *Utomhus* ("outdoors") which was attended both by environmental educators and by Reggio pedagogues such as Vea Vecchi and Stefano Sturloni.

thetic experiences, AEE turns the tables in a fundamental way. Art is not an *added* quality, the icing on the cake; it is rather the point of departure in the effort to find ways in which people can connect to nature. A second fundamental characteristic is that AEE, to my knowledge, is one of the first contemporary approaches of bringing together artistic practice and environmental education in which practitioners also made an attempt to formulate an epistemology.¹⁸ Both aspects of AEE will be treated extensively further-on in this thesis. Mantere describes AEE as a form of learning that aims to develop environmental understanding and responsibility “by becoming more receptive to sense perceptions and observations and by using artistic methods to express personal environmental experiences and thoughts” (1995a, p. 1). Artistic experiences improve one’s ability to see; they help one in knowing and understanding. Therefore, she maintains that these can be of high value in learning about the environment. I take Mantere’s description of her method of art-based environmental education¹⁹ as a first attempt at a definition:

What do I do as an environmentalist and as an art teacher? To put it rather simply: I try to support fresh perception, the nearby, personal enjoyment and pleasure of perceiving the world from the heart. To achieve that, it is necessary to stop, be quiet, have time and feel psychologically secure in order to perceive the unknown, the sometimes wild and unexpected. At times conscious training of the senses, decoding the stereotype, is needed. I aim at an openness to sensitivity, new and personal ways to articulate and share one’s environmental experiences which might be beautiful, disgusting, peaceful or threatening. I support and facilitate the conversation with the environment (Mantere, 1998, p. 32).

In short, Mantere’s conception of AEE is grounded on the belief that sensitivity to the environment can be developed by artistic activities (Mantere, 1995a). As an artist, and as a teacher and therapist, Mantere (2004) came to find it more and more important to go back to the basics of the process and skill of perception. In this, the question of how we perceive and how we receive or reject the messages of the environment is central. In this – and this is important to underline because it counters allegations of a too Romantic view of nature – there is also room for the “shadow” side of experience, for feelings of disgust, fear and agony.

¹⁸ My use of the term epistemology here is based on the particular notion of anthropologist-biologist-philosopher Gregory Bateson, who regards epistemology as the process, by which we “know,” “think” and “decide” (Bateson, 1979). Bateson extends the conventional notion of epistemology into other concepts, including the relationship between aesthetics and biological epistemology.

¹⁹ While Mantere uses the term *art*-based environmental education rather than *arts*-based environmental education, I prefer to use the latter, more inclusive term, as “art-based” may be taken to be limited only to the field of the visual arts. Being a broader term “the arts” in plural are a vast subdivision of culture, composed of many creative endeavors and disciplines. They encompass visual arts, literary arts and the performing arts – music, theatre, dance and film, among others.

2.7.1 The roots of AEE in Finland

The historical antecedents of arts-based environmental education in Finland go back to 1971, the year that the first European regional InSEA²⁰ congress was held in that country. Finnish art educators had pooled their efforts to arrange this meeting with the overarching theme “Environmental Protection in Art Education.” Pirkko Pohjakallio is a specialist on multidisciplinary approaches to EE in the context of Finnish art education since the 1970’s. Quoting Kauppinen (1972), she provides the rationale for the congress at the time: “One reason for making the theme was the wish to emphasize the manifoldness and diversity of our environmental problems – [they] are not purely biological, economic and social ones but also aesthetic ones, and are consequently part of art education, not only as separate subjects of study but also as integrated parts of other subjects dealing with our living environment” (Kauppinen, cited in Pohjakallio, 2007). Already at that time, as Meri-Helga Mantere (1992b), notes, attention was paid to aesthetic and critical observation of the environment, both in the education of art teachers and in the curricula of Finnish schools. In the first decade, the focus of the kind of EE, practiced in Finland as part of art education, was on the manmade environment. Subjects were environmental pollution and the exploitation of nature. Problems of the environment were visually approached in teaching by identifying, classifying and listing the types and degrees of damages. As Mantere summarizes, “the emphasis was not so much on the environment as it was on politics” (p. 95).

Similarly, also Pirkko Pohjakallio notes that in the early 1970s, the prevailing interest in art teacher education and in visual arts first was in cultural studies and in linguistic and conceptual directions. The emphasis was on interpretations of expressions of visual communication and on investigating if these revealed ideology and relations of power. It was a progressive move away from integrating art with crafts in the curriculum. Environmental education, at the time, concentrated on problems, and this was reflected in the images that were created in art classes, representing “dying nature, spoilt built environments, factories that polluted, and chaotic traffic jams” (Pohjakallio, 2007, p. 4). In these times of social activism, practicing and becoming art teachers read the ecological and political pamphlets of the time. However, when they tried to address the themes and questions during art lessons, these proved so wide and difficult, that neither pupils nor teacher could envisage any solutions, leading to feelings of despair rather than empowerment. Ultimately this led to a dead end: “the use of conscious, threatening environmental scenarios and political topicalities as intellectual fuel proved to be a questionable idea” (*ibid.*).

The 1980’s saw a change in Finland. From first being a subject that was limited to environmentally conscious groups and individuals interested in nature conservation, the earth’s ecological state started to capture the interest of the general public. Art teaching gravitated to assisting learners in acquiring skills in reading and evaluating

²⁰ InSEA stands for the International Society for Education through Art.

the language of the manmade environment. Parallel to that, in teacher education, issues stemming from environmental psychology and environmental aesthetics were discussed. Towards the end of the decade, new trends emerged. Art educators began to develop activities that were strongly influenced by down-to-earth phenomena in environmental art and the new ecological awareness. A key figure in this development of a new approach to EE in the 1980s, as Pirkko Pohjakallio notes, was Meri-Helga Mantere. To the latter, an artistically oriented EE would be at its best when the artistic and creative perspective would run through the teaching project, from the stage of its planning to the evaluation of its results. Effectively, what this implied was that in the entire EE process the emphasis would be on the manner of observing, experiencing and thinking that is customary to art (Pohjakallio, 2007). Whereas before, art students, on basis of the prevailing orientation at the time of linguistic methods and critical theory, typically used collage of media images rather than personal and intimate contact with the actual environment, this now all began to change. To be sure, students were taken outdoors before by art educators as well, taking their pencils, drawing pads and brushes along. Here's the contrast, in Mantere's (1992b) own words:

Now the purpose is to search for a more direct connection with the materiality as well as spirituality of nature. Sand, water, or any other environmental material became tools for reflection and expression. Also allusions to the mythical meanings of nature could be a starting point in the art exercises given to students (p. 96).

When in the 1980s new expressionist painting, earth and environmental art emerged in society, these "were greeted as a breath of fresh air by art educators after the threatening images of the 1970s that had failed to empower those who had created them" (Pohjakallio, 2007, p. 7). Art students participated in courses on environmental pedagogy and camp schools were organized in "unspoilt" environments such as the Finnish archipelago and Lapland. Pohjakallio lists the following sources of inspiration for the new activities: deep ecology, gestalt therapy, experimental learning theories, and environmental aesthetics.²¹ Mantere is well-aware that this move "out-of-the-classroom" could easily be labeled a Romantic and mythical "return to nature." She notes that the ability and experience of Finnish art teachers to work in EE through artistic means nevertheless began to draw the interest of environmental educators in general. What was attractive to them was this insight: "Attitudes and values do not seem to change through teaching that emphasizes scientific facts" (Mantere, *ibid.*). By

²¹ Interestingly, the new approach shares some striking similarities with the ethos of the nature study movement in America, with its valuing of the training of the eye and mind "to see and comprehend the common things of life," thus establishing "a living sympathy with everything that is" (Bailey, 1904). Nature study, at the beginning of the twentieth century, as we saw, was about taking the things at hand and trying to understand them, rather than primarily making references to the systematic order of objects as may be provided by science such as botany or geology.

consequence, she adds, emotional, aesthetic and practical methods became more and more appreciated. What came into focus was the pupil's own relationship with nature and the environment, which implied a holistic and hermeneutic approach to environmental issues. Pohjakallio adds that in the newly emerging arts-based environmental education, the life-world approach came to stand central. Through that emphasis on the idea that the environment is, first of all, *inhabited* by persons and not something remote or detached, aspects were taken up that had been mostly neglected in art education's earlier bearings in formalist and semiotic approaches. Characteristically, the inhabitant's relationship with the environment was participatory rather than solely informed by focused attention. It involved a two-way influence and identification:

In this approach, the environment is as much a drama and narrative as a set of critical insights and political views. In life-world, environmental aesthetics, all the senses contribute to understanding, so that the environment is as much felt as understood. It is partly a tacit affair – but not, as a consequence, beyond theorizing. (Pohjakallio, 2007, p. 8)

We thus see that the 1980s were in many respects a turning point. It saw the genesis of, what Mantere termed, the *new* environmental education (through art). A movement had emerged in art education, in which, according to Mantere, the freedom and courage to have confidence in "art as art" was central. Concomitantly, the word "process" became nothing less than essential, and the artistic process came to be seen not only as a psychically integrative, individual experience but also as a (if not the most) legitimate basis for the teaching of art. The ideas of Jung and art therapy in general influenced and inspired many Finnish art teachers. As Mantere puts it, "one could hardly talk about the soul in public, [but] one could at least talk about some kind of spirituality" (Mantere, 1992c, p. 91). Typical of the time was that many teachers began to discuss their own situation as artists.

An important parallel development was the emergence in Finland of special art schools for children. In contrast to the compulsory comprehensive schools, these provided a new opportunity to develop artistically demanding and at cases long-term projects.

In 1992, a little more than twenty years after the landmark 1971 InSEA conference in Helsinki, the Earth Summit took place in Rio de Janeiro, the big UN Conference on Environment and Development. Again, an InSEA conference was held in Finland. At this occasion, Mantere articulated the specific Finnish approach to an international readership more fully in her seminal article "Ecology, Environmental Education and Art Teaching" (which appeared in the InSEA publication *Power of Images*, 1992). She wrote that, in her view, ecological thinking and action should be regarded as a guiding principle of *all* education. Furthermore, art education could play an important role in the development of new forms of EE. To her, a genuine appreciation of nature and motivation to act for the good of the environment are based above all on positive and valued experiences and these are often of an aesthetic nature. Such expe-

riences, she went on to say, can be generated by open and immediate contact with the phenomena of nature and the often new and fresh view of these phenomena that art provides. To her, to perceive “better” is the necessary starting point to creative change in personal and collective decision making and lifestyles (Mantere, 2004).

Mantere presents several arguments to support her claim that art education can play an important role in the new EE. All of these rely, as she puts it in her article in *Power of Images*, on “the artistic apprehension” of life and the environment, and on the opportunities that lend themselves to artistic influence (p. 17). Here, I shortly summarize some of her points. To begin with, she emphasizes that appreciating one’s experiences, emotional expressions and subjective processing of things is at the core of art education. For that reason, aesthetic practice could be an extremely valuable contribution to experiential learning in EE (which she held as the latter’s most fruitful and functional principle). In artmaking, participants learn by doing. Everything begins with personal experience. Simultaneously, art teaching encourages participants to discover, unearth and also to lend weight to their own mental images. These two combined, mean that art education can offer a mode in which learners can engage with their experiences and observations of the environment through artistic activity. This can be done by working with mental images, tangible pictorial expressions, etc., and by bringing to bear matured levels of reflection and conceptualization. As such, artistic activity actually constitutes – and this is in the context of this thesis an important observation – “cognitive action and learning” (to which I would add: in its own right).

Secondly, Mantere also underscores the need to create positive visions and concepts for the future. Sustainable development is not only about conservation but also about creating the new: better environments, objects and lifestyles. It is in the design of these that art education can play a vital role. Moreover, it is of great value if pupils become active themselves on behalf of the environment, in short, that a change of attitude is brought about. Finally, Mantere calls attention in her article to the critical insight that when an ecological lifestyle is primarily seen in terms of restriction and austerity, then it is more likely that change will only be accepted as a last resort. Through art, “it is also possible to develop the mythical, metaphorical and deep-level psychological levels of man’s relationship with nature into a constructive resource, in which factual information achieves deeper meanings” (1992a, p. 18). For Mantere, art is often therapeutic, but this aspect is seldom mentioned. She herself alludes to this dimension in her article, but does not elaborate on it very deeply.²²

In his article “From Environmental Art to Environmental Education,” Timo Jokela (1995), professor in art education at the University of Lapland, claims that the visual arts can offer elements to EE that are lacking in other fields. To him, “artistic-aesthetic learning” involves observation, experience and increasing awareness. Art

²² Also in this thesis this aspect of AEE is not the main focus. In my 2009 paper “Arts-based environmental education and the ecological crisis: Between opening the senses and coping with psychic numbing,” I took up the subject at some length.

sharpens our schemes of observation and activity, and thus facilitates bringing the phenomena to our consciousness. Art continuously creates new ways of observing. Even more so, visual art can be understood as actually being a history of evolving and varying schemes of observation. Previous learning experiences dominate the way in which we subsequently observe and describe our environment, says Jokela. He underpins this claim by quoting Arnold Berleant, as follows: “environments are not physical places but perceptual ones that we collaborate in making, and it is perceptually that we determine their identity and extent” (Berleant, quoted in Jokela, 1995, p. 18).

For Jokela, the “environmental world” and the “art world” share an educational task. Environmental art, for him, is first and foremost art that is *defined* by the place it is made; it is created, as it were, by the environment. Its historical antecedents go back to the 1960’s (e.g. the practices of “earth art” and “land art”). The Finnish art educator goes on to list four types of exercises that illustrate how environmental art can be a method of EE. On the one hand, these exercises are faithful to the practice of environmental art and as such they are a basic part of art education. On the other hand, they are also methods for increasing one’s sensitivity towards the environment. In the latter sense, they are essentially EE. These are the categories that Jokela provides:

- Exercises on focusing your observations and perceiving them more sensitively;
- Exercises which bring forward the processes happening in nature, and help one in perceiving them more sensitively: growth and decay, the flow of water, the turning of day and night, the changes of light, the wind, etc.;
- Exercises which aim to alter set ways of viewing the environment;
- Exercises which test the scale of the environment and human “limits.” The starting point is a large amount of material and the aim is a clear change in the environment. (pp. 25-36)

A binding factor in Jokela’s categories, it seems to me, is the implicit driving force: they are exercises that work *towards* achieving or accomplishing a pre-established goal; they “aim at.” In the research focus presented here, and on which I will elaborate later, I take some distance from this (what I take as a more) “purposive” orientation.

Mantere (1995b) makes an illuminating distinction between (a) seeing art as a tool of EE, (b) seeing art itself as a form of EE and (c) seeing EE as a form of art. Each alternative, she says, is possible and tones the content and activity in a different way. I see my work as being primarily situated on the second level that she identifies, i.e. art as being *in itself* a form of environmental education. My primary concern is to see art not in a utilitarian manner; not as “a tool for,” but rather as an activity with intrinsic value. Thereby I see, as I will sketch more fully later, the aspect of “open-endedness” in artistic process as one of its key defining elements. In theory, this would allow for outcomes of artistic process in/with nature that are contingent to the aims and concerns that reign in most forms of EE (e.g. in “education for sustainable development”).

It is important to bear in mind that a composite approach such as arts-based environmental education inevitably always seems to fall between two stools: it is neither environmental education proper (because it starts off from an arts- rather than science-based perspective), nor can it convincingly be classified as a subfield of art education, as it moves away from artmaking as primarily a self-referential discipline (*“l’art pour l’art”*). In fact, one could say that two rather separate communities of art educators and environmental educators exist, often not understanding (or more often not aware of) each other’s discourse, hence bringing along the problem of incomensurability of the paradigms from which they each approach education.

In an interview that I held with Mantere in 2007, I invited her to expand further on her conceptualization of the combining of art education and EE, and the way she considered that participants learn about the environment through art:

One learns by observing the connection between outer and inner. One learns by using the senses. One gets sensitive when one learns that all the senses are (or can be) involved. When they are involved or enlivened or opened, you also get more original feelings or observations. The observations that one makes of art, of nature, of other people and one’s self, the environment or whatever, can be *led* by knowledge, learning theories, and so on, and that is *one* way to observe. In such cases one already has some kind of frame or concepts. But in this case the learning comes from being open to, and learning through, one’s senses. At those moments there are no ready-made words, concepts and structures. The artistic learning, or the artistic approach, goes to the basics of senses and feelings, to the fresh contact and presence. An artistic approach includes the sensitivity of one’s body movement and senses. Via sight or touch you study the environment, but if you hurry to name it you lose the newness. You get a touch, you get a smell, you get movement, you hear your environment. And when this happens without naming and readymade concepts and repetitions, you *always* get a new experience. It is possible to get fresh, non-verbal information all the time. So the senses and observations can be creative and they kind of bring up your own images, words and conceptualizations. (M.-H. Mantere, personal communication, October 10, 2007)

Here, Mantere touches upon two contrasting forces within AEE: the more passive *not-knowing* while being open to one’s senses, and the more active learning that takes place when integrating the new information. One has to shift, as it were, from one state of mind to the other. Below, I will further elaborate on the different dimensions of these distinctive states, which I term – following Dewey – *surrender* and *control*. To me, at its core, an AEE activity is a facilitated effort in which participants are encouraged to open their senses and to connect to and learn from their environment. The pedagogical *point of departure* in this is artistic practice rather than science-based learning. This orientation, however, should not be seen as being in opposition to other approaches of learning and acquiring knowledge. Instead,

artmaking is conceived of as a (as of yet highly undervalued) way of learning and understanding *in itself*, complementary to other modes.

As we saw, Mantere herself emphasizes in her texts the value of experiential subjective learning processes, which she contrasts with science-based experimental knowledge. At the same time, she underlines that an art educator needs to know the scientific ecological basics like cycles of water and energy and materials used; he or she needs to be aware of the ecological threats of today: “I think that to plan an AEE workshop or lesson not knowing or caring about the ecological aspects is not environmental education at all and thus not AEE as I understand it” (M.-H. Mantere, personal communication, September 1, 2012). Moreover, in her view, art educators ought to be able to explain in what ways the arts and aesthetics may contribute to enhancing the aims of EE as a whole, in cases where they work together with science teachers.

Nevertheless, she also holds that AEE methods, in the effort to support perceiving the world from the heart, can only achieve such fresh perception through a stop. For it is at that point that learners begin to be receptive and “to perceive the unknown, the delicate, the sometimes wild and unexpected” (Mantere, 1998, p. 32). When, through conscious training in the senses, the predominant cultural and personal stereotypes are decoded, not only the participant’s perception becomes very different, but also his or her articulation of these in words and picture. When the subjective is both supported and facilitated by the art teacher, “more and more unconventional conversations with the environment follow” (Mantere, 2004). From her background in art, Mantere has tried to meet the challenges posed by the environmental imperatives of today. She did this by using strategies and methods that are derived from experience and knowledge of art and art education and even the world of art therapy. She mentions that important sources of inspiration were some of the Finnish traditions connected with the forest and the international field of environmental art. Further, philosopher Arne Naess and psychologist James Hillman were important mentors to her. Art touches the heart and it is the speech of soul, she quotes the latter saying (Mantere, 2004).

What I distill of this discussion of AEE as it developed in Finland are a few core traits. First, one has to distinguish between the first phase of AEE in the 1970s which focused on visual imagery of the ecological crisis, and its second phase, when this perspective was complemented – if not to some extent replaced – by a more sensorially-grounded approach in which personal direct experiences of both the natural and built environment became characteristic. It is to this second phase of AEE, which emerged in the 1980s, that my attention is mostly focused, the idea that a relationship with nature can be built through the senses: the art teacher puts his or her trust in experiential learning and the teaching can move out of the classroom. The pupils are encouraged to open their senses by artistic practices, which can be almost anything from drawing and building out of natural materials to making conceptual art. Through these practices it is hoped that the pupils recognize and study their own relationship with the surrounding environment. In this, the artistic result is less impor-

tant. The goal for art education is to emotionally involve pupils and to develop their ability to see the traces we leave in the landscape.

Part of this is to see the environment through art, and art through the environment. A forest, for example, can provide the materials for making art – interpreted by traditional techniques or through conceptual art. Part of the focus is to train the students' artistic view, so that they see and express aesthetic qualities and values in both the built and natural environment.

To this condensed appraisal of AEE I want to add two characteristics which I noticed are distinctive to the Finnish approach to this second phase of AEE, which are an inclination to keep the process open-ended and not to work necessarily towards reaching a preconceived and –defined goal, and the other is that practitioners of the teaching of AEE tend to see the importance of (and actively engage in) the unpacking of the epistemological foundations of their work. Through my research, I have come to find that “the Finnish approach,” especially with its valorization of articulating the epistemology of AEE (how and what we learn through engaging in artistic activity), is still rather exceptional in the world. In this respect, it is interesting to note that Mantere (1995a), in her foreword to the book *Images of the Earth, Writing on Art-based Environmental Education*, speaks of a “we,” that is a group of Finnish artists and art teachers at the university level. Though she grants that the book is not a comprehensive account of AEE, the opening lines do have an authoritative and programmatic ring to them:

We believe that it is possible to develop environmental understanding and responsibility by becoming more receptive to sense perceptions and observations, and by using artistic methods to express personal environmental experiences and thoughts. Artistic experiences and activities improve one's ability to see; they help one in knowing and understanding. The issues of values and lifestyle, raised by the ecological crisis, can be approached by artistic methods, reaching otherwise unattainable areas of experience. (Mantere, 1995a, p. 1).

Nevertheless, especially when I broaden the scope to the world at large in the next section, I found that no commonly agreed-upon body of principles, standards or other set of criteria is available which would allow me to judge if a certain practice can be considered as AEE. In this, it differs fundamentally with environmental education. As we saw, it was only in hindsight that the latter was first identified as such. When looking back, researchers could determine that the term “popped up” for the first time in the United Kingdom in the mid-1960s. The maturation of the field into a discipline has of course taken much longer and is still in process.

Mantere's and Pohjakallio's account of the history of AEE in Finland helps me to situate my own interest in (and emphasis on) what I have termed there the “second phase” in the maturation of AEE in Finnish society, which started in the 1980s and facilitated a learning *with* nature through the practice of artful methods. In this, the nature within and the nature without are understood as being continuous. I often felt

that my own conceptualization of AEE and the way in which I practice it is experimental, new and hardly can be termed a method yet, if it ever will. I regard it as pioneering probes in a new territory that is opening itself up as one goes along. As I see it, there is not a situation yet of “normal practice” of AEE (analogous to Kuhn’s notion of normal science), no firmly established tradition. The recent observation by Greek researchers Maria Daskolia, Athanasios Dimos and Panagiotis Kampylis, that creative thinking in environmental education remains a greatly under-researched topic, also hints in this direction (2012, p. 269).

So with these considerations in mind I expand my gaze in the following section, in order to see if also elsewhere in the world forms of education can be identified, both contemporary and in the past, that one could designate as AEE in practice. In drafting this situational image, I look at both formal and non-formal practices of education, offered from kindergarten up to the post-secondary level.

2.7.2 Practices of AEE elsewhere in the world

One of the earliest examples in the twentieth century that I could find is the practice of Elwyn S. Richardson, who was director and teacher of the Oruaiti School in the far North of New Zealand between 1949 and 1962. In the book *In the Early World* (1964/2001) he tells the story of how he takes the pupils (from families of both Maori and European descent) on his experimental primary school out to study the world around them. From this emerges a growing perceptive power, which is reflected in the children’s poetry, ceramics and other forms of art. In the foreword to the book, John Melser describes the school as “a community of artists and scientists who turned a frank and searching gaze on all that came within their ambit” (p. v). Richardson’s early endeavors have recently been the subjects of a rich doctoral dissertation by New Zealander Margaret MacDonald (2010). She contextualizes Richardson’s belief that the most powerful learning arises out of children’s own lives and experiences. He held that learning through the arts “raises students’ potential for self-knowledge, critical discernment, imagination, understanding, awareness and empathy for others” (p. ix). As an example, MacDonald mentions how – out of the study of wasps – came poetry, pottery, linocuts, creative writing, and mathematics. Richardson used the arts as a medium for learning all kinds of properties of a phenomenon under study. This was done in a detailed and dynamic way. In the development of his own educational philosophy and curriculum, science played a critical complementary role as well. In hindsight, as MacDonald convincingly shows, Richardson was able to seize the opportunities that were afforded by working in an environment “which was hospitable to educational experimentation in the field art and crafts” (*ibid.*). On many levels, he transcended the educational practices of his times. What strikes me as important to note as well, is that *In the Early World* can be read as one of the first and few attempts, to my knowledge, at articulating some of the epistemological foundations of centering learning about

nature in an arts-based approach, of which observation, discussion, experimentation and expression are all consecutive parts (cf. Richardson, p. 2001, p. 157).

Over the years there have been several other inspiring attempts to forge connections between art education and environmental education or ecological thinking. When I commenced my research, in 2006, there was only little I could find on ongoing methods. In a paper that I wrote that year, entitled *Forget your Botany: Developing children's sensibility to nature through arts-based environmental education*, I highlighted three practices, the art-infused botanical excursion that Linda Jolly facilitated in Norway, the work of Swedish artists Magnus Lönn and Bjorn Ed with the language of nature in *Palaver på grenesiska*, and *Finnish Forest – 'Silva' in Art Education* as described by Pirjo Olsen of the Vantaa Art School, a private, extra-curricular school in southern Finland.²³ When my article was published, some other practitioners of art in environmental education who read it recognized their own pedagogic ethos in it and they informed me of their own work in this regard. One of them was Jinan Kodapully from the Indian village of Aruvacode, who had been practicing workshops with rural children from 2000 onwards. He called the workshops "Sensing Nature, Knowing Nature." For Kodapully, the workshops were an exploration in sensitizing the senses and initiating creativity. As part of "seeing nature," the children were to collect and arrange leaves of various shape; they would then try to render their different color nuances in paint through mixing the primary colors. The children also drew leaves in detail, and Kodapully introduced aspects of light and shape. In the "touching nature" exercises, the children made things and became aware of the textural and other qualities of objects related to the touch sense. A few games were aimed at "smelling nature," a play for identifying smells. This they did with eyes blindfolded. For "hearing nature," the children made a range of sounds using instruments made from natural materials, such rattles and whistles made out of leaves. Jinan found that children are naturally inclined to listen to the sounds around them and they are particularly good in imitating birds.

It was interesting for me to learn more about Kodapully's pedagogical viewpoints. He claimed for instance that instead of teaching *to* children we could start learning a lot from them:

Awakening the intelligence of the body seems to me the first step towards acquiring knowledge. At the initial stages of learning (living) the tools for learning also get developed. These tools are the most important aspect as it will determine not only the paradigm of our worldview but also how we are going to perceive the world and what knowledge we will create out of it. (Kodapully, 2006)

Because our immediate contact to the world outside is through our senses, Kodapully wanted to endow the senses a very important role in the process of

²³ The first two of these I will evaluate in considerable detail in chapter 3.

learning; to him they are a reciprocal device that helps establish communion between the inner and the outer nature.

In the course of time – and all the more rapidly after professor Pirkko Pohjakallio, Mari von Boehm, Henrika Ylirisku and me had established an academic research group on arts-based environmental education in 2007 – I acquired additional knowledge of approaches elsewhere in the world that could be termed arts-based environmental education on basis of the description of the field that Meri-Helga Mantere had provided. None of these initiatives, however – with one exception being the US-based educational organization *Irthlingz* that is directed by Sharon Abreau – would self-identify their work as expressive of AEE.

In my efforts to map early initiatives, I occasionally came upon other pioneering endeavors, such as the book *An Eye on the Environment* by H. B. Joicey (1986), which has a focus on visual art of the natural and built environment and provides “a strategy for seeing and understanding” through the use of elements such as line, rhythm, shape, form and pattern. The little book was published in association with the World Wildlife Fund. Remarkably, the author notes that too much emphasis on first-hand experiences and objective drawing can also give a *wrong* impression. The point of gravity should be work that is the product of the inner landscapes of the mind, Joicey holds. The foundational aspect of embedding the environmental learning in art comes from a view that art “is about the organization of our emotional, imaginative and sensory experience” (p. 25).

In 1997, *Art Education*, the journal of the National Art Education Association in the United States, published a special edition on the theme of art and ecology. In it, co-editors Don Krug and Mary Ann Stankiewicz note that art educators have incorporated the natural and built environment into their teaching for over a century, and also point to the roots of such endeavors in nature study, the interdisciplinary approach of combining science with the arts. Ronald W. Neperud, in the same issue, looks at the connections between art and ecology and notes that two traditional linkages have dominated up till that time between the two fields: in the first, ecology configured as nature and served as a background in art. The other bridge between the two is the use of art as a tool for illustrating ecological concerns and for conveying messages about ecology. Louis Lankford, in his contribution entitled “Ecological stewardship in art education,” looks specifically at the elements that are important in such care of the environment: moral commitment, understanding the effects of actions and demonstrating respect. Cynthia Hollis, in the same issue, seeks to develop an art and ecology curriculum for public schools and in that context she highlights the work of ecological artists such as Joseph Beuys, Andy Goldsworthy and Helen and Newton Harrison. Hollis holds that an art curriculum that deals with ecological issues can help to empower students: “as creative individuals [they] can have an active voice in protecting their environment and changing current devastating ecological trends” (1997, p. 23).

A similar special thematic edition on art and ecology sees the light a decade later, in 2007, in *Studies in Art Education*. The shared theme here is “Eco-responsibly in

art education." The authors aim to raise awareness on and offer possibilities for integrating eco-knowledge into art education. One of the themes is "place-based education" (Sobel, 2004), which is addressed through the contributions of Sally Gradle, who thematizes "art education in a relational world" (2007, pp. 392-411), and Mark A. Graham, who seeks to articulate a "critical pedagogy of place." The latter's aim is to explore the benefits of combining the ecological focus of place-based ecology with the social focus of critical theory (Graham, 2007, p. 376).

Often approaches were taken on by dedicated and strongly motivated individuals, such as artist and art educator Peter London with his *Drawing Closer To Nature: Making Art In Dialogue With The Natural World* (2003). London states that his aim is to suggest ways in which artistic processes can draw ourselves – mind, body, and spirit – closer to nature. When our thoughts and behaviors are repositioned this way, they take on depth, grace, and a new richness of expression. Further on in this thesis I will return to London's inspiring work.

Another example of combining art and EE in practice are the achievements of Jan-Erik Sørenstuen in Norway, who developed land art activities with children, on which he reported in *Levende Spor* ("Living Tracks," 2011). The subtitle of his book is, translated from Norwegian: "To discover nature through art and art through nature."

Canadian art educator and researcher Lisa Lipsett, in her book *Beauty Muse: Painting in Communion With Nature* (2009) shares a ten year long creative journey of experiences with the natural world, connecting creativity with deep ecology, education, spirituality and ecopsychology. Through exercises and paintings she invites the reader to engage in a highly intuitive hands-on process, initiating a practice which, as she puts it, brings art-making back to its living roots.

Organized around five fundamental environmental elements – land, water, sky, plants, and wildlife – American Heather Anderson's book *Art Education & Eco Awareness: A Teacher's Guide to Art & The Natural Environment* (2011) uses fine art and hands-on art experiences to motivate students to look closely, think carefully, and find out more about the world around them. Next to dozens of hands-on art lessons for elementary and secondary students, Anderson presents informative profiles of environmental artists, and a host of eco-awareness activities of which she believes they help hone artistic research and critical thinking skills.

At times, practices in combining art and EE were initiated by groups of people such as the team of Timo Jokela, Maria Huhmarniemi and Mirja Hiltunen at the department of art education at the University of Lapland in Rovaniemi, Finland. In their activities there is a strong infusion of hands-on activities in the making of environmental art, often involving stones, wood, and including the elements of water (in the form of snow and ice) and fire. Following two booklet's explaining the practice of sculpting in ice and snow and its relevance to working in the local community, Jokela together with Glenn Coutts, edited a book in 2008 in which the educational perspectives were highlighted, entitled *Art, Community and Environment*. Featuring case studies from around the world, the book investigates issues raised by the interaction between art practice, community participation, and the environment, both natural and urban.

In Canada, Hilary Inwood (2012) developed the term *environmental art education*, to designate an emerging field of study, in which the arts are called in to assist in finding alternative ways to reach learners that may not be reached by more cognitive approaches of science education. Environmental art education, or alternatively called eco-art education, constitutes an interdisciplinary endeavor that draws from the more established fields of visual art education and EE.

When one shifts the focus from contemporary *practices* on the interface of art education and EE to *research* on this theme, it is noteworthy that currently a considerable amount of studies are being carried out on different aspects and dimensions of the meeting of art, environment/ecology/nature and pedagogy. Due to this expanding cross-fertilization, one can tentatively start to discern emerging paradigmatic fields of research. From my acquaintance with the field, I have attempted to classify these in thematic clusters. One has to bear in mind, though, that any such listing is neither definite nor exhaustive. Further, some group themes or research interests overlap as well.

- *Art and ecological literacy/nature study, environmental art education, learning about eco-responsibility/sustainability;*
- *Imaginative education and the environment, mythopoetic curriculum, pedagogies of the imagination;*
- *Art and place-based education;*
- *Aesthetics and environmental education, beauty-centric education;*
- *Art-based perceptual ecology, art and environmental awareness, art and learning through the body and movement;*
- *Art and ecopsychology, ecological expressive therapy, holistic art education.*

Recently, Helene Illeris (2012) coined the concept of *Art Education for Sustainable Development*. In an article on Nordic contemporary art education and the environment, she attempts to build an epistemological platform that might function as a tool for discussing environmental issues. The platform has four cornerstones, which I list here briefly and which partly complement and overlap with the aforementioned orientations:

- *Critical art education and the environment*
- *Poststructuralist strategies and the environment*
- *Visual culture pedagogy and the environment*
- *Community-oriented visual practices and the environment*

From this somewhat kaleidoscopic overview of diverging and converging perspectives at the intersection of the fields of art, pedagogy and environment, I now proceed to take up an aspect of AEE that I consider essential and that I thus far have mentioned only in passing: its quality of daring to engage participants in an artistic learning process that is open-ended.

2.8 Connecting to nature: between control and surrender

In the last section of this chapter, I want to revisit more extensively the two prevailing but very different modes of connecting to the world that I shortly touched upon in section 2.4.1: one stems primarily from a state of (passive) receptivity, the other comes forth first and foremost from an active, creative engagement. To be sure, this contrast is contrived; in reality, we move from one to the other continuously. In fact, as David Abram (1996a) has argued, every living creature, when adapting to the immediate situation it finds itself in, must necessarily be receptive to specific shapes and textures of that present and bring about a spontaneous creativity in adjusting itself: “It is this open activity, this dynamic blend of receptivity and creativity by which every animate organism necessarily orients itself to the world (and orients the world around itself), that we speak of by the term ‘perception’” (p. 50). Elsewhere, Abram defines perception as “the concerted activity of all the body’s senses as they function and flourish together” (p. 59), thus pointing to the concerted working-together in a synaesthetic manner, a “fusion of the senses” in which our whole embodied being intertwines with the rest of the world (or “more-than-human world” as Abram prefers to call it). In Abram’s understanding, the creativity that we associate with the human intellect is, in truth, an elaboration of a profound creativity that is already underway at the most immediate level of sensory perception. This reciprocity and forward-and-backward oscillation between the receptive and the creative is at the root of *all* perception.



Figure 3: Intertwining with the more-than-human world (Photo: G. Morris)

An inspiring example of engaging in such fluctuating movement is provided by American eco-artist Erica Fielder (2003), who wants to encourage deeply personal relationships with the wild. She has created the Bird Feeder Hat (figure 3): a wide-brimmed, brushy hat covered with seeds. The person wearing the hat must sit silent and still to be able to feel the movement of birds on the hat. The experience is vivid and sensory, and provides an opportunity to begin experiencing a deeper kinship with a wild creature up close.

One specific form of alternation between the contrasting modes takes place within artistic process, and I am particularly interested in when this takes place as part of AEE. As Merleau-Ponty explains, the roles between the one who creates, like a painter, and that what he or she paints ("the visible") inevitably change. Merleau-Ponty holds that this is why so many painters have said that things look at them. He quotes André Marchand who says, after Klee:

In a forest, I have felt many times over that it was not I who looked at the forest. Some days I felt that the trees were looking at me, were speaking to me.... I was there, listening.... I think that the painter must be penetrated by the universe and not want to penetrate it.... I expect to be inwardly submerged, buried. Perhaps I paint to break out. (Marchand, cited in Merleau-Ponty, 1961/1993b, p. 129)

Merleau-Ponty adds that at that point it becomes impossible to distinguish between who sees and who is seen, who paints and what is painted.

The person engaging in an artistic group activity as a way of possibly connecting to nature typically alters between different states of participating in what is going on: one leans back, pays attention, or one acts, interferes. This contrast manifests itself on three different levels: first, on the level of the individual participant and his or her own artmaking process; secondly, in the relationship between the facilitator and the participants: the former has at any given time the option of intervening or of letting go. Thirdly, the contrast manifests itself also in the way the facilitator prepares for the activity on forehand: will she structure it thoroughly, or allow for emergent possibilities? And by which conditions or parameters will she frame the activity, so that openness to process can come about (which can paradoxically be formulated as, "by which rules are participants encouraged to improvise?").

This overarching polarity is one between states of control and surrender. On the "control" side is our familiarity with day-to-day life, its conventions, our habits; in short, it are the habits and the order we have brought to our life. On the "surrender" side is the giving over to the new, the fundamental *not-knowing*.

In the following, I will make a further differentiation in this root polarity by distinguishing three subcontrasts (see figure 4): respectively, the pairs of purposiveness and open-endedness; of static and dynamic quality, and of "receptive undergoing of" versus "creative acting upon" the world. Of course, this model is a simplification. It is not exhaustive in its mapping of all conceivable points of contrast.

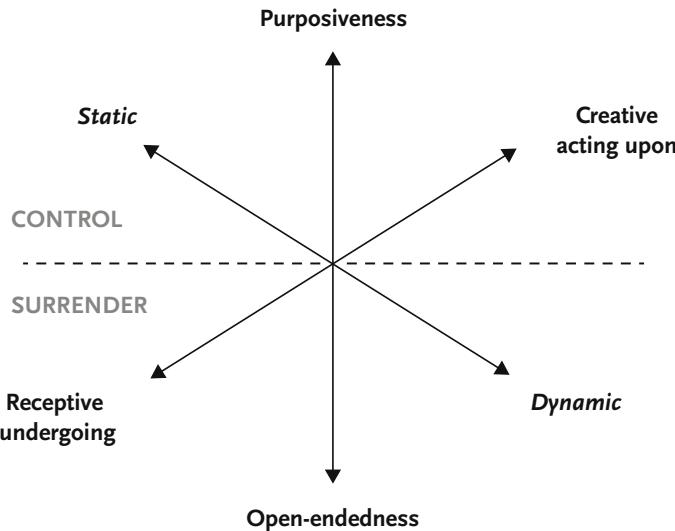


Figure 4: Three sub-contrasts of the dichotomy between control and surrender

Rather, the model is provided as a tool to indicate (sometimes subtle) relative differences in points of gravity in dissimilar pedagogic orientations.

The first contrast, between purposiveness and open-endedness, is about the extent to which an activity is planned on forehand and participants are purposefully encouraged to work towards achieving certain predetermined outcomes, or, conversely, the degree to which an activity is *not* planned from beginning to end and the outcome deliberately left open. The term purposiveness is derived from Bateson. According to Noel Charlton (2008), “self-conscious purposiveness” is one of Bateson’s key phrases. With it, Charlton explains, he means that we have learned, as Western people and through the centuries, “to identify single goals for our purposes.” part of this is our habit of thinking of “causality as a series of straight line, ‘knock-on’ effects ... without allowing for all the interpenetrating influences and effects flowing between each of us and the wider living world” (p. 1). Open-endedness refers to an inclination or ability to leave the result open. Here one welcomes the unexpected in an educational and artmaking process with participants.

Receptive undergoing is a notion derived from John Dewey (*Art as Experience*, 1934/1987), and alludes to the ability of participants to surrender themselves to process, to the world acting *upon them* – thereto actively encouraged by the facilitator. The opposite, then, is when participants are induced to creatively act upon the world themselves: the act of interfering, leaving one’s own creative imprint on the world through a mindful steering. This contrast is about varying states of mind of participants in the course of engaging in artmaking as part of EE.

Finally, the last contrast is about the difference between static and dynamic quality in the artmaking process. This distinction is derived from Robert Pirsig’s (1991) novel

Lila and has strong parallels to the Nietzschean distinction between the Apollonian and Dionysian. The static (or Apollonian) pertains to a quest for order and discipline, whereas the dynamic (or Dionysian) is about letting go, being carried away, chaos, and even intoxication. This third distinction is about the participant's tolerance for chaos versus their need for structure and order.

Below, I will shortly sketch the essence of each contrast, as I take them to be at this point in my study.

2.8.1 Purposiveness versus open-endedness

Of the three complementary contrasts, this first one alludes most to the *temporal* dimension, the planning on forehand of the artistic activity. The teacher/facilitator can decide to leave the outcome of the activity completely open (anything may happen), but usually there are some constraints operative, even if these are no other than the limited time frame in which the group engages together in the artmaking.

According to Elliot Eisner, the arts teach that in complex forms of problem solving purposes are seldom fixed, they tend to change with circumstance and opportunity. "Learning in the arts requires the ability and a willingness to surrender to the unanticipated possibilities of the work as it unfolds" (Eisner, 2002). Eisner has an open eye for the contrast between, on the one hand, purposes that are left unfixed, and on the other, a yielding to unforeseen potential. The opposite to this would be to let considerations of conscious purpose determine the agenda. This runs the risk, as Bateson (1972) warned, of becoming too one-sided: "... mere purposive rationality unaided by such phenomena as art, religion, dream and the like, is necessarily pathogenic and destructive of life; ... its virulence springs specifically from the circumstance that life depends upon interlocking circuits of contingency, while consciousness can see only such short arcs of such circuits as human purpose may direct" (p. 146). Art's function, then, is to correct "a too purposive view of life and making the view more systemic" (p. 147). Art can do this, says Rollo May (1977), because it arises from a synthesis of primary and secondary processes. Primary process is basically *pre-logical*; it manifests itself in fantasy and dreams, before discrete, logical, critical consciousness is developed. "Primary process is a trusting of one's intuition as part of the whole; it involves ... letting one's self be carried by the life process" (p. 93). Secondary process, by contrast, explains May, tries to sift everything through rationality.

In connecting to nature through artistic practice, there is a certain indirect – at least not "head-on" – quality in the process: an element of serendipity, of things happening that one did not expect. To be at ease with this is quite different from directing the attention and narrowing it down to a certain object or phenomenon intentionally, purposefully and exclusively. May points out that Bateson advocated a *resurrection* of primary process. He was, says May, firmly devoted to "this sense of the whole in human experience, this childlike rather than childish attitude, this awareness of circuitry." Primary process, he goes on to explain Bateson's orientation, is a trusting of

one's intuition as part of the whole: "it involves living closer to nature, letting one's self be carried by the life process" (ibid.).

In an interview with Stewart Brand, Bateson qualifies purpose, with thinly veiled disdain, as "the exclusion of one half of a Hegelian dialectic, as opposed to clinging to the dialectic and going on to the next synthesis, whatever it may be." Brand clarifies that the person who seeks to force a situation to one side or to its opposite denies the healthy paradox at the heart of the matter: "Rational purpose serving only its own convenience or plan – I want nature *my way* – asks for increasing trouble, the pathology of insistent control and guaranteed frustration" (Brand, 1973, p. 36).

The notion of purposiveness comes close to what Max Weber termed purposive-rational action, which he distinguished from value-rational action. Purposive-rational action (*zweckrationales Handeln*), to him, was an intentional action in a narrow sense – that is to say, consciously oriented to ends by deliberate calculation of appropriate means. A value-rational action, in contrast, would be driven by feelings and emotion, tradition and/or values. However, it is important to bear in mind that perfect purposive rational action is rarely found in social reality. Weber's point is that before the processes of industrialization and bureaucratization had settled in, the purposive-rational calculations of entrepreneurs were still embedded in value-rational action, but since then have lost this anchoring (Harrington, Marshall & Müller, 2006, p. 2).

Earlier, Kant had pointed to the characteristic of the "disinterestedness" (*Zwecklosigkeit*) of an artwork, or the well-known ideal of artistry for its own sake (a thought that became popular in the early 19th century, after Kant's death, as "*l'art pour l'art*"). The paradox about perceiving a piece of art is that we can appreciate it as something that is produced in accordance with an end, but this is an end "unlike those practical ends which organize our experience; or as Kant puts it, the work has *Zweckmäßigkeit ohne Zweck*" (Baugh, 1988, p. 480). It cannot be understood from a frame of reference of practical ends, and this puts works of art in a wholly separate category. Artmaking should not be guided by any ulterior didactic motive, Kant held. Arnold Schönberg voiced this view more strongly as follows: "nothing done for a purpose could be art" (Schönberg, cited in Gablik, 1984, p. 20). No one has ever made beauty, said Rilke (1903/2004), in a similar vein. "One can only create kindly or sublime conditions for that which sometimes dwells amongst us" (p. 70).

In short, the opposition between purposiveness and openness points to the inclination (and, even more, the *ability*) on the part of the teacher/facilitator to leave the artistic process open, indeterminate, or, reversely, his or her desire or need to rationally plan for (and work towards) certain outcomes. In the latter case, one is oriented to a clear (conscious) purpose, guiding the participants' actions. However, the opposition between purposive and open-ended in executing an artistic session as part of EE is in reality never absolute. The mere fact of organizing or even *initiating* such an activity is a purposive act, through the time that is set apart, the invitation of participants and the choice of materials that are used.

2.8.2 Receptive undergoing versus active acting upon

The second contrast, between a non-rational, receptive process of undergoing, and the rational, intentional process of acting on the world, foregrounds the aspect of *process*. It is about intentionally taking action or being responsive by refraining from action. Earlier, I quoted David Abram (1996a), who pointed out that every living creature necessarily needs to be both receptive to its environment and bring about a spontaneous creativity in adjusting itself. In Abram's understanding, this is the core of perception: this open, dynamic blend of receptivity and creativity by which every animate organism necessarily orients itself to the world. Dewey had observed that in any meaningful experience there is an ongoing oscillation between "acting upon" (or, what Abram would call, the creative) and "receptive undergoing." Every experience, according to Dewey (1934/1987), is the result of interaction between a live creature and some aspect of the world in which he lives. Dewey explained his further as follows:

A man does something; he lifts, let us say, a stone. In consequence he undergoes, suffers, something: the weight, strain, texture of the surface of the thing lifted. The properties thus undergone determine further doing. The stone is too heavy or too angular, not solid enough; or else the properties undergone show it is fit for the use for which it is intended. The process continues until a mutual adaptation of the self and the object emerges and that particular experience comes to a close. What is true of this simple instance is true, as to form, of every experience. (pp. 43-44)

As we saw before, Paul Cézanne once observed that when he was painting nature, the landscape was expressing itself through him, that he had become its consciousness. I interpret this as him saying that, as a painter, one becomes in a way an instrument or vehicle of the landscape expressing itself. When I asked David Abram to comment on this, he responded as follows:

When Cézanne is painting Mont Saint-Victoire, it may not always be the case that he feels like the mountain is painting itself through him. Sometimes he may feel he is painting the mountain, sometimes the mountain is painting *itself*. Merleau-Ponty also speaks of a reversibility, in line with all the causality out there. But I would then not say that I am *causing* all of my experiences. Sometimes the world is acting, creating, and also creating me. At other times – because I have a relative autonomy – I can feel like I *am* really the most active agent here. And sometimes the world that includes me is doing all together; the earth itself is painting a part of itself through another part of itself. These are all real and one can slip from one to another, to yet another, and that's where, it seems to me, improvisation comes in. A saxophone player is caught up in his own rhythm, and then he is listening to the other musicians

who at that point may be sort of dominating the melody, and then he has to groove with them. So sometimes they are playing and then he gets caught up. The music is playing itself through us. This is to allow that the causality can be located at many different points, and shift. (D. Abram, personal communication, February 8, 2009)

In the contrast between receptive undergoing and acting upon, I differentiate between two states of being: the surrender to process of participants, which can only come about if the facilitator allows for this (and, again, is also able to handle it), and their creative acting upon the world: their possible interference in the process, their handling, molding, and changing of objects according to their intentions while they are groping their way forward.

2.8.3 Static patterns versus dynamic quality

The third and last of the three contrasts pertains most to the dimension of structure and pattern. In *Lila: An Inquiry into Morals*, novelist Robert M. Pirsig (1992) purports that the basic division of reality is not between subject and object but between static and dynamic quality. According to him, each culture has its own pattern of what it holds as static good, that is derived from fixed laws and the traditions and values that underlie them. The dynamic good, on the other hand, is located “outside of any culture.” It cannot be contained by any system of percepts, says Pirsig, and has to be continually rediscovered as a culture evolves. Dynamic quality is a stream of quality events going on and on forever, always at the cutting edge of the present. But in the wake of this cutting edge are static patterns of value. These are memories, customs, and patterns of nature. Even if one tries, dynamic quality cannot be defined, Pirsig claims. It can only be understood intellectually through the use of analogy. One way of grasping what it is, is to conceive of it as the force of change in the universe. When this dynamic quality becomes habitual or customary, it becomes static. Pirsig defines static quality, by contrast, as everything which *can* be defined. An example is all the content of a dictionary. These static forms build the base of knowledge for a culture. The values of static morality don’t alter by themselves. Only dynamic quality brings change about; otherwise they just keep repeating themselves.

Pirsig links his notions of static and dynamic quality to pattern. Life can’t exist on dynamic quality alone, apart from any static patterns. Doing so would amount to clinging to chaos. Neither static nor dynamic quality can survive without the other. Static patterns provide a necessary stabilizing force; they provide the quality of order and preserve our world:

A dynamic advance is meaningless unless it can find some static pattern with which to protect itself from degeneration back to the conditions that existed before the advance was made. Evolution can’t be a continuous forward move-

ment. It must be a process of ratchet-like steps in which there is a dynamic movement forward up some new incline and then, if the result looks successful, a static latching-on of the gain that has been made; then another dynamic advance, then another static latch. (p. 176)

According to Pirsig, when A.N. Whitehead wrote that “mankind is driven forward by dim apprehensions of things too obscure for its existing language,” he was writing about dynamic quality. For Pirsig, “Dynamic quality is the pre-intellectual cutting edge of reality, the source of all things, completely simple and always new.” Characteristically, it can be recognized before it can be conceptualized. Based on a story in Walker Percy’s *The Message in a Bottle* (1975/1983), Pirsig gives a compelling example of dynamic quality manifesting itself. It is the story of a man on a commuter train from Larchmont to New York. His needs and drives are satisfied, he has a good home, loving wife and family, good job, but feels bad. Suddenly, while still traveling, he suffers a heart attack and is taken off the train at New Rochelle. Here, he regains consciousness and finds himself in a strange place. While lying on the ground, he comes to himself for the first time in years and begins to gaze at his own hand with a sense of wonder and delight. In *Lila*, Pirsig – or rather, his alter-ego Phaedrus – tries to make sense of what happens to this man by dividing quality into dynamic and static components: the man who suffers a heart attack has had all his static patterns shattered: he can’t find them at that moment in time. At that very instance only dynamic quality is available to him, and that is why he gazes at his own hand with full amazement.

For Gregory Bateson, as for Pirsig, the phenomena of stability and change are inextricably linked. Change and constancy are part of the same process. Or as his daughter Mary Catherine Bateson (1994) observes: “change and constancy [are] often two sides of the same coin. We can only make sense of the relationship between change and constancy by thinking of them in layers, one flowing under or over or within the other, at different levels of abstraction....” (p. 89). Her father suggested that there is a similar contrast between rigor and imagination. To Gregory Bateson (1980), these are “the two great contraries of mental process, either of which by itself is lethal. Rigor alone is paralytic death, but imagination alone is insanity” (p. 242). In fact, the one cannot exist without the other. For Bateson, rigor in the mental process goes along with a certain conservatism, and a striving for coherence and compatibility. Too much of this may lead to paralysis and stagnation. Imagination, on the other hand, may go too far ahead in uncharted territory. In that case it too needs correction from the contrary. For him it is an epistemological truth that the poles of contrast are “dialectical necessities of the living world” (p. 246), just like one cannot have day without night and no form without function:

Clearly if some part of the cultural system “lags behind,” there must be some other part which has evolved “too fast.” ... “Time is out of joint” because these two components of the steering of evolutionary process are mutually out of

step: Imagination has gone too far ahead of rigor and the result looks, to conservative elderly persons like me, remarkably like insanity or perhaps like nightmare, the sister of insanity. Dream is a process, uncorrected by either internal rigor or external “reality.” (pp. 245-246)

In a similar vein, Pirsig states that without dynamic quality the organism cannot grow, and without static quality the organism cannot last. Both are needed.

This is clearly manifested in the early development of a child. Phaedrus, in Pirsig's (1992) novel, saw that not only a man recovering from a heart attack but also a baby gazes at his hand with mystic wonder and delight. He reflects further on this. Already an infant in the womb becomes aware of simple distinctive sensations such as pressure and sound, and then at birth acquires more complex ones of light and warmth and hunger. As adults we have come to learn that these distinctions are pressure and sound and light and warmth and hunger, etc. But the point is that the baby doesn't. Something compels attention of the baby, and this generalized “something,” says Pirsig, is dynamic quality. (Whitehead would term it “dim apprehension.”) After a few months, the newborn can study its very own hand, not knowing what it is, with a sense of excitement.

If the baby ignores this force of dynamic quality it can be speculated that he will become mentally retarded, but if he is normally attentive to dynamic quality he will soon begin to notice differences and then correlations between the differences and then repetitive patterns of the correlations. But it is not until the baby is several months old that he will begin to really understand enough about that enormously complex correlation of sensations and boundaries and desires called an object to be able to reach for one. This object will not be a primary experience. It will be a complex pattern of static values derived from primary experience.... Once the baby has made a complex pattern of values called an object and found this pattern to work well he quickly develops a skill and speed at jumping through the chain of deductions that produced it, as though it were a single jump. This is similar to the way one drives a car. The first time there is a very slow trial-and-error process of seeing what causes what. But in a very short time it becomes so swift one doesn't even think about it. (pp. 144-145)

In this way, Pirsig suggests, static patterns of value become the universe of distinguishable things. “Elementary static distinctions between such entities as ‘before’ and ‘after’ and between ‘like’ and ‘unlike’ grow into enormously complex patterns of knowledge that are transmitted from generation to generation as the mythos, the culture in which we live.”

With the above outline, I hope to have provided three ways in which one can differentiate between polarities of control and surrender: predominately on either the temporal, processual, or structural plane. To be sure, the picture is more nuanced

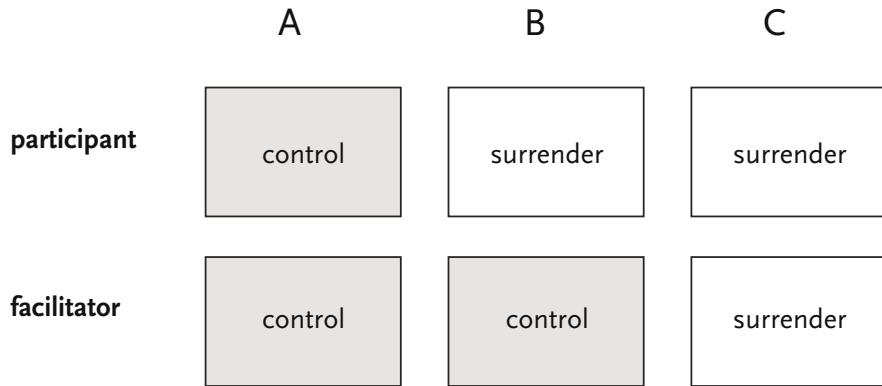


Figure 5: Contrasting states of relating to artistic process when integrating artmaking in environmental education

than suggested by these dichotomies. The ways in which the pairs play out in a given situation is also a function of the perspective, the point of view, of the person concerned, i.e. participant or facilitator, and the moment in time in which he or she acts, or, conversely, surrenders to action. The facilitator for example, must, at each given instance, choose between letting go and intervening in the process that he or she witnesses the participants are undergoing or actively engaging in.

Figure 5 is a basic binary rendering of this relational field. This crude and rather elementary scheme points at the different dominant states of relating to artistic process that both participants and facilitator can find themselves in, at any moment in time, during the artmaking activity that is carried out in the context of EE. The model is simplified also because, in practice, each pair of contrasts tends to oscillate continuously between modes of control and surrender while the participant and facilitator interact with each other. State A is the most “frozen” state, in the sense that when this is the dominant orientation, things tend to ossify: here there is the (even ultimately illusory) sense of full predictability and mastering of what’s going on. State C, in contrast, is the most volatile state, where everything seems possible and the danger of chaos looms large. Here, the “letting go,” particularly when also the facilitator incessantly dwells in this state, may easily flip over to neglect, e.g. when the facilitator fails to register instances in which one or more of the participants *do* need direction and guidance.

In the next chapter, I will use these contrasts as a frame of reference to evaluate five educational practices that I have selected, each having a different perspective on bringing art practice and EE together.

3. Five practices of integrating artmaking in environmental education

Of course natural beauty can be taught as a dead subject. I know that, but I believe also that perhaps the monstrous atomistic pathology ... – the pathology of wrong thinking in which we all live – can only be corrected by an enormous discovery of those relations in nature which make up the beauty of nature.

Gregory Bateson (1991a)

In this chapter, I will look at five concrete practices of seeking a combination of artistic practice and environmental education. I will do so partly by comparing the approaches along the different contrasts that I presented at the end of the foregoing chapter: purposiveness versus open-endedness, receptive undergoing versus active acting upon, and static patterns versus dynamic quality. For each of the five approaches I will try to determine to what extent these contrasts are applicable and in what way they help me to acquire a better understanding of the practice concerned. In the way I present them there is a progression from orientations leaning relatively more to control and planning of process, to those that seem to allow greater space for loose forms of surrender to whatever way the activity unfolds. The fact that I present them according to such ranking, however, should not be taken as entailing a hierarchy in qualities of approaches, whereby more openness and letting go *in itself* would necessarily be a better mode than retaining control. The overall picture is

more nuanced than that. I believe the five practices can be conceived of as exemplary cases, to the extent that each in its own right is representative of a certain orientation to integrating some form of artistic practice in learning about the outdoors. My selection of these cases is not rigid, on basis of the application of certain qualifying criteria. However, it is not completely arbitrary either, as my acquired familiarity with many prevailing practices of EE through art caused me to choose specifically these five examples. Considerations were the pedagogical contents and epistemological foundations of each practice, as well as the relative contrasts between them.

An additional aspect to point out is that four of the five practices that I discuss here are focused on working with children and young adults; it is only the last one in which participants are exclusively adults. In my discussion of these five ways of working with art in EE, I have chosen to disregard the aspect of the age of the learners involved. I am mindful of this omission, as age of course is an important factor. However, my primary aim here is not to present a comparative study of cases with shared characteristics such as comparable age levels or social-economic backgrounds of the members of their target groups, however significant such factors may be. Rather, I want to consider each approach in its own right, as a unique practice in itself and take a closer look both at the activities that are developed and how the educators attribute meaning to these. What is more, I believe that it is not inconceivable that all five educational approaches could well be presented to *both* adults and children, though I would not know if this has indeed ever been done, let alone documented.

In the following, I provide descriptive accounts of the five different approaches. Two of these – *botanical excursion* (section 3.2) and *art-based perceptual ecology* (section 3.5) – are more extensive than the others. There are two reasons for this: I have not only acquired relatively more documentation on them, but they are also expressive of the deepest layered contrasts – each in its own specific way – with my own practice of arts-based environmental education. First, however, I start out with presenting the approach of Earth Education.

3.1 Earth Education: getting the job done

The Institute for Earth Education (a not-for profit organization with branches in several countries) was established in 1974 by Steve Van Matre and others. The reason for setting up the organization was a shared view that the prevailing EE movement had been led astray: in their opinion it had become trivialized by mainstream education. Even worse, it had become diluted by those with their own agendas and had been co-opted by the very agencies and industries that have contributed so much to the problems. Along with its criticism of mainstream EE, the institute developed alternative educational programs.

In his book *Earth Education: A New Beginning*, author, designer and educator Van Matre (1999) distinguishes outdoor education from environmental education. Outdoor education's mission, in his view, is *not* to help people understand how life

functions here and what that means for them personally. Rather, he says, it is focused on curriculum enrichment and application in the outdoors, and developing recreational skills and socialization experiences. The major complaint Van Matre has about contemporary outdoor education centers is their “overall lack of clearly identified outcomes and matching learning experiences” (p. 26):

[L]et's not mislead people. If you really want to accomplish specific learning outcomes, then you need to spell them out, identify the individual activities designed to accomplish them, and check your participants to see if they really learned what you had in mind for them. For sure, you are going to have to channel your staff's creative surges into certain predetermined paths, and you need to be upfront about this. (pp. 28-29)

When he talks about environmental education proper, Van Matre is just as critical of how the discipline has developed through the years; he speaks of its “sickening state” (p. vi), and even talks about “environmental miseducation” (p. vii). He criticizes the practice of enlarging the concept of EE to such an extent that it is defined for example as follows: “Environmental education is education that is in, about, or for the environment.” If one uses that definition, Van Matre notes, then what *isn't* environmental education? Elsewhere he states: “We believe environmental education became a bit of everything to everyone, and consequently not much of anything to anyone. It became anything anybody wanted it to be at the moment...” (p. 46). Van Matre is most worried about a tendency in EE that educational leaders should use the EE materials in any way they like, picking and choosing “whatever catches their fancy, or whatever happens to fit with what they are doing at the time.” In contrast, he holds as imperative that some focused, sequential programs are put together “to get the job done” (p. 7).

Ideally, for van Matre, EE sets out to address how life functions ecologically, what that means for people in their lives (also involving examining their own environmental habits), and what those people are going to have to do in order to lessen their impact upon the earth. EE should deal with basic ecological understandings, that is, with concepts such as the flow of energy or the interrelationship of living things.

Here, Earth Education is proposed as a sound alternative. To Van Matre it seems very important that the learners, when they are participating in the learning activities, have a grasp of where they are going and why, and what they will do next. In answer to criticism that Earth Education might stifle creativity, he answers: “I don't think we stifle it, I think we channel it.” And in response to teachers who say that they want to teach students how to think, not what to think, and who don't want to impose their values upon them, Van Matre states, “In the end, I want them to live more lightly on the earth. Influencing their values is exactly what I have in mind.” For EE is, ultimately, about “survival of the earth” (p. 12).

Van Matre wants to make a clear distinction between what environmental education *is*, and what it *ought* to be. In the kind of EE that he sponsors, working towards certain predetermined outcomes is central, Van Matre holds that a genuine learning

program is a carefully-crafted, focused series of sequential, cumulative learning experiences which are explicitly designed with specific outcomes in mind. Van Matre criticizes science education, for, in his view, it tends to get bogged down in something other than the big picture ecological concepts. In contrast, the point of EE is change: “if there is no change, there is no point” (p. 19). If possible, learners should make real changes in their own lifestyles. One example of this are the so-called “springboard programs”: these are highly-charged, focused educational experiences that serve as a springboard for what will take place in the lives of the learners back at school and home. For Van Matre, it is important to be able to identify what one is building on (where the learners are coming from, the kind of backgrounds they have, the understandings, skills and appreciations that they have already developed) and what one is building to (what one wants them to have when they are finished). As part of developing a structure where one, as an educator, builds to, Van Matre coined the concept of *acclimatization* (pp. 52ff). What he wants to accomplish is to turn the kids on to the natural world, a feeling of at-homeness with the earth. In short, he wants the children to have the same feeling of security and comfortability that they have in their own homes, but then with the planet itself, and this would effectively be an effort to acclimatize the children to the earth and its natural systems.

One of the activities that Van Matre developed as a form of barrier-breaking acclimatization was the “Ceremony of the Marsh,” lasting for about one hour. The leader takes a group of children along, walking slowly into a marsh. At one point he asks them to form a circle, to squeeze tight and to flex the knees. While they are holding the hands tightly of their neighbor participants, the leader suggests that they should get “out of their heads” for a few minutes. One after the other, a helper puts black bags over the heads of the children. The effect is, according to Van Matre, that they “shift down”: their pores try, as it were, to pull in sensory impressions about what’s going on around them. The leader then asks them to feel the life of the marsh out there calling to them, and say: “I think the marsh really wants us to become totally one with it.....” At that point they all sit down together in the marsh. With acclimatization, van Matre and his colleagues want to get people out of their boxes and in touch with life again, so that the participants “feel themselves as something like microscopic parts of a much larger system.” The reasoning being, that when one is too full of one’s own thoughts, one cannot make room very easy for the impressions of the other life around oneself. Nevertheless, he also asserts that acclimatization focuses on the feelings, on sharpening nonverbal skills like watching and waiting, silencing and stilling, opening and receiving.

The acclimatization is structured this way to give adequate attention to detail. Van Matre calls this part of the hidden structure of Earth Education’s work. He contrasts it sharply with what he regards as one of the prevalent myths in the field of EE, namely, the idea that discovery learning is unstructured learning. Instead of promoting a kind of hippie grooving on nature, Van Matre asserts, “if our goal is to build some basic ecological understandings, then we need some structured learning experiences to help us get the job done effectively and efficiently in a mass education situation” (pp. 60-62).

The founder of Earth Education was once asked by a colleague what he would do in case he would round the corner with a group of kids in the morning and discover a Great Blue Heron feeding. Van Matre replied that he would give the Great Blue Heron ten minutes. His elaboration of his reasons for doing so is rather revealing:

I felt our program was structured in such a special way that a leader could easily take advantage of a special opportunity to instill wonder by watching a heron feed. On the other hand, I felt that the basic ecological understandings we were trying to convey were so important that we didn't want to lose the whole morning. Watching a feeding heron might also be a good *application* of the food chain idea, but since the kids weren't *doing* very much, it would not be that great of a way to instill the idea to begin with. Besides, I had a hunch that it really wasn't the kids who would decide to spend a whole morning watching a heron . . . (p. 62).

Van Matre claims that many people involved in nature education don't appear to know much about how people learn, or what he calls the mechanics of learning. For him, people learn when they take something in, do something with it, and then use it. One has to strike a balance between a good task and a good reason for doing it.

If we look at Earth Education from the perspective of its control and surrender aspects, we see that there is a high degree of purposiveness, of working towards predetermined goals, in Van Matre's pedagogics. He is adamantly against leaving the educational effort unstructured. However, he also is keen to encourage a state of receptivity to nature when the actual activities are taking place, of opening all the senses.

3.2 Botanical excursion: learning about plants and seeds

Together with Norwegian art teacher Solveig Slåttli, American natural science teacher Linda Jolly developed a program that consists of a weeklong botanical excursion with children at the upper secondary level of school education. The educational approach has been continuously further developed on basis of evaluations together with the pupils. For the description of the excursion, and Jolly's pedagogical approach in general, I lean on her article "Agriculture main-lesson and botanical excursion" (Jolly, 1996), on the report of the Doli Seminar on Researching Art and Science" (2012) which both Jolly, Slåttli and I attended, and on an article that the three of us wrote together, entitled "Biologi, bilder og bærekraft" (2011). More extensive descriptions of the art activities during the excursion are published in my article "Forget your Botany" (van Boeckel, 2006).

Each summer, when the flowering period is at its peak, Jolly takes pupils or a school class with a boat to the island of Fjelberg, a little way off the west coast of the Norwegian city of Bergen. They embark on a botanical excursion in which they are to work with nature experiences artistically and to cultivate the perceptive faculties

of the senses in a systematic manner. Along come watercolor paper and sketchbooks as well as plant identification books and magnifying glasses. A typical day starts with two hours main lesson where they study the development of the plant from seed to fruit, and to seed again. This part involves observation, making a description together and drawing the part of the plant which is being studied. The pupils write texts and have posters (A3-size) showing all stages of plant development. Then there is a short break, after which the group begins to work with “the plant of the day.” After lunch there usually is a painting exercise outdoors: this can be landscape painting or color exercises, partly dependent on the weather. After dinner the group goes on an excursion, and each time there is a different theme. During one excursion they may look at trees, at another they examine plants and plant families and they identify plants. As part of the course, everyone is asked to choose one particular type of tree that he or she will specifically study during the time that the group is on the island, and on the last day the trees are presented to each other.

The learning goals for the week are linked to the flora that is present on the island. The pupils should become acquainted with the taxonomy (the science of classification) of plants, the use of plant determination keys, and the developmental stages that each plant goes through. At the end of the course, the pupils should be able to identify over twenty species of trees and twelve major families in the plant kingdom. The cultural landscape and biodiversity are also issues discussed during the trip.

In early June, there are almost no seeds to be found, so Jolly usually takes some along herself and gives the participants a teaspoon full to look at. In the first instance, without further instructions, the students are asked to try to sort and name the seeds. After a while, they are asked to put down words describing what different types of seeds have in common. They are asked what properties seeds have, which characteristics they share despite all their differences, and what it is through which we *know* that it is a seed. Each student is then asked to mention *one* property of seeds, while the teacher notes on the blackboard what is said. After a while, when no additional characteristics of seeds are mentioned further, Jolly elaborates on what has been shared by the students, thereby providing an informative context from biology. When, for example, one participant has said that seeds are “small,” she may point out that this characteristic must be viewed in relation to the entire plant: coconuts, for example, are also seeds. The students are invited to observe that most of the seeds that they were given can be described as “kitchen seeds.” They are seeds that are used in making bread or to spice food, etc. Here, Jolly has an opportunity to discuss the nutritional value of seeds, their role in world trade and agricultural policies, their being part of an ancient cultural heritage as well as being an object of patenting. In that way, the seed, the part of the plant that is the least in size but has the greatest potential, has become a key to understanding many processes in nature and society; the students’ own observations are thus linked to a web of relationships and relevant facts.

After this group work, the pupils are now asked to choose two or three different seeds and to study them by means of drawing. The art teacher provides instructions

on the use of drawing materials and the students reflect together on how the seed is knowledgeable through its color, shape and texture. Once they have drawn the seeds of their choice, the students write a text that demonstrates understanding of how the seeds are the first stage in the growth process of a plant. This process – to observe, describe, discuss, and draw the seed – is repeated with respect to the other parts of the plant in the next few days. By the end of the period they have studied the roots, the cotyledons, the leaf form from the first to the last leaves on the stem, and the flower and the fruits.

In addition to drawing the growth stages of the plant, the pupils also make drawings of the plant as a whole. Here the challenge is to bring out parts of the plant in proportion to each other so that the details are part of a coherent picture. Some details such as fruits and pistils are enlarged next to the drawing of the whole plant. In the end, the drawings are supplied with the plant's name, the plant's family affiliations and the site where they were found. The point of the exercises is to strengthen the learners' competence in observation, to familiarize them with the growth process of plants and with painting and drawing as a means of expression. Through the daily artistic exercises the students develop their skills. Every day begins by looking back on the former day and every evening the pupils turn in their work of the day, which is a combination of drawings and written pieces of text.

The artistic exercises are an intrinsic part of the didactical method. The aim is that the learners will become familiar with different art materials and artistic techniques and they will practice to use them as a tool for the observation of plants. The instructions alternate between sessions with lectures and sessions of drawing and painting. Both teachers participate in all the sessions and take turns doing the exercises with the students and to provide guidance and training.

The next step is to look at the plant in the context of the landscape. When they first did detailed observation studies with sharp pencils, the students now paint the large surface areas and lines of the landscape, using color and wide brushes. One of the painting exercises is on the theme of the meeting of light and dark, using the primary colors yellow and blue. On the basis of the imaginary landscape that now arises on the painted sheets of paper, the children go out into the open and paint a picture of what they see. For example how the light of the skies meets upon the heaviness of the earth, producing many shades of green on the horizon. A further step could be accomplished by practicing with tones of green alone. How many nuances of green can be created in such a composition of color? How much red is there in the green of nature? How far does green extend towards blue, red and yellow without losing its green? Afterwards the pupils take their sheet of paper outside and paint the nuances of color observable at the transition between woodland and meadow or between the many different types of plant that make up a hedge. In all these places they might experience, as Jolly (1996) calls it, "seeing green for the first time" (p. 5). All of a sudden, even the monotonous green of

a commercial pine forest may speak a different language from the richly varied green of the neighboring forest of leafed trees.

Jolly explains:

A blossom might stand out from the veritable sea of shades of green formed by the rounded roof of a deciduous wood. It will strike the observer as a foreign element, as something of a revelation. We came closer to that kind of experience through a painting exercise where certain areas were left blank in a “sea” of green. Applying clear colors to these blank bits brought to light the blossoms in a flowery meadow or a rhododendron hedge or even a rose bush! After all, the blossom was so different from the rest of the plant that its connection to it was not taken for granted. (pp. 5-6)

Jolly points out that it was Goethe who first recognized that the entire plant is formed out of the elements of stem and leaf. He saw that the calyx and petals represented metamorphosed forms of the leaf element. In the case of yellow and blue blossoms, she explains, this can be understood without undue difficulty through color exercises. However, in the case of red, it may be helpful to examine the individual petals or single reddish tinted leaves of the rest of the plant. Jolly has found that whoever tries to capture plants in painting will invariably find, whilst mixing his green from the basic colors, that every plant green has an admixture of red besides yellow and blue in it. In other words, the red blossom is already contained in the green of the rest of the plant in a hidden form. In a conversation Jolly once told me of an apocryphal medieval folk belief. Before having a scientific explanation of the often striking difference between the color of a blossoming plant and the green of the leaves, there allegedly was a thought that reigned among people in Europe, namely that the difference stemmed from the circumstance that at some point in time, a butterfly had landed on the green of the plant, had fixed itself there to metamorphize into a shape of red, purple, yellow or other dramatic color (L. Jolly, personal communication, November 11, 2010).²⁴

²⁴ This poetic, if not mystical, grasp of the origin of the radiant color of flowers echoes of a similar myth about the origin of the barnacle goose. Among early naturalists, a curious belief was widely spread that Barnacle Goose Trees sprouted barnacles out of which came barnacle geese (see figure 6). People at the time thought that the barnacles had fully formed miniature geese hidden inside of them (Yoon, 2009). It has been speculated that the belief came forth from the circumstance that these geese were never seen in summer (they were actually breeding in the Arctic). Therefore it was assumed that they were developing underwater in the form of barnacles. According to Sir Edwin Ray Lankester (1970), this belief was current in Western Europe for six to seven centuries. Both folk theories are expressive of the way the porous self (Taylor, 2007) extrapolates from its own imagination without being too concerned about possible refutation of the “theory” through empirical science. This is of course the rational interpretation and explaining away of the phenomenon. Such myths, however, may conversely also provide a disembarkation point to enter a rich mythopoetic narrative that may ignite a sense of wonder about natural phenomena, from the point of view that it is perhaps not entirely without an underlying reason that such myths came about and seemed to have survived so long over time.



Figure 6: Barnacle geese, born from a tree
(from the 1552 *Cosmographia* of S. Münster)

At another time the group may go out into an oak wood with dark paper and white pastels. The gnarled trunk of the oak tree and its branches, contrasted with the lighter leafy sections, or with the sky above, could then become an ideal motif for reflecting the form and character of the oak. Hatching the light areas of the motif may give prominence to the peculiar, heavy dark form of the oak. Conversely, in other places the light trunks and leaves of birch trees shine out against the darker background of the oaks. In this case the children work with the motif by hatching the dark background and leaving blanks for the white slender stems and the tender veil of leaves.

According to Jolly, such exercises are an opportunity to work with the relationships between the different elements of a landscape, with the relationship between colors, between light and dark.

This gave a sense of something as a whole, as opposed to being fixated on an isolated object. Thus this method is appropriate to the ecological way of looking we desire to attain. In the exercise with oak and birch a familiar form engendered a new discovery through the work with the spaces in-between. After an exercise of this kind the pupils have a wholly new basis for understanding the essential being of different plants. (p. 6)

Having worked systematically in this fashion for a few days, the pupils usually feel freer to find their own motifs in the surrounding landscape. What Linda Jolly considers important on such occasions is that they learn to perceive with the eyes and

color sense of others. For this reason they pin up their paintings every day and look at them together. Jolly says about this: "This is good way of keeping them from falling behind and getting 'stuck' with one drawing which isn't 'perfect': you have the work turned in each day."

The pupils are also expected to notice details and become familiar with individual plant species. Every pupil is supposed to draw a different plant each new day. This involves detailed drawings of different leaf shapes as well as sketches of petal configurations.

A leaf metamorphosis is a subject of separate study. The leaf shapes emerge best when painted black on white paper, says Jolly. The spectrum of variation resulting from each pupil's series of leaves provides a good basis for discussing common themes such as relationships between the plants. Through drawing, the pupils find a common expression of the characteristics of related plants. For Jolly this is preferable to concentrating on outer features which, as she has found, are often misleading. She reports that "pupils discover that rhythm, balance and harmony inherent in the world of plants can speak as evocatively as poetry" (pp. 5-6).

It is instructive to take a sidetrack here for a moment and to dwell a little longer on the Goethean approach of nature that Jolly refers to. As said before, Jolly and Slättli are deeply inspired by the specific way in which Johann Wolfgang Goethe studied plants. Bo Dahlin (2001) describes Goethean science as a kind of hermeneutic phenomenology in which phenomena are understood in the context of their observable properties, not in relation to imposed, external schemata or models. To him, Goethe's idea of *anschauendes Denken* ("thoughtful observation") entails a sensitive and cultivated surrender to sense experience, "and *at the same time* a sharp and clear conceptual interpretation of this experience" (p. 466). Thus, thinking and experiencing are never separated. In the Goethean approach to nature, the organizing idea in cognition comes from the phenomenon itself, instead of from the self-assertive thinking of the investigating scientist. In short, it is "not imposed *on* nature but received *from* nature" (Bortoft, 1996, p. 240).

Part of the Goethean inspiration, as seen in the botanical excursion of Jolly and Slättli, is exhibited as well in the work of Margaret Colquhoun and Axel Ewald, who together wrote the book *New Eyes for Plants* (1996). The underlying idea both authors present is to practice "suspending judgment and to learn to see anew." A core idea they lay out is that we, through our delicate and gentle sensitivity to the plant and by attuning ourselves to its dynamic interrelations with all our senses, the plant, as it were, is brought to life in us. We, in effect, realign ourselves with the phenomena. This is the meaning of Goethe's insight that "[e]very new object, clearly seen, opens up a new organ of perception in us" (Goethe, cited in Wahl, 2005, p. 72). Because of its focus on process and relationship, Daniel Wahl calls the epistemology that Goethe employed therefore one of "conscious-process-participation" (p. 59). The observer becomes a participant.

In a recent conversation I had with Colquhoun, she explained to me that this participatory engagement with nature is an essential characteristic of the four stages

in which she teaches the Goethean science approach. The process of transformative learning starts with sense perception, but eventually, as she put it metaphorically, it is only by eating and digesting food that it offers us its nutrition: "The carrot itself needs to disappear in the process, and it is in this way of processing that the element of art comes in" (M. Colquhoun, personal communication, November 17, 2011). Or, to grasp this with another metaphor, the caterpillar has to be destroyed to make way for the butterfly to come.

Below, I will describe the four phases, based partly on Colquhoun's work, and also on what others, in her wake, have written about this Goethean process. My rendering is summarily and therefore does not adequately do justice to the full richness of this unconventional way of coming to knowledge.

The first phase entails an *exact sense perception* of the world, thereby letting the "facts speak for themselves." As Daniel Wahl (2005) explains, we stop seeing a rose and start to encounter the phenomenon, formally called rose, *as it is*. Drawing is a good way to enter this way of seeing; it alerts us to the details of pattern. Hence, this is also a key part in Jolly's botanical excursion. Careful attention is paid to the phenomenon that is being studied through a process of active looking, without attempting to reduce the experience to quantities or explanations. Goethean scientist Henri Bortoft describes this as "redeployment of attention into sense perception and away from the verbal-intellectual mind" (Bortoft, cited in Harding, 2006, p. 34). By noticing the specific details of the things, Stephan Harding (2006) adds, one's pre-conceived notions and habitual responses are suspended. The sensorial qualities of the phenomenon are thus enlivened and more readily perceived. Bortoft calls this the phenomenon coining itself into thought, inducing itself in the thinking mind as an idea. Or, as Harding expresses the same thought: "One has the intuitive perception of the thing as a presence *within oneself*, and not as an object *outside* one's own being" (ibid.). Thus we are able to apprehend the intrinsic qualities of things. Harding calls this non-informational perception, bringing a sense of wholeness, which he contrasts with perception in the service of information gathering. This *intuitive perception* is done spontaneously: through active looking one can encounter the phenomenon without preconceptions in all of its parts. One focuses for example on the shapes of leaves or the way they are arranged on the stem; Goethe asks us to then suspend the urge to theorize.

We can take as an example the observation of a tree. One can start approaching the tree by walking around it, looking at it from afar and from close by. What is its shape, what do you see at its trunk, at its bark, at its branches, what position do the latter have? And when you study the leaves, what color, shape and movement do they have? What do you see at the transition between the trunk and the soil? What do you discern in the tree's environment? Moving further, one can close one's eyes and palpate the tree bark, its leaves and branches. What does one feel, smell, hear then? (cf. Voorhoeve, 1996).

The second phase, as one moves onward, is *exact sensorial imagination* (Goethe's original was *exakte sinnliche Phantasie*). Here, participants close their eyes and allow the details that they so carefully observed in the previous stage to flow together in

their imagination. In this way, the learners can for example try to visualize the plant sprouting from seed to eventually dying. The idea is that participants, in this stage, no longer see the thing in an objective frozen present but rather begin to see, in the mind's eye, the flowing processes of movement and transition. This is necessary, for phenomena are processes that are in a constant state of formation, and empiricism can only examine parts of a process, snapshots in time. Because a process exists and develops through its interconnections, it has an integrity that cannot be grasped through dissection or reduction (although these approaches may contribute to understanding). In order to grasp the living whole of the phenomenon, the investigator must bring the phenomenon to life in his or her imagination. Although the word *Phantasie* may suggest otherwise, the *exact* sensorial imagination is restrictive in the sense that it can only be moving between what the sense perceptions have offered us, Colquhoun explained to me. In that way one approaches the phenomenon; when imagination would move itself *beyond* the phenomenon at hand it becomes illusion, she said.

In our example of the tree, one can make an effort at imagining the tree while one is not able to perceive the tree through the senses. Bert Voorhoeve (1996) suggests that one tries to move inwardly upward from the roots below to the ends of the branches as they become more and more narrow. With the mind's eye, one can try to imagine the tree's rings, the movement of the sap of the tree, both upward and downward, the transformations that the tree will undergo in the course of the change of seasons, and even the growth process of the tree, from seed to seedling, to its present state and onwards. He proposes that one makes an effort to conceive which "gestures" the tree makes. "What do you experience as most characteristic, most essential, about the tree? What does it try to tell you?" (p. 43, my translation).

This then prepares participants for the next stage, which is, *seeing in beholding*: here participants are given "a revelation of the inner being of the plant." At this point they have in fact returned to, as Colquhoun calls it, a state of "intuitive precognition," and commune with the unbroken wholeness of the phenomenon (Harding, 2006, p. 35). The thing is allowed to express itself through the observer. According to Isis Brook (1998, p. 56), such experiences are often best expressed in what she calls "emotional language," i.e. through poetry, painting, or other art forms.

Interestingly, there is a sort of change of positions: the phenomenon itself now takes the active role, and the observer, with no preconceived notions, encounters it with an open mind. In this state of receptive attentiveness the phenomenon can express its own gesture:²⁵ "When this happens, the experience of the phenomenon

²⁵ The term *gesture* is often employed in Goethe-inspired methods. In the case of humans, a gesture, which is usually unconscious, is conveyed through movements of limbs or the whole body, and expresses the intentions of a person. In the case of landscapes, as Jochen Bockemuehl (1992) explains, this inner nature initially is hidden to us and phenomena only becomes manifest through our conscious effort, which enables us to apprehend their gesture. Thus, we can be open to a plant's expression and display of a gesture, revealing to us some inner aspect. However, Bockemuehl also asserts that plants "only have soul quality in so far as we are inwardly moved when we see them" (p. 214). As an example: in the case of a leaf that metamorphoses into a flower, its form principles become completely new. It is then that "a gesture that initially reached outward now turns inward" (p. 131). The direction of its developmental movement has fundamentally changed, and the gesture indicates its direction.

revealing itself in one's own consciousness feels very much like a sudden flash of insight, much more like something received than something created" (Wahl, 2005, p. 64).

The final stage follows directly after this and is called *being one with the object*. Here, intuitive conceptualization takes place. At this stage of perception, the inner content of the thing is combined with its outer appearance or form, and this can only be achieved through the process of thinking. One starts to understand how the phenomenon relates to other forms and processes, in short, to its wider environment. These relationships define the range of possibilities the phenomenon has to transform and the ways it can do so (Wahl, 2005).

Each stage builds on the experiences the observer had in previous stages; in this sense the Goethean method is unidirectional and purposive. For Colquhoun, these stages correspond with Spinoza's notion of *Scientia Intuitiva* ("intuitive knowledge"). "Goethe drew on Spinoza. If you let the plant guide you as a teacher, you can't make mistakes. This is the science perception of the world." There is an interesting aspect here in relation to purposiveness. According to Colquhoun, it is only with intentionality that one can actually perceive something (M. Colquhoun, personal communication, November 17, 2011). Our intuition, Harding (2006) explains, can suddenly present our consciousness with a new way of seeing – "often after the thinking mind has activated the unconscious through a concentrated focusing of attention on a phenomenon or on a given problem" (p. 34).

After this field trip into Goethean science, I now return to the botanical excursion that is guided by biology teacher Linda Jolly on the island of Fjelberg. She reports that many pupils at first display a certain amount of anxiety and skepticism when faced with the task of practicing a natural discipline in this manner. But the joy of discovery, as well as the feedback provided by artistic activity, invariably result in a positive working mood. The workday is frequently a lot longer here than an ordinary school day, but the pupils tend to take this for granted.

Jolly (2011) finds it not so easy to convey to others how art and science are combined in this educational practice. There are those, she says, who immediately know that this is not science. And others are sure that one is doing a sort of instrumentalization of art for the purpose of teaching science. "Are we trying to sweeten the bitter pill of science or trick the pupils into observation while all the time denying them a true artistic creation? Or have we leveled out the differences between art and science by creating a new discipline that is neither science nor art?" (p. 88). All things considered, she maintains that her approach indeed constitutes science.

When attempting to get contemporary youngsters to describe an organism, Jolly can be overwhelmed by the poverty of their observations. She quotes Henri Bortoft, who observes: "Science students are often not interested in observing phenomena of nature; if asked to do so, they become easily bored. Their observations often bear little resemblance to the phenomenon itself" (Bortoft, 1996, p. 2). To awaken an interest among her pupils, Jolly feels that they first must be capable of seeing – not seeing things they "know" and are finished with the moment they give objects names,

but seeing in such a way that new questions arise. We commonly designate this as “a sense of wonder.” What methods can be used to see more, to open up for wonder and reflection and to create the opportunity for establishing a relationship to living things for both the pupils and the teachers? Jolly and her co-teacher’s experience is that it is through working with artistic qualities and tools that such a possibility is offered.



Figure 7: Images from botanical excursion with Linda Jolly (photos: L. Jolly)

In addition to opening up the senses and thus enabling the world of nature to become a richer experience, Jolly has also discovered that drawing plants and the landscape corresponds to the challenge that comes from the phenomenological approach to scientific research: the parts are seen in relationship to the whole and the whole is recognized in the parts. Yet, she has found that it is difficult to see with “new eyes”: “We need techniques to shake us out of habits of perception that result in ‘it is just a seed … just a leaf … just a tree.’” Through her long experience, Jolly (2011) has found that the more the pupils draw plants (this can be carried on during several hours each day), the easier it is for them to recognize not only the plant in a different setting, but also its taxonomical relations. “This recognition,” she explains, “is not a product of analytic deduction – the additive summing up of isolated characteristics, but is experienced as an intuitive leap from a feeling for the whole to the details and vice versa” (p. 91).

Jolly reports that students comment like, “I feel that I have learned a lot about plants on this excursion. I have learned to recognize trees and plant families.... It is incredible what we have learned in such short time.” Or: “I learned much more about what I drew than I would have otherwise learning. In some way the organisms become alive.” Such responses give her reason to view the art exercises as an essential method for attainment of good learning outcomes, and not as a supplement or an added aesthetic factor for teaching biology.

A key term here is the word “recognition.” According to Jolly, practicing seeing through drawing nurtures an expertise which can rarely be taught through more conventional methods like drying plants in a herbarium. She underpins this view by referring to Ronald Brady (2000), who discusses recognition as a form for acquired knowledge. Seeing is an immediate and pre-reflected recognition, it grasps the whole – thereby not summing, but integrating the parts. Jolly suggests that when drawing is practiced as a method in botany, it is possible to train and access such a recognition. With Dahlin (2001), Jolly contends that it is possible to work scientifically and at the same time to emphasize the aesthetic dimension of learning. The goal is then not only to appreciate what is beautiful in natural phenomena, but also to understand them better. As Dahlin puts it: “Nature ‘speaks’ through the gestures it makes in its forms, colors, sounds, smells and tastes. From ancient times, human inquiry has always tried to understand this ‘language’ of Nature” (Dahlin, cited in Jolly, 2012, p. 91). Jolly encourages her students to see beyond their own concepts and what they already “know.” Goethe held that the most difficult of all is that which one thinks is so easy – to see what is directly before one’s eyes. One of the goals of Jolly’s botanical exercises is to work towards a hermeneutical phenomenology (Dahlin, 2001), meaning that the pupils become absorbed in the phenomena and at the same time become aware of their own participation in them.

As mentioned earlier, for many years, Linda Jolly performed the botanic excursion together with art educator Solveig Slåttli. From her own experience, Slåttli (2011) questions whether “art” and “botany” are really identifiable as separate disciplines in their shared approach. One of the goals of instruction in aesthetic disciplines, according to

her, is to give the pupil increasingly richer possibilities to express his or her immediate experience. Artists such as Edvard Munch or Mark Rothko don't make a detour through explanation and reasoning, but create a picture directly out of immediacy to the phenomenon; through the use of color they are able to render an experience out of their life which touches us at a level which lays beyond what words can say but which we still recognize and resonate with, says Slåttli. Her own experience with students has shown that any assessment of whether or not the work of a student could be characterized as art is completely dependent on the context, the moment and criteria one uses. She has found that it is of no help to the student to use such labeling in her lessons: "It can be just as de-motivating as it can be stimulating to be declared to be an artist in a phase where one is driven by an inner urge to achieve new skills of expression" (p. 87).

The combination of art education and botany was a new experience to both Jolly and Slåttli, as the latter recalls. When she for the first time went into the natural science room with her drawing materials she felt she was on foreign ground:

Here I found there were other approaches. Of course one did train skills of observation and description of phenomena, but not with the artist's way of looking. One separated, compared, characterized and found inherent laws. One took things apart and searched for the essence under the microscope and in biochemical processes.... It was nevertheless clear for me that [Linda Jolly] attempted to give the pupils a physical proximity to the plant and to the world of plants as a whole, in addition to the formal botanical knowledge. From the very start it was also clear that she didn't want a break in the botany studies in the form of artistic elements with plants as a motif. Linda's wish was to receive help to be able to draw nearer to the botanical phenomenon in new ways which made them come forth more clearly and differentiated for the pupils. (Slåttli, 2011, p. 87)

Slåttli recalls how Jolly wanted to participate herself in the artistic exercises; she wanted to be able to experience herself which qualities could be found in the drawing and painting approaches to plants. In the same way, Slåttli had the opportunity of actively participating in Jolly's scientific approach. For every new botanical step the two teachers tried out new artistic exercises.

The ability to observe showed itself to grow in leaps and bounds already after the first plant drawing. To attempt to show with a pencil how the leaf of a lily of the valley slings itself around the stem in a double arc or how the colors change at the transition between root and stem, is demanding and requires intense observation and many attempts before one is satisfied. The focus was constantly on the plant or the phenomenon of the plant which was being studied. This made the pupils less critical to their own drawings than what I had experienced in the art lessons. They wanted primarily to get a hold of the thing itself, and the "thing" we observed with help of the pencil was composed of elements which

not only were recognized through exact observation of physical details, but just as much through capturing and reproducing the *movement* and the faint *rotation* of a tulip stem, the *rhythm* and *intervals* in the leaves on a rose or the *volume* and *feeling* of the hidden room in a bluebell. It was therefore both logical and useful to weave in basic elements of artistic exercises, which were relevant to become aware of these aspects. New materials and techniques were also gradually introduced and gave the pupils increasing possibilities to express the essence of what they experienced in ever more nuanced ways. (Slåtli, 2011, pp. 87-88)

For Slåtli, the focus on drawing and painting exercises in the biology lessons was neither chosen for creative reasons nor for allowing artistic expression. The reason why she agreed to work with Jolly was first and foremost that she had worked long enough with drawing to know how this can intensify sense perception and one's experience of reality. For her, it was exciting to let the pupils work with observation with help of methods and materials from art and thereby not being too concerned with achieving a result that should necessarily be creative or artistic. She noticed, that the absence of the concept of "art" promoted a more open and unbiased attitude to drawing and painting than she had experienced otherwise in art lessons: "For some of the pupils it seemed that it was actually liberating for their creative capacity to not have to do something that was 'artistic.' They made leaps in their drawing abilities which would be hard to imagine happening in the art lessons" (ibid., p. 88). For this reason it is no issue for her that she ought to avoid reducing art to a means for teaching science (instead of practicing "art for art's sake"). She doubts whether it would comprise an assault on the essence of art if one uses art as a means in teaching. Rhetorically she asks whether it really is doing violence against the genuine creative process, if we place the easel and the microscope in the same class room. In her view, one may just as well ask the opposite, namely, whether or not botany has been used as a means of teaching pupils to draw. In fact, in their practice, the two were complementary to each other; the borders between the two disciplines were almost erased. What was very remarkable was that many pupils, through the botanic excursion and through the artmaking activities related to this, in effect experienced that they had learned to draw: "Our focus was that the pupils would acquire curiosity, engagement and courage to work further. That they would acquire a tool to observe and experience the natural world around them, connect themselves with it and with each other through an interaction which also allowed them to recognize both principles and laws and inspire them to seek out further knowledge" (ibid., p. 88). She found that the act of opening up for art-enriched approaches in natural science made it possible to encourage inspiration and creativity for the subject matter among pupils, something which she believes easily gets lost when they are faced with advanced scientific knowledge. Jolly underlines that this is to a large extent due to the circumstance that during the botanical excursion, the children are not told, "we want you to be artistic!" That would turn off certain pupils, she has learned. It would actually be a barrier for them to engage with the task: "As the world is today, where we are all running around at an incredible tempo, we are telling them that if we are going to look at

something so slow as plants – and plants are very slow –, then we have to find tools and methods that help us see this slowness. And that's why we are now going to use these tools that you know from art classes, to try to force ourselves into a state where we can see" (L. Jolly, personal communication, November 11, 2010).



Figure 8: Linda Jolly teaching botany

In order to illustrate what she means by this, Jolly tells of the pupils all making a drawing of the same plant species on the first day, usually *Ranuculus acris*. The plant species is recognizable in all the drawings, but none of them is the same: "Each drawing has its own expression which tells about the plant, but also about the person holding the pencil. The drawing carries the personal signature of the one who made it." One of her students commented to Jolly that in the process, her drawings became

more personal, and because they demand a long time to be made, the effect was that she became more attached to them. Jolly regrets that reproductive drawing is a type of drawing which is of secondary importance in art classes today. Many pupils like doing this, she found; they don't have to relate to a demand to be creative and inventive when they draw or paint. One pupil wrote: "Learning has never been a big problem for me, but I was afraid for the drawing." But in the next sentence, Jolly adds, he says, just the same: "I dare to claim that I have gone through a drawing-metamorphosis and feel that I can now almost draw." Drawing can give a concrete experience of progression. Jolly found that the social aspect, of making a learning process visible for oneself and for others, strengthens communication. A feeling of community can grow out of seeing each other through the drawing and through the process. The pupils have expressed that they both see more and feel being seen.

In the interview that I held with Jolly in 2010, I touched a little deeper on the aspects of "recognition" and "fear of art" in the context of drawing plants:

This re-creating is the basis for a more intimate relation to the plant: they recognize it as part of themselves, though they look at it from the outside. It gives them a response, a reassurance of their existence, their identity. From an artist's point of view, this may be regarded as not being creative enough, when they are copying from nature. Nevertheless, my experience is that every drawing has its own individual expression.... We go through the drawings one after the other and look for their strengths. You look at a drawing and perhaps say: "Look what he did here, at the transition from the root to the stem: he has done very well with this transition!" There is always something to praise, which can contribute to their further drawing. It is a reassurance, also of their identity. They also see each other: each other's strengths and weaknesses. An important point is that they are not asked to be creative, as artists. The challenge to them, when they draw a plant, is to draw what they see. And because of the instruments they use, it is *implicit* in the task, to make it beautiful.... When you are trying to do a scientific exercise, you want to be very exact with the physical details that are there.

Some pupils, when they get these instruments, with paints and colored pencils and so on, in their hand, become expressive to the point that you might say that the clear physical attributes of the plant disappear in the expression. But that's very few. For most of them, when they are using colors and paper to re-create what they see outside, this aesthetic aspect will always come in without having to say anything about it. It's there. And it will also be an expression for themselves and for their creative abilities, in that recreation of what's outside. It is in the nature of the activity. Nobody is sitting there with a measuring stick and saying "That leaf is exactly like this, and that leaf is exactly like that." But if they are going to get a drawing that they are happy with, then of course the dimensions have to be approximately right, otherwise they will not be satisfied. What I am trying to say is that you can never separate – if you are going

to use something like drawing as a way to see – the aspect of creativity from the aspect of observation. I think they are intertwined. (L. Jolly, personal communication, November 11, 2010)

Jolly found that occasionally, some pupils, while being true to their observations, produced results that were much more expressive than those of their peers. She particularly remembers one girl, who made extremely expressive, romantic drawings which could be compared to those of Haeckel in the 19th century.

She felt there was something happening *around* the plant! Even the atmosphere around the plant was in movement! The others would just have the plant on the white page, but she couldn't *do* it that way, because she was seeing it in her own way. She was experiencing it that way. I think it would be just as wrong to say to her that this isn't right as it would be to say to someone else that he or she is drawing very stiff plants. Because in that case, this stiffness is *within them*, they just can't *move* with the plant. But you can try to take the plant and say, "Look, follow it with your hand; is the stem like this, or is the stem like *this*?" And when they have done that, when they have made this movement, then it is more possible for them to do this movement in their drawings. But it has to be an experience. (L. Jolly, personal communication, November 11, 2010)

In our conversation we talk about the way Vincent van Gogh painted the space in-between the cypress trees or between the stars: it is as vibrant as the stars themselves. It was that sort of vibration in those images that the girl made. Rhetorically, Jolly raises the question if van Gogh is using his creativity, his fantasy, his imagination, or if that is the way he experiences the landscape. She says that for her, this is almost an impossible differentiation. For, in the end, observation is a methodological point of entry to increase interest in natural phenomena. And she is convinced that through creating interest in such phenomena one will contribute to a foundation for environmental engagement.

Considered on the surface of things one would perhaps consider Jolly's approach as leaning to the emergence of what Pirsig would call static quality patterns, of learning botany partly through the making of accurate descriptions and depictions of plants and landscapes. From a temporal point of view, Jolly's botanical excursion is goal-oriented and well-planned. The daily routines serve a conscious, predetermined purpose. The artmaking activities are not open-ended in the sense that the parameters of what can come out of the creative process are not left completely flexible. However, as Jolly points out, the singular, unique way in which each participant in his or her own way engages in the process, allows for a gradual deepening of acquaintance with the plant at hand. In this, the recursive aspect, of returning again and again to the same phenomenon, all the time perceiving more, has its own way of enhancing a response to process in an aesthetic manner. The state of being that is very much encouraged is one

of receptivity, rather than acting upon. And in her facilitation of the activities, Jolly – a very experienced science teacher and botanist – is able to avoid rigid ossification of the process. She feels that with too much intellectualizing, the distance to nature is increased. With a tongue in cheek she is fond of quoting Norwegian poet and novelist Nordahl Grieg who once said that “botany is the worst thing plants know.”²⁶

At the same time, Jolly underscores that there is a clear (Goethean) scientific aspect in the activities that she facilitates. Goethe, while inviting us to direct our attention to the process of our engagement with the phenomena, underlined that this participatory form of science would allow anybody, who would engage in his way of seeing, to have similar experiences and insights, and thus enable him or her to verify its validity. For Goethe, the experiences that people have while practicing this phenomenon-focused science are not to be taken as arbitrary projections (Wahl, 2005).

3.3 Flow learning: creating a bridge to get reacquainted with nature

Like Steve van Matre, Joseph Cornell is another famous nature educationalist from the United States. He wrote *Sharing Nature with Children* in the 1970s to promote outdoor learning. It has been more than three decades since the book was first published; it is translated into 15 different languages with a total sale of half a million in the world. Cornell founded the *Sharing Nature Foundation* in 1979 to help his work to promote nature education. He is still enthusiastic to involve in his work, by holding activities and designing games for children to be closer to nature.

Part of the attractiveness of Cornell's (1989) approach seems to be that it offers tools to teachers to imbue the learning experience with a sense of joy. One of the challenges he takes up is how to focus children's lively energies so that an outdoor educator can lead them into nature experiences that are “deep, subtle, and filled with joyous inner meanings” (p. 15). In many years of trial and error, Cornell developed a set of principles in nature education which, according to him, fit together in a systematic way. The name he gave to his collection of methods is *flow learning*. Cornell uses the word “flow” because the nature-awareness activities that he suggests are to be used in a flowingly purposeful and directional way. As such, he shares a goal-oriented predisposition with Steve van Matre and his Earth Education. Ideally, after a successful flow learning session, each person feels a subtle, enjoyable new awareness of his or her oneness with nature and an increased empathy with all life. Flow learning can be seen as an approach to open learners up to knowledge of biology and ecological integrity through playful and engaging activities. In Cornell's own words: “people will listen much more enthusiastically to discussions of the scientific side of natural history and ecology if you first help them get into a receptive and inspired mood” (p. 19).

Key for Cornell is to start flow learning from where the learners *themselves* are; to arouse their enthusiasm and to guide them step by step through increasingly sensitive

26 In Norwegian: “Botanikk er det værste blomstene vet.”

activities and deep experiences. For him, there is a particular, time-tested, sequence of games and activities in nature that always seems to work best. The stages that naturally and smoothly flow from one into another are: (1) awaken enthusiasm; (2) focus attention; (3) direct experience; and finally (4) share inspiration.

Cornell refers to teachers or facilitators of flow learning as “leaders.” Sessions of flow learning may last thirty minutes to a whole day, and they can take place indoors as well as outdoors. A characteristic is that flow learning allows a leader the freedom to respond appropriately to the needs of the moment.

The challenge that Cornell addresses is how to overcome children’s indifference when they are tired, listless and unwilling. The games he designed enlist the children’s energy and enthusiasm; they are so much fun that they forget their complaints and eagerly join in (*stage 1*).

When a game has awakened the children’s enthusiasm, they are enjoying themselves, they often are ready for more sensitive and reflective experiences, through (*stage 2*) attention focusing activities. One such activity can be to sit with eyes closed and to ask the children to raise their finger every time they hear a sound coming from nature. From there the flow of activity can move to an “experience” activity, like playing the Camera Game. The group is divided in pairs. One child acts as photographer and the other is playing camera. The “camera” keeps its eyes shut until the “photographer” takes a picture of a special natural object in the area, by pressing on the camera’s ear for some seconds to open its “shutter,” or rather, its eyes. Cornell notes: “The cameras saw the world in a fresh and interesting way, because the time of observation was too short for distracting thoughts to intrude.” It is interesting to observe here the value that Cornell lends to perceiving the living earth in a fresh way, and also the importance he attributes to framing the activity by imposing restrictive limits, in order to make receptivity on the part of the participants possible. The act of focusing the attention is achieved in a double way: by the leader suggesting the game in the first place, and secondly by the co-learner who acts a photographer and directs his or her game partner’s focus in a certain direction.

Another game, at *stage 3* (“experiencing nature”) of Cornell’s flow learning, is called *Mystery Animal*. The children in the group are asked to close their eyes. Subsequently, the teacher describes an animal without mentioning its name. The listeners are taken on an imaginary trip to the land where the animal lives; in story form, they are shown the natural habitat of the animal, how it gets its food and spends its time. Then, when the story is finished, the children are asked to draw a picture of this animal, purely on basis of the verbal description. According to Cornell, the participants usually listen with keen attention while trying to discover the animal’s identity. And in this process they also learn a lot about the animal. When the drawings are finished the children are shown a picture of the animal that was described to them, for example a desert kangaroo rat. At that point it is highly interesting for the children to see the extent to which their picture resembles the actual animal that was suggested to them. It may be argued that in this game the imagination of the child is engaged, and the activity of making a drawing of the (yet unseen) *Mystery Animal* is

a creative process, but in the end, when the picture of the animal is actually produced by the leader, this image inadvertently acquires the status of the “true referent,” and the children can then make judgments on the extent to which their renderings of the creature are more or are less accurate.²⁷

In 2009 Joseph Cornell led a daylong workshop for educators and other interested people at Kasteel Groeneveld in the Netherlands. At this occasion, someone in the audience asked him the following question: “How do you get children to focus more, so that they are more concentrated?” In his answer, Cornell underlines the importance of finding a suitable location, setting the stage and subsequently providing a sense of closure to the activity. He elaborates as follows:

It is about getting people interested in what you are doing: that is the first big hurdle that you have, to make it enjoyable and that’s the whole purpose of those kinds of games.... The idea of really being quiet and not making any noise, that is something that you are controlling yourself, you aren’t speaking. Children learn while they don’t even know it and that is because they are enjoying the experience. (J. Cornell, personal communication, September 3, 2009)

At that point I ask Cornell about this planning and preparation of the activities. It strikes me that the exercises that he talks about are all very well planned, structured, thought-through from the beginning. This makes me wonder how one can still allow for surprises, the unexpected, improvisation – all these qualities that an artistic process brings along; in short, that one basically doesn’t know what is going to happen. I am interested in how he relates to this notion of “inviting the unexpected in.” This is Cornell’s answer:

If you have a group of 30 children there has to be a sense of guidance... In the beginning, in flow learning, you’re trying to lift everybody’s alertness, so that they are receptive and can be expressive.... The reflective activities are more open-ended.... Children need the stage set. But I’m very aware of that: let nature, let the experience, be the teacher, and don’t confine it.... In a way we are doing “damage control,” in the sense of helping people to reacquaint themselves with that understanding. It is a common experience all over the world: even children that live out in the country don’t really know that much about nature, because they are so occupied with media. This is why the activi-

²⁷ This aspect of the real animal having “the final word-status” compared to the pupil’s image is at contrast to other approaches, such as in Reggio Emilia pedagogy (aimed at children from 0 to 7 years of age), where the child’s “fantasized” depictions are often allowed to have a prolonged life without the teacher stepping immediately in to make corrections. Here, it is first and foremost the young child’s own probing which is leading and to which the teacher tries to follow suit in the further unfolding of the explorations (cf. Edwards, Gandini & Forman, 1994; Rinaldi, 2006; Vecchi, 2010).

ties are somewhat structured and directed, because you have to create a bridge for them to get reacquainted with nature. Henry David Thoreau said that the secret to knowing nature is having a sense of self-forgetfulness. Through play, you are totally involved in the experience, you are not thinking about it. That's the first step. When people are not self-centered and no longer just thinking of their own world, then it is easy to point their attention to the world around them. So it's more gradual. I think it is realistic in terms of what people can appreciate, rather than asking too much of someone. If they won't relate to it they turn away from it, and it might even do more harm than good.... If you leave it open-ended for people who don't know how to use that time wisely, then the energy drops. (J. Cornell, personal communication, September 3, 2009)

We see here that Cornell, when reflecting on his own practice, underscores that structure – static quality patterns – are necessary, to allow for deep experiences happening (of surrendering and being open to a sense of wonder). There is a clear need for conscious purpose: he feels he has to plan the flow learning activities carefully on beforehand. An important observation is also that there seems to be a flipside to too much open-endedness: the energy of participants may drop, or, even worse, they turn away from it.

3.4 **Palaver på grenesiska: utterances in the language of trees**

Palaver på grenesiska is the name of a traveling museum exhibition that toured Sweden between 1997 and 2003. Its title could be translated as meaning something like “Utterances in the language of branches.” This exhibition about “language in nature, and nature in language” of artists Magnus Lönn and Björn Ed aims to ignite the fantasy of children (primarily targeted at those between 7 and 12 years of age); they can partake in workshops and be challenged to create their own language and alphabets. The basic idea is to engage children in the joy of translating. Each time the exhibition is put up at another location, school classes of the local community are invited to come and visit. Lönn and Ed have searched for ways in which images in nature remind us of language. Which pictorial language does nature have? they ask. Are there any messages in all the fantastic forms, colors and sculptures that nature presents to us? What happens when one tries to see nature as it really is? Can we translate nature’s messages into our own language? At the exhibition children can read poems made of leaves and check out how it perhaps would look if a great tit would write down its vocals. They can, as it were, listen in on what one frog says to another frog, and take a closer look at the traces that an earthworm might have left when writing down its life story. When Lönn and Ed reflected on what the language of nature was, they were inspired by the “natural history” of the letters of the alphabet. An example is the letter “A”: upside down, it has some resemblance to the head of an ox. Similarly,

many letters in classic written languages have a concrete, physical origin in nature. Lönn and Ed have taken this idea, that the systems of languages and nature belong together, one step further and generated a host of different written languages, sprouted from natural forms that are all around us. As Lönn told reporter Gunilla Petri: "The word was first an image. Out of the image came language. Humans charged the image with magic to formulate a wish, a kill, a God, a threat. In that way the word was given a static form, sometimes even a double-tongued form" (Lönn, cited by Petri, 2002, my translation). Out there, for Lönn and Ed, there is a form and signal world which still has a lot to teach us, but we have separated ourselves more and more from it.

Artist Magnus Lönn's work is in the border zone between images and words. When out and walking, he picks up whatever he finds. This can be a young bird hit by a car, or even banana peelings, which he dries to make up his own "peel alphabet." Before the exhibition opens in a new town, Lönn invites the schoolteachers so that they can acquaint themselves with its contents and purpose. He suggests ideas for different uses one can have of "findings" in nature. According to the Swedish artist and curator, children should be encouraged to trust their own capacity to express themselves and to not be afraid of language. Lönn believes it will be worthwhile to them to try to stretch the taken-for-granted boundaries of language, for, if one looks carefully, the whole world is filled with signs.

The exhibition is developed in such a way, as one reviewer commented, that it becomes a means to enter a metaphorical interface between nature and humans, "there were experiences of wonder and surprise that cry for an articulation" (Nilson, 2003, my translation). In the exhibition catalogue Lönn and Ed (1997) explain:

This exhibition came into being from our desire to investigate what nature possibly has to tell to us. Filled as it is by sounds, leaves, tracks, buts, and so on, it is easy for us to envisage that it has something to say, to us, as human beings. We are all part of her and constantly in need of being reminded that we belong to all that grows.... What often happens when we look at nature is that we "project" our own feelings onto it. We see the autumn as "murky" for example. But autumn really is neither grim nor gleeful. It is only we human beings who have a language in which we read it like that. Through play, which can involve a strong identification with a tree or with a grass-covered hill, or through something that is part of this exhibition, we can translate nature's messages into our own mother tongue. (p. 1, my translation)

In the often very humorous exhibition, questions are asked like: What does the bark of a tree talk about; what does "Bark-ish" sound like? What do trees tell us? One of the aims of the exhibition is to inspire children to fantasize and to translate what is written down when something is for example written in Bark-ish. Here, needles and branches also have their own language: "Needle-ish" and "Branch-ish." In the caption to the illustration below (figure 9) in the catalogue of *Palaver på grenesiska*, Magnus Lönn and Björn Ed ask: "Think of the top of blade of a grass as a fountain pen. When

the wind blows through the grass, it writes with the top of the grass blade a quiet poem. Could it look like this?" (1997, p. 13, my translation).

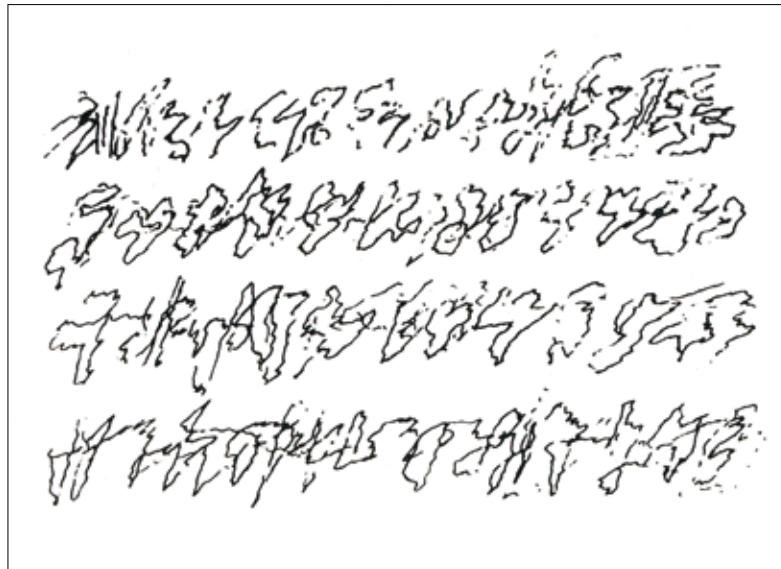


Figure 9: "A poem, written by grass" (photo: M. Lönn)

Björn Ed and Magnus Lönn try to establish communication processes by employing nature's own materials, using natural forms such as pine needles, branches, leaves and roots. It leads to such diverse results as a poem in needle language, an ant's cubical imagery, the movement of a worm spelling out curly structures on top of a piece of paper, and the croaking conversation of two frogs translated into mimicking forms. *Palaver på grenesiska*, as one reviewer put it, offers a perspective of our common world turned on its head, a sense of moving out of the "language cage" of humans (Nilson, 2003).

In 2007, in an early stage of my research, I interviewed Lönn on the epistemological foundations of his approach. Lönn pointed out that he chose to conceive of nature as a kind of language in its own right, but that he wanted to do this in a way that would not spell things out too unambiguously to people. Lönn likes to put things upside down. "To talk about nature through words is an incredible detour," he says. I asked him if he could elaborate and this is what he answered:

Even *language* is a kind of detour. Take for example the human voice, that I am using now: research has shown that, of all that I communicate, it is predominantly the sound, the rhythm and the melody in how I speak: *that* is the mes-

sage. Twenty-five percent of what I say is contents, and seventy-five percent is music, sound. We are still pretty much like birds or other animals; we sing. We make sounds, and *how* we sound, that is the immediate, the essential thing. The meaning of language is infinitely richer than that what we commonly reflect upon. We only think of contents. But the other – the way I formulate, the rhythm I make, in short, how I sound – is much more important than we tend to think it is. (M. Lönn, personal communication, December 6, 2007)

Nature is rich and full of life, and has endless ways of presenting herself to us. To conceive of that as a kind of language, Lönn suggests, is just a different way than our usual habit of classifying nature. Standard nature education, in his view, is much about “Aha, so that is *that* kind of bird!” One learns a host of names. Lönn is not against that in itself, but he believes it can be joyful to approach nature differently: “To just look at the forms, the shape of a branch on a birch tree, and to contemplate its gesture and expression.” (Here, Lönn makes the same reference to the *gesture* of a plant; this metaphor is also important to Linda Jolly as we have seen.) In the immediate, direct experience, all the senses work together in a synaesthetic blend. At such moments, one does not reflect any longer, one is only completely in the moment. But many people, says Lönn, are no longer able to do this: “it is a kind of innocence we have lost, in and through our language, through all the time naming things, by giving things labels and by reflecting and analyzing, counting and cataloging.” The pressure to be able to identify a species can become a filter between you and the plant, hindering you from experiencing the plant in its immediacy: how it looks, how it moves, or the kind of shapes it has. The experience is decimated; one doesn’t experience the form in itself, outside of the frame of language. This thought is compellingly articulated in the following poem of Swedish Nobel laureate Tomas Tranströmer (2011):

*Weary of all who come with words, words but no language
 I make my way to the snow-covered island.
 The untamed has no words.
 The unwritten pages spread out on every side!
 I come upon the tracks of deer in the snow.
 Language but no words.*

To Lönn, it is important that people become joyful from attending to different forms in nature which all seem to have their own voice. Thus it becomes an other way of seeing, of putting on a different set of glasses. For him it is extremely important to encourage people to change their habitual ways of looking. As he told a reporter, he wants to give humans new eyes; he wants “us to see reality in a new way” (Lönn, cited in Holmertz, 2000). “Maybe the true value in this,” he suggested to me, “is of versatility having meaning in and of itself, so one becomes a flexible person.” The structure of language, Lönn points out, is never fixed. One can give it shape oneself; we are allowed to develop our own language, he insists. One is not required to only use the

same words and letters that exist; it is even possible to invent oneself a secret language that only you and someone else know. This has been a very important cornerstone for Lönn, that participants are allowed to make up anything they may fancy, and do whatever they want to do. This, he believes, provides tremendous freedom, especially when working with children: they are allowed to play with nature in this manner. "When we developed this exhibition, Björn and I have said to each other that we wouldn't be pedagogical, it doesn't have to be didactic. What we wanted to do was to expand the space and to get both teachers and children to see that there are many other languages, like pine tree-ish, and conifer-ish." (M. Lönn, personal communication, December 6, 2007). Lönn has wondered time and again about the fundamental philosophical question if a word can really represent reality; to him there can be an enormous chasm between the two.

Lönn tells me of how he would interpret aspects of the exhibition *Palaver på gressiska* to teachers in the communities where the traveling exhibition was shown. He would say something like, "This is more or less the way I would have thought of doing this exhibition," and he would try to let them make their own reflections on the relationship between language and nature. His hope thereby was that they – on basis of their own unique personalities – should subsequently try to interpret it their own way. Many teachers responded enthusiastically, amazed that one could work with nature in this manner too. For Lönn, when he shows his exhibitions and is present there, he himself represents a living example of a adult human being who looks at things in a different way. An adult suddenly appears from some other place and shows himself in a different way. In his view, this is exactly like it is in theatre play, where adults attending are suggested other possibilities of playing out roles in life. Lönn doesn't want to press anyone to think in certain ways only. It is important that people are free to think what they want, he says. "If there is one thing one can learn from nature it is that nothing is ready. Everything is processes and everything takes time. We like to see to it that things are ready. But what is so nice is that things are always underway" (Lönn, cited in Holmertz, 2000).

One of the pillars on which our society is built, says Lönn, is the opposition between knowledge and imagination: "We value 'knowing things'; we praise what is useful and what is based on facts. In reality, however, it is really our imagination that moves us further. If we want to think in a different way, then our imagination is a kind of undercurrent to that" (M. Lönn, personal communication, December 6, 2007). Lönn likes to quote Einstein who said that imagination is more important than knowledge, because it is without limits. He is also fond of Swedish author Astrid Lindgren's observation that everything great that ever came about in this world first happened in somebody's imagination. Lönn confides to me that he likes the word *maybe*. He has tried to give shape to the word in many different ways. He recalls that the poet Tomas Tranströmer was once asked if he could say in a few words what his world view was, to which he answered, "Well, in that case I will say briefly, that my world view is an unwavering *maybe*." For Lönn this is fundamental: "That is what it is all about: to be able to live with that 'maybe'; to endure it" (M. Lönn, personal

communication, December 6, 2007). It comes as no surprise that Lönn is strongly influenced by Reggio Emilia pedagogy. He likes the fact that its practitioners work with a certain theme for an extended period of time, and to illustrate this he provides the example of how Reggio Emilia teachers and *pedagogistas*²⁸ take children outdoors and look with them for shadows. Later, they reflect together on the phenomenon; during a period of, say, half a year, they only look at shadows, he explains. “The way they approach the whole is by zooming in on one thing, instead of doing it the other way round, of splitting up the whole” (ibid.).



Figure 10: The word NEJ made from rose branches (photo: M. Lönn)

As a part of the exhibition, Lönn has sculptured the word *Nej* (“No”) of the parts of the stem of the Dog Rose (*Rosa dumalis*). The plant has long, bent thorns. When children see the sculpture (figure 10) they are asked, how would *this* sound? The children are encouraged to express their presumption through their own voice; they are, as it were, invited to think about how “thorny” the word may sound. At that point Lönn would mention to them that the stem bits are part of a Dog Rose, and that it is not only a *No* but that there is also the fruit and the flowers and such. “There is also a *Yes* in there. The thorniness is just one aspect of the plant, but the flower and the fruit are also part of the same plant,” he tells them. For Lönn there is a clear epistemological basis to this:

²⁸ In the Reggio Emilia pedagogical approach to early childhood education, *pedagogistas* are educators who work alongside the teacher to enhance the observation that the latter is doing. Pedagogistas focus on reflection about the learning that happens in the classroom both from the student's and the teacher's point of view.

When one uses objects from daily life, things that we are very accustomed to, and you turn meanings around, then a lot starts to happen. It is the same with letters; we know them well, but if you play with them and one does something that presents them in a new way, then more happens than if one would work with something extreme which one may have never seen before in life. In the latter case, one does not have references, it just becomes strange. (M. Lönn, personal communication, December 6, 2007)

Lönn points to the work of British psychiatrist Donald Winnicott, who developed the concept of the “transitional object.” When a child stops suckling on the mother’s breast, he or she may pick up a pillow or a towel and that thing acquires a tremendous meaning. This object, says Lönn, produces both anger and joy: “This is something unique for human beings: that we are able to invent an object that we draw close to us, and we keep with us. In the world, we create an in-between world, and it is this in-between world that is the space for imagination. If one can create this for oneself, if one succeeds in doing that, this becomes a resource later-on in life.”

After *Palaver på grenesiska*, Lönn proceeded working further with the theme of language and imagination. A new exhibition he developed carries the title *Undrien*, which is a play of Swedish words, referring to “the land of wonders.” *Undrien* is a country that is in the mind of every human being. It has no borders; *Undrien* can be as large as you like and shrink to almost nothing, says Magnus Lönn. The country is everywhere where people start wondering about things.

If we compare it to the approaches discussed before – Earth Education, Flow Learning and even Jolly’s botanical excursion – we could say that *Palaver på grenesiska* appears to be way more open-ended and dynamic, and it even encourages facilitators explicitly to be flexible and to develop their own interpretations and uses of the exhibition materials along the way. At the same time, Lönn and Ed promote a shifting from receptive undergoing to active acting upon. Visiting the exhibition and being surprised there, could then be considered as an undergoing, of experiencing surprise and a sense of wonder at the strange, humorous contraptions and sculptures of natural materials that the artists have made. Later on, in the hands-on workshops, facilitated by local teachers, the children are encouraged to make their own poems of found leaves or pine tree needles, or to imagine how a life history of an earth worm would look like. It is clear that the facilitators in this case have no purposive idea of the preferred kind of poem or piece of text or other creation that will come out of this.

3.5 Art-based perceptual ecology: a way of knowing the language of place

In 2006, American artist and scholar Lee Ann Woolery published a remarkable doctoral dissertation with the title *Art-based perceptual ecology as a way of knowing the language of place*. Her research goal was to understand how the practice of art-based

perceptual ecology brings one to an awareness of patterns in the landscape and how these yield the language of place. From what I was able to uncover worldwide of practices of combining art education and environmental education, her study comes closest to what I take to be arts-based environmental education. When Woolery, in her introduction, breaks down the concept of art-based perceptual ecology (hereafter ABPE) into its constituting parts, she makes the following clarifying description. Her study is “art-based,” for its point of departure is that artmaking can provide frames of reference and context to our sensory experience of the landscape.²⁹ Ecological perception, for Woolery, amounts to embracing the view that our body is the locus for our connection to the landscape, and that ecology provides us a way to think about what our senses apprehend of place.

ABPE, says Woolery, provides us ways to bring the layers and levels of the landscape to the surface of our awareness; in effect it *reveals* patterns in the landscape. A premise in her theory development is that the landscape holds ecological memory and does this in the form of patterns. As such, the practice of ABPE can be understood as a heuristic method for learning about the language of place. Here, it is important to bear in mind that Woolery is focused on landscape rather than on ecosystem or territory. Landscape connotes a wider set of meanings, including many cultural (cf. Simon Schama’s seminal work, *Landscape and Memory*, 1995). Woolery herself, leaning on Allen and Hoekstra (1992), defines landscape as “the spatial matrix in which organisms, populations, ecosystems and the like are set” (Woolery, 2006, p. 4).

Participants in ABPE work towards producing images and the job of these images is, according to Woolery, to fix the place in time and space. As such, the image is the container; it becomes “a graphic record of the intelligence of one’s body in relationship to place” (p. 2). For Woolery, landscapes hold knowledge, which can be understood through the science of biology, which she regards as a tool to define the life processes of organisms at a certain point in space. Here Woolery brings in the notion of patterns, by which she means the tangible record of the interactions between the organisms in a landscape.³⁰ They are – says Woolery – the codes, the expressions, of the land’s “communication system” (p. 13). ABPE is about recognizing those patterns. In general, we barely notice most patterns, but some, she suggests, are visible to the unaided eye such as river meanders, spirals or branching systems.

The assumption Woolery makes is that an artist is able to understand this communication system, “as artmaking touches a preverbal, unconscious level,” thereby creating connections to worlds that are unavailable to sight alone. To me, this claim begs further substantiation, as I think the notion of “understanding” is somewhat presumptuous.

²⁹ An important difference between Woolery and me that I like to point out here is that Woolery not only uses the word art (in “art-based”) in the singular form, but that she speaks of the frame of reference and context that art may provide, whereas my focus is more on an artistic process’s *intrinsic* qualities.

³⁰ Woolery’s conceptualization of pattern is more limited than the Batesonian concept of “the pattern which connects.” In Bateson’s thinking, “pattern” is approximately synonymous to “meaning” (1972, p. 130).

In her journey into this subject and through the process of practicing ABPE, Woolery has come to know that there are three fundamental concepts that are integral to revealing and recognizing patterns in the landscape. She lists them as follows: (1) The freedom to explore the land through direct experience in the natural world which unveils the mysteries of the landscape and allows one entrance to a “magical” space – this informs an intuitive sense of place; (2) Using imagination while directly experiencing the natural world, this allows one to experience the past, present and future of the landscape and to know multiple dimensions unavailable to just sight and the rational mind; and (3) The making of art in the natural world resulting in images that reveal patterns in the landscape and offer the language to know the land’s stories first-hand. These experiences add depth to an ecological knowing of landscapes (Woolery, 2004). Elaborating further on this, Woolery comes to identify six core aspects of ABPE-methodology: direct experience, magic, intuition, imagination, artmaking and language of pattern. These elements manifest themselves at different moments of the overall process.

Woolery underlines the importance of direct experience. To her, its primary meaning comes forth from a recognition of the body as the connection between self and world. She underpins this view by referring to indigenous peoples that experience “being shaped by the animate landscape through direct experience of the natural world,” and by quoting David Abram’s poetic description of the intertwining of our body with the more-than-human world:

As we return to our senses, we gradually discover our sensory perceptions to be simply our part of a vast, interpenetrating webwork of perceptions and sensations borne by countless other bodies supported – that is, not just by ourselves, but by icy streams tumbling down granite slopes, by owl wings and lichens, and by unseen, imperturbable wind. (Abram, quoted in Woolery, 2006, pp. 5-6)

Woolery also draws on Edith Cobb’s (1977/1993) *The Ecology of Imagination in Early Childhood*; in the latter book, Cobb regards the child’s way of building knowledge as “direct organic participation of the perceiving nervous system in systems of nature” (p. 33).³¹

The research project of Lee Ann Woolery is grounded in art-based practice. Just like I have chosen to do in this present study, she employs an (arts-based) *autoethnographic* methodology. The primary focus of Woolery’s research is to investigate her own experience and the experience of others when practicing ABPE in the landscape.

She is not afraid to explicitly state that her work is grounded in an understanding that cannot be known through the scientific paradigm of logic and reason, and she even concedes that magic is important to her thesis. She refers to “alternative realities that cannot be defined through our culture’s language.” For her, there is a paral-

³¹ Cf. my discussion of Edith Cobb’s work in section 2.1 of this thesis.

lel world next to the world of ordinary experience of daily life: the supramundane world of extraordinary experience. Among indigenous peoples, it is often the magician or shaman, living at the edge of the culture, who is the intermediary between the human and nonhuman world. The magic being performed could be considered a heightened receptivity to the nonhuman sensibilities in the landscape (cf. Abram, 1996a). In today's Western culture, however, the domain of the magic may best be understood by observing young children at play, she says. By stating this, she runs the risk of romanticizing "the natural child" (cf. section 2.1). It is the perceptual logic of our culture and our controlling mind, she suggests, which prohibit most adults from entering this magical dimension, unless they choose the work of the poet, the artist, or the creative thinker. For Woolery the bridge between the artist and the scientist (ecologist) is made through a mindful "shifting [of] one's perspective," thus expanding the physiological perceptual environment. This activity is similar, she says, to how a magician alters the common organization of the senses to be able to enter into parallel worlds. In this respect she believes that both the ecologist and the artist share elements of intuition and imagination in their experiences. Polanyi introduced the concept of "tacit knowing": one knows more than one can tell; not all knowledge can be put into words. For him, the bridge between explicit and tacit knowledge is "the realm of the between, or the intuitive" (Polanyi, quoted in Woolery, 2006, p. 8). Woolery expands on this and describes intuition as a way of "seeing through sensing," as "an internal knowing of that which is invisible." As such, it can create a connection between the external world of what we can touch, through direct experience in landscapes, and the internal world of the sensing body. Intuition is for her the bridge between knowledge that is explicit and that which is silent (Woolery, 2004).

On its turn, intuition stimulates imagination, which for Woolery (following Cobb, 1977/1993) is the *organizing* process. Approvingly, she quotes Clark Moustakas, who holds that "in the intuitive process one draws on clues; one senses a pattern or underlying condition that enables one to imagine and then characterize reality. In intuition we perceive something, observe it, and look and look again from clue to clue until we surmise the truth" (Moustakas, cited in Woolery, 2004). Imagination in ABPE, says Woolery, is a means to form images in the mind, giving shape and form to the unknown; it allows us to test what we feel through intuition, but cannot see. This conceptualization is very similar to Goethe's concept of exact sensorial imagination, which we discussed in the context of the botanical excursion (cf. section 3.2).

Woolery specifically calls attention for the element of time passing, the temporal dimension. If we couple the exploration of spatial dimensions in a given landscape with imagination, this may yield a temporal exploration of those places. We can thus speculate on the way things may have been and how they might evolve in time. Thus, imagination becomes a modeling device through which we can test possibilities. I believe here Woolery might be running the risk that such a depiction might unwontedly harness the imaginative faculty into a straitjacket of what Bateson called purposive rationality (cf. section 2.8.1).

Woolery (2006) elaborates on the importance of artmaking as process in her practice of ABPE, and cites artist Hannah Hinchman who suggests that the very act of making art is a tactile event, a complete body experience: “you feel the shapes inside your body, and your body wields the tools that capture the shapes” (Hinchman, cited in Woolery, 2004, p. 12).

Also in this sense, Woolery’s work can be seen to built further upon the way early scientist-artists before “the age of mechanical reproduction” – like Goethe, but also Darwin and Haeckel – used drawing as a mode to perform scientific research; to them, the pictorial process was a way of achieving knowledge. The image that the artist produces can then be seen as a symbol or transitional object that represents “the language of what one *feels* (intuition), with what one can *touch* (direct experience in landscapes), with what one *cannot see* (magic)” (Woolery, 2006, p. 13, emphasis added).

An interesting aspect of Woolery’s (2006) research is the way she connects her own childhood experiences to her research; through painting, she feels she is able to go back in time and relive “every nook and cranny” of the intimate physical, psychological and emotional experiences she had as a child. As she describes it, when she returns to the same place thirty years later and starts to create a mixed media painting, her sensory modalities are on full alert, “as the image unleashes the experience once again” (p. 21). Through this, she is able to regain entrance to this spatial/temporal landscape, the very psyche of place. It is the image that ties the artmaking, her imagination and memory together. She enters the process with the assumptions that her childhood experiences in the landscape are somehow coded in her, they are “woven into the very cells and tissues” of her body. ABPE practice in the original landscape of her childhood, then, could be the avenue by which to retrieve the coded information from that period, taking Woolery back to an emotive, sensorial and intuitive knowing of those first experiences, and allowing her to bring it to the surface of her consciousness.

This constitutes one part of Woolery’s research, going back to the landscapes of childhood. Another part is the exploration of artmaking in habitats that are completely new to her. Her research pressed her to ask questions such as “Could there be a process by which the land holds memory that is similar to how direct experiences in the landscape is held as memory in human cognition?” And, “What is the commonality between human cognition and ecological structures?” Her tool in finding answers to these questions is artmaking. As we saw, she had discovered that the practice of ABPE brought her childhood memories of direct experiences in landscapes to a conscious level. But she also wants to push this one step further, by asking if ABPE could bring the land’s memory, the patterns in the landscape, forward to consciousness: “Can I know the subtle changes in the land that are happening right before my eyes, but that I cannot see, by creating images at this site by practicing ABPE?” (p. 27). The made image could then perhaps be considered a *tangible* awareness of the patterns in landscape – their, what she calls, “recapitulation.”³² At some points in

³² In music theory, a recapitulation is the section of a composition or movement in which musical themes that were introduced earlier are repeated. There is an important distinction here with the Batesonian concept of *recursiveness*, which involves feeding back the outcome in (and thus modulating) an ongoing process (cf. Harries-Jones, 1995).

her thesis, one gets the impression that there is an element of control, and that Woolery indeed already *knows* that practicing ABPE will provide her with an ability to enter the temporal and spatial dimensions of a place, and that it will reveal to her a world that she could not see or know or understand before making art about it. The artmaking then becomes a way for her to retrieve, express and communicate the embodied knowledge to others.

Woolery presents a detailed overview of how the coding of experiences, which she equates with the physiological process of embodiment, actually takes place. Following the work of American psychoanalyst David Beres, she distinguishes three stages. The first level is a pre-perceptual phase at which sense data are collected: color, sound, smell, taste, the feel of things. But these sensations are perceived by our peripheral sense organs; they still need to be interpreted. The second level is the organization of the primary sensations into percepts. Perception is understood here as the process of making meaning out of sensation. Jakob von Uexküll held that this is something we share with animal life: each organism creates from the raw sense data of the external world its own perceptual world, its *Umwelt*. Organisms can have different *Umwelten*, even though they share the same environment. Each functional component of an *Umwelt* has a meaning and so represents the organism's model of the world. When moving from the first to the second level, the sensation becomes percept: sight becomes vision and hearing becomes sound. For this to occur, the brain must have a model at its disposal to store the new information, a model that constantly changes in the course of time. At this level, Woolery takes up the images that are generated through ABPE practices. These images become the forms that carry her experience in the land, both past and present. She refers to an intriguing metaphor of John Dewey who held that an art form "carries the experience, not as vehicles carry goods but as a mother carries a baby when the baby is part of her own organism" (Dewey, cited in Woolery, 2006, p. 33).³³ The third level of perception, finally, is when the mental representation of something gains an independency: the phenomenon does not actually need to be present to the senses at that time. A symbol can come to represent the absent stimulus.

It is interesting how Woolery thus constructs the contours of how an artistic way of knowing can come about. However, one can discern an important distinction between, on the one hand, artistic knowing employing the senses at a given location in the landscape (and expanding on the sensory input through "exact sensorial imagination"), and on the other hand artistic process that allows for bringing in new elements that may be foreign to the place one finds one's self in, which are alien to the spatio-temporal nexus at with the artmaking is carried out. I will thematize this important difference later on in this thesis.

A separate chapter is devoted to laying out an ecological model of patterns in the landscape. As said earlier, Woolery suggests that the landscape holds an ecological memory in the form of patterns and these patterns are indicators of the land-in-flux.

³³ In *Art as Experience*, Dewey (2005) adds to this that works of art are "literally pregnant with meaning" (p. 123). This aspect of latent (or potential) meanings will be taken up in section 10.3.

She learns from Vladimir Vernadsky, the Russian pioneer of biospherics, that movement, resulting from the multiplication of living organisms, is continually taking place all around us. Yet we barely notice it. “What we do notice most readily is the static result of the dynamic equilibrium of these movements resulting in the beauty of nature – its diversity of form, color and rhythm” (Vernadsky, quoted in Woolery, page 37). We have, says Woolery, “an unaided eye” (p. 38), and to that eye the landscape’s patterns present themselves like the way the water moves through the landscape in the form of a river. Woolery then goes on to ask, if perception is the key to reading patterns, how do humans perceive such patterns? And how is perception knowledge?

To find an answer to these questions, Woolery turns to systems thinking, and particularly to the work of Gregory Bateson, Francisco Varela and Humberto Maturana. According to the latter Chilean scientist, even the simplest organisms are capable of cognition. For while they do not see, they nevertheless are able to perceive changes in their environment, e.g. differences between light and shadow, or hot and cold. For Maturana, his new theory of cognition, which he developed together with Varela and which has come to be known as the Santiago Theory, suggests that the process of knowing is much broader than cognition through thinking. As Fritjof Capra (1996) summarizes this insight, “it involves perception, emotion and action – the entire process of life” (p. 175). The simplest organisms are capable of holding knowledge and this knowledge is transferred via energy exchange. Woolery then extrapolates this insight to human beings practicing ABPE and poses the question whether humans, as part of nature, could be privy to ecological knowledge through a relationship with the landscape via an energy exchange such as image making.

At this point in her reflections, Woolery takes a closer look at the way scholars have interpreted the work of famous German biologist Ernst Haeckel (1834-1919). Cornelia Hesse-Honegger, for example, has made extensive studies of Haeckel’s work and she surmises that the kind of pictures he made and which were meant as scientific illustrations, were often “precognitive.” The knowledge acquisition effectively takes place during and through the artmaking process (Hesse-Honegger, discussed in Woolery, 2006, p. 41). The biologist Olaf Breidbach, another scholar on Haeckel, wrote a study on the “art forms” that the latter found in nature. Breidbach holds that Haeckel’s reasoning was simple: humans *are* nature and they are the result of evolution. Our thinking and actions stem from this evolution, so ultimately, when we come to know something, it reveals our *own* nature. The draftsman, that is, the scientist-artist skilled in drawing complex phenomena precisely and accurately, engages his senses actively with the world: “his sensory organs, his motor activity, are results of a development with which, in the end, nature merely represents itself” (Breidbach, cited in Woolery, 2006, p. 41). This leads Woolery to formulate the chain of connections that informs her inquiry:

[I]n the act of forming the image, the knowledge of the organism being studied, which is energy, is transferred to the artist. The artist embodies the organ-

ism's knowledge through a phenomenological relationship. In the act of art-making, energy is exchanged between the artist and the organism.

The image, which is energy made tangible, is formed through the artist's motor activity. From this, I extrapolate that the wisdom held within the organism comes through the artist and into the image, thus original knowledge held in landscapes lives in the image and in the artist. (p. 42)

Both this notion of a phenomenological relationship between artist and organism (exchanging energy with each other), and the idea of nature representing herself through the works of the skilled artist (such as Haeckel) drawing nature, recall Merleau-Ponty's notion of intertwining with the flesh of the world. As mentioned earlier, the French phenomenologist was much taken by the art of Paul Cézanne, whom is claimed to have said that when he paints, it is the landscape "expressing itself through me." This view is echoed by Dutch artist herman de vries, when he says, "when I breathe, nature enters my lungs, sometimes I have the feeling that I am not breathing, but the outside world is breathing me, because I am obliged to breathe" (de vries, cited in Furlong, 2002, p. 52). Martin Buber (1937/1950) thought this relationship to be even more active on the part of the *landscape*: "This is the eternal source of art: a man is faced by a form which desires to be made through him into a work. This form is no offspring of his soul, but is an appearance which steps up to it and demands of it the effective power" (p. 9.) In a similar vein, the German philosopher Friedrich Schelling (1775-1854) held that truth can only emerge in an interaction between subjectivity and the world of objective reality (nature). Anticipating Bateson and his seminal work *Mind and Nature*, Schelling held that the opposition between mind and nature is only apparent. For Schelling both are informed by a common order and are ultimately in harmony with each other: Nature is "visible spirit," and spirit is "invisible nature." In reason, Schelling says, "nature recognizes her past works; she perceives and recognizes herself as herself." Or, as Robert Williams (2004) explains Schiller's position: "Nature *needs* our minds to be complete" (p. 109). The best instrument of thought, in Schelling's view – and here he reminds us of Woolery's orientation – is art. Shelling suggested that because art is necessarily only *partly* a conscious activity, it is better able to express the harmony between nature and the mind. In art, nature "consciously comprehends and completes itself." As knowing animals, we are that "in which nature opens her eyes and sees that she exists" (Schelling, cited in Tallis, 2005, p. 110).

Artnaking is for Woolery (2006) a unique means to acquire new knowledge. Painting, she says, allows her to "sense" more than her eyes can see. It is a mode of direct experience that allows her to know ecological elements of the landscape such as temperature, season, and moisture content of the air. As Merleau-Ponty, Abram and others have articulated before her, her relationship to place, and the ecological elements in it, is fundamentally a reciprocal one: "I am shaped by the elements of the land – the patterns, which are a code of the energy transformation in a landscape – and I cannot separate myself from the environment in which I exist" (p. 44). In the

process of trying to understand that relationship, Woolery presupposes that there is a connection between the coding of experiences in human cognition, the way they are held in memory, and the coding of the land's ecological processes. The latter, to her, is also a form of "held memory."

It is telling that Lee Ann Woolery (2004) chose to open a shorter article that she wrote on her research, entitled *Knowing the Language of Place Through the Arts*, with a quotation of Johann Wolfgang von Goethe: "He to whom Nature begins to reveal her open secret will feel an irresistible yearning for her most worthy interpreter, Art."



Figure 11: Woolery's naturalist drawing of ledge along the tributary of Hominey Branch (photo: L.A. Woolery)

As an educator, Lee Ann Woolery points out that there are two main reasons why she considers the practice of art-based perceptual ecology as important in our day and age. Firstly, that is because we live in a culture with an emphasis on singular methodologies of thinking and knowing, and the second reason is that in this culture there is an ongoing loss of experience in and of the living earth, especially among children. For her, there is a clear ethical foundation to her work. By learning pluralistic ways in which to perceive the landscape, we may come to know the place in which we live and thus find connections with the local habitat. She believes that when a deeper connection to landscape is established through the practical application of ABPE, it may be more likely that both teachers and students will be good stewards of our ecological and cultural communities.

Artmaking enables Woolery to create representations of her experiences in landscape. These are awakened by her imagination as well as her sensory and emotional

experience, and her means of expression are stories, symbols, postural changes, gestures and inarticulate sounds, or what she regards as “the raw materials of art” (p. 60). ABPE uses a language that is true to the experience; its narrative grows out of it. When Woolery interprets her findings, she finds that she in fact drew from *both* a metaphorical and a literal knowing, thereby using a combination of the language of art and the language of ecology.

Recurrently, in her art-based autoethnography, Woolery looks back at her personal experiences as a child: when she was very young, she had a great fear of being swallowed into the dark abyss of the unknown. Her exploration into the woods, unsupervised, provides her with an intuitive embodied knowing and an acute sensibility to the animate landscape. In contrast, now, when she is an adult, in order to get in touch with that embodied knowing of place, it is necessary to enter through her artwork. Artmaking thus becomes a means to reveal her tacit knowing of the landscape. A remarkable circumstance worth mentioning here is that Woolery has a background in art therapy, a trait she shares with art educators Peter London and Meri-Helga Mantere who also work on the interface of art and the environment.

In the following, I will give an overview of how Woolery carries out ABPE in practice, based on her own notes. As a way of entering into the process, she prepares herself by focusing her attention first on her breath, on the air that is entering her lungs. That helps her to slow down her ordinary pace. Through that, she begins to notice details in the surrounding landscape. When she starts to draw realistically, she senses a discomfort in her gut: it is accurate of her visual observation of the landscape, but it is not expressive of the communication between her and the flesh of the land, the inter-species communication in this landscape. “The naturalist pencil drawing that she made of a ledge along the tributary of a river (figure 11) “says nothing of my relationship with this place, of the knowledge held in the land’s stories.” Subsequently, she intentionally focuses on a select portion of her visual field (like for example the ledge), and abstracts the image. All details are eliminated.

I abstract the ledge by considering it as one element in the full view of the ecological landscape before me. Using this method of deconstruction, I am able to consider each object’s relevance and relationship to the object situated next to it. In this method of information gathering I don’t get caught in the natural tendency to stay within the cultural constructs I have been taught; instead I let go of the need to classify and name these objects through the traditional Western classification system. (Woolery, 2006, pp. 75-76)

This view is close to my own practice of AEE, of calling the participant’s attention to the spaces in-between the objects, and by encouraging them to shift between what is foregrounded and in the periphery of one’s awareness (in chapter 10, I will treat this theme extensively). By eliminating the details, Woolery can focus her attention instead on shape, form, color, line, light and dark, value, and pattern. This enables

Woolery to consider the dynamics of the relationship between the objects. The deconstruction process cuts away all preconceived notions and cultural constructs and opens her, she says, to the “magical space where land and all animate beings converse” (p. 78). The more Woolery engages and immerses herself in artistic practice, the more imaginative her work becomes.

In the process, Woolery feels that what she sees with her eyes and which she sets out to draw naturalistically, is in fact not congruent with what she feels and experiences viscerally. When she begins to draw with more abstraction, she also starts to really see, she reports, *beyond* what her eyes were recording. The resulting final image is thus a “translation” of the experience, that is, the felt sense of magic and mystery of place. Effectively, imagination has thus become a way for her to be able to interpret the natural world.

In a field note that she made along the Santa Cruz River in Arizona, she provides a telling example of how she achieves a heightened awareness of place when she is waiting for a thunderstorm to pass over. People know thunder best by its sound, Woolery asserts, but she is prompted to wonder whether thunder has a shape and color as well. She sees a dark cloud forming in the distance where thunder begins to form and senses a foreboding presence rapidly gaining on her from behind. The vegetation around her and the packed earth start to release their scented oils, triggered by some primeval force, before the rains hit. Soon the rain cloud comes nearer, and there is a release of the thunder storm. She feels an electric sensation traveling along the length of her skin and raising the hair on her arms. The roaring thunder affects Woolery in her pelvis which becomes “the place where the land meets the body” (p. 85). She then makes a painting in an effort to express the feeling the thunder causes. The resulting image to her is a symbol of the place in her body where she felt the sensation. She turns her eyes to the sky when she hears the sound of a female hawk, and is struck by the forms of the shifting clouds and their shades of white. Subsequently she looks downward, where she follows the shadows of the clouds across the dry landscape. The shifting becomes a perceptual exercise for her that provides dimensionality to her sight. She shifts her visual focus downward and upward: “When I merge these two fields of vision I perceive a depth to the landscape *that was previously unnoticeable*. In this one visual scan I have juxtaposed multiple scales in the landscape, shifting from micro to macro and foreground to background, allowing me to travel through multiple spatial dimensions of this landscape” (p. 86, emphasis added).

Another exercise that Woolery describes, and which she performs after the storm has passed, is “the shadow exercise”: the tracing of the outline of a shadow as it is cast by a creosote bush onto a page in her journal. With a felt tip marker she traces the outlines every five minutes during a 20-minute timeframe on consecutive pages of her journal, which remains in the same position. When she is finished and looks at the drawings she has made, she is astounded by the rapid movement of the shadow. “In this exercise I have taken one frame of the earth’s process and fixed it in time.... This allows me to be more present in the moment, enabling me to notice detail that I otherwise would not see” (p. 89). For her, in the

making of her art, she is transformed from viewer to active participant.

It is remarkable how, for Woolery, as we noted before as well, art becomes an *additional* tool for observation, and not necessarily something to invite for bewilderment, doubt, uncertainty, or ambiguity. Art's meaning is first and foremost to her, it seems, to extend the array of means that we have at our disposal to get a fuller picture.

When she works with groups, she starts the artmaking process by asking the participants to choose a place to sit or "to let the place choose them." At an occasion, when a small group is gathered in a forest on Bainbridge Island in the Pacific Northwest region of the United States. The participants are given two tasks: to record during a four-hour observation time their description of the place in words (through narrative approach, poetry, or just a word list) or through images, and to perform an artistic abstraction exercise.

In her description of the execution of the latter, Woolery sketches how one of the participants, "Ann" (her name is anonymized), is able "to deconstruct or peel away layers of the ecosystem" (p. 100) and to concentrate on the gestalt of her subject. By eliminating color, Woolery reports, Ann is allowing herself to bring only certain elements to the forefront of her awareness, such as the shape and form of the prominent *Umwelt*. In her narrative, Ann finds meaning in the J-shape of the limbs of the Western red cedar. Thus she is able to move beyond what she literally saw, which leads Woolery to state that the process provides Ann with "a perspective of the multiple dimensions of this temperate rainforest ecosystem *that was not available to her when she first entered the site*" (p. 102, emphasis added).

In her research, Woolery is interested if ABPE has opened the participants to other ways of knowing the landscape. She distinguishes between ways of knowing that are found in narratives and those found in images. What is remarkable is that Ann, in her personal narrative about the experience, seems to anthropomorphize the natural phenomena around her, that is, she "projects" feelings onto – or is able to discern animate characteristics in – the trees around her. Such a "subject" in the landscape is for example a horizontal snag, which "responds" on behalf of the landscape of which it is part. Here is the ensuing dialogue:

Ann: What can you tell me today?

Landscape: I stay unchanged while across the pond the alders change daily – growing leaves, losing branches, moving, swaying, and growing lichen. I stay in my place, cemented to the log, one day I will move but it will be only to fall down. Once the friends inside me do their work, I will fall down to the ground into another phase of my life. (Ann, cited in Woolery, p. 103)

What is happening here? Is this a form of exact sensorial imagination, in which Ann imaginatively "fills in" what is lacking in her sense observations? Or is she taking it even further, that is, moving towards fantasizing, evoking characteristics, moods, thoughts in objects that are attributed to ("projected"), but not present in the natural phenomena one perceives close by? Or are they – because of the intertwining rela-

tionship between the sensate and the sensible (Merleau-Ponty) – real *because* they are evoked in Ann and is she giving a voice to these seemingly mute forces, the *genius loci* of the place? Is it indeed the landscape expressing itself through her?

Referring to David Abram's (1996) *The Spell of the Sensuous*, Woolery suggests that there is a language, an ecological vernacular, that is spoken between and within species that reside in a particular locality. The land issues meaningful expressions, there is something like an “earthly utterance.” (This characterization is reminiscent of the utterances in the language of leaves of Magnus Lönn and Björn Ed, which I described before.) Possibly leaning for this on Abram as well, Woolery suggests that our actual experience of the landscape is through an “overlapping sensory exploration, known as synesthesia.”³⁴

Another participant in the ABPE process is “Bill.” In his report he relates how he was experiencing the magic of multiple dimensions of the landscape when contemplating a water droplet that was about to fall down from the moss into a small wetland. Again, we come across the anthropomorphizing phenomenon alluded to earlier (if one could call it that): “Gravity was doing its best to pull down my little water droplet but it clung to the lush moss with all the energy it possessed and I loved it for its struggle. I focused on just the branch, moss and the water droplet and I noticed that it looked like something else entirely, not just a water droplet in the sun but almost a woman in a skirt giving birth” (Bill, quoted in Woolery, 2006, p. 107).

A third participant, “Carl,” experiences what Woolery qualifies as a “corporeal knowing of the landscape through a sense impression.” Carl felt the nuances of the pond and was “gathering them into his body.” The reflection of sunlight off the pond is so surreal to him, that while he *sees* brown and green colors, what he actually *feels* is decay. “The standing water feels like an acid hole sucking nutrients from the surrounding ecosystem.” In Woolery’s understanding, he entered the spirit of the place and, when listening to what the landscape had to say, “he literally *became* the decay” (p. 109, emphasis added).

Doing perceptual experiments like these allow Woolery and her co-participants to interpret the complex patterns of place. For her, these perceptual patterns are unavailable to sight alone, and yet there is a language that can describe these. The way she achieves access beyond sight is by opening herself to imagination: in that mode, she says, she feels gifted with the capability of seeing what is not immediately present. But, as I stated earlier, it is unclear if the line between imagination and fantasy is clearly demarcated here.

When Woolery herself engages a dialogue with the image she has made of cir-

³⁴ Here Woolery equates, perhaps a bit too readily, the physiological condition of synesthesia, which only certain people have (who for example *cannot* help but see different colors attributed to different letters, a specific condition that is persistent over time), with the synesthetic experience of not being able to tell in isolation what each of our senses pick up, as there is in fact a continuous and subtle interplay of sensory input, that is hard to disentangle (e.g. of tasting and smelling at the same time).

cles in snow at the base of a group of beech trees, she comments: "I must be free of any critics residing in my head, my own critics as well as others, if I am to take in the wisdom that is offered in this dialogue." Woolery asks the image for example: "Why have you shown me this way?" And the image then "responds" to her: "Look at the integral places of connection, the tension created at the intersection of lines; this is where life is the fullest. It is at this intersecting of life that wholeness is formed" (p. 113). At a certain point Woolery notices, when she rereads the notes that she had penned down in her journal about the dialogue, that there is a point where it is hard to know what is her own thought and what is the voice of the image. It feels to her that the image-making has ignited her exploration. It is an inquiry-based process that is brought about by practicing ABPE, but which is combined with prior ecological "book knowledge." The combination allows her to develop another understanding of the landscape. When practicing ABPE, she in effect moved between the abstract/metaphorical and the concrete/rational: "My art was the synthesizer" (p. 116).

Woolery points out that there are patterns that are visible to the unaided eye – e.g. the trail left by the bark beetle on the interior bark of a cottonwood – and sets of patterns that are invisible. Reminiscent of James Gibson's notion of affordances (cf. section 2.4.2), she notices the changing sunlight and how it defines the site: "This quality of light offers more opportunity to notice the distinguishing differences between shade-tolerant plants and shade-intolerant species.... The light is what creates a spatial dimension, what makes the landscape appear 3-D" (Woolery, 2006, p. 121).

In her images, Woolery tries not to replicate what she sees before her and she encourages her co-participants not to do so either. Instead, she aims to create a "feeling state" on basis of her phenomenological measurements. In effect, she tries "to capture in measurement, the overall health" of [a particular] ecosystem, expressed in the very essence of its gestures." (Again, we see a recurrence of the term gesture, which we also encountered in our discussion of the work of Jolly and Lönn.) This is primarily a kind of tacit knowledge. She can know the feeling state of a certain place, for her internal systems are constantly (though unconsciously) regulating in response to her environment. Her body makes assessments of the place in various ways: "through my eyes as they measure the color saturation of a plant's leaf, or my ears as they compare the volume levels of the calls of the predator and prey or my skin as it measures air temperature at different levels of the canopy" (p. 121).

A particular type of exercise that Woolery has designed is the so-called abstraction exercise. The art activity consists of two levels. Level one is to paint the subject of one's view in a naturalist way. Interestingly, as we saw before, Woolery considers this way of painting as disappointing. For, yes, it may provide an accurate account of one's visual perception of the landscape, but "it says nothing of the communication between or within me and the flesh of the land, my ecological perception of place" (p. 126). The second level, then, is to perform the visual observation exercise again, but this time one puts one's focus on the patterns that one perceives. One could then for example notice a gesture created by the limbs of the trees. At this level, questions may come up like: "What does my hand know when it mirrors the gesture of the grasses?"

or “What might I know if I were to get up now and move my body, mirroring the gesture of the grasses?” (p. 127). In effect, by carrying out an abstraction exercise, she feels participants are able to come to the essence of a place, like for example a glen: through eliminating the forest surroundings and literally peeling away the layers that are in view, a deeper level of understanding and ecological perception is achieved. For her co-participant Ann the image that she made in the abstraction exercise allowed her to articulate her sensory understanding of the landscape. Previously, Ann was aware that the patterns in the landscape were telling her something in their own language, but it was just that she didn’t know *what* it was they were telling. When Woolery asks her to elaborate, Ann confides that there are words formed in her mind but that she doesn’t quite know how to get this knowing across in the English language. It seems that it is ultimately through the image making that she finds a way to translate her embodied knowing, and to move beyond what she literally saw, as Woolery puts it.

In the closing of this comprehensive overview of Woolery’s approach, I want to touch on her way of facilitating the ABPE process with her co-participants. She does not present much material on this; what I can find on this is relegated to the appendices of her thesis. Here she lists the instructions for practicing dialoguing with images and the landscape. It is striking how open these guidelines are. The first one is an encouragement to “move back and forth between image making, dialoguing with images, dialoguing with the land, reflecting on image and writing.” In doing so, she mentions in the second guideline, one should immerse oneself in that activity, giving it abundant time: “Spend the majority of the time today in the dialoguing process. The image making process is just a way for you to get back into being full-bodied in the landscape.” The instructions that follow become more and more open, allowing for accessing intuitive and visceral ways of knowing: “Be open to the process. Put your critic away,” and “Be open to really hear what first comes in to your head. Also be aware and notice what you are feeling in your body. Does your intuition, your gut say something to you?” (p. 208).

There is the remarkable aspect of dialoguing with images and landscape. If one gets stuck doing this, the participant is advised by Woolery to approach the process by being aware of one’s images, to notice the lines, shapes, and texture, and to consider what these might mean. One could begin with asking the image and/or the land the question, “What can you tell me today?” By doing so, the image is granted its own agency as a partner in the dialogue.³⁵ Further, the participants are, rather paradoxically, persuaded to notice what they are *not* noticing. To me it seems that one can only do so by stepping out of the process and looking back to it from a distance. All in all, these instructions leave the participants with much to find out themselves; their unspecific and even paradoxical nature effectively forces the practitioner of ABPE to find his or her own bearings in the process.

³⁵ In section 10.3, I will come back extensively to the relevance of this phenomenon, which I refer to (thereby following McNiff, 2004) as the manifestation of “angels” that talk back to the artmaker.

When the participants have practiced ABPE for the first time, Woolery invites them to reflect on the process. Again, what comes across compellingly is the open-ended (rather than leading) nature of her questions as she has presented them in the appendices. The first question is: “What happened to you and within you during your experience in the landscape?” She is interested to hear how they interpret their images and the words that they have put on paper as part of the process: do these reveal patterns in the landscape, reveal the land’s stories? Importantly, Woolery also wants to find out if participants are able to forge a bridge between their intuitive understanding of the landscape and ecology, by asking, “How do you know whether the conclusions you are drawing about ecology are right or wrong based on what you intuit?” Connected to this is her question whether there is a need to have formal education in science or ecology to understand knowledge presented in the artmaking process. In that regard, she asks participants whether their experience of practicing ABPE would have been meaningful if they had no knowledge of the names of plants or in case they would lack a science background. These are indeed fundamental questions. In her dissertation, Woolery, regrettably, only in passing touches upon the relation between ecology and science on the one hand and intuition, metaphor, tacit knowledge, etc. on the other, and, even less so, does she addresses how this relationship might have been conceptualized through the lens of the co-participants themselves.

When one considers ABPE from a perspective of surrender versus control, it is clear that Woolery intentionally wants to keep the process open-ended and dynamic. However, when she specifically calls attention to the temporal dimension, and co-participants are encouraged to couple their sensory and perceptual exploration of the spatial dimensions in a landscape with their imagination, the latter becomes harnessed as a tool. Through their imaginative capacity, they are able to speculate on the way things may have been before and how they might evolve in due time. For Woolery, thereby following Corbin (1969), imagination can be conceptualized as an intermediate universe which is located between, on the one hand, the universe of sensory data and the concepts that express their empirically verifiable laws, and, on the other, a spiritual universe. As she understands it, imagination “has application as a modeling device, allowing one to test the possibilities” (p. 10). Thus, in my view, she purposively delineates (and thereby limits) the role of imagination to be a means that can be employed as a useful method, not unlike the way Goethe would encourage students to practice exact sensorial imagination (see section 3.2 on the botanical excursion). There are, however, conceptualizations of imagination that are more dynamic, involving letting go of control and surrender to the unknown (as I will show in chapter 11).

3.6 Discussion

If we compare the five approaches discussed here, Earth Education and the botanical excursion stand out as practices that most directly aim at imparting established biological and ecological knowledge to learners. Flow learning does this to a lesser

degree, as it first and foremost aims to inspire and awaken enthusiasm as a basic for subsequent experiential and intuitive understanding. Similarly, art-based ecological perception seeks to enhance prior ecological book knowledge through other modes of becoming aware of ecological patterns in landscape. *Palaver på grenesiska*, I would argue, leaves most room to evocation of the unexpected. Lönn and Ed's approach of freely playing with the language of trees, branches, leaves and pine needles might encompass a wider appreciation of the powers of imagination than what the practices of Woolery, Jolly, Cornell and Van Matre seem to accommodate for. In *Palaver på grenesiska*, the outcomes of the process – or, to be more precise, the child's experience of process and how it makes meaning of it – can go in *any* direction, thereby even moving away from science and ecology. To me the challenge resides in avoiding the false dilemma of either leaving the artmaking process completely undirected, thereby running the risk of that it moves too far away from understanding nature as an underlying goal, or, in contrast, of harnessing the artistic part to such an extent that it gets subsumed under a more goal-oriented approach and isn't allowed to become more than just an *added* method for acquiring scientific knowledge. In the latter case, ultimately it is science rather than art that is assigned the source of the facts that matter.

There are other contrasts between the approaches that can be highlighted, e.g. the aspect of a proactive versus a restrained stance of the teacher's/facilitator in structuring and guiding of the learning activities, or diverging views on desired outcomes of the learning process. The selected exemplary cases range from minutely prepared curricula to very open-ended approaches. In the case of *Palaver på grenesiska*, even *becoming* local facilitators are encouraged to first make their own interpretations of how they would want to work with the exhibition, rather than to follow a prepared trajectory. In stark contrast, Earth Education urges teachers to work with clearly identified outcomes and matching learning experiences. Moreover, their creative surges need to be channeled into certain predetermined paths.

As I remarked in the introduction to this chapter, I devoted relatively most attention to my presentations of the botanical excursion and arts-based perceptual ecology. Though ABPE in many respects comes close to the kind of arts-based environmental education that I practice, in its attentiveness to process, embodied learning, and the discovery of ecological patterns, to name a few, there is also an important contrast. Woolery puts much emphasis on the intentionality with which one engages in artmaking, and on working towards developing deeper understandings. In this it seems to me that here imagination runs the risk of being limited and harnessed through its equation with visualization, i.e. the process of forming mental images. In my own AEE practice, as we will see, I try to allow imagination more free rein, encouraging art to “invite the unforeseen.” The botanic excursion marks another important contrast as was expressed by art teacher Solveig Slättli. For she asks the question whether it could be the case that practicing botany during the field excursion turned out to be an unexpected means for them to learn how to draw – precisely because it seemed liberating for the creative skills of students to not *have* to do something “artistic.” Here, the intensification of the sensorial perception of reality through drawing

and painting demonstrates in practice a way in which natural science can open up for art-enriched approaches. From the students' perspective, the unanticipated impact of artistic process seems to manifest itself primarily when looking back, in hindsight: they were learning to paint and started to make art while nobody announced that they would be doing so! It seems to be an important observation that the act of labeling the creative part of the activities as "artmaking" apparently causes surprising difficulties. It is in that regard remarkable that Woolery (2006) discloses that she – in a dissertation on *art-based* perceptual ecology – chose, as much as possible, to refrain from using the word art. The reason she provides for this are the societal values inherent in the word that often play out: "In modern western culture, art has been relinquished to only being made by artists" (p. 204). It often resides in a museum or gallery and the viewer is separated from the physicality involved in the creation of the work. Art, conceptualized this way, is taken to refer too narrowly to an end product rather than to the process that gave rise to it. For Woolery, then, artmaking is the process of giving image form, whereby the image is the vocabulary. This resonates with Linda Jolly's reluctance to ask the pupils to be creative. In the task of drawing a plant, the aesthetic aspect is intrinsically part of it, even though it remains implicit. As we saw, the latter found in her teaching experiences that the aspects of creativity and observation are deeply intertwined.

PART II

4. Determining my research questions

In this part, I present the biographical and scholarly context that provides the background from which I undertook my research in the subject of AEE. Subsequently, I formulate the core questions that guide this study, followed by the research design, in which I present both the theoretical context and practical implementation of the methodologies that I have deployed to carry out this inquiry.

4.1 A personal history: critical anthropology, self-reflexivity and the senses

Before moving into the field of art education, I studied social anthropology. During the time of my Master's study, in the 1980s, the orientation of critical anthropology was *en vogue* in academia. It trained me to ask questions such as "who says what, to whom, and with what aims?" We were encouraged to search for the often hidden relations of power between individual people and between cultures at large. Critical anthropology, with its critique of ethnocentrism and logocentrism, encouraged scholars to be reflective on the overarching context of their own practices, and to ask why the research was being done, and who would benefit (most) from it. Furthermore, researchers were to situate themselves against the backdrop of the dominant culture of which they were part, and to attribute significance (and bias) to such determinative contextual circumstances. The process of self-reflexivity, and of increasing one's consciousness of the (among others epistemological) implications of the unequal relationship between "Self" as researcher and the researcher's object, "the Other," led many critical anthropologists to embrace an overall critique of appropriative aspects of the scientific study of the Other (cf. titles as *Time and the Other: How Anthropology Makes its Object*, by Johannes Fabian, 1983/2002, and *The Domestication of the Savage Mind*, by Jack Goody, 1977/1992).

The emergence of, what came to be termed, *dialogical* anthropology – one of the offshoots of critical anthropology – highlighted the constructedness of ethnographic texts. It called for a closer examination of ways in which ethnographic knowledge is produced, and it encouraged to bring local voices into academic representations (Pink, 2009). In 1986, James Clifford and George Marcus published the watershed anthology *Writing Culture*, in which they looked at ethnography as literature. They asked questions like whether not all ethnographies ultimately are rhetorical performances determined by the need to tell an effective story. The authors of the anthology argued that ethnography had arrived in the midst of a political and epistemological crisis; by implication, Western writers simply could no longer portray non-Western peoples with unchallenged authority. The cultural representation of Others, they held, was from now on inescapably contingent, historical and above all contestable.

Instead of criticizing the dominant discourse, others started pioneering in new directions, in search of a *post-modern* ethnography (Tyler, 1986). Some of them even went so far as to make what was termed a literary (or even a poetic) turn. They experimented with other narrative modes which, they felt, would possibly render more truthfulness to their writings and would acknowledge more honestly what actually was experienced in the meeting of Others with completely different worldviews and ways of communicating. New practices evolved like *ethnopoetics* (cf. Hymes, 1981). Dennis Tedlock (1983) argued that pauses in oral performances could be indicated in written text on paper in the same way as a line breaks in poetry, and the words themselves could be formatted in such manner that they would reflect the more subtle qualities of the speech in a traditional non-Western culture. The text became like a musical arrangement: “An ethnographic score not only takes account of the words but silences, changes in loudness and tone of voice, the production of sound effects, and the use of gestures and props.... Ethnopoetics remains open to the creative side of performance, valuing features that may be rare or even unique to a particular artist or occasion” (Tedlock, 2011). Anthropology started to move into the direction of aesthetics! Such projects were highly ambitious, perhaps even *over*-ambitious. As Victor Crapanzano contends, dialogical anthropology was heralded as a new paradigm that would provide a solution to whatever the current crisis in anthropology would purport to (1992, p. 188).

In the wake of this development, it did not take long before anthropologists started to also criticize the supposed “ocularcentrism” of ethnographic practice at the expense of giving attention to the non-visual senses (Stoller, 1989; Howes, 1991). J. Douglas Porteus (1990) even went so far as to state that “vision drives out the other senses.” He regarded vision as an ideal sense “for an intellectualized, information-crazy species that has withdrawn from many areas of direct sensation” (p. 5). As alternatives to an exclusively vision-based notion of landscape, he suggested terms like a “smellscape” or “soundscape.” David Howes (2011), on his turn, criticized the preoccupation with (if not fixation on) written words; the verbo-centric approach of dialogical anthropology, he held, was limited because it did not sufficiently take the senses into account (cf. Pink, 2009). Howes points out that, in the 1950s, the impetus

in anthropology to focus on the senses can be traced to the work of Margaret Mead and Rhoda Métraux (1953) on the cultural patterning of tactile experience. Mead and Métraux saw a clear analogy to language. Just like linguistics requires a special ear to be able to hear, in order to speak and communicate through words, scholars in cultural analysis need to be able to taste and to smell, using “all their senses in a systematic way” (Mead & Métraux, cited in Howes, 2011, p. 440). However, the inclination (in the wake of the postmodern tide) to approach *any* cultural utterance or expression first and foremost “as text” seemed to sidetrack if not extinguish the nascent interest in sensorial experience. For some time, it seemed like anthropologists came to structure and approach *everything* like a language or text. The focal points were different – what linguistics was for Claude Lévi-Strauss, was text for Clifford Geertz, discourse for Michel Foucault and dialogue for Dennis Tedlock – but the linguistic turn started to proliferate and completely dominate the anthropological imagination, as Howes notes. For the most part, cultures came to be regarded as texts to be read and the anthropological function was reduced to one of writing (as opposed to sensing). Another anthropologist who resisted a singular and too exclusively linguistic turn was Michael Jackson. He criticized Geertz for positing truth at the level of disembodied concepts and decontextualized sayings. In contrast to Geertz’ view that rituals for example are designed to “say something of something,” Jackson held that their meaning resides first and foremost in their *doing*. Hence, knowledge of the body (or what Jackson refers to as somatization), rather than verbalization, should be at the core of anthropology’s interest.

Slowly but steadily, the ethnographer’s own sensing body became more and more present in his or her cultural analysis. Sensorial experiences that were hitherto peripheral or neglected in ethnographic accounts, such as the taste of things, but also pain or illness, started to come to the fore (Stoller, 1989; Okely, 1994; Seremetakis, 1994a). The anthropology of the senses demanded a form of reflectivity that pushes further than asking how culture is written and turns its focus to “the sites of embodied knowing” (Pink, 2009, p. 15).

Though most of the development sketched above took place after I had left the ranks of formal anthropological scholarship, I did attend to its first surge. I studied anthropology in the period that a need to fundamentally “reinvent” anthropology (Hymes, 1974) came to be felt. My background in critical anthropology, its concerns and issues, forms part of the background to this present study. Thereby I am well aware that the “scientific trope” I employ (Tyler, 1986), this specific way of organizing and framing language, colors what I present in writing. As such, this representation of my findings may inevitably reflect a bias that comes forth from the particular medium I have chosen to express them in.

In hindsight, it was meaningful to attend to this dynamic period in anthropology, though I lacked the courage and ability to practice a radical ethnopoetic stance all the way through. It *did*, however, open up a field of *possibilism* (Naess, 1972), of realizing that research could in principle be pursued in radical different and more artful ways – thereby still doing justice to the phenomena that are studied.

With my kaleidoscopic anthropological palette as basis, my interest started to be colored by new areas of interest such as the worldviews of indigenous peoples, environmental philosophy, and art practice and education.

4.2 Environmental philosophy and indigenous peoples' world views

Through philosopher Wim Zweers (author of *Participating with Nature: Outline for an Ecologization of our World View*, 2000), I was first introduced, in the early 1980s, to the work of Arne Naess, Holmes Rolston III and several other seminal scholars in the new field of environmental philosophy. I became particularly interested in scholars working on the intersection of ethnology and ecology, such as Gregory Bateson and, in the Netherlands, Ton Lemaire. This interest ran parallel to my encounter with world views of indigenous peoples, particularly those in North America, as expressed by interpreters and spokespersons such as Thomas Banyacya, Philip Deere, Oren Lyons, John Mohawk, Leslie Marmon Silko, and Bill Wahpepah. In the 1980s, I made two long visits to the United States, each time visiting several Indian Nations and learning more of how indigenous peoples seemed to share many of the concerns that were voiced by environmental philosophers in the West.

My interest in ecology and native peoples resulted in several film projects; together with a group we produced documentary films on the confrontation between indigenous peoples and the Western world (*The Earth is Crying*, 1986; *It's Killing the Clouds*, 1992), as well as filmed portraits of thinkers critical of the modernist technocentric paradigm such as Jacques Ellul and the aforementioned Ton Lemaire. In my article *Ergens tussen de berg en de mier* ("Somewhere between the mountain and the ant," 1995a), I argued that the ecological crisis was not confined to the environment *out there*, but stretches to our human selves as well. I tried to analyze the sense of alienation, the loneliness, or what I then called the "existential void" that had opened itself. I reflected on what it may mean to live without a spiritual point of reference to guide our actions (which many indigenous people still fostered even amidst of their despair due to the onslaught on their traditional cultures).

In 1997, we produced the film *The Call of the Mountain*, on Arne Naess and the deep ecology movement. Working on the documentary allowed me to acquaint myself with Naess's "ecosophy," that he first introduced in 1973. Ecosophy for him was synonymous with ecological wisdom, and this concept later became one of the foundations of the deep ecology movement (Drengson & Inoue, 1995). Naess developed a personal ecosophy which he termed "Ecosophy T," an allusion to his mountain cabin Tvergastein on the Hardangervidda mountain plateau in southern Norway where we recorded the film.

One of Naess's insights that lingered with me was his distinction, derived from Kant, between moral actions and beautiful actions, which I took up in section 1.6. Naess would encourage people to make an effort to articulate their ultimate values in a non-coercive way. His hope was that they wouldn't conceive it as a burden to act in

ways that are beneficial to nature, but rather as something that is in accordance with their inner voice. One may recall that moral actions are solely motivated by respect for the moral law and thus only performed from a sense of duty. The motivation for a beautiful action, by contrast, comes from an inclination whereby it feels natural to do something.

When I worked in support of indigenous peoples' struggles for their right to self-determination, I was reminded of this forcefully, when I found that urging Western audiences to act in solidarity with indigenous peoples as an ethical duty simply did not seem to work. People took it as pointing a moral finger, telling them how they ought to behave, rather than letting them determine themselves what they should do. I figured that if people could be encouraged to act *with* their inclinations and *still* develop beautiful actions (without someone else pushing them to it), this would be much more powerful and enduring if it could grow into a habit or become a norm that is internalized and thus is sustained over time. It was here that I saw an important role for the arts, as the connections to inspiration and inner feelings of persons are inextricably and intrinsically part of it.

4.3 Expanding art practice into art education

In 2003, I started working as an art teacher at different schools in the Swedish village of Hällefors. I had no formal education in art teaching but nevertheless stood in front of three different classes of kids, ranging in age from nine to twelve years. My experience was that the pupils were often quite reluctant to show their completed artwork, and even less eager to talk about it in front of others. At times, a child would cover the drawing that it had made with its arms, in order to prevent me from seeing it. At some point I tried to take the art lessons out of the classroom, into the outdoors. This could be a grove of trees or a graveyard near the school. To me it became clear that the children were not familiar at all at having education in a different-than-usual setting. The first times out in the open air, they sprang around like young calves that are released in their meadow for the first time in their life, after having been inside the barn for some time. It was very difficult to focus their attention on the artmaking assignment they had been given. Only after having been out with them a couple of times did they acquire some of the calmness and focus that was needed to engage in a meaningful art lesson outside. It was an interesting experience for me, to see the kind of "conditioning" that takes place through standard education, and to notice how difficult it is to break away from this.

At that time I also started teaching painting courses to adults on Saturdays. Often these courses would last the whole day. I started using approaches based on the work of art teacher Betty Edwards (1979; 1989). Edwards's teaching techniques are based on the premise (derived from research on lateral brain functions) that after early childhood most people develop their left, verbal hemisphere at the expense of the visual, creative right side. On basis of this theory, Edwards developed exercises

which “drew” on the right side of the brain, for example asking students to copy a portrait in a newspaper upside down, so that they are no longer able to draw a face’s features the way they habitually think these should look, thereby falling back on their “autopilot.”³⁶

For many course participants this new way of relating to composition and color and to the process of painting in general, was completely new, foreign and frightening at first. For me it was interesting to notice how they were able to implement the learned methods also in an outside environment, for example when I would take the group to a farm or natural area. I noticed also how important it was to have a break from time to time, a *genomgång* (review), to talk as a group together about the results that were obtained that far. In the beginning I would put a lot of effort in getting the process going, by giving my own encouraging comments on the results that the participants had obtained at that particular moment in time of the painting session, inviting them to join in on my reflections. But, as it happened, I could more and more “step back,” and be witness to them talking about their own work or that of others in a mutually constructive, genuinely inquisitive way. I noticed that a collective process unfolds – or maybe more accurately, a shared “energy” manifests itself – in painting at the same spot together. The presence of the others, working with the same motif more or less simultaneously, has a radiating impact on each and every one of them. Perhaps the best word for this phenomenon is a “co-evolving” of the artworks.

4.4 Moving into the field of arts-based environmental education

As it happened, while being on a landscape painting course in 2001 at the school of craft and design Capellagården on the Swedish island of Öland, I picked up the book *Power of Images* in its library. This is a selection of papers given at the European Regional Congress of InSEA in Helsinki, which took place in 1992. In it, I found the

36 However refreshing Edwards’s approach may have been, it is important to point out that in the years since 1979, the year that she published *Drawing on the Right Side of the Brain*, a rigid dichotomization of brain functions in either the left or right hemisphere has since been contested as being pseudoscientific and over-simplifying. According to Noel Charlton (20008), also Gregory Bateson was one of the people who, at the time, distinguished between the left brain as the part of consciousness that is calculating, rational, and the right brain, where processes of dream, humor, metaphor, and most understanding of the sacred were believed to occur. Recent research, however, has found that the two brain hemispheres are in fact highly complementary. Science writer John McCrone even speaks of “myths” that have grown around the brain’s asymmetry. He calls the suggestion that the left cerebral hemisphere is the coldly logical, verbal and dominant half of the brain, while the right is the imaginative and emotional side “simplistic at best and nonsense at worst” (McCrone, 2000). This circumstance, however, to me does not play down the radical newness of Edwards’s art exercises which aim to bring out the practitioner’s creative abilities (assumingly stemming from the right side of the brain), as opposed to the analytic and logical abilities (attributed to the left brain). More recently, Iain McGilchrist (2009) has suggested that the differences are not about which skills each hemisphere possesses, but pertain to the way in which each uses them, and to what end. The differences are more on the level of the way they pay attention, the flexibility versus rigidity, and their different attitudes to the implicit, the unique, and the personal, as well as the body, time, depth, music, metaphor, empathy, morality, certainty and the self.

article “Ecology, Environmental Education and Art Teaching” by Finnish art educator Meri-Helga Mantere. Reading this article inspired me profoundly. Learning of such possibilities to combine art education and environmental education opened up a new window and territory for me. As it happened, in response to a letter I had written to her, expressing my enthusiasm, she eventually invited me to come to Finland and to acquaint myself with ways in which arts-based environmental education was practiced in her country. During my stay, in August 2003, Mantere strongly encouraged me to pursue a doctorate study in AEE; in that way there would be some continuity in the work that had been done in this field from 1992 onwards. Mantere introduced me to Professor Juha Varto, who said he would welcome a submission for a postgraduate study. Subsequently, when my proposal was accepted and I had received a stipendium, I could start my research in 2006.

Initially, the aim of my research project was to map, articulate and evaluate the epistemological foundations of the innovative pedagogical approach of AEE (“epistemology” is understood here as the process, by which we “know,” “think” and “decide”).³⁷ My research focused specifically on the added value of artistic practice when engaging in environmental education. I addressed this subject from different perspectives: from the point of view of teachers that practice AEE, from the perspective of their pupils, and from the viewpoint of scholars who reflect on a meta-level on the pedagogical aims and merits of structured combinations of artistic and environmental education.

However, after having preoccupied myself for some time with the theme of AEE, I came to find that one is faced with major challenges when aiming to make the epistemological underpinnings of current practices of AEE more explicit. A first difficulty was to operationalize the term “arts-based environmental education”: it is not an established field, and at the time that I started my research hardly any pedagogical approaches had identified themselves unequivocally as proponents of AEE. Therefore I began to map for myself which practices existed that in some way integrated art education and EE. (As a result of this effort I identified among others the five approaches that were presented in the preceding chapter. Initially, I had the intention to conduct fieldwork at a few selected cases, if this would be practically feasible.)

A second complication I encountered was finding suitable arenas to conduct fieldwork. I have learned that in most cases where forms of (what I take to be as) AEE are practiced, these are one-time events in the form of a workshop or short course. I assume that this is due to the circumstance that such practices cannot infringe too deeply on existing day-to-day curricula of schools. However inspirational and rich the activities may be, the very circumstance that they often last relatively short (ranging from a few hours to a week at the most) made it difficult for me to join in as a

³⁷ Bateson defines epistemology as “[a] branch of science combined with a branch of philosophy. As science, epistemology is the study of how particular organisms or aggregates of organisms *know, think* and *decide*. As philosophy, epistemology is the study of the necessary limits and other characteristics of the processes of knowing, thinking, and deciding” (Bateson, 1980, p. 250).

“participant observer.” One would have little time to build a satisfactory rapport that would enable meaningful engagement both with teachers and students.

Moreover, and this was the third problem, I found that teachers that do practice forms of integrating artistic activities and EE often are dedicated, motivated and enthusiastic pedagogues but in general have only to a limited extent reflected upon the theoretical underpinnings of their art teaching practice and the way in which they combine it with EE. (Though there are significant exceptions that confirm the rule: Lee Ann Woolery’s extensive analysis of her practice of arts-based perceptual ecology is a case in point.) It is difficult to identify, gather and assimilate pedagogical understandings from other teachers and facilitators, as, also to them, integrating art education and EE is a new practice that still seems in need of finding its bearings. This circumstance means that it would be almost exclusively me, as researcher, who would set out to chart the implicit or unformulated foundations that guide their work (and of which the actors may not necessarily be aware themselves).

When I reflected on these challenges, my idea of what the point of gravity of my research was to be started to change. I felt that I should maybe first try to get a clearer picture myself of what AEE was all about. Then, in early 2008, a decisive moment happened. I had been invited by Linda Jolly to give a presentation at her department, the Section for Learning and Teacher Education of the University of Life Sciences in Ås, Norway. One of the attendees of the session was associate professor Edvin Østergaard. After having listened to my presentation on how I intended to conduct my research, he encouraged me to change my focus to what I would get out of analyzing my *own* (rather than other art educators’) experiences, when facilitating activities that combine art and EE. I considered this an intriguing and meaningful suggestion; though it would also imply a shift in the kind of students I would work with, as most of my own practices at that time I carried out with (young) adults as participants, rather than children. In retrospect, the conversation with Østergaard proved to be of great significance for the further development of my research, as I immediately followed up on this idea and later also had the benefit of having him as one of my research supervisors. With that change, my role as researcher effectively changed from a prospective participant observer of other people’s practices to one of being *both* practitioner and researcher (or, better put, a reflective researcher-practitioner). I saw that the most meaningful and appropriate way for me to address the theme of connecting art and EE was to take myself – as scholar, artist and educator – as the primary agent who facilitates activities in this field.

In this, I kept my intention to interview other facilitators of art-enriched practices of EE, as well as “outsiders” who would be able to make informed reflections on my research theme: scholars, writers, philosophers, artists, art educators, nature guides and science teachers who on basis of their field of expertise and experience could comment on my findings and the perspectives that I would develop along the way.

One of the challenges of embarking on this research project – but of course also one of its opportunities – is that I can only to a limited degree build further upon existing research. My research topic is, in many ways, a journey into new ground.

As noted before, there is no established tradition or authoritative history of AEE that has grown over the years since the term was first coined in the early 1990s by Finnish art educator and scholar Meri-Helga Mantere, and by consequence no longitudinal studies of the effects of AEE on participants have been carried out thus far.

Analyzing the five different current orientations to integrating art practice in EE that I presented in the previous chapter, I found that there are considerable differences in the relative weight the compared approaches give to control over process versus surrendering to it. Some facilitators allow for more open-endedness in their way of facilitating the educational activities, where others set out with clearly defined, attainable and desired goals. It became clear to me that each approach, and each stage of the process that participants go through, requires different competencies of the facilitator in his or her interaction with the group. I consider my own practice of AEE as leaning more towards leaving the outcome undetermined. I considered that it would be meaningful to find out, through my research, what participants get out of their experience. However, it is important to underline at this point that none of the AEE sessions that I facilitate (and which I will self-reflectively explore here) have been developed into a praxis yet, neither by me nor by anyone else. The development and further deepening of these activities essentially concurred – in an experiential learning cycle – with my exploratory research of them.

My primary interest is thereby not to articulate the differences with the five approaches of combined art and EE that I explored in chapter 3. I am well aware that by having pointed out some elements that I found lacking in these approaches, I did evoke – to use a painter’s term – “a negative space” that invites for an a presentation on my part of what then the surplus value of AEE might be that could make up for these assumed deficiencies. But though I have created such an expectation myself, this is not what I set out to do here. Rather, I want to explore the AEE activities that I facilitate in their own right. As I will show, my point of departure is that I, through the phenomenological orientation to my research, allow the phenomena “to speak for themselves” as much as possible, without judging them from a predetermined frame of reference.

Now that I have sketched the background to and the context of this research project, I move on in the next section, where I formulate more concisely what my inquiry in essence is about.

4.5 Aim, objectives and research questions of this study

The overall and overarching aim of this study is to contribute to a more sustainable earth through the exploration of the significance and specific contribution of integrating artmaking into environmental education. I am interested in what happens when the latter is *grounded* in an artistic approach. What takes place when participants engage in such endeavors, and what is my own part in this, as facilitator? In my conceptualization of AEE, the activities that I facilitate are intended to enhance the

participants' sense of connection to nature by inviting them to initiate such efforts by immersing themselves in artistic process.

My aim is not to provide a complete and exhaustive inventory of all characteristics of these activities. One reason for this is that these AEE activities inevitably share properties with other forms of teaching, both in art education and other forms of education. Listing them all would be redundant and distract my focus of those marked qualities and peculiarities that make a difference. I try to highlight those facets that strike me as relevant. Thereby I consider performing a full mapping of characteristics as premature in this stage. My concern is to look for those aspects that stand out, and seem typical for this specific way of seeking reconnecting to nature through art.

It may be argued that one needs, at any rate, some set of criteria on basis of which one is able to identify which characteristics of these AEE activities are noteworthy and perhaps distinct from other practices. I believe, however, that by formulating such criteria I would run the risk of precluding being open to the largest possible scope of meanings. I am curious to see if artistic activities that I facilitate do indeed enable new ways of connecting to and learning about nature and thus could possibly be an alternative to more purposive and science-based approaches of environmental and outdoor education. With my research I want to gain a deepened understanding about ways in which EE can potentially be enriched when initiated from (and informed by) arts-based approaches. Breaking these aspirations down into objectives, I come to these:

- a. I aim to acquire a deeper understanding of the fundamental processes that are induced by (and at the heart of) the AEE activities that I facilitate;
- b. I want to map the desired competencies of the facilitator of such processes;
- c. I seek to explore the significance and potential role of AEE activities in developing new forms of education about the living earth.

Below I present my three research questions, which correspond to these objectives:

1. What is distinctive in the process of the AEE activities that I facilitate?

- What is particular about engaging in these AEE activities?
- Which phases can be distinguished in the process of participating in an AEE activity and what happens in each of these?
- What kind of experiences do participants report about the different stages of partaking in an AEE activity that I facilitated?

2. Which specific competencies can be identified for a facilitator of AEE activities?

- Which aspects does the facilitator need to take into account to safeguard the well-being of participants and to maintain an optimal learning environment for them?
- How does the circumstance that the facilitator allows for a more open-ended experience of an AEE activity impact the process and its outcomes?

3. Does participating in the AEE activities that I facilitate enhance the ability of participants to have a direct experience of feeling connected to the natural world?

- Do participants in these AEE activities develop a sense of connection to the natural environment?
- Does the effort of approaching the natural environment through art in this way encompass and lead to new understandings of nature?
- What kind of knowledge is built through participation in such AEE activities?
- Can the artmaking part of such AEE activities be conceived as a form of learning in its own right?

5. Research design

One way to look at the design of this study is to regard it as the “road map” that shows how I provided structure to my research activities. In its core, it renders my process of collecting, analyzing, and interpreting empirical data. More fully, it also encompasses how I set out to connect these to my research questions and, ultimately, to my conclusions.

The first thing to point out about my research is that it is thoroughly qualitative. Following Denzin and Lincoln (1994), I take qualitative research to be inherently multi-method in focus. According to these authors, it usually involves the studied use and collection of a variety of empirical materials that describe routine and problematic moments and meanings in individuals’ lives. These materials can originate from personal experience and even introspection on the one hand, to observations, interviews and even aggregate findings in case studies on the other. Qualitative research is not a single type of social inquiry; it emerges from a number of different research traditions or disciplines. Denzin and Lincoln suggest that the patchworking between these multiple methodologies of qualitative research can be viewed as *bricolage*, with the researcher being the *bricoleur*. They define the former as a pieced-together, close-knit set of practices that provide solutions to a problem in a concrete situation. This emergent construction may change in time and take new forms, as different tools, methods, and techniques are added to the puzzle. Characteristic of the reasoning process that is brought to bear in any qualitative research, according to Burns and Grove (1993), is that it involves putting pieces together perceptually, in order to make wholes.

In the broad field of qualitative research one can distinguish a basic divide. On the one side are research practices that *start off* from a certain theoretical point of reference: a hypothesis is formulated which is tested in the field. The aim of field-work then is to investigate whether the empirical data give cause to affirm or refute the supposition. On the other side are more descriptive orientations which attempt to render the phenomena as much as possible, “as they would disclose themselves.”

My research is situated on one of the slopes that this first watershed divides apart:

I did not test a premise but try to be open as fully as possible to what is manifested and disclosed in the AEE activities themselves, and in my facilitation of them. This puts me in a broad estuary where research orientations are situated like phenomenological analysis, grounded theory, and also artistic research. Here, the researcher does not begin a project with a preconceived theory for which confirmation or refutation is thought. Instead, a more inductive, holistic approach is sponsored. One aims to find, on a higher level of synthesis and abstraction, some organizing clusters that afford to make meaning of the array of phenomena that one describes. Such clusters are termed themes, existentials, or gestalts. The researcher begins with an area of study and allows the theory to emerge from the data (Strauss & Corbin, 1998).

In this process, there is a latent risk in the activity of theory-building. One's metaphors and concepts – that is, one's *constructed* “tools for thought” – can become reified and may be attributed agency in themselves, thus committing what Alfred North Whitehead called “the fallacy of misplaced concreteness.”³⁸ Nevertheless, my aim was to approach the phenomena in terms of the themes, the structures of meaning, that I found. As Max van Manen (1990) explains, a theme is the experience of focus, of meaning, of point; it is a form of capturing the phenomenon one tries to understand: “Themes are the stars that make up the universes of meaning we live through” (p. 90).

In the activity of generating new theory, there can be moments where there are “jumps” in our understanding. New connections may literally *dawn* on us, the way that light appears in the sky just before sunrise. Such strokes of insight cannot always, on a one-to-one basis, be reduced to one's findings; it may be the immersion in the process of analysis itself that gives rise to them. At a certain moment, as one has reached a higher level of integration in one's attempted grasp of the phenomena, there may be a sudden instance of “things falling on their place,” or, in more transcendent terms, of epiphany. The moment of breakthrough seems to sever itself from the preceding process of logical and sequential theory formation (though the act of engaging in that process is by no means contingent, as it has prepared one to be receptive for the new at precisely that point). Thus, paradoxically, such an experience of striking realization or breakthrough comes forth from one's findings but it may be that it can only be partly attributed (and traced back) to them. When this is the case, it can feel like another form of truth has been tapped.

Here it may help to consider the way in which Russian cinematographer Andrei Tarkovsky (1987) cherished the poetic vision of the world. He regarded poetry as a particular awareness of the world, a philosophy that guides us when we relate to reality. Artists, he said, are capable of going beyond the limitations of coherent logic. They attempt to convey the deep complexity and truth of the impalpable connections

³⁸ With his concept of *the fallacy of misplaced concreteness*, Whitehead (1925) points to the act of erroneously taking an abstract characteristic and dealing with it as if it were what reality was like in its concrete form. The fallacy is involved whenever thinkers forget the degree of abstraction involved in thought and draw unwarranted conclusions about concrete actuality. When a hypothetical construct is treated as if it were a concrete physical entity, we “reify” it, that is, we make it into a “thing.”

and hidden phenomena of life. In short, they examine life beneath the surface. For Tarkovsky there was such a thing – at least in relation to cinema – as the *logic of poetry*. Analogous to going through the chain sequence of linking one's research conclusions to one's data, moving from “there” to “here,” traditional theatrical writing, he asserted, links images through the linear, rigidly logical development of the plot. Events are linked arbitrarily and forced into sequence in obedience to some abstract notion of order. Tarkovsky held that one could follow another rationale in arranging the sequence of events. He advocated an approach that does justice to the complexities of thought and to poetic visions of the world: “The birth and development of thought are subject to laws of their own, and sometimes demand forms of expression which are quite different from the patterns of logical speculation. In my view poetic reasoning is closer to the laws by which thought develops, and thus to life itself....” (p. 20).

One of the effects of forging poetic connections is that the spectator – or, in the case of a research report, the reader – is invited to be more active. He or she becomes a participant in the process of discovering life, unsupported by ready-made deductions from the author. Associative linking, in contrast to the logic of linear sequentiality, opens up for new possibilities which allow for an affective as well as rational response.

I am well aware that the notion of the “logic of poetry” cannot be readily transposed to, and incorporated in, the trope of academic discourse, with its claims of scientific rigor and transparency. However, Tarkovsky does remind us of the limitations of establishing and situating trustworthiness “only” on basis of judging the coherence of the logical links between research data and interpretation. As I see it, the researcher who truthfully wants to examine life “beneath the surface” has to walk a narrow ridge. On the one hand, one may diverge too far into the realm of speculation, by making overly unsubstantiated claims. On the other, there is the chance that one doesn't sufficiently allow one's interpretations to mature and develop further, thus blocking more probing attempts at meaning-making in which one looks beyond and possibly transcends “the evidence at hand,” as represented by one's data.

I have come to regard my research journey as stepping in and out of a stream, or, perhaps, as a better metaphor, a meandering river. When facilitating an AEE activity, I step into the running water. I build upon previous experiences and my reflections on these. When I then ascend back to the shore, I can mirror what happened this time to the growing body of knowledge that I am building, both of my own and others' practices in AEE. Heraclitus held that we humans have a hard time recognizing those things that are constantly changing and which, through that, also change our lives. Heraclitus saw us as “sleep-walkers through life”: we are generally disinclined to figure out the actual turnings of our lives until we inevitably stumble on them. However, in James Fernandez's (2009) reading, Heraclitus's postulate of constant flux did not exclude stabilities and constancies: “We may never be able to step into the same stream twice as regards the never-ending flow of the watery content, but there is greater constancy in the stream bank and the watercourse itself. Thus while we can never step into the same river again, we can step off the same stream bank at

least thrice if not over and over again into that constantly changing stream" (p. 167). Holding on to that metaphor, one can say that stepping in and out of the stream is exactly that: the river bank (my dialogue with the theory, with the existing body of knowledge), allowed me to make meaning of the flux of lived experience in AEE.

When immersing myself in this study it struck me that there is an interesting resemblance between the *contents* of my research – which is fundamentally about the process dimension of AEE – and the way in which I performed my exploration of this theme in practice. The effort of trying to attain a deeper understanding of the subject matter that I take up here, constitutes, in itself, just as much a process. Participants in AEE activities pass through different stages when engaging with art, and I saw the same happening in my study: shifting first from an initial surrender to process to an (assumed) sense of control, and then to letting go again; exchanging uncertainty for the acquisition of new forms of understanding, and facing new doubts again as I proceeded.

5.1 Researching lived experience: allowing the things themselves to speak

In his monumental biography of Martin Heidegger, Rüdiger Safranski (1999) points out that the great ambition of the early phenomenologists in Germany was to disregard anything that had until then been thought or said about consciousness or the world: they were on the lookout for a new way of letting the things approach them, without covering them up with what they already knew. That which showed itself, and the way it showed itself, as Safranski explains, they called "the phenomenon." Husserl wanted to show that the entire external world is already present within us. We are not an empty vessel into which the external world is poured, but always we are relating to something, that is, consciousness is always consciousness of something. As such, consciousness is not inside but outside; it is *alongside* of what it is conscious of. Or, as Safranski wittingly defines phenomenology, it is "consciousness being raised to the level of consciousness" (p. 75). The phenomenological mode of inquiry attempts to represent lived experience as raw and unelaborated as possible. Phenomenology wants to slow the researcher down and hold his or her gaze on the phenomenon itself. In Husserl's own words, "Through reflection, instead of grasping simply the matter straight-out – the values, goals, and instrumentalities – we grasp the corresponding subjective experiences in which we become conscious of them, in which (in the broadest sense) they 'appear'" (Husserl, 1962/1997, p. 161). In an effort to illuminate the specific quality of lived experience, we need to concentrate on our perception of it; as in mathematics, the contents that we put between brackets is treated separately. Husserl (1939/1973) put it this way: "[Putting it in brackets] shuts out from the phenomenological field the world as it simply exists; its place, however, is taken by the world as given in consciousness (perceived, remembered, judged, thought, valued etc.)" (p. 53). The technical term for Husserl's phenomenological method is the performance of an *epoché* – a state where we suspend judgment about something; we consider experience free of whatever is projected in it by both commonsense

and philosophical doctrines (Bensusan, 2004). The technique that Husserl develops to achieve this is the phenomenological reduction. Safranski's understanding of this technique is that it is a manner of performing a conscious process in such a way that attention is focused not on what is being perceived but on the process of perception. One, as it were, "steps out" of a perception, but only far enough to get the performance into one's field of vision. To illustrate what he means by this he provides the following example:

I see a tree. If I perceive my perceiving the tree, I notice that I furnish the perceived tree with the label "real." But if I only imagine a certain tree, or recall it – what do I see then? Do I see recollections, ideas? No, I see trees, but this time trees furnished with the label "imagination" or "recollection." Just as there are many trees, so there are many kinds of being. Trees seen here and now, trees remembered, trees imagined. The same tree that at one time I regard with pleasure because it gives me shade, and another time from the viewpoint of the economic advantage of cutting it down, is not the same tree in these perceptions. Its being has changed, and if I examine it in what is called an "objective" and purely factual manner, then this too is only one of many means of letting the tree "be." Phenomenological reduction therefore brackets out the question of what the tree is "in reality" and examines only the different ways in which, and as what, it presents itself to consciousness, or, more accurately, how consciousness stays with it. (Safranski, 1999, pp. 75-76)

According to Safranski, phenomenological reduction – this focused attention to the processes in our consciousness – is "the all-decisive aspect of phenomenology." Van Manen (1990) cautions that the problem of phenomenological inquiry often is that our common sense pre-understandings, our suppositions, assumptions and the existing bodies of scientific knowledge all predispose us to interpret a phenomenon in a certain way *before* we have even meaningfully started formulating a research question. Our predicament is that we are (too) easily assuming that scientific and everyday knowledge have already had much to say about the phenomenon at hand, before we try to come to understand its deeper meanings with fresh eyes.

However, if we, follow-up on Husserl's urge and rigorously try to "take hold of the phenomenon and then place outside of it [our] knowledge about the phenomenon" (Husserl, 1939/1973, p. 47), there is another epistemological quandary. For if we simply try to forget or ignore what we already know, our presuppositions may creep back into our reflections. Van Manen's suggestion for how to address this problem is to make our (a priori) understandings, beliefs, biases etc. as explicit as possible, thereby holding them deliberately at bay.

Basically, according to Van Manen, qualitative research asks the question: *What is it?* It always wants to know what the nature of the phenomenon is as it is meaningfully experienced. A phenomenon may be defined as "that what manifests itself in experience" (Willis, 2001, p. 8); the things in the world are phenomena *in so far as*

they are presented to consciousness. This meaning is never simple; it is often multi-dimensional and multi-layered. Phenomenology always addresses any phenomenon as a *possible human experience*. In that sense, says Van Manen (1990), phenomenological descriptions have an intersubjective and universal character. Moreover, he contends that phenomenology is less concerned with the factual accuracy of an account than with the plausibility – whether it is true to our living sense of it. Phenomenology demands of us re-learning to look at the world as we meet it in immediate experience: "...it offers accounts of experienced space, time, body, and human relation *as we live them*" (p. 184, emphasis added). The aim of a phenomenological hermeneutic is "to try to disclose the most naïve and basic interpretation that is already there but as yet is unelaborated in the life-world³⁹ experience" (Willis, 2001, p. 6).

For Van Manen, phenomenological research is "a poetizing activity." It involves a use of language that "authentically speaks the world, rather than abstractly speaking of it." As such, it is a language that, as Merleau-Ponty said, "sings the world." Van Manen points out that phenomenological research is broader than research of particular instances, as might be practiced in ethnographies and case studies that focus on a certain situation, a group or a culture. Phenomenology is foremost interested in questions of meaning and significance of certain phenomena. Here Van Manen refers to Martin Heidegger, who regarded phenomenological reflection as following paths towards a "clearing." At this open spot, something could be shown, revealed or clarified in its essential nature. But the paths (or methods) to get there are not fixed; they need to be discovered or invented as a response to the question at hand, hence my metaphor of stepping in and out of a meandering river.

There is an important difference between living through an experience and reflecting upon it. Both cannot be done at the same time, Van Manen asserts, for when one for example would try to reflect on one's anger *while* being angry, the anger would already have changed or dissolved. Therefore, phenomenological reflection is always retrospective; it is about experience that is already passed. All recollections of experiences are already *transformations* of those experiences.

Analogously, in phenomenological research, there is an essential distinction between description and interpretation. This difference sets the immediate description of the lived-through quality of lived experience apart from subsequent mediated accounts of the meaning of these expressions. Van Manen distinguishes between the pure description of lived experience (phenomenology) and the interpretation of that experience via "text" or some symbolic form (hermeneutics). When we confront something that is already an interpretation, like an artwork, we actually interpret an interpretation. Language and thinking are difficult to separate in experience. To underline this, Van Manen paraphrases Merleau-Ponty as follows: "When I speak I discover what it is that I wished to say" (p. 32).

³⁹ The concept of life-world (*Lebenwelt*) is derived from Husserl. The life-world is the world of immediate experience, the world as "already there" (Van Manen, 1990).

Phenomenology can be regarded as a carefully cultivated thoughtfulness; in fact, according to Van Manen (1990), it has been called “a method without techniques.” Its “procedures” involve various kinds of questioning, a rigorous interrogation of the phenomenon. Therefore he underlines that it is important that scholars do justice to the fullness and ambiguity of the experience in the life-world, thereby retaining an essential sense of ambiguity. With a touch of poetry, he writes that the phenomenological method “consists of the ability, or rather the art of being sensitive – sensitive to the subtle undertones of language, to the way language speaks when it allows the things themselves to speak” (p. 111). In the process of focusing on the meaning of lived experience, the phenomenological researcher borrows, as he puts it, other people’s experiences and their reflections on their experiences. The goal is to better be able to understand the deeper meaning of an aspect of human experience in the context of the whole of human experience.

Van Manen contrasts phenomenological research from other forms of data collection such as participant observation. The primary interest is not in the subjective experiences of our informants, so that we could report on how something is seen from their perspective. The deeper goal is to ask the question what the nature of a phenomenon is as an essentially human experience. In the performance of phenomenological research, the acts of gathering and analyzing are not really separable; they should be seen as parts of the same process. Van Manen speaks of *close observation*, which seeks to break through the distance often created by observational methods. It is not merely a variant of participant observation: “Close observation involves an attitude of assuming a relation that is as close as possible while retaining a hermeneutic alertness to situations that allows us to constantly step back and reflect on the meaning of those situations” (p. 69). One is, as it were, a participant and observer at the same instance. (Although, in practice, as I will point out in section 5.3.1), an integral and continuous merging of roles is impossible for epistemological reasons.)

Important for my research project is Van Manen’s observation that if one is oneself an educator performing research, one then has to deal with the question what it means to be both educator *and* researcher. Are these two modes of being separable if they are united in the very same person? To Van Manen, there is a problem when a scientific research perspective is confused with pedagogic understanding. A pedagogic orientation can indeed be quite different from the orientation afforded or warranted from a scientific point of view. The scientist, he says, speaks with “an altered voice,” in which the pedagogic voice may be muted, or is no longer hearable. Van Manen reminds us that, first and foremost, pedagogy is an *embodied* practice – something that some researchers and theorists easily seem to forget. When roles and responsibilities become blurred, one easily runs the risk of trespassing the boundaries and this may have negative consequences that are hard to foresee. This epistemological quandary was also central to my research efforts and I will repeatedly come back to the challenges it posed to me.

When moving closer and closer to the phenomena one wishes to research, one ideally comes closer to their deeper meaning, or *essence*. I end this overview on phe-

nomenology by zooming in on what is meant by this key concept. The distinction between appearance (the things of our experience) and essence (that which *grounds* these things) is fundamental in phenomenology. The word essence comes from the Greek *ousia*, the inner nature or true being of a thing. Essence is what makes a thing what it is, and without which it would not be what it is (Van Manen, 1990). Merleau-Ponty (1962/2002) states that phenomenology is “the study of essences” (p. vii). Van Manen (1990) warns that one shouldn’t mystify the word. After all, the term is a linguistic construction. It can be said that a certain description encapsulates the essence of something *if and when* “the structure of a lived experience is revealed to us in such a fashion that we are able to grasp the nature and significance of this experience in a hitherto unseen way” (p. 39).

A term that is closely associated to a phenomenon’s essence is its depth. According to Merleau-Ponty (1968), “[d]epth is the means the things have to remain distinct, to remain things, while not being what I look at at present” (p. 219). Depth gives lived experience its meaning. It also, says Van Manen (1990), gives the phenomenon “its resistance to our fuller understanding” (p. 153). To overcome this resistance, a certain openness is required. Moreover, the measure of openness needed to understand something is also a measure of its depthful nature. Van Manen is very aware of the circumstance that phenomenological projects and their methods can have a *transformative* effect on the researcher concerned. As such, phenomenological research can be seen as a form of “deep learning.”

5.2 Practicing interpretative phenomenological analysis

The main touchstone in this research project is one particular form of phenomenological research, namely the relatively recent practice of interpretative phenomenological analysis (IPA), as it was advanced by Smith, Flowers and Larkin (2009). They define it as a research approach that is “committed to the examination of how people make sense of their major life experiences” (p. 1). Originating from psychology, this approach is increasingly practiced in other social sciences as well. A key aspect in this form of analysis is to explore experience “in its own terms.” IPA research is specifically interested in what occurs when the everyday flow of lived experience takes on a *particular* significance for people. In other words, it is focused on those moments when something important happens in our lives. It is important to underline that while efforts are directed to getting closer to the participant’s personal world, this can neither be done fully nor in a direct way. The researcher’s access is dependent on his or her own conceptions. These are needed to be able to make sense of the personal world of others, through a process of interpretative inquiry. Hence, hermeneutics, or the theory of interpretation, is a distinctive trait of IPA.

Characteristic for IPA studies is that they usually have a small number of participants and aim to reveal something of the experience each of them had. Usually data are collected in the form of in-depth interviews which typically allow the researcher

considerable flexibility in probing interesting areas which may emerge in the conversation. The transcripts of these are analyzed through systematic and detailed qualitative analysis, which subsequently is turned into a rich narrative account. The aim is to elicit key experiential themes.

Smith *et al.* (2009) point out that there is an important distinction between the researcher and the participant on whose experience the research focuses. The researcher employs the same mental capacities as the participant, but the researcher employs those skills more self-consciously and systematically. They call this aspect a “double hermeneutic”: the researcher tries to make sense of how the participants make sense of what is happening to them.⁴⁰ Smith and his colleagues characterize IPA as a set of common processes and principles, of which one is the commitment to move from the descriptive to the interpretative. The relative centre of gravity in time reflects whether one deals with a more phenomenological or a more interpretative orientation in the research. In the inductive process, one starts off from the lived experience. In the process of interpretation, and of interpreting the interpretations of others, one climbs up to a more abstract or meta-level of themes. A common procedure in IPA, which I also practiced here, is that when the data are transcribed, the researcher annotates these texts for insights into the participants’ experience and perspective on their world. A further step towards analysis is when the researcher subsequently begins to look for recurring patterns of meaning (or themes) in these annotations. By thus putting pieces together to make wholes, meaning is produced. These wholes can also be understood as gestalts.

As I mentioned before, in my introductory remarks on phenomenology, no researcher enters any research field as a blank slate, and one should not pretend either to be one. In *Being and Time*, Heidegger argued: “Whenever something is interpreted as something, the interpretation will be founded essentially upon the ... fore-conception. An interpretation is never a pre-suppositionless apprehending of something presented to us” (Heidegger, quoted in Smith, *et al.*, pp. 24-25). We cannot help but bring our *fore-conception* – our prior experiences, assumptions and preconceptions – to the encounter. My own fore-structure was informed by my prior experiences and acquaintance with the field of arts-based environmental education. My rendering of the field here is inevitably colored by my engagement with

⁴⁰ In order that their readers can appreciate some of the intricacies of IPA on this meta-level even further, Smith *et al.* (2009) point to an *additional* double hermeneutic, which is in fact a differentiation between two interpretative positions, which they call (leaning on Ricoeur) a hermeneutics of empathy and a hermeneutics of suspicion. The first tries to adopt an “insider’s perspective” and to reconstruct the original experience in its own terms. The latter is a hermeneutics of “questioning” and for this it consults perspectives from outside to shed new light on the phenomenon. The researcher, as it were, stands alongside the participant concerned and tries to take a look at him or her from another angle, actively interrogating what was said. Inevitably, the analysis here may move away from representing what the participant would say themselves, and become more reliant on the interpretative work of the researcher. But it doesn’t have to be an either-or. Smith *et al.*, argue that IPA can take a (what they call) “center-ground position,” where these two hermeneutics are combined. The questioning is fine as long as it is prompted by close attention to the text itself (cf. pp. 35-36, 106).

the subject. Clearly, there was no watershed point distinguishing a definite “before” and “after” the research. I went back and forth from experience to interpretation and from interpretation to new experiences.

Smith *et al.* point out that such a fore-structure can also be an obstacle to interpretation, as we want to focus on the new object rather than on our preconceptions. Heidegger, however, directs our attention to a dimension of the process of interpretation which is often neglected. Instead of conceptualizing the relationship experience-interpretation as a one-directional process in time, we *also* make sense of our fore-structures *through and in terms of* the things themselves: “while the existence of fore-structures may precede our encounters with new things, understanding may actually work the other way, from the thing to the fore-structure” (p. 25). In a similar vein, Hans-Georg Gadamer held that a researcher’s fore-projection “is constantly revised in terms of what emerges as he penetrates into the meaning” (Gadamer, cited *ibid.*, p. 26). There is an interesting paradox at work here. In the encounter with the phenomena, researchers may not necessarily know which part of their fore-structure is relevant. It is through engaging with the material that they may be in a better position to know what their preconceptions were.

Smith *et al.* add that this is a very dynamic process. It may well be that one can only really get to know what the preconceptions are once the interpretation is well underway. In their words, by consequence, “the phenomenon, the thing itself, influences the interpretation which in turn can influence the fore-structure, which can then itself influence the interpretation” (*ibid.*). Added to this: while being immersed in this process, this dialogue, it is very difficult – if not impossible – to distinguish a prior conceptualization from a latter one, as the process constantly goes back and forth. Similar to Van Manen’s advice to be explicit about one’s *a priori* understandings, Gadamer encouraged a sensitivity that would not extinguish oneself but would rather involve “the foregrounding and appropriation of one’s own fore-meanings and prejudices. The important thing is to be aware of one’s own bias” (Gadamer, cited *ibid.*).

Following the insights of hermeneutical theorist Schleiermacher, Smith *et al.* point out that interpretation is not a matter of following mechanical rules. A better way to characterize it is to see it as “a craft or art, involving the combination of a range of skills, including intuition” (2009, p. 22). They do warn, however, that such a position does not provide researchers a license to claim that their analyses are more “true” than the claims of the participants in the research. Nevertheless, “it does allow us to see how our analyses might offer meaningful insights which exceed and subsume the *explicit* claims of our participants” (*ibid.*, p. 23). The process of analysis in IPA is fundamentally iterative: “we move back and forth through a range of different ways of thinking about the data, rather than completing each step, one after the other” (p. 28). This concept of a non-linear and dynamic style of analysis and interpretation is referred to as “the hermeneutic circle,” and Smith *et al.* consider it a useful way of thinking about “method” for IPA researchers. (It is revealing, in that regard, that they surround the word method with quotation marks, cf. p. 28).

I opened this section by mentioning that practitioners of IPA are first and foremost interested in how people make sense of their major life experiences. It is here, that it can draw important insights in the concept of experience itself from the field of anthropology, as I will show in the following.

5.3 An anthropology of experience, expression and evocation

One of the concepts in anthropological theorizing that can be regarded as foundational is that of experience, says C. Jason Throop (2003), and it has proliferated remarkably throughout contemporary anthropological writings. It is one of the key notions that provide the ground upon which anthropologists are able to construct their discourse. Yet the concept of experience is often a taken-for-granted construct and as such not questioned. Throop even goes so far to state that “while the importance and centrality of experience is evident, the definition and operational properties of the construct [of experience] remain largely elusive” (p. 220). A century ago, it was William Dilthey (1910/1976, p. 210) who defined an experience as a unit in the flow of time which has a unitary meaning. On a higher level, there are more comprehensive units that are made up of parts of a life, which are linked to each other by a common meaning. According to Smith *et al.*, persons that have such experiences of major significance will commonly engage in a considerable amount of reflective thinking and feeling, in the process of coming to terms with what the particular experience means. Such intense experiences can either be the result of proactive agency on the part of the person or they may overcome him or her unexpectedly. Here we are reminded of the Deweyian pair of active control and receptive undergoing. For my study on the theme of connecting to nature through art this aspect of how a person makes sense of stirring and influential events in life is important. Artmaking inevitably tends to touch the inner dimensions of the person (cf. Mantere, 1992a); because of this, also practices of employing art practice in understanding and connecting to nature may be of deep significance to the participant concerned. This may be even more the case when the teacher/facilitator is an active catalyst in evoking such an impact. Having compelling and transformational experiences as a learner was for Dewey a clear characteristic of good education (Wong, 2007). A degree of estrangement, a rupture from daily routines and ways of perceiving, is strived for, to thus make way for new deep experiences, and to enable participants to see the world with fresh eyes.

Dilthey (1883/2006) also made a clarifying distinction between our immediate living through of experience, as a sequence of events, and the retrospective attribution of meaning. In the latter case, the experience is structured as a particular coherent unit or form (*Erlebnis*). This retrospective imposition of meaning (looking back) is in contrast with the fluidity and indeterminacy of the experience itself. Edward Bruner (1986) states in *The Anthropology of Experience* that we can never know completely another person’s experiences. He or she may be willing to share some aspects of what they have lived through, but everybody censors or represses. Furthermore, the person may not

be fully aware of, or able to articulate, certain aspects of what has been experienced.

Anthropologist Victor Turner (1986) is interested in a particular type of experiences. Leaning on Dewey and Dilthey, he construes experience in a dramatic and transformative sense as referring to peril and experimentation, to the shifting sands of our human being-in-the-world.⁴¹ Such experience can disrupt routinized, repetitive behavior and, in doing so, may cause shocks of pain or pleasure. What is likely to happen, Turner points out, is that the person concerned may have an anxious need to find meaning in what has disconcerted him or her, whether by pain or by pleasure. The undergoing of an experience suggests a crisis in which social conventions, routines and habits are disrupted and put to question. At such critical or liminal moments, the structures of social life are suspended, and people feel pressed to refocus the meanings of their cultural universe. In such cases forms of social drama are ways in which this dialectic of doubt and certainty is worked out. Interestingly, in the context of this thesis, the forms of drama he mentions in this respect are art, theatre, myth and ritual.

Elaborating further, Turner makes a critical distinction between sheer experience and *an* experience. Mere experience, for him, is simply the passive endurance and acceptance of events. *An* experience, in contrast, stands out from the evenness of passing hours and years. It forms, what he calls, a “structure of experience.” In other words, “it does not have an *arbitrary* beginning and ending, cut out of the stream of chronological temporality. Rather, it has a clear initiation and a consummation” (Turner, quoted in Throop, 2003, p. 224). Turner moves away from a focus on the subjective character of individual experience and instead turns his attention to inter-subjectively mediated cultural and social expressions. When we recount our experiences to others, we must decide where to begin and where to end. We establish limits and thereby frame the experience. In short, it becomes a construction.

In the following, I will look into how the postmodern ethnographic gaze both underscores and embraces the distortion that inevitably takes place in our renderings of what people (including oneself as researcher) experience.

There were some crucial developments within anthropology in the late 1980s which caused me to change my conception of the field considerably. In hindsight, one of the watershed moments (to which I also referred in section 4.1) was the publication in 1986 of *Writing Culture*, edited by James Clifford and George Marcus. The authors questioned the standard ways of representing field knowledge in contemporary anthropology. The book was received as an outline of a postmodernist program for the field. Through it, critical anthropologists became much more self-conscious and reflective about the act of writing. Stephen Tyler, in a 1996 interview, sketches the newly-found freedom as follows:

⁴¹ Turner attempted an etymology of the word *experience*, deriving it from the Indo-European base *per* (which means to attempt, to venture, to risk). This root can also be recognized in the word *peril*.

If you start off with the assumption that you are still going to create a text, there is now a really advantageous situation. We could make a text anyway we want to. We're not constrained by any particular form. We could be eclectic, borrow from whomever we want to. And also there is no necessary sense that you have to put together a beautiful aesthetic object or an integrated whole of some kind. It's not so much that the text would be messy, though I suspect it would, but that the text itself could contain so many different forms of textualization that it could cross any number of genre possibilities or incorporate all kinds of stuff like performance studies and other things as well. (Tyler, quoted by Lukas, 1996, p. 16)

With a Baudrillardian ring to his argument (cf. chapter 1), Tyler (1986) opposes the idea that there is such a thing as an (ethnographic) "description of reality." What ethnographers present as such, is to him in reality an *imitation* of reality: "Their mode is mimetic, but their mimesis creates only illusions of reality, as in the fictional realities of science. That is the price that must be paid for making language do the work of the eyes" (p. 137). Tyler's alternative is *evocation*, enabling the reader "to think in-between things." The point of evoking rather than representing phenomena is that "it frees ethnography from mimesis and the inappropriate mode of scientific rhetoric that entails 'objects,' 'facts,' 'descriptions,' 'inductions,' generalizations,' 'verification,' 'experiment,' 'truth,' and like concepts that, except as empty invocations, have no parallels either in the experience of ethnographic fieldwork or in the writing of ethnographies." As such, post-modern ethnography is "no longer cursed with the task of representation: a discourse that evokes doesn't need to represent what it evokes" (p. 130). Without hesitation, Tyler applauds the advance of a postmodern ethnography. And yes, it may be fragmentary but it is so because it cannot be otherwise; life in the field *is* fragmentary. "It is not just that we cannot see the forest for the trees, but that we have come to feel that there are no forests where the trees are too far apart, just as patches make quilts only if the spaces between them are small enough." The fragmentary nature of the postmodern world leads Tyler to be suspicious of *any* form of totalization, even of invocations of holism. To him it are all literary tropes,⁴² "that is, vehicles that carry imagination from the part to the whole, the concrete to the abstract, and knowing them for what they are, whether mechanistic or organismic, makes us suspect the rational order they promise" (pp. 131-132). Instead, he sets his hopes on a new kind of holism that emerges through the reflexivity of text-author-reader in which no member of this trinity is privileged as the exclusive locus of the whole.

Postmodern ethnography does not move toward abstraction, away from life, but back to experience. Here, Tyler takes issue with the idea that ethnography is a record of a prior experience of the researcher. To him, it is *itself* the means of experience: "That experience became experience *only* in the writing of the ethnography.

⁴² A trope is a rhetorical figure of speech, turning a word away from its normal meaning, e.g. in metonymy and metaphor. The word is derived from the Greek *tropos*, a turning.

Before that, it was only a disconnected array of chance happenings. No experience preceded the ethnography. The experience *was* the ethnography" (p. 138, emphasis added). The postmodern world, in his depiction of it, is in a sense timeless: past, present and future coexist in all discourse.

For me such insightful reflections on the distorting effect of scientific tropes and on the ontology of experience were a meaningful addition to the research approach chosen here of interpretative phenomenological analysis. In pioneering forms of postmodern anthropology, with its fresh look at aspects of research such as how to account for dimensions of time and process, new modes are explored which, in my view, start to acquire some shared characteristics with artistic ways of understanding and engaging with the world. And indeed, it doesn't hurt to be reminded, from time to time, of the constructedness that any disentangling of experience and its interpretation entails.

My phenomenological orientation was not only enriched by insights from the anthropology of experience, but also by a specific, autobiographically colored branch of this field, which turns the gaze intentionally to the life-world of the researcher him- or herself, as I outline in the following section. As a facilitator of AEE, I am also a participant among other participants. Therefore I regard autoethnography – making meaning of my own experiences in a structured way – as a meaningful addition in the tapestry of my research bricolage.

5.3.1 Including the vulnerable self through autoethnography

In this qualitative research project, I combined the identities of being an artist, art teacher and researcher. My study then inescapably has a multi-dimensional and somewhat hybrid form. One way to anchor this plurality of perspectives in one common undertaking is to have a keen eye for the autobiographical aspect of the exploration. Traditionally, in so-called insider ethnography, the researcher has a direct involvement or connection with the research setting. Such research contrasts with more positivist notions of scientifically sound research in which the researcher is taken to be an objective outsider studying subjects external to him- or herself (Rooney, 2005). A particularly evocative form of ethnographic writing practice which provides room for the researcher's autobiographical personal narrative emerged in the late 1990s and was termed autoethnography. Characteristic for an autoethnographic text is that it often is written in the first person: it privileges the individual. It tends to feature dialogue, emotion and self-consciousness; authors use their own experiences in a culture reflexively to look more deeply at self-other interactions. Autoethnography challenges accepted views about silent authorship in which the voice of the researcher is not included in the presentation of the findings. This form of ethnography includes the researcher's vulnerable self, emotions, body and spirit and produces stories that evoke the imagination of the reader (Denzin, 1997; Reed-Danahay, 1997; Holt, 2003; Muncey, 2010). As the researcher is interacting with others, the sharp distinctions be-

tween personal and social, self and other, become blurred. Autoethnography rejects the notion that lived experience can only be represented indirectly, through quotations from field notes, observations or interviews. Instead the researcher him- or herself becomes the epistemological and ontological nexus upon which the research process turns (Spry, 2001). Here, we thus see an interesting attempt to come to terms with the problem I discussed in the previous section, of the tension between what is actually experienced and its later rendition through the narrative that is presented to others. However, I think the problem is not completely removed by switching the focus of our gaze inwards to include the story of oneself. The recursive process, of taking account of one's own development when partaking in activities with others and feeding that new knowledge systematically back in the further unfolding of one's practice, may help overcome some but never all of the distancing – between self and process, and between event and its later interpretation. The gain is in the acknowledgement that one's own self is implicated from the very beginning, in the positive sense of “being at stake.”

Qualitative researchers need to be storytellers – moreover, they need to pay attention to the *art* of storytelling (Wolcott, 2001). The translation of intuitively grasped meanings or tacit knowledge is not always possible through conventional and discursive renderings of language. Sometimes these can be better communicated – albeit indirectly – through story, a point that is also underscored by Peter Reason and Peter Hawkins (2006, p. 55): “There are many languages in which meaning can be created and communicated ... the languages are analogical and symbolic; they do not point out meaning directly; they demonstrate it by re-creating pattern in metaphorical shape and form.”

For Deborah Reed-Danahay (1979), autoethnography in essence is a synthesis of both a postmodern ethnography, in which the realist conventions and objective observer positions of standard ethnography have been called into question, and a postmodern autobiography, in which the notion of the coherent, individual self has been called into question. The criterion for the evaluation of its merits then becomes nothing more – but also nothing less – than the truthfulness or credibility of one's own story. Clifford Geertz (1988) speaks of the need of the quantitative researcher to be first and foremost a convincing “I-witness”:

...negotiating the passage from what one has been through “out there” to what one says “back here,” is not psychological in character. It is literary. It arises for anyone who adopts what one may call, in a serious pun, the I-witnessing approach to the construction of cultural descriptions.... [It] is to pose for yourself a distinctive sort of text-building problem: rendering your account credible through rendering your person so.... To become a convincing “I-witness,” one must, so it seems, first become a convincing “I.” (pp. 78-79)

Though this focus on the “I” or the self may suggest otherwise, autoethnography is not necessarily limited to the self because people do not accumulate their experi-

ences in a social vacuum (Holt, 2003). In that regard, Smith *et al.*'s (2009) reference to Heidegger's discussion of *Dasein* ("there-being") is relevant. *Dasein*, for Heidegger, is *always* already thrown into the pre-existing world of people and objects, language and culture, and cannot be meaningfully detached from it. *Dasein* implies and necessitates – and this is relevant to the discussion here – a degree of reflexive awareness. And this selfhood requires also the existence of others. Even being *alone*, says Heidegger, is only further proof of the existential requirement for others.

A characteristic aspect of the autoethnographic mode is that it constitutes a form of literary self-exposure. Tami Spry (2001) holds that a researcher practicing autoethnography needs a degree of courage to be vulnerable. However, this vulnerability does not mean that *anything* goes. As Ruth Behar (1997) points out, this exposure needs to take us somewhere we could not otherwise get to. It has to be an essential part of one's argumentation and not some kind of decoration or exposure for its own sake.

Mindful of the pitfall that an autoethnographic orientation runs the risk of becoming too narcissistic in its self-referential exposure, I sought to balance it with (and nest it in) the overall orientation to interpretative phenomenological analysis which I pursued. In doing so, I paradoxically tried to conceptualize "myself as other" (Spry, 2001, p. 708). My autoethnographic account, then, is to be taken as one "sample" between all other samples, i.e. as one account between the accounts of all the other participants in the AEE sessions that I facilitated.

In my research, when I entered "the experiential situation" (Van Manen, 1990, p. 166), I took on the role of both facilitator (of AEE practices), of co-participant, of observer, and of phenomenological researcher. These roles interplayed and at times it was difficult to see oneself as a "pure" teacher/facilitator" and not a researcher, or as an analyst interpreting the findings and no longer engaged in AEE as process. As such, it was not easily to find a "research persona" (Smith *et al.*, 2009, p. 67) that I could feel comfortable with. Donald Schön (1983) makes an important distinction in this context between reflection in-action (while doing something) and reflection on action (after one has done it). With the former, one partakes in a recursive loop, in which the contents of the reflections is fed back into the actual doing *while* doing it, leading on its turn – in its implementation in practice – to new reflections.⁴³ The quandary remains, however, of how to retrieve reflections in-action once they have effectively become memory *after* they have entered the feedback loop.

I think it is important to identify the epistemological challenge that manifested itself here; as soon as one "shape-shifts" from being a facilitator/participant to the persona of being a researcher, this change impacts the process itself. The "changing

⁴³ This is akin to the notion of second-order cybernetics, as developed by Bateson, Mead and others.

In it, the investigators are part of the system. They can never see how it works by standing outside it because they are always engaged cybernetically with the system being observed. When investigators observe a system, they affect and are affected by it. The larger system, in Batesonian terms the organism-*plus*-environment, is to be considered as a single circuit of which one, as researcher, is part as well (cf. Brand, 1976; Harries-Jones, 1995).

of hats" implies that one is not any longer a participant on the same grounds, but one inevitably takes a "detached" distance to the actions and phenomena taking place. In that regard, one has to be mindful, in my view, that when one steps back and reflects with a participant on how the experience has been, one enters in a asymmetrical power relationship: he or she who asks the questions sets the agenda for the conversation (Kvale & Brinkmann, 2008, pp. 33-34). Here, the autoethnographic dimension to my research and its subjective perspective potentially were at odds with a key notion of phenomenology, namely that interpretations should be developed from the phenomenological core, i.e. from the participants themselves – and *not* from the researcher.

Moreover, if one records sessions on film or audiotape, the very act of recording can be taken as an intrusion of privacy and of the mutual trust that is upheld in the intimate and out-of-the-ordinary space that is established between the participants. They are invited to allow for a state of receptivity, which tends to bring along a condition of vulnerability. In such circumstances, the recording – and even the state of observing rather than participating – can be experienced as an infringement of the process. Though I held several formal (yet primarily unstructured or semi-structured) interviews, at times I have also chosen to refrain from adopting an interview protocol and from scheduling sessions ahead of time. Instead I preferred to make notes in my research diary after having completed more loose and improvisational conversations with participants. Such spontaneous dialogues might for example have ensued somewhere out in the natural environment in the area where the AEE activities took place, but also at the dinner table, or during an evening walk.

Autoethnography, like any personal narrative, is inherently subjective. Andy Convery points out that "identity is created rather than revealed through narrative"; one constructs an attractive moral identity through the selection, organization and presentation of events and emotions (Convery, cited in Rooney, 2005, p. 13). Another weakness is its reliance on personal memory; the narrator's remembrance may be fallible. Narrative is always a story about the past and not the past itself; the narrator may prefer to forget certain events (cf. Rooney, 2005, p. 14). Nevertheless, in my assessment, the benefits of what Rooney termed "researching from the inside" outweigh its inherent limitations. My presupposition was that one can practice autoethnography while trying to be mindful, to the best of one's ability, of the mentioned drawbacks.

In the pages above I have recurrently referred to aspects of storytelling in autoethnographic accounts and also in general in discourse that is generated in the qualitative research tradition. It is for this reason that, in the following section, I will zoom in a little closer on the importance of story in my study.

5.3.2 Storytelling, narrative analysis and the aspect of time

For philosopher Arne Naess it is characteristic of natural science that it only asserts something about the abstract relations in reality, that is, the relations between things

and phenomena and not about the *content* of reality. The latter, he maintains, one accesses through direct spontaneous experience. This does not discount the fact that an understanding of abstract relations is very important in our day-to-day actions: “If you see a mountain that seems to threaten you or to fall over you, and you start running, you have some error in abstract relations of a geographical kind. But the perception of the mountain threatening you, *is* a perception of reality” (Naess, cited in van Boeckel, 1995b). In Naess’s work on the relation between ecology and philosophy, his notion of spontaneous experience of reality is one of the key concepts. In his distinction between abstract relations and concrete contents, science deals with the former, whereas anyone’s spontaneous experience of the world is singular, and thus not verifiable in a scientific sense (only perhaps through analogy or metaphor, but this would never be exact).⁴⁴

Since time immemorial, humans relate to and make sense of the world through stories (“narratives”) and through the embodied act of telling or listening to story. I believe there is a close connection between on the one hand the way we, pre-reflectively, encounter the living earth first-hand through spontaneous direct experience, and on the other, the act of attending – or rather *surrendering* – to the multilayeredness of story and the resonances this may evoke. Analogous to the idea that beauty is in the eye of the beholder, the meaning of a particular compelling story is in the ear of the listener: on basis of its ambiguity and manifold meanings each one in the audience of listeners is in his or her particular way affected by the story that is shared, and subsequently makes his or her own meaning of it.

Sometimes a point of view comes across more compellingly through a concrete example or illustration of the subject that is addressed. What is operative here is – what I call, in a twist of A.N. Whitehead’s dictum – *the accuracy of the well-placed concreteness*. The narrative or anecdotic form, seemingly representing a more ad hoc phrasing of a complex and abstract issue, might actually bring us closer to its core.⁴⁵

In the kind of research that I carried out here the data easily might have become too fragmented and the narrative flow of what people shared with me would thus have been shattered. One way in which I addressed such an unwanted effect was by employing narrative analysis, which is concerned with the search for and interpretation of the stories that people create to understand their experiences, to do justice to these (Roberts, 2002). The raw material of narrative analysis is the ways people organize and forge connections between events. The focus of attention shifts from what actually happened to the meaning people make of what happened, that is, the storied nature of human recounting of their experiences. For Susan Chase (2005), narrative

44 In section 1.3, I presented Charles Taylor’s (2007) distinction between the porous self and the buffered self. Perhaps it is in the moment of having a direct, spontaneous experience of the world that the boundaries between self and living earth are blurred, and have, even for no longer than a moment, indeed become porous.

45 The risk of the opposite is there of course as well, when the person concerned reduces a complex body of thought to a concrete example, thus no longer doing justice to the rich, multi-faceted and polymorphic quality of more abstract discourse.

is retrospective, a shaping or ordering of past experience. Thus, events and objects are organized into (and understood as being) a meaningful whole, allowing one to see the consequences of actions over time. Proponents of narrative analysis argue that people perceive their lives in terms of continuity and process. It will come as no surprise that Smith *et al.* (2009, p. 196) assert that there is a strong intellectual connection between the interpretative phenomenological approach and various forms of narrative analysis. IPA is centrally concerned with meaning-making and the construction of narrative is one way of doing so.

When people organize and order their experience through narrative analysis, they inescapably (but not always consciously) make decisions on how they relate to the dimension of (the passing of) time. In my research and writing, I tried to provide some counterbalance to the widespread tendency to regard the newest research developments in the field as the highest attainable point of coming to insight and understanding. Even in postmodernism, in its rejection of grand narratives, at least *one* implicit narrative, or undercurrent, is ignored or left aside and that is the assumption that we Westerners are attending to a continuous further unfolding of linear time. This stepped-over meta-narrative holds that poststructuralism, deconstructionism, and lately also *post*-postmodernism ought to be taken to be the most current, sophisticated and therefore by implication most accurate ways of grasping and understanding our world. I have a hunch that of all the social constructions we identify among others and that we readily expose, the construct of chronological time ("clock time") is most often overlooked. Time is conceived of as passing in sequential and equal "units of time" and this is taken for granted – so much so, that it is part of what in phenomenology is called our "natural attitude." Next to the biases that are produced through our ethnocentrism and logocentrism (Derrida), I suggest that we can also speak of a contemporaneous time-, or *right now*-centrism, which, in my view, limits our capacity to be fully attentive to what has been said or thought at an earlier time (*earlier*, that is, from the perspective of chronological time). Perhaps, through performing a phenomenological reduction, by paradoxically "suspending" – for the moment (sic!) – our now-time-centrism, we can try to become more receptive to the words or images that a particular writer, artist or philosopher has released into the world at a particular occasion in history. Cases in point here are some of the quotations in this thesis of painters, poets and writers like Cézanne, Rilke, Lawrence and their coevals.

To evoke some contours of another way of appreciating the phenomenon of time, I draw on Native American novelist and poet Leslie Marmon Silko, who suggests that time is *round*. A recurring theme in her work is the revolt in archaic societies against historical time (Irr, 2001). Silko (1996) contrasts traditional Native American beliefs about the spatial nature of time with the linear concept of time:

My interest in time comes from my childhood with the old-time people, who had radically different views of the universe and reality. For the old-time people, time was not a series of ticks of a clock, one following the other. For the old-time people, time was round – like a tortilla; time had specific moments

and specific locations, so that the beloved ancestors who had passed on were not annihilated by death, but only relocated to the place called the Cliff House. At Cliff House, people continued as they had always been, although only spirits and not living humans can travel freely over this tortilla of time. All times go on existing side by side for all eternity. No moment is lost or destroyed. There are no future times or past times; there are *always all* the times, which differ slightly, as the locations on the tortilla differ slightly. The past and the future are the same because they exist only in the present of our imaginations. We can think and speak only in the present, but as we do it is becoming the past, which is always present and which always contains the future encoded in it. Without clocks or calendars we see only the succession of the days, some longer, some shorter, some hotter, some colder; but the succession is cyclic. Without calendars and clocks, the process of aging becomes a process of changing: the infant changes; the flower changes; the changes continue relentlessly. Nothing is lost, left behind, or destroyed. It is only changed. (pp. 136-137)

Silko contends that past, present, and future coexist in instantaneity. To her, “linear time is a complete fiction” (Silko, cited in Hoffman Nelson & Nelson, 1999, p. 129). Such a more – if one wills – poetic or metaphorical grasp of time allows one to both look with a new eye at what has been expressed in a supposedly more distant past by historical Others (artists and writers), but also to appreciate in a more dynamic way what happened more recently in one’s own life-world. The memories of one’s own experience, the recollections of the participants in AEE, the narrative representations of both of these through stories, all intermingle with each other in often unconscious ways and thereby inform each other. They are in a fundamental sense co-present in ways that are hard if not impossible to disentangle.

5.4 An artistic approach to qualitative research?

Such a plea for allowing extra room for narrative flow and a more poetic relationship to time may raise the relevant question whether, in a research project that is so much centered on artistic practice and wants to take distance from too logo-centric research approaches, it wouldn’t be meaningful and appropriate to employ some of the approaches that are associated with (what has come to be termed) art-based or artistic research. Looking deeper into this issue, I found cause for hesitation to make this leap, as I will argue below. For Lenore Wadsworth Hervey (2000), artistic inquiry is a form of inquiry that uses artistic methods of data collection, analysis, and presentation. It uses and acknowledges a creative process and is aesthetically motivated and determined. All stages of the research process are saturated with art. In the data gathering stage, art is made in relation or in response to the research question. And when the data are analyzed, the transformative processes are infused with artistic methods. Even the presentation of find-

ings may involve artmaking. In art-based inquiry, one of the characteristics of the analysis and interpretation of the data, according to Woolery (2006), is that there can be no interpretation of the artwork by someone other than the artist. To me, the latter position seems a bit too absolute; I see no reason why no fruitful interpretation can come forth from a dialogue between artist and non-artists. In and through such an encounter, meanings can become manifest that the artist herself may not even be aware of.

Elliot Eisner (1981) identified some of the core differences between artistic and scientific approaches to qualitative research. He maintains that there is a vast difference between research participating in a scientific mode and research that is participating in an artistic mode. Both use entirely different forms of representation. Scientific work, he says, *of necessity* employs formal statements which express either empirically referenced quantitative relationships or communicate through discursive propositions. The language used is formal, literal, and there is little or no scope for the poetic and the metaphorical. Utterly different to this are artistic forms of representation. Here, in contrast, there is a *premium* on idiosyncratic use of form. In Eisner's words, "For the artistic, the literal is frequently pale and humdrum. What one seeks is not the creation of a code that abides to publicly codified rules, but the creation of an evocative form whose meaning is embodied in the shape of what is expressed" (p. 6). There are, Eisner continues, also rather different criteria that scientific and artistic research use for appraising the validity of the work. In a scientific work, the criterion is whether or not the conclusions are supported by the evidence. Its preoccupation is the validity of the methods and the interpretations. In artistic approach, the validity is sought in another way: "Validity in the arts is the product of the persuasiveness of a personal vision; its utility is determined by the extent to which it informs. There is no test of statistical significance.... What one seeks is illumination and penetration. The proof of the pudding is the way in which it shapes our conception of the world or some aspect of it" (*ibid.*). It comes then at no surprise that Eisner argues that artistic approaches to research are less concerned with the discovery of truth than with the creation of meaning. Eisner points out too that artistic research approaches, compared to scientific ones, tend to focus less on observable behavior and more on the meanings that the person's actions have for him- or herself (as artist) and for others. Here the researcher him- or herself is the primary and most important instrument: "the major source of data emanates from how the investigator experiences what it is that he or she attends to" (p. 8). In this, emotion plays a central role. Knowing is not conceived to be a one-dimensional phenomenon; it can indeed take a variety of forms. Affect and cognition are not viewed as independent spheres of human experience. Artistic approaches to research embrace a methodological pluralism. For, as Eisner compellingly states, "[t]o know a rose by its Latin name and yet to miss its fragrance is to miss much of the rose's meaning." Eisner nevertheless warns against an either-or position: "It is to the artistic to which we must turn, not as a rejection of the scientific, but because with both we can achieve

binocular vision. Looking through one eye never did provide much depth of field" (p. 9). In artistic inquiry, he suggests, the sensory data may not be organized in a neat fashion; the artist/researcher may only partly be conscious of them.⁴⁶

With Eisner, I was uncomfortable with adopting an unrestrained, exclusively artistic approach to research at the expense of other ways of acquiring knowledge and insight. I regarded it of added value to present my sensory data in some form of order and to make a concerted effort to bring them to consciousness. (Or to seek a synthesis between primary and secondary process, cf. section 2.8.1). I also thought that one would gain by trying to make the process one has gone through more transparent, if the aim is to share one's research findings with others.

Shaun McNiff (2008), whose work on imaginal dialogues with artworks I will thematize in section 10.3, is another promoter of an arts-oriented approach to research. He defines art-based research as "the systematic use of the artistic process, the actual making of artistic expressions in all the different forms of the arts, as a primary way of understanding and examining experience" (p. 29). Thus, art can be used to interpret art, and artistic expression and psychological reflection can be integrated as part of a research project. The newness of the art-based approach, for McNiff (1998), is that the images and processes of artistic creation are "always at least one step ahead of the reflecting mind" (p. 27). As such, it differs from the artistic work itself because of its interest in theoretical matters. Henk Slager (2009) asserts that the most intrinsic characteristic of artistic research is its "continuous transgression of boundaries in order to generate novel, reflective ideas" (p. 51), and Esa Kirkkopelto (2008), professor of artistic research at the Theatre Academy in Helsinki, holds that artistic research is not research of art but rather research of reality *by means of art*: "it restructures and criticizes our conceptions of reality by appealing to the evidence of art and its mode of being and manifesting itself" (p. 11, emphasis added). With such conceptualizations of the practice of art and research/science, it seems that the essentialist divide in *Two Cultures* (C.P. Snow, 1959/1993) is contested. With that famous notion, Snow pointed to the breakdown of communication between the sciences and the arts/humanities.⁴⁷

Where, then, do we put the new notion of "artistic research"? Is this concept an oxymoron, that is, a figure of speech that combines contradictory terms? Or is it a pleonasm, a redundancy of words, like in "black darkness"? At odds with Snow's notion of *Two Cultures*, I believe that the same person can at one point be in the culture of art and at another place or moment in the culture of science. But being in both cultures *simultaneously* seems difficult – if not impossible. An additional problem here is the doubling ef-

46 Without mentioning it, Eisner seems to refer here to William Blake's famous lines, which were also so dear to Gregory Bateson: "May God us keep / From single vision and Newton's sleep!" (Blake, 1802/2007, p. 491).

47 Others have since pointed out that, ultimately, this dichotomy is a false one. Stephen Nachmanovitch (2007), for example, brings up that both artist and scientist are in the business of uncovering reality. Though the relationships between art and science may be rich and complex, they are *also* fluid. Inspired in this by Gregory Bateson, Nachmanovitch holds that, seen at a deeper level, the two domains are aspects of an essential *unity*.

fect that takes place when one would perform artistic research on the meaning of artistic activities (as part of AEE). Here there is some semblance to the double hermeneutic of a researcher interpreting the interpretations of others; in this case however, the dangers of *misinterpretation* are vastly bigger, in my view, as the meaning-making in art is primarily a singular activity that is to a lesser or higher degree closed to outsiders.

In the end, these circumstances sketched here made it less fitting for me to approach my research questions primarily through art-based or artistic research.

After this exposition of some of the philosophical, phenomenological and ethnographical bearings of my research, which for me represent the highest level of abstraction in the hierarchy of my research design, I now proceed to outline how this multifaceted orientation was put into practice in my research.

In section 5.2, I emphasized IPA's commitment to understanding experiential events or processes from the perspective of particular people in a particular context. The intent is to grasp the meaning of something to a given person. However, such a focus cannot be conflated to an exclusive preoccupation with the individual. People are always thoroughly immersed and embedded in a world of things and relationships. In IPA, the particular and the general are not so distinct. It is against this background that Smith *et al.* embrace and strongly advocate a case study focus to research (2009, pp. 30-32, 38). At this point in the outline of my research design I descend to the more concrete level of how I have tried to adopt precisely such an approach in this study. Respectively, I will address the case study focus, the research setting, and my procedures of data collection. Finally, I describe how I planned to analyze and interpret these data.

5.5 A case study focus in researching AEE activities

Moving slowly to the more concrete, on-the-ground level of the practical research *methods* I used, I begin with taking a closer look at case study design and the procedures I followed in collecting data in this particular study. In his standard work on case studies, Robert K. Yin (2003) clearly outlines some basic aspects of the design of this type of research. The definition he provides of a case study is that it is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially in situations where the boundaries between phenomenon and context are not clearly discernable. It is a way of investigating an empirical topic by following a set of pre-specified procedures. In this section, I provide an account of how I assessed the extent to which these procedures could be fruitfully applied to my research of arts-based environmental education.

First of all, Yin distinguishes between exploratory, explanatory, and descriptive case studies, and my study can be seen as a specimen of the first category, as my research questions are more focused on "what" rather than on "why" or "how." I aimed to answer my questions on basis of studying types of AEE practices that are each repeated ("replicated") in time, and therefore my research project can be regarded as a so-called multiple case study of three dissimilar AEE activities.

There is a caveat here, for Yin underlines that the case study strategy should not be equated with qualitative research methods that follow ethnographic practices of inquiry. Some of these, he says, seek to use close-up, detailed observation of the world by the researchers and, in doing so, they try to avoid prior commitment to any theoretical model. As this is an apt characterization of precisely the phenomenological qualitative approach that I pursued here, this apparently would imply that it cannot be assimilated with Yin's formulation of what a case study proper is. For in a technical sense my approach doesn't wholly subscribe to the model of case study analysis that Yin has outlined. Nevertheless it does provide me with elements which are relevant and applicable in this study, some of which I will take up in the following.

Yin defines the research design of a case study succinctly as the logical sequence that links the data that are to be collected and the conclusions that follow to the study's initial research questions. He recommends that researchers, before commencing their research, try to indicate what kind of data are relevant in answer to the research questions, as this will provide focus to the full scope of data that they are going to collect. In my case, with my phenomenological orientation of aiming to get to the things themselves by bracketing my pre-understandings, I tried to be as open as possible, for a prolonged period of time, to everything that might manifest itself, including less obvious and distinct aspects of AEE. Having said that, I *did* have some pre-conception of the kind of data that would be most relevant to me. Ideally, the themes and essences that would come forth from my field data, specifically in the form of written notes, transcripts of interview and focus groups, would help me to identify distinctive features in the different phases of the process of an AEE activity. This is the gist of my first research question: *What is distinctive in the process of the AEE activities that I facilitate?* The interviews and focus groups would be more successful if they would allow me to bring to the surface what participants themselves regarded as meaningful experiences, when they partook in an AEE session: what stood out more than something else, what caused excitement, and what frustration? Appropriate here is Gregory Bateson's aphorism that relevant information "is a difference that makes a difference" (1972, p. 453). As I have situated my research primarily in the field of art education, useful data would also help me to uncover some of the pedagogical tenets that underpin or are implicitly expressed through the practice of AEE activities.

My second research question –*Which specific competencies can be identified for a facilitator of AEE activities?* – pertains to the unpacking of some of the core competencies of facilitators of such activities. There are three kinds of data that I deemed most relevant here: (a) feedback on my facilitation from participants; (b) feedback from colleague teachers when these joined in sessions I facilitated (and in general the comments and reflections on the role of being facilitator from other art teachers and informed outsiders); and (c) my own reflections on facilitation (during and after it takes place) as these come forth out of an inner dialogue and through my explicitation when I mirrored my views to those of others.

In the first chapter I discussed the growing gap between humans and nature and the disappearance of the real as aspects of our current predicament. I suggested that

this detachment from the living earth is at the core of the current ecological crisis. Therefore, I hoped that the findings of my research would offer some clues that would help determine if the act of partaking in AEE activities can contribute to counter this sense of alienation. My third and final research question was: *Does participating in AEE activities that I facilitate enhance the ability of participants to have a direct experience of feeling connected to the natural world?* Ideally, my data would help me to get an understanding of the extent to which participants in AEE activities indeed developed such a connection and if they, through partaking, gained new understandings. The notion of “connection to the natural world” was hard to operationalize, and it was difficult to provide clear indicators, as this sense of developing a bond with the living earth is ultimately a personal experience or sensation. However, I tried to seek answers to this question by having an open ear and eye to what the participants shared about their experiences and by making an effort to grasp allusions they perhaps would make (which at times may have been very indirect) to having established and felt such a connection. It could well be that this would only come to the surface as “undercurrents” in people’s communications, i.e. in those bits of meaning that come forth, as it were, “between the lines” of what is explicitly uttered.

As noted before, interpretative phenomenological analysis tends to contain a substantial element of narrative. The same is often the case for case studies. Such narratives, according to Bent Flyvbjerg, typically approach the complexities and contradictions of real life. In an illuminative essay, entitled “Five Misunderstandings About Case-Study Research,” Flyvbjerg maintains that, to case-study researchers, “a particular ‘thick’ and hard-to-summarize narrative is not a problem” (2006, p. 237). On the contrary, they tend to be skeptical about erasing phenomenological detail in favor of conceptual closure. Invoking a quote of Nietzsche about science, such density can even be applauded: “Above all, one should not wish to divest existence of its rich ambiguity” (Nietzsche, cited *ibid.*). Flyvbjerg has an open eye for the difficulty of summarizing and generalizing case studies, which is primarily due to the reality studied. Often it is, in his view, not even desirable to try to do so: “Good studies should be read as narratives in their entirety (*ibid.*, p. 241). Thus, the case-study method can still meaningfully contribute to the cumulative development of knowledge. Flyvbjerg takes issue with the widely shared bias against case-study research, namely that one supposedly cannot generalize from a single case. To him this all depends on the case one is speaking of and how it is chosen. One should not underestimate “the force of example” (p. 228).

In the following section, I present, respectively, an overview of the units of analysis in this study, the procedures I used to collect my data, and an outline of how I subsequently proceeded to analyze and interpret my findings.

5.5.1 My units of analysis

My units of analysis – or *cases* – are three types of AEE activities that I facilitated at different moments in time and at different geographical locations. As the scope of my study exceeds the single-case level, I used a so-called multiple-case design (Yin, 2003). Another way of formulating this is that each distinct AEE activity represents a subunit of embedded analysis (i.e. at a lower level) of my practice of arts-based environmental education in general. Each of these has a different point of gravity within the overall scope of inquiry. By studying three different cases, I was able to use both *cross-case* examination (searching cross-case for patterns) and *within-case* examination. The three different AEE activities that I researched I termed, respectively, *wildpainting*, *lines of the hand*, and *clay little-me*. In the period between 2006 and 2011, I have facilitated each of these AEE activities several times and in numerous countries across Europe, both in rural areas and cities. The research project was carried out in Belgium, Finland, Germany, Norway, Sweden, The Netherlands and the United Kingdom. Important to mention is that for each of the three activities that are studied, I selected one exemplary case and one specific individual narrative account. With these examples, I aimed to highlight a particularly colorful and vivid session of each type of AEE activity concerned. This provides a more in-depth illustration of what such an activity comprises and it elucidates how it impacts the participants in this specific case. The narrative accounts are different in that these pertain to the somewhat exceptional experiences of certain individual participants. They represent fairly unique or rare episodes in the unfolding of the AEE activities. These individual anecdotes encompass what I found to be particularly remarkable and unexpected experiences of participants. On this confined scale, I zoomed in on what happened to and with this specific person. These descriptions were mostly based on what I could recall when I (in-keeping with my autoethnographic approach) looked back at particular AEE sessions and considered which strong participant experiences evocatively “stood out” from those of others. In this regard Victor Turner’s distinction between mere experience and *an* experience is to the point, especially where he conceptualizes the latter as being dramatic and transformative and having an element of “peril” in them (cf. section 5.3). Some of the reasons that prompted me to select particularly *these* three narrative accounts are provided in the next chapter, along with the stories themselves. Both the three exemplary cases and the three individual narrative accounts were selected *a posteriori*, in 2011, after I had stepped back and demarcated the beginning and end of the time period to which my research should pertain.

There was no clear rationale for selecting the geographic sites where the AEE sessions took place; sometimes I was invited to lead a workshop, at other times I organized the activity completely myself. The exhaustive overview that I present below includes virtually all occurrences of AEE activities that I facilitated in the period between 2006 and 2011. I mention place, year, number of participants and whether the activity was carried out outdoors or indoors. The gender division of participants was unbalanced in practically all cases with vastly more female than male participants.

(In cases that *all* participants were female, this is also mentioned.) With respect to the wildpainting sessions, I indicate whether it was a workshop of several hours or a full course lasting five days or more. (Where deemed relevant, I addressed these aspects in the rendering and analysis of my data.) Regarding the age of participants, in all cases they were adults, with predominance in the age group of 20 to 30 years. Finally, with respect to the educational context of the activities, none of these took place within the formal framing of an ongoing curriculum. The activities unfolded as distinct workshops or courses for which people could apply on forehand. In some cases they were offered as an extra activity as part of an overarching formal course taught by others (e.g. as part of horticultural design or art teacher education.). Still other occasions of workshops were part of spontaneous forms of informal education at conferences or gatherings.

Wildpainting

Belgium – 2006: Chassepierre (workshop), 22 participants, outdoors;

Finland – 2010: Nuuksio nature reserve (workshop), Espoo, 8 participants, outdoors; Nuuksio nature reserve (workshop), Espoo, 10 participants, outdoors;

The Netherlands – 2006: Wijk aan Zee (workshop), 50 participants, all female, indoors; 2009: Beugense Peel (workshop), 26 participants, outdoors;

Norway – 2008: Kandal (five day art course), 7 participants, both indoors and outdoors; 2009: Jølster (five day art course), 12 participants, both indoors and outdoors; Kandal (five day art course), 7 participants, all female, both indoors and outdoors; 2010: Engeløya (six day art course), 9 participants, all female, both indoors and outdoors;

Sweden – 2008: Ockelbo (workshop), 50 participants, outdoors.

Lines of the hand

Belgium – 2006: Chassepierre, 22 participants, outdoors;

Netherlands – 2006: Arnhem, 14 participants, indoors; 2009: Wageningen, 8 participants, outdoors;

Sweden – 2008: Ockelbo, 33 participants, indoors;

United Kingdom – 2010: Dartington, 18 participants, outdoors.

Clay little-me

Finland – 2006: Vihti, 8 participants, all female, indoors; 2008: Helsinki, 20 participants, outdoors; Helsinki, 25 participants, all female, outdoors; 2010: Helsinki, 3 participants, all female, indoors;

Germany – 2011: Freiburg, 16 participants, indoors;

Netherlands – 2009: Driebergen, 8 participants, outdoors; Schellingwoude, 7 participants, outdoors;

Norway – 2010: Oslo, 10 participants, indoors; Oslo, 2 participants, indoors;

Sweden – 2008: Vickleby, 9 participants, all female, indoors; Ockelbo, 33 participants of which 2 male, indoors; 2009: Holmhällar, Gotland, 22 participants (including 3

colleague teachers), outdoors; 2010: Ockelbo, 63 participants divided over two sessions, indoors;

United Kingdom – 2008: Dartington, 6 participants, outdoors; 2010: Dartington, 18 participants, outdoors.

In my study I worked with groups of various sizes, comprising of participants with sometimes very different background experience. Next to them there were also several other interlocutors. These partners in conversation form a heterogeneous group:

Participants in AEE activities

When I refer to the group of participants in my research, I mean those persons that have partaken in AEE workshops and courses that I conducted in the period between 2006 and 2011. These participants – the majority female – were exclusively adults. In most cases they had a relatively high level of education. This group of participants can be divided into two subgroups: those with a general or non-specific background, and those that are (or are to become) teachers to others. While the AEE activity at hand was geared towards each participant's individual experience, this may not have been the primal interest why people chose to engage in it. Some may first and foremost have partaken in the AEE activity with the hope of acquiring new pedagogical methods that they then later would be able to put into practice themselves in *their* teaching to children, young people and/or adults. At times, I have noticed some disappointment of participants who had hoped to learn a new, clear-cut methodology for practicing artmaking in the context of EE, which they then couldn't readily discern in what actually took place. (And which I had not offered to them as such either.) From my side, whenever teachers or would-be teachers would take part, I would express on forehand my aim that I wanted this acquaintance with AEE first of all to be *their* own personal experience. Ideally, I told them, it would impact their individual sense of connection with the natural world in a meaningful way. My assumption thereby was, I would add, that undergoing a strong experience of meeting the world "with fresh eyes" (thus *learning by doing* what AEE can be) would make them better teachers themselves – at the point when *they*, on their turn, would facilitate such activities for others.

Most of my material is based on my research notes from dialogues with participants during and after the artmaking sessions. With a limited number of participants I conducted unstructured and semi-structured interviews. These specifically took place during the Wind and Water sailing expedition on the Baltic Sea in April 2009.

Participants were provided anonymity and confidentiality through the alteration of their real names into pseudonyms. For that reason also, I tried to avoid making reference to the exact location and date of the site where the AEE activity took place. Neither have I indicated the ethnic group or nationality of participants, as the possible advantage of providing such information is outweighed by my desire to keep the data as anonymized as possible. The same pertains to their exact age, and to a person's relative skill

or talent in making art (or apparent lack of it). There is also an epistemological reason for these intentional omissions and that is that I wanted to focus as much as possible on the experience *itself* of participants at the moment it takes place, rather than on how it is informed by their personal backgrounds. (Although of course this wider context of a person's life experience and life-world can in truth never be discarded.)

Important to point out here as well that I also regard those colleague teachers that joined in as participants in the AEE activities as belonging to the overall category of "participants."

Informed outsiders

A separate group of interlocutors were those art teachers, environmental educators, artists, writers and scholars, who – through personal experience and/or knowledge – had something informative to say on the themes that I took up through my research questions. Their contributions provided context and multiple perspectives to my research data. Because these conversation partners haven't participated in the AEE activities that I facilitated, my exchanges with them, as relative "outsiders," necessarily have a more interpretative character. The criterion for choosing these interlocutors was the extent to which I anticipated they could shed light on aspects of the theme of this research project: on basis of their professional engagement (e.g. through teaching), their thinking on the relationship between humans and the more-than-human world, and/or through their own artistic practice. This group is comprised of the following subcategories:

Artists: Magnus Lönn (Sweden); Antony Gormley (UK); Beth Carruthers (Canada); Lynne Hull (USA).

Scholars/writers: Lars Krantz (Sweden); Margaret Colquhoun, Stephan Harding (UK); Kari Carlsen, Ingunn Fjørtoft (Norway); David Abram, Richard Louv (USA).

Art teachers: Mari von Boehm, Timo Jokela, Anniina Koivurova, Meri-Helga Mantere, Pirkko Pohjakallio, Kristina Skog, Sara Tobiasson, Leena Valkepeää (Finland); Peter London (USA); Eva Bakkeslett, Grete Refsum, Ingunn Rimestad, Solveig Slåttli, Jan-Erik Sørenstuen (Norway); Nina Gunnarson, Yngve Gunnarson (Sweden).

Science and environmental teachers: Joseph Cornell (USA); Aksel Hugo, Linda Jolly, Edvin Østergaard (Norway); Kees Both (The Netherlands).

Me

This level speaks to the self-reflective mode of inquiry (being a "reflective practitioner" or "practitioner researcher"), that is, to the autoethnographic dimension of my research. I moved from being subject (agent) to being object (as co-participant) in my research project. As an "artist-theorist," I was both researcher and the researched (Sullivan, 2005). Here I felt akin to Lee Ann Woolery (2006) when she states that in her arts-based autoethnography the researcher, co-participants, images and landscape are *all* subjects.

5.5.2 Procedures of collecting data

During and after the AEE sessions that I facilitated, I assembled three types of empirical data: (1) audio-recordings of sessions and of interviews with participants and other informants; (2) notes on my observations and reflections in my research journal; and (3) latent autoethnographic memories that came forth while engaging with the research material. Thereby I used as methods for the gathering of my data respectively observation, individual interviews, and focus groups.

Observation

I performed the role of facilitator and researcher simultaneously, thus being a “reflective practitioner” (Schön, 1983). Combining these orientations in one proved difficult. I experienced myself that the term “participant observer” is an oxymoron: when one genuinely participates (i.e. when one is fully present as facilitator), one no longer observes; when one observes (i.e. takes a reflective, objectivist distance to the process), one no longer participates. Most clearly this dilemma became manifest when I asked, in my “research persona,” if I could make photographs and/or could audio record certain sessions. I was aware of some of the intrinsic disturbances technology-mediated modes of recording human activities can bring along (cf. Walter Benjamin’s notion of the loss of aura, see section 1.4). Even the *suggestion* from my side, that this could be an option, often seemed to bring about a change in the whole configuration, the pattern of relationships between participants and me. I found that such a shift is often barely (if at all) consciously noticeable; perhaps it is mostly at an intuitional level that one registers that people perform a little more restricted. Only at these sessions did I make audio-recordings: in Dartington, the United Kingdom (twice), in Ockelbo, Sweden; in Oslo, Norway (twice); and in Helsinki, Finland. These recordings were done with all participants present and with their consent.

At those instances that I observed rather than participated, I tried to pay keen attention to the verbal utterings and body language of the participants – before, during and after the AEE activity. Important to examine for me as well was the way in which their evolving artworks would develop in and through the process. There was this broadening relational field, expanding from the relationship between the participant and his or her nascent artwork, and from there the relationships to the other participants working simultaneously on their artistic creations, and on its turn, the relationships between the participants, their artworks and me as facilitator. I look upon this expanding relational field as a series of more encompassing and inclusive gestalts. (I will come back to this in section 9.3.)

Individual in-depth interviews

I conducted twelve interviews with individual participants after the clay little-me making session in Gotland. All of these were put down in writing without use of audio equipment. My method was to start with general questions. During the course of the interview, which would last about a half hour at a time, I would then zoom

in further. The basic interview structure developed in the process and became more fine-tuned (less open-ended) the more people I had interviewed. I did not use an interview schedule, as my interviewing often was partly participant-led. By leaving my questions as open and expansive as possible, I encouraged the interviewee to talk at length. My interviews alternate between sequences which are primarily narrative or descriptive and parts in which I invited the participants to be more analytic and evaluative.

In seeking answers to my research questions I also interviewed several artists, art teachers and academic scholars. I solicited comments on the experiences I had and understandings I gained when working with groups of participants, and I asked them to comment to these on basis of their own practice and experiences. Also these interviews were not systematic and highly open-ended.

Smith *et al.* (2009) remind us that the aim of a qualitative research interview is to facilitate an interaction which permits participants to tell their own stories, in their own words. Kvæle and Brinkmann (2008) phrase its characteristics slightly different. According to them, such an interview attempts to understand the world from the subject's points of view, with the aim "to unfold their experiences, to uncover their lived world prior to scientific explanations" (p. 1). In an *inter-view*, they argue, knowledge is constructed in the inter-action between interviewer and interviewee; it is "an inter-change of views between two persons conversing about a theme of mutual interest" (p. 2).

Group evaluations

David Morgan (1996) defines focus groups in qualitative research as a research technique that collects data through group interaction on a topic determined by the researcher. In essence, it is the researcher's interest that provides the focus; the data themselves come from the group interaction. As such, the focus group is one specific form of group interview. Smith *et al.* (2009, p. 71) consider it less readily suitable for IPA researchers, as the larger sample of contributing voices tends to make it more difficult to infer and develop the phenomenological aspects of IPA. The context of a group setting may make it quite arduous to elicit experiential narratives. But that doesn't mean either that they rule out that it can be done. In the focus group method, the researcher convenes which several participants who have had a certain experience and interviews them in a relatively unstructured way about that experience. The moderator or interviewer creates a permissive and nurturing environment that encourages different perceptions and points of view. The accent is upon interaction within the group and the joint construction of meaning and making sense of a phenomenon (Bryman, 2008, pp. 473-475). One of the strengths of the focus group approach, according to Alan Bryman, is that it offers the opportunity of allowing people to probe each other's reasons for holding a certain view. The latter can be more interesting than a question-followed-by-an-answer approach which can at times be predictable: "an individual may answer in a certain way during a focus group, but, as he or she listens to others' answers, he or she may want to voice agreement to something

that he or she probably would not have thought of without the opportunity of hearing the views of others" (p. 475). Because the moderator has to yield a certain amount of control to the participants, the issues that preoccupy them are more likely to surface. In short, they are forced to think about and possibly revise their views.

The downside of this, of course, is the phenomenon of *groupthink*: in this psychological phenomenon, group members refrain from critically evaluating alternative ideas or viewpoints. Other group effects may occur as well. Some participants may rather keep their thoughts and feelings to themselves, or, the opposite, certain prominent speakers may dominate the conversation. Further, it can be that participants are more prone to express culturally expected views in group sessions than in individual interviews.

As facilitator-moderator of the focus group sessions I kept the structure open and I usually asked only general questions, of the type "How *was* it, to do this?" Thus, the exchange could take a relative free reign, allowing for a rich sharing of participants' experiences in which my interventions as moderator were minimal. I made an effort that as many voices as possible could be heard, sometimes inviting those who had not spoken yet to seize the opportunity.

Though I regard these evaluative sessions, which are an integral part of the AEE activity proper, as sharing similarities with focus groups, I want to acknowledge as well that there are important differences. One of the characteristics of the focus group technique, for example, is that participants tend to be carefully selected and invited to contribute to research. Further, people in a focus group, according to Richard Krueger (1988), typically are unfamiliar with each other: they are selected because they have certain characteristics in common that relate to the topic of the focus group. To underscore the circumstance that the evaluative part of the AEE sessions cannot satisfactorily be fully assimilated with the focus group method, I henceforth will refer to them as my group interviews or group evaluations.

5.5.3 Methods of analysis and interpretation

There is a subtle difference between analysis and interpretation, though the terms are often used synonymously. Where the former involves working to uncover patterns in the data, the latter entails explaining those patterns, translating them, stating and making sense of them in one's own words. Ultimately, it is both modes together that inform one's understanding. IPA is committed to moving from the particular to the shared, and from the descriptive to the interpretative (Smith, *et al.*, 2009). This process of analysis can be viewed as an iterative and inductive cycle that draws upon a repertoire of strategies which Smith and his colleagues present (*ibid.*, pp. 79-80), from which I highlight and slightly paraphrase the most relevant in the context of this study. The IPA researcher aims to analyze the experiential claims and understandings of each participant; identify emergent patterns within the ensuing experiential material and keeps an open eye for where commonality and difference or nuance are

expressed; develop a full narrative, supported by commentary on data extracts, that guides the reader through the interpretation; and, last but not least, reflects on his or her own perceptions, conceptions and processes. An IPA analysis starts out from immersing oneself in the original data, thus entering the participant's lifeworld. In the process, there is eventually a shift of focus, away from the explicit claims of the participants. As Smith *et al.* point out, there is often an element here of personal reflection that comes in. The exploratory comments that are written down and the interpretations that are developed at this stage will inevitably draw on one's own experiential and/or professional knowledge (p. 89). Smith and his colleagues underline that IPA is avowedly interpretative: the interpretation may well move away from the original text of the participants. "What is important is that the interpretation was inspired by, and arose from, attending to the participant's words, rather than being imported from the outside" (p. 90). In the process the body of data grows larger; it now comprises, next to one's field notes, both the interview transcripts and the exploratory comments one has noted to them.

A further stage in the analysis is to develop emergent themes on basis of these. The researcher tries to map interrelationships, connections and patterns for whole groups and across cases. Each stage of the analysis takes the researcher further away from the participants and includes more of him- or herself as author. Yet another step is to search for connections *across* the emerging and recurrent themes.

Before moving on to the next stage, of reporting on what my actual engaging with the material brought forward, I need to confess that I found it rather challenging to formulate succinct and meaningful criteria for the interpretation of my findings. As my study is first and foremost exploratory, I feared that too tight criteria may act as a straightjacket hindering my openness to the phenomena, and especially to those that I would *not* expect. What I can say, however, is that the first criterion in interpreting my findings is the extent to which participants' reports of what they got out of engaging in the AEE activity (and my own observations of what happened during these sessions) enable me to enhance my understanding of the distinctive features of the process of an AEE activity. The same can be said with respect to the degree to which my findings shed light on (what I take to be as) some of the key competencies of a facilitator of AEE activities.⁴⁸ Regarding the question of whether participants' felt more inclined or able to have a direct experience of feeling connected to the natural world through partaking in AEE: the criterion to assess this for me was, first and foremost, whether or not the participant's subjective experience confirms attaining such a connection. Next to that I was also attentive to my own observations of changes in behavior and interactions during and after partaking in the AEE session, which pointed in this direction.

48 As a clarification, the extent to which a competency is regarded as "key" is a function of the frequency, persistency and force with which a certain quality resurfaces across different cases – both in the participants' reflections and those of my own.

Though I built my interpretation primarily on the participants' and my own experiences, I also drew, added to that, upon a wider range of perspectives. There were, first of all, my dialogues with (what I have called) informed outsiders. Next to these were insights gained through my consultations of the works of scholars, philosophers and artists whose perceptions helped to enlighten the themes of this study. Here I also benefited from less commonly used sources such as novels, poems and films. In general, I was particularly interested in the undercurrents that manifested themselves at unexpected places, like what a particular philosopher or writer, in my understanding, seemed to suggest *in-between* the lines or outside the confines of more controlled and formal settings.

5.5.4 Considerations on the study's trustworthiness

However cautious the researcher may have proceeded, the truth claims of an IPA analysis will always be tentative and inevitably remain subjective, as Smith *et al.*, 2009, p. 80) rightly assert. In research such as mine, the boundaries between researcher and the researched are blurred. As I partly make myself the subject of study, my biases possibly threaten the study's trustworthiness. My prior, inside or tacit knowledge may lead me to make false assumptions and misinterpretations, and I may miss potentially important information. It seems evident that "researching from the inside" (pertaining to projects where the researcher has a direct involvement or connection with the research setting) may easily compromise validity. Addressing this concern, Pauline Rooney (2005) suggests that the task is, ultimately, for researchers to "minimize the impact of biases in the research process, to carry out research in consciousness of its socially situated character and to make the researcher's position vis-à-vis the research process transparent" (p. 7).

In the following, I will present what my own approach has been to tackle these issues, thereby using Andrew Shenton's (2004) text "Strategies for ensuring trustworthiness in qualitative research projects" as my guiding reference. Leaning on Egon Guba's (1981) work on the assessment of the trustworthiness in research, Shenton discusses four strategies for ensuring the validity and reliability of a qualitative research project. These address, respectively, its credibility, transferability, dependability and conformability.

Credibility

The criterion of credibility (also referred to in the literature on qualitative research as "internal validity" or "truth value") concerns the question of how congruent the findings are with reality, and the first provision that Shenton mentions which may help to promote confidence that the phenomena have been accurately recorded is the practicing of well-established research methods. In my case, these are interpretative phenomenological analysis, case study research and autoethnography. Of these, the third is arguably the least established, but this circumstance is countered through the

triangulation of the different research methods, on which I will say more below.⁴⁹

Credibility can also be strengthened, says Shenton, through a prolonged engagement and familiarity between the investigator and the participants. This can lead to the building of a trust relationship, and thus to a more adequate understanding. In my research the length of engagement has varied considerably. At several sessions, I had only met the participants just before the AEE activity commenced, and often I didn't link up with them again thereafter. At some occasions, my relationship with them was intensive, like in the five day wildpainting courses, or when the AEE activity was part of a weeklong course on another theme, such as the "Children and Nature" course that I co-taught at Schumacher College in the United Kingdom in 2010.

Another safeguard for keeping up credibility is the extent to which individuals that served as informants were sampled randomly. In my research project, I conducted only one-to-one interviews with participants who had joined in the little-me making activity on the island of Gotland (see section 6.3.3). Nearly all of these were held on the deck of the schooner Helena. The randomness of the sample was determined by whoever was available for an interview in-between the working rota on the ship. Of the 22 participants in the *Wind and Water* course, I interviewed nine, among which the two teachers that joined in the course as co-participants.

An important provision pertaining to a study's credibility involves the extent to which different methods for gathering data were used. In my case, such triangulation consisted of the combination of (focus) group interviews, semi-structured and unstructured interviews with individual participants, my recollections of events and the notes on my observations in my research journal. In that way, I was able to access more fully the richness and complexity of AEE activities and explore them from more than one angle.

Triangulation may also take place via the data sources and involve having a range of informants and environments at one's disposal. In my case, I engaged with a wide diversity of participants, teachers and other stakeholders which I interviewed about my findings or whose actions I observed (cf. section 5.5.1). Additionally, I worked at a broad variety of sites. Environmental triangulation involves the use of different locations and factors like the time, day or season when the activity took place. In my case, the activities were conducted both inside of buildings, in gardens and in relative wild natural settings. Comparing the results allowed me to assess if environmental conditions may have influenced the information received during the study. I also compared data related to the same AEE activity but which I derived from different phases in the fieldwork. The wide geographical dispersion of AEE activities and the multiplicity with which they transpired over the years 2006-2011 establish exactly this, in my view.

49 Triangulation in research pertains to the use of more than two methods in a study, thus allowing the researcher to double or triple check his or her results. Through *methodological* triangulation, the researcher can attempt to decrease the deficiencies and biases from using a single method, and counter-balance the weaknesses of one method with the strengths of another.

Because of its personal nature, autoethnographic researchers would be hard pressed to provide verification criteria to other scholars which would allow them to rigorously assess both findings and analysis. For Laurel Richardson (2000) this aspect gives her cause to suggest rather different ways of approaching autoethnographic texts; she looks for modes in which aesthetic and emotional impacts on the reader are not subdued but play an important role. Richardson offers the following five criteria as a frame of reference when evaluating a personal narrative paper: (a) Is it a substantive contribution, enhancing our understanding of social life?; (b) Does it have aesthetic merit? (Is the text artistically shaped, satisfyingly complex, not boring?); (c) Is there an element of (self) reflexivity on how the writer came to write the text?; (d) Does the text affect the reader emotionally and/or intellectually?; and finally, (e) Does the text embody a fleshed out sense of lived experience, and thus express reality? Performing autoethnography necessarily implies both embracing one's subjectivity (thereby voicing one's prejudices and assumptions) and being mindful of the inevitable bias it may bring along.

Transferability

Next to the criterion of credibility, Andrew Shenton discusses the provision of transferability, which is also being referred to as a study's external validity, applicability or generalizability. The concern here is the extent to which the findings in my study can be applied to other situations. Qualitative research, by its nature, is particularistic. However, there can be a desire to heedfully assess whether the study's findings and conclusions have implications that go beyond the confines of one's own research data, and can indeed be generalized to other situations.⁵⁰ Shenton (2004) recommends that the researcher makes at least an effort to demonstrate how the locations in his or her case study compare with other environments, but he also notes the difficulty to determine the "typicality" of the locations in which the fieldwork took place (p. 70). A good way to do this is through collection of "thick" descriptive data that allow comparison of one context to other possible contexts (to which one may ponder transfer). Subsequently, thick description of the context can be used to make judgments possible about the extent to which the results fit elsewhere as well (Guba, 1981). Along the same lines, Yin (2003) discusses the provision of external validity, which he understands as the extent to which the study's findings are generalizable beyond the immediate case study (p. 35). Yin underlines that an analyst should first of all try to generalize a certain set of findings to some broader theory, rather than trying to select a "representative" case or set of cases. Thus the ensuing theory can become the vehicle for examining other cases and new empirical inquiries at other locations.

In my case, the multiple-case design of my study, as said before, allowed me to attempt to recognize patterns, which I then tried to compare across cases, linking characteristics of the studied phenomena in terms of a broader (theoretical) scheme. Of

⁵⁰ The analysis gains in generalizability if the logical links that are established in one case can be inferred to other cases as well. One abstracts from the given concrete case certain characteristics that are deemed essential and presumes they must be similar in many cases (cf. Bryman, 2009).

course, each time one of the AEE activities is performed at a certain place is distinctive in itself; it is different from previous and following practices of the same activity together with a group of people. On basis of some of my findings I have drawn generalizing inferences, most specifically for example regarding the competencies of the facilitator. At such instances, my analytic generalizations rose above the individual cases.

Dependability

Seen from a positivist orientation, a study's dependability or reliability is enhanced if the researcher can show that if the work were repeated, in the same context, and with the same methods and same participants, it would lead to similar results. Shenton (2004) has a different take on this, noting that such provisions are always problematic in qualitative research. Rather, he recommends that the researcher reports on the processes that took place within the study, with the goal that any future researcher would be able to repeat the work – but not necessarily with the aim of gaining the same results. Considered from that point of view, the research design becomes more of a “prototype model” (p. 71) allowing the reader to determine the extent to which proper research practices have been followed.

In my case it is through meeting this latter provision that I strive to enhance the study's dependability, rather than through indicating its repeatability in the course of time. As I said before, I didn't follow a fixed set of procedures; often I decide on the spot on how to proceed or what to do next. At any rate, my type of facilitation is inevitable highly personal and hardly repeatable by others, I would say, if the person aiming to do this hasn't physically participated him- or herself in one of the AEE sessions that I facilitated. Moreover, several other, relatively independent factors continuously come into play when deciding where an AEE session will take place: the weather, the time of day, and, not in the last place, my assessment of the energy and enthusiasm of the participants. Sometimes the weather forces me to cancel a session when it's half-way, or to switch from one activity to another, e.g. from painting to doing another artistic activity inside. All this makes the criterion of repeatability less applicable. In my approach to AEE, it is precisely the thrill of attempting, at the spot, to do something slightly different or new each time that allowed me to retain my “freshness” as facilitator. (I will say more on this aspect in chapter 8).

Confirmability

The fourth and last criterion Shenton takes up is that of the degree of confirmability or objectivity of a study. Researchers, according to Shenton (2004), have to ensure (as far as they possibly can) that their findings are the result of the experiences and ideas of the informants, rather than their own preferences (p. 72). One way to test this is, again, through triangulation: it is the variety in research methods and data sources which together afford a test of prevailing predilections on the part of the inquirer, which otherwise may have remained too implicit or hidden. Guba (1981, p. 87) recommends the practicing of reflexivity: researchers should have the intention to reveal their underlying assumptions which gave them cause to formulate their questions the

way they did. Here, the recording and use of one's introspections in one's research journal are deemed indispensable. In the prelude to the exposition of my research questions, I believe I have elaborated extensively on the assumptions that guided my research, of which the most central one is that I assumption that artistic activity can enhance a person's ability to connect to nature in ways beyond what more established approaches in EE (on the whole) thus far were able to bring about.

Further, a study attains a higher degree of confirmability if researchers in the presentation of their results also discuss "preliminary theories that ultimately were not borne out of the data" (Shenton, 2004, p. 72). In the case of my study I repeatedly make attempts at theorization on a higher level of abstraction. In my view, such pursuits are almost inevitably bound to have a more probing and speculative character. For this reason I have indicated in the text, as much as possible, where such conjecturing on my part is indeed at hand. At other instances, some lack of direct connection with the data seems unavoidable when applying an autoethnographic approach to one's writing, as I pointed out above.

It is worth mentioning in this context that Shenton (2004) recommends the performance of *negative case analysis*. Through searching for and discussing elements in the data that appear to contradict patterns or explanations that are emerging, the analysis may be refined. In my study, I did this by highlighting individual narrative accounts that deviate in some way of the mainstream, either in a positive or negative sense. At occasions, when uttered, I also report on criticism of my facilitation of an AEE activity, e.g. when participants experienced it very different from how I had purported it would be.

Where my study perhaps most markedly *lacked* is in its omission to perform information-sharing sessions with a sounding board of other researchers. Having such sessions could have helped me to recognize my own biases and preferences; in my case there was hardly any peer scrutiny of the project by colleagues. As Shenton points out, an investigator's closeness to the project frequently tends to inhibit his or her ability to view it with real detachment. What I also failed to do is to hold so-called member checks, in which I could have asked the informants to read the transcripts of dialogues in which they participated. This could have showed the extent to which they considered the cited words as being reflective of what they intended to say during the interview. That being as it is, I can only hope that the reader will trust that my renderings are done honestly and accurately.

On the other hand, I believe my study does meet some of the provisions for promoting credibility through my "thick description" of the studied phenomena. Hopefully my detailed description of the AEE activities and their evaluation helps to convey a sense of the actual situations and contexts in which they took place, thus helping to lend the overall findings some "ring of truthfulness." Important here is the principle of "sensitivity to context," e.g. the socio-cultural milieu in which the study is situated or the existing literature on the topic (Yardley, quoted in Smith *et al.*, p. 180).

After this elaborated review of possible concerns regarding my study's overall trustworthiness and validity, I now proceed with the presentation of my findings in the next part of this thesis.

PART III

6. Three case studies of facilitated AEE activities

Painting is something that takes place among the colors, and ... one has to leave them alone completely, so that they can settle the matter among themselves. Their intercourse: this is the whole of painting. Whoever meddles, arranges, injects his human deliberation, his wit, his advocacy, his intellectual agility in any way, is already disturbing and clouding their activity.

Rainer Maria Rilke (1907/1985)

In my research I have zoomed in on three contrasting types of AEE activities that I facilitated in the period between 2006 and 2011, with different groups and at miscellaneous locations across Europe. Carried out both outdoors and indoors, each thematized our sensorial relationship with, and embodied experience of, our life-world. *Wildpainting* and *lines of the hand* are on the two-dimensional plane, the making of *clay little-me's* works the three-dimensional space. The content and structure of the first two activities I developed myself. The third, in contrast, was conceived of by British sculptor Antony Gormley; the version I practice is based on memories of my participation in an artistic workshop with him in 2006 at Schumacher College in England. I believe that the three activities all comprise some core features of AEE, each in a distinct way. Most importantly, in each of them, I foreground the participants' own embodied knowing. In this, the following observation by artist and art educator Peter London (who taught at the same course) has been clarifying to me: A

scientist, when studying a phenomenon, asks: "What *is* this?" An artist asks the very same thing, what is this, but then adds: "and what is it *to me*?" (P. London, personal communication, 11 September, 2006).

When comparing the three activities there naturally is the variety in the use of materials, such as paper and pencil, paper, brushes and paint, and clay. But there are also contrasts in the way the activities aim to forge relationships to the natural environment. In each, the way in which spatial and temporal aspects are brought to the fore is a little different; the theme of the artmaking may range from seeking a connection to the landscape "in front of our eyes" to the pursuit of an intensified embodied sense of place, and from working with art in the here and now to creatively engaging with storied memories of one's earlier sensory experiences.

In order to pursue my study fruitfully, it is first of all essential that the three activities that I facilitate *can* indeed be seen as characteristic of AEE. Here, there is of course the danger of tautology, or, put differently, of a form of self-referentiality that becomes too fixed. For, after all, if it is me who presents a (aggregate and selective) conceptualization of what I understand AEE to be, this then also allows me to subsume under that category whatever activity I designate as fitting. The underlying problem here, as said before, is the lack of a clear and broadly shared definition of AEE. My first reference and point of embarkation for this research journey is the loose definition that Meri-Helga Mantere (1995a; 1998) provided (see section 2.7). AEE, for her is, in essence (again recapitulating), a form of learning that aims to develop environmental understanding and caring by encouraging participants to become more receptive to sense perceptions and observations through artistic practice. In AEE, artistic methods are used to express personal environmental experiences and thoughts. The assumption thereby is that such artistic experiences improve one's ability to see; they help one in knowing and understanding. To achieve that, Mantere believes it necessary that participants in an AEE activity are encouraged to stop and be quiet, to have sufficient time and to feel psychologically secure "in order to perceive the unknown, the sometimes wild and unexpected." For her, AEE can comprise a conscious training of the senses, but also an intentional decoding of stereotypes. Key for Mantere is openness to sensitivity, and to new and personal ways to articulate one's environmental experiences.

The AEE activities that I facilitated and that I study here are, in their own specific ways, all grounded on the view that sensitivity to the environment can indeed be developed through artistic activities. They are very simple in their basic structure: participants use just a bit of clay, a piece of paper and pencil, or paint, brushes and easel. The setting of the activities is often outdoors in the natural environment. At times it is also inside. In the case of working with clay – the *little-me making* – the quietude and sense of containment afforded by the room or studio where the activity takes place helps participants to focus their attention maximally to the evolving and unpacking of the process. Here, the human body and its organs are thematized in the artmaking. The activity centers on the participants' inner environment or, phrased differently, that part of nature that *includes* the human body. The two activities – *wildpainting*

and *lines of the hand* – relate more explicitly to the outer environment or circum-ambient universe; here the connection to landscape is thematized. One should bear in mind however that the distinction between inner and outer stems largely from a Cartesian dualism dividing mind (*res cogitans*) from body/nature (*res extensa*). Many thinkers to which I refer in this study (cf. Bateson, Merleau-Ponty, Ingold, etc.) ardently try to overcome this strict dichotomy.

For me it, then, seems defendable that I have selected this heterogeneous but mutually complementary group of activities as examples of AEE in practice. Because of their diversity and different points of gravity, I believe they allow me to meet the purpose of this study and to seek answers to my research questions.

The structure in which I present my findings is as follows. I first provide a general description of the content of each AEE activity. I sketch its format, describe how it was conceived, and provide context from art (education) theory. Subsequently, I zoom in on one representative rich example for each case concerned. Zeroing in even further, I end each section with a narrative account of *one* particular participant's experience, which in my view highlights aspects of the themes that I address through my research questions. In one way or the other these latter accounts represent dimensions of what participation in an AEE activity can evoke in people, but then in an amplified and rather intense way.

In this presentation of findings I devote most space to the third case study, the making of clay little-me's. I facilitated this AEE activity much more often than the other two, and I thus also acquired substantially more empirical data on its impact.

6.1 Case I – Wildpainting

With the word wildpainting, I refer to a form of visual artmaking that I have been facilitating with groups of people out in nature: in the forest, the mountains, the fields, at a riverside or seashore. It basically means two things: to paint in “wild” areas (i.e. in natural places that have been relatively little affected by human presence), and to paint in an other-than-ordinary, surprising (wild) way. (The name is somewhat misleading, as the painting in most cases doesn't take place in what can be regarded as genuine wilderness and it is not as otherworldly or uncontrolled as the word wild may connote.) The aim is to encourage the participants to open up to the aesthetics and the energies of the landscape through trying to see (and smell, listen, etc.) as if one perceives it for the first time. It means to dare to draw and paint in quite a different way than we are accustomed to: leaves don't always have to be green and the sky not eternally blue. Instead participants try to observe afresh, deeper and deeper, letting the motive come to them as they experience it there and then. In that way, artistic process becomes something between meditation and perceiving the world in the way a child does. In wildpainting, participants use acrylic paints, brushes, charcoal and pencils, a painting easel, and a piece of white paper taped to a masonite backing board as surface.

In the following, I first provide a contextual frame to wildpainting as artmaking activity. From there, I proceed by sketching the basic structure that the activity has, to move on to the example case of wildpainting at one specific location, which is the hamlet of Kandal in the mountains of western Norway. I close the section on wildpainting by drawing attention to the individual subcase of a remarkable and surprising incident with **Anne-Lene**, a participant in one of the wildpainting courses that I taught.

6.1.1 Seeing color with fresh eyes: the context of wildpainting

Though I occasionally facilitated a wildpainting session that started and ended on the same day, a typical wildpainting course lasts five days, with about five hours of artmaking each day, and with regular breaks for coffee, lunch, and for taking time to talk about the progress that has been made up until that point. There is no demand of having prior artistic skills. As I announce in the course flyer, what *is* needed to partake in a meaningful way is the enthusiasm to participate and a desire to learn something new, in short, to dare to participate in a process such as this.

The impetus to practice wildpainting stems from the years I have attended courses led by artist and art teacher Wilma Caris at the MK24 art atelier and course center in Amsterdam. For my own art teaching courses, I had much benefit of Caris's instructions for working with acrylic paint. Some properties of this painting medium render it very suitable for art teaching activities. Once applied on paper or canvas, it dries up very quickly. This allows one to put another, different color on top of a painted surface, as soon as this first layer has dried. With this layering of colors one can create special effects, as the second color that one applies on top of a color painted earlier acquires a different tint due to the surface of color already there, underneath it. This depends on factors like the brilliancy or opacity of the lower layer of paint and the relative transparency of the new layer of color. The resulting color may have lost some of its intensity or it may become more luminous.

The method I encourage participants to use in my wildpainting courses is to paint a plane of color on top of an underpainting that they have previously done in a very different color (using acrylic paint), to enhance the vividness of the color contrast. I may for example ask them to try to paint the landscape they see in front of them first "as wrong as possible": if the vegetation is green, they should paint it in red, or if the sky appears blue, they should try to paint it orange. Later they are asked to apply the colors that they actually perceive on top of the wrong colors. If they then, for example, start to apply green color on a red plane, there are (at least) three ways of relating to the fresh green color one achieves this way: first to consider it in its own right as a green tainted by the red color underneath it; second to notice that this green is a different green than a green color that is directly applied on the white paper or canvas, and third, perhaps most importantly, as a green color of which the impact in the overall composition is determined in its articulation in relation to planes of the

first (dried) layer of color that still have remained uncovered by new paint. In short, when painting this way, ideally the underpainting lends support and gives depth to the colors in the evolving overpainting: they enter in a dialogue. In the latter case, the more green is applied on top of the red, the less the remaining patches of red form a counterweight to the expanding areas in green. With a few brush strokes the relative proportions and mutual balance of green and red may shift dramatically, with instant consequences for the overall organization and aesthetic appeal of the composition. As John Ruskin (1906/2005) said, “In all perfectly beautiful objects, there is found the opposition of one part to another, and a reciprocal balance obtained” (p. 225). Two years later, painter Henri Matisse gave the following vivid depiction of what this seeking of balance implies, this process of (what I call) *dialoguing* between new and earlier applied colors:

If, on a clean canvas, I put at intervals patches of blue, green and red, with every touch that I put on, each of those previously laid on loses its importance. Say I have to paint an interior; I see before me a wardrobe. It gives me a vivid sensation of red; I put on the canvas the particular red that satisfies me. A relation is now established between this red and the paleness of the canvas. When I put on besides a green, and also the yellow to represent the floor, between this green and the yellow and the color of the canvas there will be still further relations. But these different tones diminish one another. It is necessary that the different tones I use be balanced in such a way that they do not destroy one another. To secure that, I have to put my ideas in order; the relationships between tones must be instituted in such a way that they are built up instead of being knocked down. A new combination of colors will succeed to the first one and will give the wholeness of my conception. (Matisse, 1908, in *Notes d'un Peintre*, cited in Dewey, 1934/1987, p. 141)

In a similar vein, visual arts pedagogue Vea Vecchi (2010), one of the first *atelieristas*⁵¹ of the Reggio Emilia schools, believes that one can be attentive to such connections when working with children. Rather than “imprisoning” their subversive vitality, colors can be allowed to express their different identities in complex and subjective relationships.

[A] certain shade of yellow changes if the size of the area it covers changes; ... if [it] is juxtaposed with a similar shade of color or with a complementary one; or placed in a particular quality of light. Shades of color can be discovered and gathered in nature just as they can be tasted in certain foods. Colors can ac-

⁵¹ At Reggio Emilia, *ateliers* are workshops in visual arts. An *atelierista* is an educator with an arts background (an “artist-in-residence”) and there is at least one employed in each of the Reggio Emilia schools. Vecchi herself mentions that an important task of the *atelierista* is to maintain a certain way of seeing in which the role of poetics in the learning process is highlighted, thereby “appreciating the dance constructed together by cognition and emotion in all fields of knowledge” (Vecchi, 2010, p. 128).

quire great power of expression through words or painting; they can be played or danced.... All of us are born equipped with an extremely refined sensibility for perceiving color; but as with other perceptive abilities it is the brain that must practice decoding. To achieve this task it is important for it to encounter adequate contexts, otherwise we lose opportunities for *seeing* and *tasting* the things around us. (pp. 30-31)

Typical of wildpainting is that it aims to move such dialoging with colors out of the studio and into the open air. The landscape becomes, as it were, another conversation partner, a part of a larger choreography in which place and light are dynamically explored through color and form. However, a wildpainting course typically also has its base in a studio or art room so that certain assignments can be carried out inside as well. In that way one can adjust to weather circumstances. (And some guided sessions take place inside four walls *anyhow*, so that the participants familiarize themselves with the materials and with working in a group together.)

An important aspect of wildpainting is to put the participants, as it were, “on their wrong foot.” To *wrong-foot*, a sporting term, is to play a shot in such a way as to cause one’s opponent to be off balance. One hits or kicks the ball so that the other player believes the ball will go in the opposite direction to the one in which it will really go, and the effect is that he or she moves in the wrong direction. Understood more broadly, the other is intently put into an unexpected or difficult situation. He or she will be expecting a certain outcome, but you predetermine that that outcome is not bound to happen. This intervention, the organized surprise, tends to cause confusion, and in some cases also frustration. The other person may feel that he or she is being made a fool of, or worse, trapped into a situation that is not of their choosing and on which they don’t have control. For many participants in wildpainting, this new way of relating to colors, to the process of painting, and for that matter to artmaking in general, is at first completely new, foreign and frightening, and may cause them to feel being wrong-footed.





Figure 12: Images of various wildpainting sessions (I)

My inspiration to teaching the wildpainting courses comes from painter Paul Cézanne, who wrote, “The landscape thinks itself in me... and I am its consciousness.”⁵² According to Becks-Malorny (2001), Cézanne’s concern was not to convey the illusion of a three-dimensional world to the viewer. Rather he was creating a new reality using the two-dimensional surface of the painting. If he had used traditional linear perspective, he would have had to depict every object the size required by perspective. But what Cézanne wanted to do was to show each object the size which *he* saw it. He refrained from using traditional methods of creating depth, but this leaves the question unanswered how he then was able to create paintings that seem to suggest space and distance, nevertheless. It are such questions that I like to take up with the participants. I may for example point out to them (thereby leaning on Becks-Malorny) that Cézanne made use of the knowledge that cold colors, such as blue and green, appear to recede, while warm colors – red, orange, yellow – seem to stand out from the surface. In his own words: “I try to render perspective through colors alone” (Cézanne, cited in Becks-Malorny, 2001, p. 50).

We must not paint what we think we see, but what we see. Sometimes it may go against the grain, but this is what our craft demands.... People will teach you the laws of perspective at the Beaux-Arts, but they have never seen that depth results from a juxtaposition of vertical and horizontal surfaces, and that is what perspective is. I have discovered it after long efforts, and I have painted in surfaces, because I do nothing which I have not seen, and what I paint exists.” (Cézanne, cited *ibid*, p. 48)

Cézanne followed up on the advice of Pissarro not to use lines to outline the forms of his motifs. Instead he used overlapping forms, building his objects only by gradations of tonal value. This insight, that there *are* no enveloping lines in nature (though we are tempted to draw them!), only patches of shifting colors, is one of the key elements I hope to convey to the participants. Usually I also elaborate a bit on Claude Monet’s instructions to his students. Traditional landscape artists tended to depict the individual phenomena of the natural world – leaves, branches, blades of grass – as they had studied and conceptualized them. Monet, however, like Cézanne, wanted to paint what he saw rather than what he intellectually knew. And he saw not separate leaves, but splashes of constantly changing light and color. He desired to see the living earth as a pattern of nameless color patches, the way a man born blind would see it if he suddenly gained his sight (Seitz, 1960). Monet gave the following advice to one of his art students: “Whenever you go out to paint try to forget what objects you have in front of you – a tree, a house, a field, or whatever. Merely think, here is a little squeeze of blue, here an oblong of pink, here a streak of yellow, and paint it just like it looks to you, the exact color and shape, until it gives your own naïve impression of the scene before you” (Perry,

⁵² This widely-cited statement by Paul Cézanne is in fact the contraction Merleau-Ponty (1993a, p. 67) made of the original quote (posthumously brought to us by Cézanne’s friend Joachim Gasquet), which I inserted in section 2.4 and took up with David Abram (in section 2.8.2).

1927). At another occasion, Monet noted: "I only know that I do what I can to convey what I experience before nature and that most often, in order to succeed in conveying what I feel, I totally forget the most elementary rules of painting, if they exist that is" (Monet, cited in Kendall, 2004, p. 167). A landscape does not exist "in its own right," he held, as its appearance changes at every moment: "the surrounding atmosphere brings it to life - the light and the air which vary continually. For me, it is only the surrounding atmosphere which gives subjects their true value" (Monet, cited in Moffett, 1984, p. 149).

A subject that I take up repeatedly in the context of wildpainting is the importance of complementary colors. High contrast or complementary colors are colors that are directly opposite to one another on the color circle. Sometimes they are described as *clashing colors*: if they are applied too close together, clashing colors may appear to vibrate and overwhelm the viewer. Vincent van Gogh was very mindful of the impact of complementary colors. He repeatedly came back to their importance in his letters to his brother Theo, such as here:

I am always hoping to make a discovery here, to express the feelings of two lovers by a marriage of two complementary colors, their mingling and their opposition, the mysterious vibrations of kindred tones. To express the thought behind a brow by the radiance of a bright tone against a somber background. To express hope by some star, the eagerness of a soul by a sunset glow. (van Gogh, cited in Nachmanovitch, 1990, p. 59)

The color circle that I use in wildpainting is based on the "color wheel" that was first publicized in 1839 by Michel-Eugène Chevreul. On the wheel, twelve colors of the rainbow are placed in a graduated circle. Chevreul, who was a chemist, believed that using complementary hue pairs (opposite on the color circle) can create greatest harmony, what he called "harmony of contrast."⁵³ Van Gogh seemed to have been well aware of the Chevreul's ideas of "entwining" separate colors as he was very fond of using the pairs of blue and orange, and red and green. In a basket he would keep balls of wool in mixed colors to help him see what shades could be combined. In one letter to his sister he tells her that there are "colors which cause each other to shine brilliantly, which form a *couple*, which complement each other like man and woman" (Van Gogh, cited in Lane Fox, 2010).

Of equal importance as getting the participants to acquaint themselves with the use of complementary colors to me is to try to focus them on the color of shapes that are often regarded as colorless, like snow, water or shadow. It was one of the big breakthroughs of the Impressionists that they found that shadows *do* have color. Renoir once said, "No shadow is black. It always has a color. Nature knows only colors ... white and black are not colors." (Renoir, cited in Rewald, 1973, p. 210). Working from the then-relatively new theory of complementary colors, the logical

⁵³ Chevreul (1854/1981) defined the complementary of a hue as the portion of the spectrum that the color absorbs. Red for example mostly absorbs green.

color to use to render shadow was violet, being the complementary of yellow, the color of sunlight. Monet said: "Color owes its brightness to force of contrast rather than to its inherent qualities ... Primary colors look brightest when they are brought into contrast with their complementaries" (Monet, cited in Ball, 2003, pp. 177-178).

As said, in wildpainting, part of the wrong-footing is that participants are asked to first apply a layer of intently "wrong" colors. When these have dried, these hues may subsequently "ask," as it were, to be covered by, and to enter into a dialogue with, their complementary (not yet present) colors. Goethe (1810/1973) held – and Chevreul would develop this insight further after him – that colors are harmonious if they are located opposite to each other on both sides of his color circle, thus generating what he called the "splendid effect." Goethe wrote: "Yellow demands red-blue / Blue demands red-yellow / Red demands green / And contrariwise" (note 810, emphasis added). Preparing the stage for such expressions to come forth in the process, is one of the aims of this specific AEE activity.

6.1.2 The unfolding of a wildpainting course

At the first session of a five day wildpainting course, the participants introduce themselves to each other. Almost always, some of them state that they have a fear of painting or that they have not touched a painting brush since they were a child. One reason for them joining the course, I regularly hear say, is that they want to see if they can overcome and rekindle a fire that seems to have been extinguished a long time ago.

On this first day, I tend to start out by giving an assignment which I learned in 2001 from British artist and art teacher James Bates and have repeated myself with numerous groups of art students in the years since. At this point in time during the course, the participants have no idea yet what to expect. I provide everybody with a sheet of paper and a piece of charcoal. Then all get an instruction that consists of just three words: "draw a horse." Receiving no additional information, the participants slowly get into action. Interestingly, and as I have seen confirmed time and again, nearly everybody who does this tends to draw a horse standing still, stiff, with its head facing towards the left. The whole point of this first exercise is that this habitual stereotype of a horse drawing is made manifest through their own actions. The next assignment is that they get a new sleeve of paper on which they again are to draw a horse, but this time one that is stung by a bee. Without breaking for a pause, I subsequently give a third assignment, which is to draw a new horse *on top* and *across* the stung horse, but this horse would be a horse hanging in the air, that had just jumped off a cliff. Yet, with that assignment, the exercise is still not completed. The fourth horse the participants are asked to draw – on the same paper on which they had drawn the bee-stung horse and flying horse – is a stallion that mounts the horse that is hanging in the air. So, in effect, the participants make a drawing of three horses across each other. Then I hang these new drawings beside the initial ones they have made when asked to draw a horse with no further ado. As one can expect, the differ-

ences are rather dramatic. The sets of horses drawn wildly on top of each other are infinitely more interesting as image, as a piece of art, than the stiff “archetypal” horses they called upon, when they responded to the first assignment in their habitual ways.

The reason for me to open the wildpainting course with this assignment is that it tends to work as a real eye-opener for people about what an arts-based process can lead to. They experience a sense of surprise, an *Aha-Erlebnis*, when they discover an elementary artistic capacity that they carry with them but the expression of which seems to require them to cross a threshold. If they draw scenes in nature at all, most seem to find themselves repeating and repeating ingrained images, such as the one of the horse, in the way they are used to do, relying on “autopilot,” as it were.

In the rough sketch that I present to the participants of the kinds of things we will be doing in the rest of the week, I touch upon the difference between a theoretical understanding of color and our embodied perceptions. To illustrate my point, I often pick up two transparent plastic jars with acrylic paint. In my left hand I have a jar of ceruleum (sky) blue, which according to theory is a “cold” blue. In my other hand I hold a jar of ultramarine blue which is considered “warm.” Then I point out that a Mediterranean sea, painted primarily in ceruleum blue, may convey a feel of being warm, while a starry night painted in ultramarine, may feel cold as steel. Again, according to theory, ultramarine, because of its relative high content of red, is regarded as a warm blue. Ceruleum, in contrast, because of the yellow in its consistence (and complete lack of red), is considered a cold blue. During the course I regularly come back to this difference between theory on one hand and the phenomenology of direct experience on the other; the latter may be opposite to what one would infer from a purely theoretical approach.

In a following session, the participants paint a color circle themselves, mixing pairs of two primary colors to so-called secondary colors (i.e. mixing blue and yellow to green, blue and red to purple, and yellow and red to orange). The circumference of the color circle is divided in twelve equal arcs and each of these is to be filled with color in such a way that one would find the most contrasting (or complementary) color of any given color on the opposite location of the circle (cf. figure 12). For example, opposite of red would be green. Almost invariably, most participants in wildpainting courses – even the more skilled ones – do this exercise “wrong,” though it seems so undemanding. For when they progress in mixing the colors and they move from red to yellow, they are bound to find that as they approach the pure yellow, the hue of their orange mix has become too reddish, and no matter how much yellow they add to it, it doesn’t become more yellow. It seems impossible to dilute the red that is already blended into the yellow.⁵⁴

⁵⁴ I am in fact hoping (if not *aiming*) for this “mistake” to happen; it is part of the didactics, for it contains an important lesson. To achieve a very yellowish orange, they would have needed only a tiny drop of red paint; but once they have added too much red their only recourse is to wait until the applied paint has dried up and to cover that part of the color circle with plain (titanium) white color. Once that white has dried as well they can start all over again with a “clean slate” on this part of the circle. They have learned something about the properties of yellow and red and what happens if one mixes them – the power of red in the yellow base. They have also learned something of allowing for making mistakes and coming beyond them, and of how the color white can act as an “eraser” in this.

On another day, an assignment could be about the use of “negative space.” Negative space, in art, is the space around and between objects or the parts of an object, for example the area between a cup and its handle. An artist using negative space is said to rely on the space that surrounds the subject to provide shape and meaning. Betty Edwards (1979; 1989; see also section 4.3), asserts that the students’ use of the negative spaces (for example they are asked to draw the space around their fingers), helps their brains to make the transition to what she calls “right-mode seeing.”⁵⁵ For people who have never practiced this, it may come as a new discovery that the space around a subject, and not the subject itself, forms an interesting or artistically relevant shape and can even be a key element in an artistic composition. Paying attention to negative space also helps in moving away from drawing contours with lines: by filling out the full area of negative space the form stands out as its positive image. Like with the drawing of the horse exercise, practicing working on basis of the negative space rather than focusing on the object itself, helps us to move away from creating from a seemingly ingrained, deep-seated mode (“autopilot”), meaning that we start painting from memory/habit and we stop observing what is actually in front of us.



⁵⁵ Edwards’s teaching techniques are based on the premise that after early childhood most people develop their left, verbal hemispheres at the expense of the visual side, the creative side of the brain (Edwards, 1979; 1989). A rigid dichotomization of functions in either the left or right hemisphere of the brain has since been contested as being pseudoscientific and over-simplifying. In my view, however, this circumstance does not play down the radical newness of Edwards’s approach to exercises that aim to bring out the creative abilities (attributed to the right brain), as opposed to the analytic and logical abilities.





Figure 13: Images of various wildpainting sessions (II)

A key element in wildpainting is to regularly have a *genomgång*, as it is called in Swedish, a “going-through” or review, in which we talk together about the paintings as they have become at that moment in time. In the beginning I put a lot of effort in getting the process going, by giving my own encouraging comments on the results, inviting them to join in on my reflections. As the course progresses, I feel that I can more and more step back, and leave the floor to the participants themselves, as they start talking about each other’s and their own work.

Another day, we may start with a disciplined exercise of mixing greens. I ask them to make a matrix grid and to paint two types of yellow color (lemon- and cadmium yellow) on the left in boxes on the vertical axis, and several types of blue (ceruleum-, cadmium- and phtalo blue), along a horizontal axis. The instruction is to mix the different hues of yellow and blue in the different boxes where the horizontally and vertically arrange colors meet. The result is that one gets a wide range of greenish tonalities. These can then be varied even more, e.g. by adding water to the mix which allows the white paper surface to shine through, by adding zinc (mixing) white paint, which makes the color mix less saturated, or by adding the color black next to the different blues.

After this, I ask them to take the paper with the mixed green colors plus a second large piece of paper with bits of curled up adhesive tape on it outdoors. They should look for and collect parts of plants that match the different green hues that they have mixed and attach these to the sticky tape (figures 14 and 15).



Figure 14: Mixing different hues of yellow and blue into a range of greenish tonalities



Figure 15: In the garden, some greens are much harder to find than other ones

Such more technical exercises are meant to help the participants prepare themselves for the actual wildpainting activities that take place in a relatively wild natural environment, sometimes at quite a distance of the studio (in and around which the above-mentioned exercises were carried out).

In the following, I describe three of these excursions into nature in more detail. They all take place in Kandal, in western Norway. The reason for highlighting three rather than picking out one is the circumstance that the sessions in and of themselves don't last very long; moreover, most activity is done in silence by the individual participants. These sessions together, with their subtle differences but also similarities, provide a nuanced view of what wildpainting is about: they all occur in the natural environment and the participants carry "in their rugsack," as it were, the new skills and insights they have acquired during the more technical exercises that were performed previously, inside of the artmaking studio.

6.1.3 Example: wildpainting sessions at Kandal, Norway

Kandal is a small agrarian community in the southwest of Norway. There are seven participants for the course at Skarstein Gård: all of them are women, some from the local area. I am so deeply involved in the process of facilitating this course and trying to "hold the space" that I don't document the sessions other than through taking a few photographs and, on moments in-between, hastily putting some notes on paper. As course facilitator I feel my relationship with the participants would be strained if I were to conduct formal interviews with them. The observations that follow below are based on my written notes and my recollections after the course has taken place.

On the third day of the course, I take the participants to the garden from which we have a magnificent view on *Skjortan*, a mountain peak a little further beyond the south end of the lake. The last hour of sunlight produces warm colors on the mountain and its slopes. The local participants, having grown up in the area, know this majestic mountain very well; they have seen it from several angles, and one has even climbed it. A few have drawn or painted this landmark before, but never in the way that I suggest we will do it now. It is after dinner, and the summer weather is unusually warm. As midsummer has just passed and we are rather high up north we can benefit from the soft evening light until very late at night. I ask them to paint the mountain "as wrong as possible." I suggest they paint the large grayish rocky parts in pink, using crimson red mixed with white. All the other parts should be "maximally different" to the colors that they actually perceive, meaning that they should look for the opposite or complementary colors on the color circle. For that purpose, I have asked them to bring along the color circles that they painted the day before. The trees and bushes, which "are" green, should be painted in the complementary red color, orange for the blue of the evening sky, and so on. I ask them to start immediately with the painting, without making an initial sketch with pencil or charcoal. Thus their painting brushes, in effect, become their sketching tools.

Slowly, a bit puzzled, the participants set into motion, collecting the paints from the plastic jars. It is obvious to me that many of them have not used such a candy-like color as crimson red ever before, and it feels odd to them to use this paint to render a motive in nature. To actually paint the rocky surface of the mountain with this color,

and to apply the “wrong” colors to render other elements in the landscape almost physically goes against their inclination, something that is underlined by their sighing and groaning. To me, this part of the assignment is about pushing them to cross a first “threshold.” When all have been able to paint at least the basic forms of the landscape in these shockingly different colors and have more or less managed to fill out the paper, I ask them to take a break and to arrange the painting easels beside each other. We then talk about the experience.

Nearly all share that it was a very odd if not frustrating thing to do, but some also voice a sense of excitement of trying something new. They persevere in doing it because they also see others doing it, and they want to see where this will lead to. As the facilitator of the session, I make some remarks about compositional arrangements and give suggestions for alterations, for example if the bushes are too big relative to the mountain behind them. For now, I ask them to continue painting again, but this time – now that the applied “wrong” paints have dried up – to choose for those colors that they actually perceive in the landscape at this very moment and to put them on top of the colors they painted before the break.

To me, this is a rewarding phase. For what is about to happen – or rather, what I expect to happen on basis of previous experience – is that several of them will be overwhelmed by the intensity of the colors and undergo a moment of epiphany. The green colors of the trees that are applied on top of the red paint acquire a radiant quality, both caused by this red underneath them and by the adjacent red areas which have not been covered by green paint (yet). The same happens with the blue color of the sky that is applied on top of the orange. I encourage them to be aware of the interplay between the receding orange (in the sky part) and red (in the areas with vegetation), and not to simply cover every “wrong” colored element with the “appropriate” colors. I suggest they leave some parts (or even pockets) of dried paint as they are, i.e. rendered in the original complementary colors. This is a highly exhaustive undertaking, as each decision of where to apply color – or conversely, to *refrain* from doing so – affects the whole composition.

Regarding the mountain colored in milky crimson red, I suggest that they also here look attentively to the colors they actually perceive right now on the rocky mountain surface: the more grayish, bluish and brownish colors, and that they apply these in paint on top of the pink. One reason for choosing the crimson is to achieve a defamiliarizing effect. The participants are encouraged to use a color that for many people evokes associations with candy or baby clothing, but certainly *not* with mountains.

I know from previous experience – and in that respect my teaching here is *not* very open-ended – that for many there is a great temptation to do it *too* well: the risk looms that pretty soon all the red they have used to paint the vegetation will be covered by greens and all orange color in the sky will have become blue: “back to normal.” I suggest we have another break and the easels are again arranged on a row beside each other. When we talk about the experience, many give expression to their excitement and say that they have never painted mountains in such way.

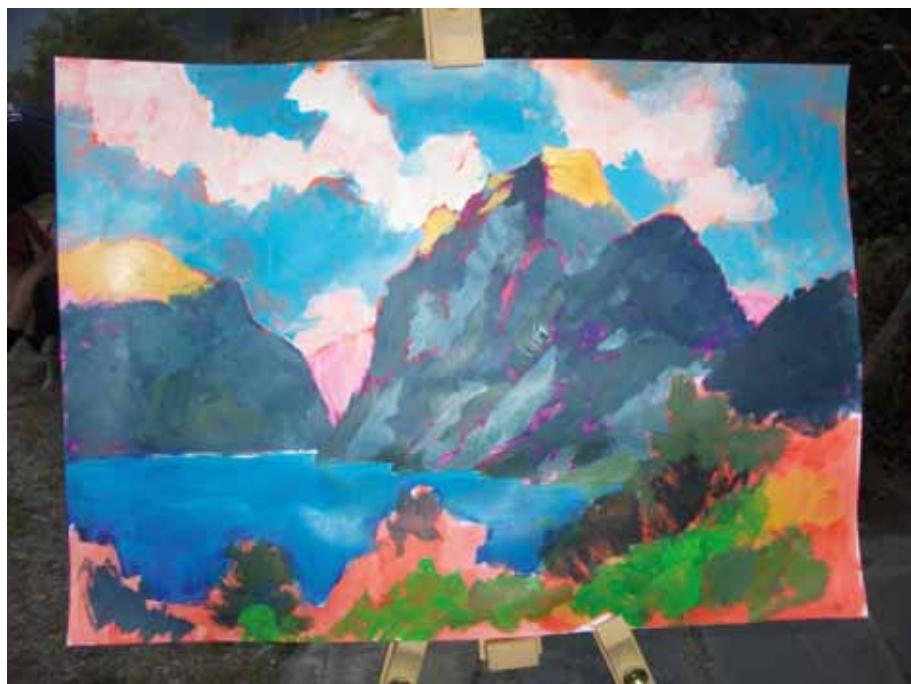


Figure 16: A painting half-way the process

The participants are seeing new things, new ways in which colors concur, even though they – at least some of them – are so familiar with the motive. I try to warn them that they run the risk of loosing the vibrancy of their work if they proceed too long. To underscore my point I make photographs of the paintings as they look at this stage in the process, so that I can later show them how their work still looked at this point in time (see e.g. figure 16). The hour becomes late and the shadows slowly grow longer. When it also starts to become a little chilly, I suggest that we stop painting. Again, we have a *genomgång*, and also this time I ask the participants to share in the group how the experience has been for them and I comment on each individual painting that has been made. Many express their surprise about taking part in such an artistic process, and some report that it helped them to see the interacting of colors, both on the painting and in the landscape, in a new way. There is both the struggle and the reward of having made the effort.

Another wildpainting activity thematizes a wild streaming river. Though it rains occasionally on this grayish day, we stack the painting easels, boards and paints in our cars and drive to a river in the area that is emptying water from the glacier in Lake Breimsvatn. When we have arrived at the spot I ask the participants to erect their painting easels at a distance of at least ten meters from each other, adjacent to the roaring river on our left-hand side. The first activity I invite them to do is to draw the river on a vertically positioned piece of paper, taped on a backing board that is

supported by the easel in front of them. The participants are asked to hold a piece of charcoal with both hands. I suggest they try to express on the paper, while they keep their eyes closed, what they perceive and feel, when listening to the river passing down beside them. After about half an hour, we gather the drawings together, put them beside each other, and we talk about the experience. It is remarkable how different the experience has been for each of them.

One participant, **Ann**, says she really liked the experience, but she would have appreciated having a bit more time. She talks about how she became aware of two different tonalities: the deep roaring sound of the water moving more deeply and the high, bubbling sound of water on the surface. "Before doing this I was never aware of that difference in sound," she adds. In her drawing she tried to express the difference between these two types of sounds by making some parts of the paper dark and leaving others untouched.

Regina mentions that she usually hears a little better with her left ear. She recognizes the sound, as she lives near a river, but it also produces fear in her, as she has small children and she is afraid that they might come too near to the roaring water.

One participant, **Cecilia**, made an imaginal journey in her mind upstream along the river, to the fells and the origin of this water. "It brings back many memories of being at a river at other occasions in my life. But I never experienced it the way I did now. At the start I didn't think it would be that black. A memory came back to me of a boy in the local community that drowned." Contemplating this further she says she feels like singing a children's song. The song is about a violin player who is learning from the river to play the instrument. In the river is a troll and when the river makes a dark violent sound the apprentice plays that sound on the violin. He is lured to play faster and faster, thus matching the turmoil the vibrant river is producing.

Britt-Marie finds it fascinating to hear so many *stories* in the water. "These are warm stories. A whole universe, made up out of sounds and light." She expresses the sound in the drawing, using the opposition of light and dark as the organizing principle: "The positive is there because there is also the negative."

Malin, in contrast to the others, says that she first felt frustration doing this. Her paper got loose due to the wind and she had to fix that again. When ready to pursue, she started to draw lemniscates (the symbol of infinity), on the paper, one after the other. "That made it all more relaxed, the eternal movement."

Maike is the last of the women to comment. She found it difficult to draw by holding the charcoal with both hands. In the end, she broke the piece of charcoal in two and held one piece in each hand. "That was better. It was so peaceful. I almost wanted to lie down and fall asleep."

After this *genomgång*, the participants return to their easels. The next activity I suggest they do is to now *paint* the river, this time with eyes open, but with the same awareness they had when they drew it with their eyes closed, an hour or so earlier. And again, after these paintings are made, we collect them together at one place in the near vicinity, where we can also sit and discuss the experience. As it happens, however, the rains starts to pour down heavily and we need to cut the review session short. Hurriedly we pack all artworks and materials in the cars and return to the farm.

It is amazing to see how, for some participants, their self-confidence in the making of art grows during the five days of intensive wildpainting. **Malin**, who in the beginning confided that she had stopped painting when she was about nine years of age, now continues painting until 11 pm (and if I had not reminded her of the late hour she might have continued even longer).

However, things can also work out rather differently, as the description in the next section will show. In this episode, one participant in a wildpainting course reacted in a way that neither I nor the other participants would expect. I single out this narrative account because I believe that through its exceptionality and dramatic intensity, it tells about aspects of wildpainting that otherwise would not easily come to the fore.

6.1.4 Narrative account: ripping a painting apart

Before presenting the story of the experience with participant **Anne-Lene**, I need to confess that the reader will exclusively read *my* account of what happened with her at the occasion on which I report. What is lacking is **Anne-Lene's** own rendering of her experience. Because of this omission, I could have chosen *not* to include this narrative account. Nevertheless, I think it is important to incorporate it, despite this shortcoming. But I mindfully refrained from pushing **Anne-Lene** to provide me with an explication of her deeper motivations for acting the way she did, as she seemed to indicate to me nonverbally that she would rather not do so. Here, again, we see tension between being a facilitator guiding the artistic process and being a researcher who simultaneously seeks to uncover meanings and analyze what takes place in the case at hand. I have respected (what I took to be) **Anne-Lene's** wish to leave it as such. For reasons of protection of her privacy, I also changed her name (as I have of all participants in these descriptions) and I make no reference to the location of the following narration of events.

During this particular wildpainting course it rains most of the days. On one day, however, it is sunny weather and I want to make the best use of this. In the morning, we go by cars to a picturesque sea bay. My invitation to the participants is to make small landscape paintings on pieces of cardboard of about 12 by 12 cm in size, using acrylic paint. The small size makes it easier to paint a miniature landscape or to highlight a detail with just a few paint strokes. When one is not satisfied with a particular result one can just grab a new card and make a new effort. The whole morning is spent with intensive painting.

When we have returned by car to the farm where the course is based I suggest we do another painting session after lunch. I am so excited about the quality of the light and the sudden possibility of working outside, that I perhaps have become a bit *over*-enthusiastic and start pushing the limits. The idea of another session is welcomed with enthusiasm and we move the painting easels to the garden and position them in a circle around a blooming lilac tree. The assignment is to paint the tree, the surrounding landscape and sky in complementary colors; that is, in colors that are most

opposite to the colors they see in front of them, as if they are making a color photo negative. This means that the sky should ideally be painted in orange hues, the tree and other bushes around it in red and the blooming purple lilac flowers in bright yellow. I also suggest using two painting brushes simultaneously – one in the left and one in the right hand. The participants look a bit bewildered but nevertheless start going. Some of them jump right into it and are almost dancing with the brushes. For a few it proves a hard challenge, which seems aggravated by the circumstance of the intense sunlight.

At a certain point, when they have finished filling out the paper in wild yellow, orange and red colors, I announce that this is the moment to move to the next phase. From here onward they should apply the actual colors as they see them in the lilac tree and its surroundings on top of the warm, firey colors that they have already put on the paper. The change in the paintings that subsequently takes place is quite dramatic. I walk around from one participant to the next and give suggestions or ask some questions. I notice that one participant, **Anne-Lene**, is sighing deeply – for her it is a real struggle. **Lisa**, on the other hand, who earlier had said that she had never painted before in life, is in the process of making a vibrant, luscious painting, with a harmonious balance of colors. I am impressed and suggest her to be careful now and to be aware of the risk of continuing working too long, as this might easily spoil what she has created thus far. With some modesty she says she is not so sure herself whether what she has made is that interesting. “You don’t have to believe my word for it,” I say to her, “but let’s just see what the others say about it.” I take the opportunity to show her painting as it has evolved to the rest of the group, and this enables me also to point out certain effects of color juxtaposition and aspects of composition. What I had not taken into account was that the mere act of me calling attention to this work would solicit applauding remarks and exclamations of praise. **Lisa** becomes even shyer because of this. This is not what I had intended to happen, as I have made it a point the previous days to foster an attitude of “upholding judgment” on each other’s work – be it of a negative or a positive kind. When the short break is over and the participants continue painting, **Anne-Lene**’s sighing is even deeper. After about three minutes I suddenly hear a scream behind me and the sound of a heavy piece of paper being torn to pieces. **Anne-Lene** has decided she cannot (or doesn’t want to) do it and puts an end to her ordeal this way.

The next morning, when in our group discussion we reflect on these events in the garden, I try to point out that I find it a pity if someone destroys his or her work, for that doesn’t allow it to be addressed any longer. Through that, I say, I feel that a learning possibility is missed. At the same time I also try to underscore that there can be situations in which destroying what one has made may feel as the most appropriate thing to do. After I have commented like this, the matter is left as it is. It feels to me, intuitively, that for **Anne-Lene**, who is in tears, things are best kept that way – at least for the moment. Later on I find no good opportunity to reflect back on the incident with her. The course has almost come to an end and the activities now move to cleaning and packing; there is even no time for a shared evaluation of the course, which

feels frustrating. **Anne-Lene's** rupture into despair remains unaddressed. I am not sure though whether this is necessarily a bad thing; to me it feels that there has to be some indication on the part of the person involved that he or she indeed would want to take the issue up again. For me, at that point I don't feel that there is such a desire or need and I prefer not to press **Anne-Lene** into something she doesn't want either.

That evening, I touch upon the event with a colleague art teacher who has joined in both sessions that day as co-participant and she confides to me that she had thought from the beginning that it was pushing it a little far: doing *two* intensive art activities on one day *and* inviting the participants to fill out this large paper with such vibrant red and yellow colors at the middle of the day! Such colors are already very powerful in ordinary circumstances, she asserts, but if you paint them outside on that scale in the intensity of the summer heat, one may be asking for trouble.

6.2 Case II – Lines of the hand

*The lines of life are various; they diverge and cease,
Like footpaths and the mountains' utmost ends.*

Hölderlin (1812/1966)

An important aspect of AEE is how we relate and feel connected to places in nature, to landscapes. This relationship, however, may undergo deep changes in different phases of one's life. The felt bond, at any moment, is partly informed by prior experiences and shaped through our memory. What do we carry with us as a "storied remembrance" of places we have been before and the sensory perceptions we have felt there? And can such places in nature and "memories of the senses" (Seremetakis, 1994b) be evoked through art and imagination?

The lines of the hand activity is about engaging the imagination as fully as possible, and the point of departure is merely a drawing of someone's palm lines on a white piece of cardboard of 10 by 10 centimeters. This uncommon circumstance, however, makes the activity at once more intimate and personal. Through that, the participants seem to enter a different than ordinary space. We see the lines on the palm of our hands every day but we seldom really pay attention to them. However, I don't address or put in focus any esoteric, storied and culture-specific meanings of these lines. Like one's fingerprints, they are singular for every person involved. When the cards with the drawn lines are exchanged between participants I assume this tacit dimension comes into play in some fashion; there seems to be a shared appreciation that these lines *are* special and intimate to us, without explicitly acknowledging this quality as such.

Vea Vecchi (2010) makes an interesting observation about materials that are used when investigating reality, though in her case it pertains to working with very young children. She lets the children themselves make the choices of the material – which can

be of different size, color, substance and with different qualities of touch and sound. One important condition for her, however – and this is the reason for bringing it up here – is that these materials should be capable of triggering memories of personal experience. In the encounters between humans and materials, our minds are capable of connecting very different planes and levels: “a sense can call to mind a memory and narrate a reality by recollecting it” (p. 32).

With the lines of the hand activity I want to investigate the relationship between our imaginative capacity and memory: could the exciting of the former, through an artmaking activity, possibly trigger and evoke the formation of gestalts in the latter? Sarah Katherine Foust Vinson (2010) defines her concept of storied memories as the memory-narratives that drive the stories we tell about ourselves (p. 14). A person’s remembrances of the past allow for revision of self. Such memories are both framed and mutable, for they are shaped not only by what was encoded in the past but also by the individual’s present state. Foust Vinson refers to Ulrich Neisser (1967) who held that only fragments of experience are encoded in autobiographical memory; by consequence, rememberers must seek to reconstruct their memories and personal histories, and they refer to the elements of their autobiography in the form of a narrative, a story, of their personal experience.

The border between memory and imagination is narrow. Foust Vinson points at the usual distinction between narrative and story: psychologists and scientists speak of memory’s narrative structures, she says, whereas stories are generally associated with imagination and creativity. She however, wants to use the terms interchangeably, as, in her view, memory becomes both narrativized *and* storied. Rememberers are also crafty creators – hence her new concept of storied memory.

It is exactly at this interface where the lines of the hand activity challenges the participants. A source of inspiration here is the following quote of William Blake, penned down in the last year of the eighteenth century:

And I know that This World Is a World of Imagination & Vision. I see Every thing I paint In This World, but Every body does not see alike....The tree which moves some to tears of joy is in the Eyes of others only a Green thing that stands in the way. Some See Nature all Ridicule & Deformity & by these I shall not regulate my proportions, & Some Scarce see Nature at all But to the Eyes of the Man of Imagination Nature is Imagination itself. As a man is So he Sees. As the Eye is formed such are its Powers. You certainly Mistake when you say that the Visions of Fancy are not be found in This World. To Me This World is all One continued Vision of Fancy or Imagination & I feel Flatterd when I am told So. (Blake, 1799/2008, p. 702)

Could imagination, or imaginative vision, help participants access (or feel a sense of *re*-connection to) nature? Could this ability facilitate their capacity to retrieve what they carry as memory of place along with them from childhood onwards (while they themselves may not be necessarily aware of this)?

6.2.1 Memory and imagination: the context of lines of the hand

Webster's Dictionary (according to Robert Dilts, 1998) defines imagination as the "act or process of forming a conscious idea or mental image of something never before wholly perceived in reality by the imaginer (as through a synthesis of remembered elements of previous sensory experiences or ideas as modified by unconscious mechanisms)." In this concept of imagination, mental representations or images are internally generated or constructed. In the words of Joseph Glanvill (1665, quoted in Webster), "Our simple apprehension of corporeal objects, if present, is sense; if absent, is imagination." Memory is the recollection of something one has already experienced in ongoing reality, of prior moments when one received new information through one's sense organs when these engaged in relating to the environment. Imagination, in contrast, involves forming a mental image of something that is not necessarily related to one's past experience, and neither is in the ongoing environment. However, as Webster points out, imagination does involve "the power to recombine the materials furnished by experience or memory." Thus, we can find imagination defined in *The Edinburgh Encyclopedia* (Brewster, 1832, p. 186) as "the will working on the materials of memory; not satisfied with following the order prescribed by nature, or suggested by accident, it selects the parts of different conceptions, or objects of memory, to form a whole more pleasing, more terrible, or more awful, than has ever been presented in the ordinary course of nature."

We tend to think of imagination as an "out of this world" faculty that has little to do with reality and truth. Australian poet John Allison (2003) shows how ordinary imagination can be intensified to become an organ of cognition, and thus offer a path to real knowing. Allison holds that poetic knowing and seeing may reveal aspects of the world invisible to science. He distinguishes between a whole range of meanings of the word imagination. It may pertain to fantasy (when someone says "that is just your imagination") to picturing (e.g. imagining a view), but also to artistic sensitivity ("a rich imagination") and to an aesthetic sense (a certain interpretation that a person offers may express a keen imagination). Finally, says Allison, there is a special case of heightened imagination, where it becomes something spiritual, a "visionary capacity." Allison believes that these different meanings can in fact be considered as successive stages in the faculty of imagination. Fantasy, then, is that what happens to imagination "when nothing is really going on"; it is driven by wishes and desires of which one doesn't necessarily have to be conscious oneself. When we move to picturing, we are directing the faculty of imagination in service of other motives. In artistic or aesthetic perception, if we take it one stage further, we start to identify relations and patterns, both between and in things.

Our memory works in mysterious ways and informs our understandings when trying to make meaning of our experiences. The attachments we developed to place, our sense of belonging, have provided us with a rich array of hints of smells, sounds, views, tastes and feelings. Most of the times this happens unconsciously and memories manifest themselves at sudden moments, as Eeva Kilpi lyrically described:

Memory has a hundred ears, a thousand eyes, and most of its eyes are shut, for one has to look forward. But once in a while one of the eyes of memory unexpectedly opens, and then one sees events from the past as if they happened now, everything is alive and close, and you feel that you can recall any moment of your childhood whenever you want. But that is not so, memory has a will of its own, it is like another being that has grown into us, like a twin being that walks beside us and sometimes performs services for us, sometimes betrays us. (Kilpi, cited in *Touch of Memories*, 2004)

It was human geographer Yi-Fu Tuan (1974), who coined the term “topophilia.” With it, he referred to the affective bond between people and place. This bond, according to Tuan, may vary greatly from one person to the next and is expressed in different ways in different cultural contexts. Tuan suggests that the “love of place” often takes the form of an aestheticizing of a place or landscape. Our attachment to a particular environment, like our home place, can be based on memories and he contrasts this with a supposed alienation that is produced by modern environments that give rise to a sense of placelessness. Elsewhere, Tuan differentiates space and place: “When space feels thoroughly familiar to us, it has become place” (Tuan, cited in Dean & Millar, 2005, p. 14). Place is something known; it belongs to us in a non-possessive sense, and reversely, we belong to it.

The term *geopiety* conveys this sense of belonging to a certain place even stronger. In the way Tuan uses this other term, he refers to the sense of intense attachment to and reverence for nature and a particular place. Usually this stems from a feeling of rootedness in the soil and is based on intimate knowledge and memories. According to J.K. Wright (1947), who first coined the term, it denotes a sense of thoughtful devoutness aroused by human awareness of the natural world and geographical space. As such it is a quasi-religious feeling for nature and landscape. A lines of the hand activity can be taken as an effort of introspecting one’s memory of sense of place. For some, this indirect and evocative approach, in which other participants play a co-creative role, may be a means to investigate the reaches of one’s own geopiety.

6.2.2 The structure of a lines of the hand activity

I conceived of the lines of the hand activity in 2006, when I tried to think of new ways of engaging the imagination of participants in an arts-based activity. For many people there seems to be something rather special with the lines of our hands that we carry with us all the time, and wherever we go. The hands have been a source for divination for centuries, and usually associations are made with fortune-telling booths and gypsy caravans. In palmistry, the hand palm that is read is envisioned as a microcosm on which the person’s life path can be foreseen on the lines that crisscross the palm. The so-called *life line* is the prominent line that begins at the base of the thumb

and runs upward to the forefinger. Other major lines are the so-called *Head line* and *Heart line* (cf. Fairchild, 1995). In general, we seldom pay attention to these lines. This is also the case with many other aspects of our body and the living earth around us; we usually simply take them for granted. The lines of the hand activity is aimed at arousing and igniting the imagination and to encourage looking at familiar things with fresh eyes – important aspects of art practice.

“Lines of the hand” consists of a series of stages. As facilitator of the activity, I usually start out by pointing out that this workshop will be about our embodied knowledge: our sensorial perception, our memories and our imaginative capacity. I am interested to see what happens when we look at imagination not as a tool of our will, but as a mode of engaging with and of relating to the world in a following mode rather than in an intentional (purposive) way.

As an opening, I tend to tell about apocryphal reports on prisoners in complete solitary confinement. It is said that some of them were actually able to endure the extreme conditions and did not go insane because they were able to engage in an imaginal dialogue with another living creature in the cell – be it a mouse, a cockroach, or even an ant. The prisoners would relate to this creature as a *Thou* (Buber, 1950) rather than an “it,” and it became a living relationship for them. By investing their imaginative capacities in the encounter, they found a way of keeping a very basic sense of social and cultural relations intact, picturing themselves in a richer world than the one afforded by the concrete walls of the cell block. I then suggest to the participants that, with this activity, I would like them to dwell for some time in their own imagination, to see what they can retrieve (or what spontaneously emerges) from there.





Figure 17: Images of various lines of the hand sessions (I)

Each participant receives a piece of white cardboard of about 10 by 10 centimeters, and I ask them to make a (not too detailed) pencil drawing of the main lines on the palm of one of their hands. To make the drawing, they should use their unschooled non-writing hand. The reason for using the “wrong” hand is to cause an estranging, defamiliarizing effect and to direct the focus to the lines of the one hand that is most predominant in our everyday actions.⁵⁶ It is important that the participants don’t spend too much time on the drawing, as the lines shouldn’t be too elaborate and detailed; the sketchier they are the better.

The participants are then asked to form small groups of four to five persons each. Within each small group they exchange the cards, so that each participant has the hand line drawing of somebody else. One group member is asked to report later to all the participants on what will come up in their specific small group. The group finds a quiet space for itself. The participants spend some minutes meditating on the drawing of rather abstract lines each of them holds in their hands. When doing that, I ask them if they can try to experience themselves as being *in* a landscape, a landscape that is formed by the lines on the paper. They should try to feel the different sensory experiences that being in this landscape seems to bring along. Subsequently, the members of each small group tell each other of how it is to be in this imagined territory, one after the other, until all have had their turn.

When all small groups are ready, I ask them to assemble together with the others in the larger group. I invite the reporters to share what took place: what were the kinds of sensory experiences that the participants talked about in their group? Which ones came up first? Which were easier to describe, and which ones more difficult? Was there a difference between participants who talked about themselves as being *inside* a landscape and those who looked *at it* from a distance? Their answers provide openings for a dialogue about our (culturally-biased) predominantly visual-centered relation to landscape, compared to perceptions of people in so-called primarily oral cultures. Visually-centered people tend to regard landscape as something that unfolds itself in front of us, as a map we hold in our hands (cf. Ong, 1982).

An important aspect of AEE is to facilitate and to encourage participants to open their senses more fully towards their environment. One will recall how Meri-Helga Mantere (1998) described AEE as a method that supports fresh perception and that aims at an openness to sensitivity. The activity with the lines of the palm of the hand is, at first glance, in marked contrast to this. Yet I presuppose that it is a relevant endeavor in the context of pondering our sensory and aesthetic relationship to our environs – but then approached in an indirect manner. The process is aimed at enhancing the participant’s openness to environmental experiences; however, in this case, the

⁵⁶ Only later did I find out that this is in marked contrast to how a palmist would read the hands.

Traditionally, for a right-handed person, the left hand is said to represent his or her future potential, so that would be the hand that is examined first. (In some schools of palmistry the left hand is the subjective hand, indicating the person’s natural inclinations and abilities.) The right hand, conversely, is believed to represent the personality as it happens to be at the very moment the hand is read. For left-handed people it is the reverse (Fairchild, 1995).

participant's relationship to the more-than-human world is, as it were, approached "from the inside out." How it "is" to be in the imaginal landscape has to be retrieved from memory, evoked by the imagination and all the combinations between these. In that sense, the activity can also be done inside a building, with little or no sense perceptions of an immediate natural environment.

I assumed that one of the outcomes could be that it teaches the participants how rich the power of imagination potentially is and how easy (but also: how hard) it is to imagine and/or retrieve memories of past sense perceptions. It brings along the challenge of formulating them to others – which may feel childish or crazy, but this is done in a safe, small group environment. One talks about the lines in the hand palm of another participant, at the same time as somebody else is speaking about one's *own* hand lines. I expected that participants would realize how different the associations can be that come up from one person to the next. Further, the activity presumably would allow for reflection on what landscape is and how we relate (or *not* relate) to it. Ideally, it would also provide space to talk about the differences between fantasy (taken as a pure mental construction), imagination, and visualization in the mind's eye.⁵⁷

When the initial stages of the workshop are completed, I ask the participants to request their respective partners in the exchange to return them the card with their own hand lines. Now, the idea is that they take it along on a short walk in the local area in search of a physical spot in the area that would, in some way, "resonate" with the drawn lines on their card. They should look for some kind of resemblance in patterns, and this could for example range from shapes in the bark of a tree, the patterns in the plume grass, to structures in the scratches on a rock, or even to lines in the sky. Once found, this resonating part of the environment is then their location, I suggest, where I would like them to write a *haiku*-like poem.⁵⁸ In this short poem they should try to respond to the "gift" they've received of one of the other participants trying to imagine him- or herself as being in a landscape formed by one's own hand lines.

⁵⁷ One could argue that a lines of the hand activity is at least partially a visualization exercise. (Webster's dictionary defines the verb "to visualize" as "the act or power of forming mentally visual images of objects not present to the eye.") Julian Pas (1995) holds that there is a small but important difference here between visualization and imagination. For the object of imagination, he maintains, is "something not only absent, but never wholly seen before" (p. 175). I will come back to the theme of imagination and its relation to direct experience in chapter 11.

⁵⁸ A *haiku* is a three-phrase poem, and this form of poetry originates from Japan. Haiku typically take aspects of the natural world as their subject matter.



Figure 18: Images of various lines of the hand sessions (II)

It is only after a few sessions of lines of the hand that I added the haiku-making part as a new element to this activity, and when I did this the first time, something special happened. When all had re-gathered in the larger group to read the poems out loud to each other, I could not understand them, as this was done in Finnish. The moment was so charged with attentiveness and emotions on the part of the participants, that I felt that I simply could not ask to have this part translated to me as well (as was done for me in the phases prior to the reading of the haikus). However, from the body language (and also from asking people later) I could understand that the experience had been deeply moving to all. I had left it open whether or not participants would want to share their haiku with the group, and there was only one who did not want to present hers.

I felt that by making a personal poem on basis of finding resonating elements in the environment, the experience would deepen further. Ideally, it might allow for increased understanding of what Gregory Bateson (1972) called “the pattern which connects” the elements of the world: the connection between the lines of our hands, the morphology of our hands, and the forms and expressions we find in nature around us.

I found that the ideal composition of a group for a lines of the hand activity is 15 to 20 people, because in that way small groups can be formed of four or five people each, and in each group the participants have enough time to focus deeply on the image of the lines, and to imagine themselves as being in the suggested landscape.

6.2.3 Example: lines of the hand at Schumacher College

When I led a lines of the hand session at Schumacher College in 2010, I had prepared it in such a way that others would take care of both visual and audio documentation, allowing me to focus my attention completely on the facilitation itself. Another important circumstance is that two days earlier all the participants had also partaken in a little-me making activity that I facilitated. Because of this I thought I could safely assume that there was a rapport and basic sense of trust between the participants and me, and that they would have become to some extent familiar with my way of facilitating artistic activities.

As part of a so-called short course, entitled *Children and Nature: Rediscovering a Sense of Wonder* that I co-teach with Richard and Kathy Louv, I facilitate the lines of the hand activity next to an enormous Horse Chestnut tree, on the lawn of Schumacher College. It is a sunny afternoon and 17 people participate. I start out by giving everybody a pencil and a piece of cardboard, and dividing the group into four small groups. I explain how the session will begin by drawing the lines of one of one’s hands, thereby using one’s “wrong” hand to draw. Each commences making his or her own abstract field of parallel and crossing lines. When done, they exchange these cards with a partner in the group. I ask them to each separately spend some time in private at a silent place somewhere on the lawn, and there they should try to picture themselves as being in that drawn “landscape” – engaging their memory of all kinds of sensorial experiences they previously had in life. Later these impressions are shared in the small groups and subsequently one person from each group re-

ports on the things that were mentioned when the larger group has convened again.

Below I present a selection of the accounts that were given at this plenary gathering, halfway of the unfolding of the lines of the hand activity. The presentations were recorded with a digital audio-recorder and transcribed in full.

Sarah, the representative of the first group, gives the following account of what participants in her small group had contributed:

“We were struck by how many of us saw water in landscapes and also by how evocative the experience could be. Everyone talked about sounds, and what they could see, and also feel.

As for myself, from far above, kind of like a map, I saw an expansive delta, going out into the sea. The delta was enormous. And creatures, that you'd know to be enormous, would be hiding in the water. Huge flocks of birds. From above they are tiny, with a flush of color.

One of us saw an oak tree, at a very specific place along the River Dart. With the tide out, the ferry having just gone past. Wildlife on the edge, with the smell of water and mud. And the whole image being very calm and peaceful but alive with the buzzing of insects.

And we had a landscape in the Rocky Mountains, with a waterfall streaming over the rocks: there was a refreshing spray. The tinkling, crystal sounds of the quieter bits, and the roaring of the louder bits. A feeling of freshness as the water falls down.

Another mentioned an estuary coming down to the sea but with a sense of looking down again, in the early morning on a cold windy day, with a real sense of isolation. The tracks of two birds going through the water, and an echoing call of seagulls.

And finally we had a desert landscape. Almost a story, walking through the desert along a rocky edge and coming to a ravine. On one side is the ravine, and a landscape with lizards and dry scrubby plants and the hot feeling of desert where you know it is teeming with life. But you have to look for it carefully because it is desert, and it is more hidden. And through the ravine seeing the ocean blue ahead: you see the sparkling sun on the waves. But to get there you have to go half under, half over a dangerous overhanging rock. But definitely sure of going to the ocean and splashing into the water. Diving into the ocean, teeming with fish. But having gone through the ravine and rock to get there.”

I try to start a dialogue by asking open questions on what has just been shared, such as whether people in this group also talked about things that they tasted. “No, taste didn't come up; it was sounds: the calling of animals, the sound of water.” “And touch?” I inform. “No.” “Any smells?” “Yes,” **Sarah** replies, “one talked about the smell of the mud, and the smell of the water.”

I then try to take it to another level: “Was there a difference between people that saw themselves as being *in* the landscape, and those who were looking at it from

above, or saw it like an image hanging on the wall?" "Yes, there were differences," **Sarah** reports. "There were two of us who were very much looking down from above and there were three where there was definitely a sense of being in the landscape."

Next, **Margaret** of the second group reports:

"One of ours was seeing a landscape from above, a river delta. It really looks like a map of Egypt, of the Nile delta.

The second was a transmuted form, a wave seen crushing on the beach, to even a different angle, a mountain scene, seen as a difficult course to maneuver and to overcome and travel through, and definitely seen as a progress through a landscape.

The next person was also very much in the landscape, in regards to lines being trees, tree stumps, in familiar favorite places. Sitting back, sitting in the environment and seeing things around her and feeling it as well.

The last one was looking across mountains. It was probably the clearest image anyway; it didn't allow much room for interpretation! But it was so clear; it could not be anything else, to my mind, anyway. It was an image of mountain tops interlocking with spurs; it invited a view of a known environment, again. [Notice that here the reporter starts to anticipate that I will ask the same questions to her as I did to the reporter of the first group.] So, familiar environments and known ones, but also not-so-well-known, seen from a greater distance, and perhaps less involved. About the aspect of employing the other senses, I don't know. One of us said she was sitting, and talked about leaning back to a tree."

Mabel reports on the third group:

"We had done this in silence and, interestingly, all four of us have the same water scene: one with a waterfall, one with a deeper stream, one with a delta, and one of them transforming from a wave to a deep fen with water that was damp. So it's interesting: the water thing seems to be there. Looking at something from a distance does moderate your sensory inputs, doesn't it? People mentioned sounds, but no smells, I think. One of them, with the wave breaking: for her it was the sound of shattering glass and a very pure breaking wave. A quite sensory experience."

And this is how **Louis** recounts what was shared in the fourth group:

"All of us had an amazing sense of adventure! And we all had water as well. The first one was a landscape view from quite high up, in the mountains, looking out towards the sea in the distance. There was wind, but there wasn't too much sound or smell. But it were very precise descriptions of exactly what was happening with roads and, you know, kind-of observing the scene.

The next one was quite a dangerous scene with a tornado, and some terrible watery conditions and possible death at the end, but we never got that far. And that was involving fish and eating fish and salty water spray and terrible scary sounds. Things like that.

And then there was an immersion in a woodland, where there was a quite comfortable. . . yeah, I definitely would have liked to go to that place, kind of nice. . . A little adventure in a woodland with the promise of a waterfall at the end of a woodland journey. Definitely quite a lot of senses, kind of smells and feeling of the place, you got a sense of that.

And the final one, I think it was like a wacky dream really! It was about bouncing, about traveling between two plateaus upside down with things strapped to arms, and then swinging on vines and hitting into damp, slimy rocks and waterfalls, and sunsets were somewhere in the middle of that. Leading up to some cozy, quiet place, which you had to slitter inside. You could only lie down; you couldn't stand up."

I ask if one of the participants in this group would like to talk of an experience of hearing sounds. **Veronika** responds and says, "Yes, it was too noisy actually! I just looked for a cozy, slightly quieter place. But you couldn't hear the sound from the distance, the water from the waterfall. But actually the waterfall was coming from a cloud, not running from the tiny rock! I could *feel* the water." For **Louis**, there was "a sensation of the *slack* of water on my boat and a feeling of fear, and the taste of the salt spray."

"Did people find themselves immediately immersed in the landscape or was it like looking at a picture, *out there*"? Was there a difference in that way?" I ask. **Sylvia** reports: "Two of us looked from kind of high up, looking down. And then we kind of got into it; and then two of them were right into it from the very beginning."

Jonathan proceeds to report on the last group:

"This one [he shows one of the cards] was seen as a Native American tipi. And there were feathers on the top and there was the sound of music, of drums. And there was a big powerful, strong full moon outside. That was one interpretation of it. The person saw himself actually on top of a mountain. So, instead of a tipi, it was a mountain. There was a small form up there and that was a person dancing, swirling around with a lot of movement on top in this little form on top of the mountain.

This one [**Jonathan** shows the next card] was being in a familiar place, in a rocky seaside, where all the strata come up and these little ridges of rocks that you have to walk across; she saw crams, rock pools – quite a dangerous place, a very alive place, where you could fall over and hurt yourself easily on the rocks.

This one [he produces another card] started off as being seen as an opening flower. These two lines look like the shape of possibly a lily that would

take an insect in, down to the bottom of it. The flower was seen as the positive space and below the line was the negative space which was air. The curve that was below the line could also be a breast. So that became the positive space and the negative outside. And in terms of holding it a different way up, it was a hat, a long, peaky hat being blown by some kind of force. There is another line on the page, of which I was not quite sure what it was, some force forcing this hat to go over to one side.

And lastly [**Jonathan** takes up the final card], there was a familiar place, perhaps the person's own, which was made up of both alive and dead branches, and that seems to be quite realistic; the person may have been at this real place, which actually exists. And when the person went deeper into that landscape, they saw deer there, coming out from wintertime. They realized that there was a small curve in one of the lines which became an opening. It was like the entrance way to where the deer had come from and that would have been their winter home. And when approached closely and crept inside, there was a really strong smell."

"Maybe you can come back to the kinds of sounds and smells there were?" I ask. **Jonathan** mentions the sound of drum and the smell of deer winter home but no additional elements. "And what about *touching*, feeling something?" I press on. "People mentioned the rocks, the sharpness of rocks. The softness of flowers," he responds.

With that, the first part of the session has come to an end. As **facilitator** I try to distill some threads out of what was said in front of the whole group:

"It is interesting: if one invites people specifically – and asks them a few times – to try to picture themselves in a landscape and to engage all the senses while doing it, for most people this remains limited to the visual sense, the eye sight, the seeing. That is maybe no wonder, because you start with the drawn lines, so you relate to the visual. But it seems for some reason harder, in your imagination, to evoke smells, to evoke sounds, touching things, hearing things. So usually, it is the visual.

And then there is also a difference often between men and women. Usually, it are mostly some of the men who look at the landscape from the outside, and say: "I see a picture on the wall, or I see a map and it is this or that," and it is more often women who say: "I find myself in a landscape, a desert, or I am on a sea." So, in general, women for some reason seem to have it easier to go into it.

I think that the fact that we relate so much to the visual has a lot to do with the kind of culture we live in, which is so eye-centered. That very much determines our relationship to landscape. As educated people, we tend to read a lot. If you would use your ears more, you would hear all kinds of sounds in a wide circle around you, and not only relate to the things your eyes see in front of you. So if you engage the senses more, you are more in the center of

the experience. But given that, I think it is very rich what you shared of the different experiences and how you were still able, just with this small card, to engage your imagination. It shows that we can just tap into that; it doesn't take much, just a pencil and a piece of paper."

After this, I ask the group if any of them found it hard do this. One of them, **Mabel**, responds:

"I think that if I wasn't sitting here in a circle with other people, I would never do it. For me, to think, 'O, I have got an hour to spare on a Sunday afternoon, let's go off with a group of people and do this,' I just don't think I would ever do that. I don't know why. The excuse and permission makes it easier, but *out there* it might be quite difficult to justify."

I answer that this is actually an important point; often the person offering this kind of artmaking activities provides people with an excuse, as it were, to be a little "crazy." Participants find themselves doing things that don't seem to make a lot of sense, at least at the start of it. But when a teacher says "*please* do so," and other people around also starting doing it, one may feel more comfortable doing it, I suggest, sort-of gearing oneself up to do it. But when one is on one's own, as individual, I add, most people would probably seldom do these kinds of things. One seems to need a little push across the threshold.

I then ask if doing this made sense to them, in the context of the question if and how we can connect to nature through art. **Sarah** answers:

"I think that is a difficult one, [in regard to working] with children. If they haven't had experiences, even of the imagination, if they haven't been at such places, it's really difficult for them to do it. Maybe you wouldn't ask so much about the senses, but you'd ask them to imagine themselves in the landscape, and then it might be dragons. They have a lot of imagination, I think, to make something out of it. I have had the experience, working with children, where we find objects and then try to create stories out of them: they're quite reluctant to engage in that. I found that imaginations in children, in the main, are shut down a lot more than I would expect. That's been my experience."

At that point I move to the next part of the lines of the hand activity, and I ask everybody to give the card with the drawn hand lines back to the person who first drew them at the beginning of the session. Now each has heard another person talking about being in the landscape or place that is formed by one's own hand lines. I ask them to make a short haiku-like poem of three lines, containing a central idea, in which they try to respond to how the other person described him- or herself being in "their" landscape. I suggest that they can make the short poem on the back of the card. I then add that I would like them to do this not just at any

place. Rather, they should look carefully to find some patterns or shapes in nature that *resonate* with the drawn lines of that hand. I say: "These lines might be branches; they might be on a rock. But when you've hit that place, try to write the haiku there." When they are finished they should come back to the gathering spot and wait until everybody is ready, and they can then share their poems with all the others.

Some time later, when everybody has assembled again, I encourage them to read their words out loud to the others, but I also mention that if they don't want to share their poem, that's fine too. I don't suggest any order: who likes to start, starts, and who eventually is the last, ends the session. But I want to make sure that everybody at least has the opportunity to do it. "The floor is yours."

Below are some of the poems that are presented:

*Beauty is lines of life
I see a dividing line
Creation is one continuous line*

*I am honored
to feel the vastness of the ocean
in the palm of my hand*

*The flower's breast opens.
The insect enters,
moved by the unknowable.*

*A tree stump lies,
where the ospreys fly,
by a far-off lake in the high lands.*

*Mossy glint
Waterfall wink
Cozy chink*

*The chasms of my life.
Open like cracked earth in summer.
Only the water of your gaze
makes them swell with meaning.*

*A crooked branch across the threshold.
Dreams come in through the woody arch of bark.
Find deer, smell of musk,
a shaft of light in the dust.*

*Coming together, glowing, never ceasing,
Bringing, carrying, nurturing, reaching out,
meeting limitless expanse,
Returning above the cycle of life, water.*

*Deep breathe that the river flows through me.
I rest my spine on the trunk wood of the tree.
Pungent mud smells in my nostrils,
flies buzz in my ears.*

All participants do read their poem at some point. I ask them what they got out of this experience. **Mabel** starts off and says: "It was nice. I actually found it quite easy. I never wanted to write poetry, so for a minute that came to me with great skepticism. If I'd been out on my own, if I hadn't been doing this and somebody would have said to me: 'Write a few lines of poetry' I'd still be walking around the garden, I wouldn't do it! I found that a really, really good exercise." **Ben** adds: "I really liked it, even the last bit. Now I have this picture and I have my idea of what I can see in there, in my picture. But then I went out and I could see some other part and it immediately just made sense of what the person had said." **William** feels that what we did was in fact quite delicate: "It is that willing suspension of the distance. You're actually gonna go with it. As soon as someone would question it, or be cynical, then it dissolves. It's a sensitive thing." **Veronika** says that she believes that to draw the lines of your hand is not something that you can actually be very cynical about, because one is so concentrated. "You don't see the point, from the beginning, to write a poem; I think without having done that [drawing the hand lines] it would be harder for someone to get into." **Louis** comments that he feels that "it is kind of like an enticement into creativity, because creativity is quite challenging for a lot of people. Sharing their creativity with others is a big challenge." With that we concluded the lines of the hand session.

6.2.4 Narrative account: making poetry for the first time

I have chosen to highlight here the story of what happened with participant **Gunvor** during a lines of the hand session because it, in my view, reveals some of the transformative potential of this AEE activity. To me, it shows the importance of the presence and the encouragement of the other participants. They seem to have provided a sense of security that I am tempted to hold as even a *condition of possibility* for being privy to such a deep experience.

Again, like in the narrative account that I presented in the part on wildpainting, I chose not to interview this participant afterwards. As much as possible, I wanted to leave the special character of the experience intact in the way it impacted her, and neither to infringe on it nor make it stand out as something extraordinary. It felt to me that if I were to "pin it down" through asking interview questions and thus make the experience explicit, I would run the risk of "over-exposing" it, putting too much in the open what maybe was meant to remain personal and ultimately ungraspable.

The lines of the hand session in which **Gunvor** participates takes place somewhere in the mountains in Norway, inside of a cottage that is part of a goat farm. The group is rather small, and we cannot paint outside due to heavy rain. All five participants are female, and they have already been together for some days as part of the wildpainting course that I facilitate. For **Gunvor**, it seems to feel awkward to join in a session like lines of the hand; at least I have this impression when I explain to the group how we will do this activity. Its purpose is left open by me, and I assume it is obvious to all that it will involve one's personal sphere through the thematizing of the private space of one's

hand in a deep way. Engaging in such an activity is not something **Gunvor** seems even remotely familiar with – at any rate it seems more new to her than to the others, I assume. Perhaps – but this is inferring – she feels it to be too “New-Agey.”

However, when she does overcome her hesitations and joins in, the group process enfolds very well, also for her. Like the others, she draws the lines of her hand, shares the card with her hand line drawings with another participant and receives somebody else’s card in return. As the group is suitably small, there is no need to split it up. All engage for some minutes in picturing themselves as being in the two-dimensional landscape of someone else’s lines and then the imaginations are shared in the group. **Gunvor** pictures herself being in some kind of mountainous landscape, but doesn’t mention any sensory experiences, except for the visual elements she sees in the drawing.

Subsequently, when all have shared the kind of memories and imaginations of sensorial experience that came up when meditating with the card, **Gunvor** (and of course the other participants as well) are invited to cross an *additional* threshold which is writing the short poem or haiku. Because of the rain, we don’t go outdoors this time to look for patterns in nature that resonate with the hand lines. **Gunvor** confides that she has never made a poem before in her life. The others gently encourage her to give it a try this time. After minutes of contemplation, words are put on the paper, erased, and new words penned down again. The group of women seems to serve for her as a “safe container.” When all have written down their poem, they take turns in reading their poetry out loud. **Gunvor** is shy to read hers. The others ask her in a non-pressing manner to try to not be afraid. With a soft voice, **Gunvor** starts out and says first that she does not know if it is a poem *at all*, for she is so unfamiliar with it. “It are just some words I put together.”

*Sea landscape
colors, abundant kelp
slopes of fells and valleys
fish.⁵⁹*

When the others compliment her with her achievement, a glimpse of pride is detectable on her face.

This recollection is partly based on notes I made afterwards and on my memories of the event. I was so engaged, both mindfully and intuitively, in facilitation of the process, that I didn’t think of audio-recording the session. I didn’t even have the presence of mind to mention to the participants that I wanted to use the experience in my research. This thought only came up long after it had actually taken place.

⁵⁹ This is my translation to English. The original Norwegian text was: *Havlandschap / fargar, velster i tang og tare / fjell og dalsider / fiske.*

6.3 Case III – Clay little-me's

And The Lord God formed man from the dust of the ground and breathed into his nostrils the breath of life, and man became a living being.

Genesis 2:7⁶⁰

The third AEE activity that I research as part of this study is the making of a small clay sculpture of one's self, a (what I have come to term) "little-me." As an artmaking activity, it is different in two ways from wildpainting and lines of the hand. The latter two I conceptualized and developed myself, whereas it was British sculptor Antony Gormley who conceived of the activity of making a little-me representing one's own body. I first learned of making little-me's from Gormley in September 2006, as part of a group activity which (like the elaborate example of a lines of the hand session in the previous chapter) also took place at Schumacher College. The second difference is that lines of the hand and wildpainting are on the two-dimensional plane, while clay little-me's get shape in three-dimensional space. The most important dissimilarity, however, is that during most of this activity the participants work with their eyes closed.

Below, I first describe my own experience of attending this session with Gormley. This provides the context and is then followed by a loosely organized presentation of descriptions that participants in little-me making activities have provided over the years and at several different places in Europe. I have arranged these descriptions loosely in thematic clusters. Like in my treatment of wildpainting and lines of the hand before, also here I provide a representative example, which is the specific case of making little-me's with a large group of art teacher students on the Swedish island of Gotland in April 2009. This section on clay little-me's ends with the narrative account of one person's particular experience.

It is important to underline that a clay little-me session is not confined to the artmaking part where participants have their eyes shut; the reflective group dialogue which immediately follows is as much part of it as the actual molding of the clay. One of my interests in developing this activity was to see if such a hands-on workshop affords for new and creative ways to register one's immediate environment; whether or not the sensory-based task of sculpting one's own body with closed eyes enhances the participants' ability to engage with place, with and through their bodies. Is there a dialogue going on between the internal (the corporeal and anatomic) and the external (the environment) as poles in a continuous exchange process between body and place?

60 The Hebrew for man is pronounced *aw-dawm*, from which Adam is derived. It's also related to *aw-dawm-ah*, which means red earth, or red clay – indicating the natural earth elements that composed Adam's body, and the body of every human being since.

6.3.1 Mapping the body: the context of little-me making

In September 2006 I am at Schumacher College to facilitate a two-week course with the title *Art in Place: Linking Art to Ecology*. The course is to offer the participants an opportunity to explore the relationship between humans and the natural world, based on the premise that nature has always inspired artists and the view that art offers a medium for a deeper environmental connection. The three consecutive teachers of the course are Peter London, Antony Gormley and Peter Randall-Page, and my own role is to be their facilitator.⁶¹ One of the things that are surprisingly new to me is how Gormley, the second teacher, is able to connect an art-mediated, singular experience of one's own body to the overarching theme of the course, "art in place." For me, prior to coming to Schumacher, the course title had connotations with land-art and site-specific art, which seemed to rule out – at least at a manifest level – the mindful focusing of one's attention on one's own physicality. I was assuming that when one engages in an artistic process that thematizes place and ecology, the human body – especially one's own corporeality – is left outside of the endeavor. In hindsight, the making of a "clay self" on the last course day with Gormley was for me an epiphanic experience of how one could relate to artistic process in a new way.

In his artist career, Antony Gormley has revitalized the human image in sculpture through a radical investigation of the body as a place of memory and transformation. Thereby he would often use his own body as subject, tool and material. Since 1990, Gormley has expanded his concern with the human condition to explore the collective body and the relationship between self and other in large scale installations like *Allotment*, *Critical Mass*, and *Domain Field*.

Together with Gormley we carry out several different artmaking activities, and the final one is the making of a miniature clay sculpture of one's own seated body, which the participants spontaneously dub a *mini me*, but to which I here refer to as a *little-me*.⁶² Each participant is asked to take a chair and to sit in front of a piece of hardboard that is in a horizontal position. We work alone. Everyone has two fist-size lumps of clay on the hardboard plate in front of him or her, and the first task is to model one of these into a cubic form. This cube is to represent – in clay – the chair on which one is sitting. The other lump will be used as raw material to mold the body of the clay figure itself. This is done, from beginning to end, with eyes closed and in a sequential fashion: one piece of molded clay stuck to the other. Antony Gormley offers us what one can take to be a guided meditation in which he invites us to focus our attention on the different parts that constitute the body, starting (and moving upwards

61 In Schumacher College's facilitation info sheet it is stated that the role of the facilitator is to discuss and review the learning process on an ongoing basis with students, teachers and other college staff; make people feel comfortable and nourished; and to assist in the assimilation of the learning process. I point this out because my facilitation here is in assistance to the visiting teachers; this role is basically different from *myself* being the combined teacher/facilitator of the three AEE activities that are the subject of this study.

62 I choose not to term the clay figure a *mini me*, as this term is associated with a dwarf in the Hollywood movie *Austin Powers: The Spy Who Shagged Me* (1997).

from) the foot on the right hand side. He asks us to pay attention to what we are feeling in this foot while we are molding its representation in clay. Then we put the small foot of clay on the board plate, a little in front of the cubic form. He then asks us to tear a new piece of clay from the lump that we have in front of us. From this piece we shape the lower leg and calf, again being mindful to what we are feeling in this body part. From there we proceed to knee and right upper leg, and to our bottom, sitting on the cubic clay chair. The same procedure is then repeated with the leg on the left hand side. When both legs and buttocks are ready, we go on forming the belly, waist, breasts, shoulders, and the back – the complete torso. The head comes last. Gormley is careful to point out that we shouldn't put our efforts into making an aesthetically pleasing or physically accurate, realistic human figure, but that we only try to express in the clay what we are feeling at that moment in the specific point of our body that he asks us to focus on. "If your belly feels round, make it round," he says, and "if your shoulders are feeling heavy, *make* them heavy!"



Figure 19: Antony Gormley facilitating little-me making, whilst making one himself as well (photo: E. Chandler)

Finally, when one has completed the little-me, one is allowed to open the eyes. Gormley requests that each of us waits in silence until all others are ready as well. For me, like for anybody participating, it is quite an overwhelming experience, to finally see the clay figure we have made. All little-me's are put on a row beside of each other and we talk about



Figure 20: The backs of the little-me's tend to be highly expressive

how the results look and how the process has impacted us. At some point, Gormley comments that he finds particularly the back side of many of our little-me's compelling.

This is the first time I ever participated in such a workshop; also to most of the others it is a completely new experience. Since then, I have learned that at least one other course participant has conducted little-me making workshops herself, at other settings. In a personal communication, Antony Gormley told me in Helsinki in 2009 that the session at Schumacher College was for him the first and so far the only time that he had ever facilitated this type of clay workshop with a group of people.

6.3.2 The structure of a little-me making activity

Since this experience at Schumacher College I have facilitated numerous little-me making sessions myself – across Europe, with as diverse groups of participants such as Reggio Emilia pedagogues, art education students, horticultural design students, forest service rangers, and so on.

A little-me making session usually lasts about an hour. The way I facilitate it is very similar to how I learned it from Gormley, as described above. From the moment the artmaking process starts, I lead participants through molding their own



Figure 21: Little-me, made by one of the participants at Schumacher College
(photo: A. Gillespie)

body in miniature, step by step, from one body part to the next. Each part is first kneaded separately, and then, when ready, attached to the body part that has already been finished. The sequence of working is as follows: right foot → right lower leg → right thigh → right bottom rested on chair → left foot (and onwards as at the right hand side) → lower part of torso → intestines, stomach, belly → breast and back, spine, lungs, heart → shoulders → right hand rested on right knee → lower part of right arm → upper part of right arm and shoulder → left hand rested on left knee (and onwards as on the right hand side) → neck, throat → head. In 2010, I introduced an additional element: before they start working the clay with eyes shut, I ask participants to place a cup of water in front of them, on the same table and within easy reach. At the point where they commence making the neck, I ask them to drink a sip of water, while they keep having their eyes closed.

When everybody has completed his or her little-me, they open their eyes and sit for a while, frequently in astonishment about the outcome. Now they also take a first look at the results of the others. Often there is a bit of laughter, and other expressions of excitement. I then usually wait for a good moment to ask them to arrange the little-me's side by side of each other on a row, all facing in the same direction. I then start out by asking some pointed questions, which I try to keep as open-ended as possible. Often I begin by inquiring: "How was it?" And then slowly a conversation evolves. A little further below I list some of the typical questions I would ask during such a reflective session, which for me is an integral part of the AEE activity.

Finally – and this marks the end of a little-me making session – I try to shift the conversation to what they think they'll bring home from the experience. I am interested to hear if they make some wider connections.

Part of the descriptions that participants provide and that are presented below stem from their audio-recorded answers to my asking of questions right after the clay molding session had ended; others come forth from interviews with individual participants that took place hours or days after the little-me making. Below I have mixed descriptions based on written notes and excerpts of transcripts from audio-recordings.

What I submit here are fragments that are not arranged in a chronologic or topographic order. The organizing principle is a loose thematic association. Each section is opened by a presentation of some of the prevailing catalytic questions⁶³ that I posed regarding the theme at hand.

Theme: Body and inner world

When the participants have assembled in front of the row of clay figures facing them, I invite them to give their first reactions now that they have released their little sculpture into the world, in full exposure to the human gaze.

⁶³ Tim Hurson (2007) defines a catalytic question as a "perspective-changing" question that get things moving. Asking the right question generates energy: "Things start shifting and shaking in new ways. The question that suddenly unblocks your thinking is exhilarating" (p. 149).

Catalytic questions

- How was it to do this?
- How is it for you to see the clay sculptures when you open your eyes?
- Did you experience something that you were perhaps not aware of before you did this?
- Did you experience a difference in sensations when working on different body parts, like between inner organs and limbs?
- How does it feel that your clay sculpture is exposed to the others?
- In what way would it have been different if you would have had your eyes open while making it?
- Did the circumstance that other people were not looking at you and your becoming sculpture have an impact? Where you aware of their presence?
- You were unable to see how it was developing, if it was proportionally or anatomically correct, did this influence your way of working?
- How was that to let go of control?

Responses

To **Fredrik**, the little-me he has made expresses shyness. “When you see yourself in the mirror,” he adds, “you feel disturbed.” It looks different than he had expected. He thought his little-me would be sitting up straight; instead it is bent forward. In contrast, **Britta** mentions that her sculpture feels right: “It is what I had experienced, and it is really me too.” Only a minority assess their own work this way. Most participants share that they find their little-me to be rather different from what they had expected it to look like. **Lisa** says that for her it is a rather awkward kind of thing and she feels not totally comfortable with other people seeing what she has made. To **Pirjo**, her clay sculpture looks very different than the way she felt it to be with her eyes closed: “It is just different. I feel that it now looks kind of sick or suffering.” When I suggest that through showing the little-me one perhaps exposes an intimate part of one’s self, the soul, to others, she asks rhetorically if that indeed isn’t the case with *any* artwork. I mention that when one engages in painting, one is perhaps better able to hide one’s inner world compared to this unreserved exposure of the body. **Taimi**, who is a visual artist, responds that all participants in the little-me making knew very well on beforehand that they wouldn’t be able to hide things. She contrasts this with the circumstance of a painter having no prior intention to express any of his or her feelings or experiences in the artwork. Nevertheless, even in such a situation, **Taimi** believes, “the soul might still be present in the result,” adding: “Maybe you don’t see it at first, but then after some time when you see this artwork again, there is something in there.”

Petra had expected that when she would open her eyes, it would look all wrong (“out-of-the world”), but now she thinks it is much better than what she expected. **Hetty** adds: “When you create something, you expect it will be something beautiful.

You seek for beauty, not only for a truthful expression. In practice, however, it is not so easy to differentiate between the two."

I invite the participants to describe how they experienced their body when they were working this way. It seems that not only the fact that the body isn't visible poses a challenge to them, but it also proves hard to visualize the inner parts. For many, there is a tension between inner space and outer body surface. **Emilia** mentions that for her, going inside the body is giving her more space. "If you don't know how it looks like, there is more imagination." She adds that to her this feels like a more natural way of engaging with art process; she felt more connected to herself. Though it was difficult for **Britta** to attach parts to each other with eyes closed, she later found that it "worked": "You *really* get to go through the parts of the body. You really did feel different parts." At the legs she could feel the heat of their exposure to the sun, and she felt the pressure of the flat board on her thighs. She especially felt her belly: "It was a specific feeling; more particular than other parts. And I *did* know how to form it; it was self-evident. Of other parts I had to be more conscious."

Others don't experience this sense of connection. What they describe is a toilsome struggle, like **Fredrik** for example: "You emphasized the sensations, but I had difficulty to do that. I was controlling the body; that's what I usually do." Some found it even confusing, like **Maija**: "Until we reached the stomach, it was OK. But when you talked about the torso, the upper body, the chest, there was a misunderstanding of terms. For me, the stomach and the back are the same thing. They are always one whole." Some participants report sensations of a change in the relative size of their body parts, like **Hanna**, who felt that her feet and legs were big compared to the other parts of the body. **Sophia** mentions that she found it less difficult to relate to the parts of her body higher up. **Pirjo** also comments that it is easier for her to tell how she feels in the center of her body than how she feels in the legs and hands. In her chest, she says, "there are more things happening, like the breath and everything. You kind of feel the heartbeat." **Taimi** describes in detail the difficulties she had:

"In the beginning, with the right foot, it was really hard for me, to kind of get that. I was so concentrated on my hands. I could only feel my hands first, however hard I tried to feel my foot. The first information would be the movement in the hands. But with the second leg, it was already different, how the information came.... My brains were first processing the feel in the hands. It was wonderful to feel the connections.

At some point, it was also like a battle. At first there would always be the image that you have learned, what you know of how your body looks like. I would have to go through that, to skip that and then to just go to the feeling. But the further we got in the process that also started to be easier. I also felt that something happened, like, at in the back and the shoulders. It was funny that when I was doing the throat part, I started coughing... If we would have started from the head and finished with the feet, we might have felt the feet really differently, in the end."

I direct the participants' attention to the aspect of working with closed eyes. For **Maija**, who attended a little-me making session outdoors, her awareness of place is very strong. "By closing my eyes I could discover voices, the world of sound," she recalls. "I don't listen consciously so often. It felt like being in front of TV and watching a nature documentary, the same soundtrack." For **Emilia**, the atmosphere (as she calls it) of working with closed eyes was a great help: "We could not follow others. It was also helpful that the other people were quiet." **Jorunn** suggests that when your eyes are closed, "you feel more connected with your emotions than with your brain." **Tarja** shares that this way of working gave her a special freedom, without judging: "Just to hear your voice commanding and go on, it made me free. Somebody conducting, that gives freedom." When I ask her how it was not to be aware of other people looking at her, she responds: "That was good too. There is a search of composition; there is freedom, not being faster than anyone else, and you have no concept of it. You are in your area alone and that's it. You don't know what anyone else is doing." Like the other women in this particular session, **Sara** appreciated being in a situation of not judging upon her self: "The combination of having one's eyes closed and everybody *else* having their eyes closed was doubly freeing." Most participants seem to share these observations. **Maria** guesses that the activity would be quite different with eyes open: "Then you would think: does it really look like me? Now I could not control my doings so much. That was positive and good." **Iiris** was so immersed in the process that she relates that in the end she didn't *want* to open her eyes: "I was quite surprised; I didn't want to because I really enjoyed doing it."

There is a dissenting voice: **Fredrik** found the closing of the eyes limiting: "I am not used to it. With open eyes your self-critique can be more predominant. With closed eyes, you cannot expect something good." That very aspect, however, is liberating to others, like **Sheila**: "When you lose the ability to use one of the senses, you accept the failure more. If I would have seen that my clay arm was swelling up I would be more frustrated. Now I accepted it. I can't do it right because I don't see it and I don't care. One does whatever one does!" In a similar vein, **George** says that it is great that it *could* not go wrong: "Because one doesn't see the person anymore, one forgets about the human being." **Liina** even goes so far as to say that she believes that she would not have been able to do it any other way: "I think that one needs [to have one's eyes closed], to be able to enter into oneself. Otherwise I would have had a whole array of impressions around me and then it could not have entered me in the same way."

When we have the evaluative conversation the participants usually sit together facing the frontal sides of the little-me's they've sculptured a moment ago. At a certain point, I turn all the little-me's 180 degrees around, so that the participants see the backs of the human figures. I call their attention to the back sides of the sculptures. As Antony Gormley first pointed out when we made the little-me's at Schumacher College, the backs often tend to be much more expressive than the front; this side of the sculpture seems to convey more directly the feelings, the tensions that one picks up from one's body. I try to shift the focus to how it is to work with one's inner di-

mensions, while being part of a group. (However, while doing this, I am mindful of the fact that I am not an art therapist.) In response to me bringing up this theme, several participants talk of the tensions and even pains in their body that they became aware of. A good example is Greta, who shares her experience that when she was working the clay, she could feel where it was hurting

“The lower part of one of my legs was growing bigger and bigger. And also the knees were growing while I was doing that. When I came to the stomach, I started to work in a different way. More holes. The upper part was different. I felt where it was hurting, where the chair was uncomfortable. When I came to my shoulders – I have a bad shoulder – I made them opposite to how I was thinking. I thought they would be big. My person collapsed. After that I changed my way of working. It fell, and I molded it. Something changed in my whole way of working, it came more together. Why did I not feel so when I started? The stomach felt like an open hole. And then, I wondered if I should do the back as well. It was open. It is strange how it changed. How the working process changed.”

To **Petra** it felt weird to express what she was feeling.

“I wanted to make it nice. One part was hurting and I tried to make it bigger. It was a surprise to see it. I felt very much: ‘the little-me *is* me.’ I felt very attached to it. But it felt good to leave [the little-me] there. I don’t know if I would want to bring it home. I’d rather have it stay there in nature, back to the earth. All these feelings we put into it. The hurt, how it felt. One left that behind, there, on the ground.”

Maria felt the fatigue in her body: “When I am tired I bend forward. I really felt going down.”

Some people who have undergone specific medical treatment at a time in their life mention how this impacts their experience. **Liza** tells that the activity was difficult for her, because she was operated on a few times. “When I worked on the arm, it did not feel like it was a part of me, in any case, because there are a load of screws inside of me. So when I started to mold that arm it did not feel as natural as the arm on the other side.” Another woman, **Terike**, who underwent several operations as well, said that also for her it was difficult to get into contact with her body. “It is a little empty. One doesn’t really feel that much.”

In one conversation with a group of participants I ask what they thought about the fact that I had encouraged them, during the session, to give expression to the knots, the pains or tensions they might be feeling in their bodies. **Taimi** responds by saying that it was good that I encouraged that:

“It felt good to express that pain. Maybe it even did something for it; it could work as a relaxation of the muscles. It is definitely a more therapeutic approach

than just making artworks. If someone would collapse mentally, in this kind of process, then this person has already a personal situation. You are not really pushing it to such an extent that it becomes dangerous. That would be the case if you would go really into that pain and ask us to dig into the painful muscles, like if you would ask: 'Where exactly *is* that pain?' I have once been in a bio-energy workshop where we were asked to dig in this pain, and it was terrible. Nothing happened to me, but about three people went somewhere really far and deep; they went back into their childhood. So, it's good to be aware of this, of what you are saying."

At the same session, **Pirjo** relates that through the activity she transferred things from inside to outside: "This is an aspect that is very present for me. Things can come from your bodily memory that you really don't expect.... When one uses one's body the way one normally does, such memories are not triggered." I encourage her to elaborate by asking her whether, in her view, participants during this artmaking session remained on "the safe side." **Pirjo** nods affirmingly and then adds:

"I think that our culture is too afraid of crossing those borders. That's why so many people have problems and feel bad: there is no way for them to get their feelings out and to express and share them in a safe environment. It seems like it always has to be a therapist to do that, and I don't think that that is natural. I think it should be in all the actions. It is one of the most important things in my life, to explore those areas that are unknown to me. I think that is actually one of the core points in these kinds of exercises that go deeper: that first you start with building the safety and the trust in the group. Then you are always very conscious about where the limits of the group are at any given moment, of what you can do and what not. I also think that it doesn't have to be the responsibility of the teacher. It can be a common agreement. If people talk about or express things that are very personal, that remains inside the group: that builds trust too. And then there should also be the freedom *not* to take part, and the freedom to leave if you like to do that."

One of the male participants at another session, **George**, had difficulty with making his little-me. This what he shares about his inhibitions and the epiphanic moment he experienced when seeing the result:

"I didn't want to manifest the way it *is*, but the way I *wanted* it to be. I wanted to make it better. I understood that it would entail bringing my problems out to the light. But from the start onwards, this was truly building a reflection. I know that one of my shoulders is always lower. But in the clay figure I put the other shoulder much higher. So there is something going on there. And when I came that far I couldn't adjust, it was already built this way. And then I felt:





Figure 22: Images of various little-me making sessions

it's not balanced. My posture is terrible, as you can see from the sculpture. For me it is a very clear image of what I am working on. That is really great for me to see."

Remarkably, at several occasions people attribute special meaning to cracks that show themselves in the little-me's or to limbs or other body parts falling off. Like **Richard**, who observes that his clay sculpture has partly collapsed: "I am imbalanced; I am not holding together and I find that worrying." In a similar way, others see a reflection of their own unbalanced state in the evolved sculpture. **Ivar** for example says: "For me it is very symbolic. I had some huge back problems a few years ago. When my back broke over there on the table I was actually not surprised. It was symptomatic. I found it a very good exercise."

In a way the session could perhaps be regarded as a form of mild harassment of the participants. Some, like **Terike**, express that it *was* indeed uncomfortable to them, sitting for so long in an irregular position. **Sheila** noticed that it took a lot of concentration, working with eyes closed: "Every time I would get back to my clay sculpture I was worried that someone would knock it over, I was just trying to locate where I was."

However for some, the experience was very rewarding. **Taimi** says that it was a very tender exercise; she felt completely comfortable. Several participants mention that the session had a meditative quality, that it was a relaxation. **Petra** puts it this way:

"Just being there, doing things with your hands – I did something physical. It takes me in another direction. It was a nice experience, I felt very calm and safe, like being in a meditation. Usually a meditation is sitting still and thoughts are floating in any direction. Here I concentrated on the art. Doing one thing with my hands, in that sense it was different."

Tarja says she was focusing so much on her feelings that she wasn't even aware of where she was. **George** emphasizes its grounding effect. **Ivar** says that he is used to meditating and visualizing, but that this was very different, "it was kind of turning the whole thing upside down, for me."

Theme: Facilitating little-me making

An important aspect of facilitating AEE, it seems to me, is to be able to allow for a certain degree of uncertainty in the process, of not knowing on beforehand what is going to happen and what the outcomes will be. Some participants welcome this, to others it is creating frustration as we will see below.

Catalytic questions

- How was it that a stranger was talking about *your* body?
- Did the process go at the right pace for you, or did it go too quickly?
- If someone tells you to focus your attention: does it make it more difficult or easier to do this?
- How do you like that it was done in a sequential fashion, moving from the making of one body part to the next?

Responses

Emilia was excited to go outdoors and participate in the activity in the open air. It was nice for her to sit in silence and she thought that it could have lasted longer. For her it was a plus that she did not know what was coming next: "If you are a control freak you would know: 'We are going to do this and this.' But I concentrated on what is coming. It was interesting and connecting." Like **Emilia**, **Fredrik** was enthusiastically expecting something: "We were prepared to do something more, implement something that would be more demanding." Yet, he also confides that he would have appreciated knowing a bit more what was going to happen:

"I would expect to be guided. Not in detail, but at least the title, the kind of thinking behind it. Then, when we have a session in nature, you could say, 'and this we do because . . .' or something like 'take two or three hours to discover more details.' Then it is easier to connect. When there is less connection, you have to make the connections yourself. If you are more prepared you are also more aware of what you should pay attention to."

Leif was very curious from the start: "I had much energy; it was good to go out. The moment of silence before we started was really nice, like getting to know the

place, listening to all these harmonic sounds. Just birds, water, the wind..." Like him, **Britta** thought it was nice to *not* know what would happen:

"Before participating in this, I would have hated to have some guided experience. It was good to walk somewhere, through the environment. It felt calm, full of expectation. It was nice to sit together, experiencing the same thing and be in the same place. The silence was nice, relaxing. You prepare yourself to do something and clear your mind for other experiences, processes; you get prepared for something else. I like it when you do things and you know: *now it is starting!*"

The word excitement comes back several times. **Petra** comments: "It was exciting to start: something new, unexpected. Let's go see what we do. I was not at all bothered about the fact that we did not get information on beforehand. It just made me curious."

A basic aspect of making the little-me's is doing it as part of a group together, more or less in the same pace. For **Maria** it is hard to say exactly what kind of effect this has: "You did not sense the other people that well." **Pirjo** believes that doing this in a group creates a kind of energy that supports the process; it enhances the concentration everyone puts into it, and the trust, just by sensing the presence of others.

Hanna, a colleague art teacher, comments on my facilitation that she is not so sure whether the encouragement of withholding judgment should be such an overarching concern for a facilitator. For her, it is more about engaging in a constructive dialogue with the participants, and thereby "allowing to be shared what wants to be shared." What she missed in my facilitation was some kind of introduction: "It would have been good to hear what environmental art is about. It might have helped me to orientate myself if I had a little backing and information. What is the point of these practices? You could tell about the body, movement, and how important these are when you define arts-based environmental education." She surmises that some people may have found it helpful to have a connecting red line. When certain people are reluctant to engage, I could then say something like: "I, as the teacher, have selected this." Then they would perhaps accept this, she suggests, and start to look for the connections themselves. **Hanna** feels that I could have unpacked for the participants how the workshop is constructed. "If you would have emphasized that we were going to engage all the senses, then that would have been clearer."

Some participants don't like the fact that the sequence of the little-me making is so directed. **Maria**, for example, comments later that she would like to do it again without somebody telling how she should proceed. **Taina** says that she kind of lost her way, while doing it. "For me, to start with the little feet just didn't work. It would have been more comfortable for me to start with the *whole* body, and feeling my own way into it. When I lost my way I had the feeling that I'd better have a look, but I didn't! However, in the end it was good to just stick with it." **Leif**, in contrast, comments on my "leading words" that they were appropriate: "You get more focused on feeling at particular places of your body." **Britta** also thinks that it

was good to be guided all the way through. She emphasizes that she prefers not to know on beforehand what is to happen.

For some it all plainly takes more time than for others. **Sheila**, for example, felt in the beginning that it was difficult to let go of control, “to just accept that now it is *this* that is at stake.” It took her several minutes before she was able to start for real. Also for **George** there was a struggle. “I felt in and out of control. I felt for example that my hands were different. Every time you said, ‘first the right side,’ I felt that side more than the left side. And when we went to the left side, I had this sense of: ‘O, where am I now?’ Is it similar, is it dissimilar? It was really difficult, to feel the connections.” When I asked **Jorunn** if the fact that someone tells you to focus your attention makes it more difficult to do, she answers: “No, it is a help. At the moment there are a lot of things going on in my head, so when you tell me how to focus on my own breath, I can feel that I am only breathing up to *here* [she makes a gesture with her arm]; it feels like I am not breathing like I should.” **Lily** felt herself really challenged:

“One is put to the task of just keeping one’s eyes closed, and then to do something. I didn’t really know if I would manage to come up with *anything*. But then, at the end of it, I slowly started relaxing, the body form just started to come up. The pieces were not falling off and I felt a bit more confident. Towards the end, working on the head, I was so excited that I really wanted to see *what* was going to come out of it. It was quite an interesting experience.”

Theme: Connecting to the environment through art

One of the reasons that I developed the little-me making activity is to explore if the experience with a natural material like clay would in some way enhance a sense of connection to the natural world. Moreover, I wanted to find out if developing such a relation through the artmaking process would also bring along new learning experiences. I tried to find out if participants considered participating in the little-me making activity as something that perhaps in some way had increased their understanding of their environs.

Catalytic questions

- Do you see some relevance in what we have been doing, in the context of efforts of connecting to nature through art?
- Do you see any point in doing this when trying to learn about the environment or when working with ecological questions in general?
- What do you think of the aspect of using clay: what does that mean to you? Is the medium of importance?
- While you focused on your body, did you also in some way relate to the environment around you?

Responses

A little-me making activity can reveal things that participants were not aware of before, like it did for **Maria**:

“That was really interesting. I don’t think I have ever before made my own body. Here I was trying to picture my own feelings and emotions. When it is three-dimensional, it opens up more senses. With your fingertips you feel the shapes, and you are using your body more.”

Some participants express the curiosity, and even impatience, they had to see what had come out of it. For **Britta**, it is important that clay is a natural material: “It is the same as we are. You can really feel being alike to it.” What makes working with clay enjoyable to her is that it has its own language: “You are not working only with your ideas; you are co-creating with the clay, learning the language of the clay, and learning to express yourself with it.” For **Taimi**, working with clay is therapeutic: “It is *always*, whenever one takes a piece of clay in your hands. I didn’t feel any resistance from the material.” **Ria**’s experience is that working with clay is very sensual; clay can shift from being wet to dry and from being cold to warm and reverse as no other material. “The clay can feel cold when one’s body is warm.” **Jorunn** relates that she felt she was *in* her body. But she couldn’t express this so easy: “When you have done the foot and you are about to connect it with the leg, you then destroy the foot; at least you feel like you do that.”

For many, the situation of being engaged in an artistic process seems to afford a new kind of awareness, which is directed to both the inner and outer world. It makes a difference here if the little-me making activity is done in a natural environment or inside of a building. **Olaf**, who joined in a session outside, mentions that with his eyes closed he is in fact *more* able to experience the landscape around him. **Brigitta**, who participated in a session I facilitated in a forested garden, says that she felt that she was on her own, in the woods, in a peaceful way, as it can be as well at other occasions when one has the eyes closed: “You kind of forget that there are people around you. It could be just me and you in the woods, being surrounded by trees.” At the same location, also **Sheila** comments that she loved doing it, “I liked that while walking back after it, there were sounds going on, like the change of the wind that I noticed on the way out. It was quite interesting, I was definitely more aware of my surroundings on the way out.”

But one doesn’t necessarily have to be in a natural environment for this kind of impacts to happen. **Lily**, one of the participants of a session that took place inside a building, comments, “What we did today was making ourselves re-enchanted by nature: seeing the miracle and seeing the fun in it, seeing our connection and our possibilities of being creators in connection with ourselves *as* nature. I would say: feeling the nature *within us*.” **Pirjo**’s experience of doing the AEE activity in an indoor setting impacted her environmental awareness in an unforeseen way. For her, the hum-

ming of the air-conditioning and a nearby computer made her feel that her head was really big: "I heard the computer and the other noises all the time. I didn't pay attention to that before we came to molding the neck and head. And then I had this sensation of having my head full of electricity; it became *huge*."

What comes up at different occasions is that the mere circumstance of having the idea that one is engaging in *artmaking* seems to bring along a threshold, a sense of incompetence or inadequacy. This is for example the case for **Lynn**, who says that she likes to see art but has never considered herself as "a gifted person who is able to do amazing things." However, she then goes on to say, one's view may change: "Gradually, if you just give yourself some time to reflect on things, then you *are* totally capable of doing it." Pointing at the row of little-me's in front of her, she says, "I am really mesmerized about what we have here, it is really, really beautiful." **Sheila** wants to confess that she "was never good at art." This was for her a difficulty with the whole process: "I felt it to be discomforting. For me, it is sort of 'I am back in the art class,' where I am producing something of poor quality. So I haven't got the confidence in this area." **Britta** is very clear about her view that art is a way of experiencing and of investigating: "You can feel things with the skin, the hand; you can create things, just being there. It is a way of being more aware. I think it is very good. It started so many things inside of me, things that I missed at college." For **Ragnhild**, who is herself an art teacher, the experience encouraged her to be more daring to do things: "It is very difficult to do art if you don't want to show yourself. Everything I teach I try to do through facilitating art sessions. Being an artist, however, I don't know how to show others that something *is* in fact an art process or a piece of art: to me the teaching itself is a piece of art as well." Also **Inge**, another art teacher, is explicit about her view that the little-me making session in a natural environment helped her to learn about nature. "But if I would have had more time," she adds, "or I was there alone and not in this situation, I would have connected more." And she continues:

"It would have been meaningful if we had dug out our own clay. Now we just had time to get a taste of things. Going in deeper, you come more in contact. The closing of the eyes, that was good. You concentrate more on your own stuff. It was strange sitting on chairs in a circle. Maybe we would be more in contact with the elements if we had sat on the ground. I felt like an old lady on a chair."

Taimi mentions that this kind of experience, of connecting with one's body in such a way, is very rare in modern life. "To have an experience like this is groundbreaking, it's powerful." For **Eeva** it is self-evident that an art activity like this is useful when one is learning about the environment, and she adds that it was "mostly about hands, not about eyes." In a similar vein, **Pirjo** appreciates that she did something that was not only about trying to make one's hands do something that one's eyes couldn't see, but about "bringing the knowledge out that is in there, in the hands themselves."

Reflecting further upon this, she adds, “It may even be easier to find the information from your body in your hand, than to gather it from the image.” **Melanie** comments that it was interesting for her to see how different senses work: “Initially, I tried to visualize all the parts of the body, but at one point I didn’t do that anymore; my hands were just working on their own. And then, at the end, I was really impressed; I thought my figure would be small and slim but actually it wasn’t at all. It is strange how you get different images.” **Tarja** suggests that one learns something about the senses. “What you feel with the senses is more or less dependent on the eyes. You feel different with your eyes closed.” **Ravi**, who is from a non-Western country, has difficulty uttering his thoughts in English. To him, the little-me making was like looking into a mirror:

“This sort of corrects our perception towards ourselves. When you close your eyes, what would you see? Who am I? Sometimes when there is a mirror in front of you and you look at yourself, you ask: who am I? With the connection of all the senses, concentrating on your inner strength, you bring out your self/character, not trying to fake it. You are trying to observe your inner self, reading your self, connecting all the senses of feeling, proportionality, the symmetry, when you really try to understand who you are and you project that character.”

Sophia opens a wider perspective, when she looks at the meaning of the activity in the context of “education for sustainability”: “If we work towards a more sustainable society, a green culture, part of that is showing how you have to appreciate yourself. If you don’t have respect for yourself, then it is hard to show love and respect for the environment that we are connected to. So in my view it has to start there, by being more connected to the environment at the local level, and on a smaller scale.”

One of the assumptions for me in doing this study is that artmaking can encourage or even cause the practitioner to see the world with fresh eyes (cf. chapter 2). When trying to do this, however, one may wonder if prior acquired (storied) knowledge would not stand in the way of an ability of achieving such a receptive openness to the world. About this dimension **Pirjo** says:

“For me it was very hard – actually even impossible – to come out from this image that we have about the human body: how it is, and how I’ve learned it and how I have done it before with clay. [That image] is not how I *sense* my own body. When I have my eyes closed I don’t see myself as that picture that I have of myself. I don’t sense myself as shapes and space; I sense myself as color and as movement. It was very hard for me to connect that to this clay. When thinking about the body parts, I didn’t feel the shape, I felt the color.”

Taimi discloses that she molded her body in the way that she knew it should be done, rather than perceiving it afresh. “But,” she adds, “giving form to the muscles is a hard thing to do, not-knowing what is there.” **Elizabete** says that at times she felt divided,

trying to shape her head in clay as she *knows* it is, and at the same time trying to give expression to how it feels.

Intrinsic to a little-me making session seems to be that things are bound to happen and manifest themselves in and through the process, which neither me nor any of the participants have anticipated. Time and again, I am surprised by what participants get out of it. **Lily** expresses her amazement about the effect that having her eyes closed had on her, just some minutes before:

“Maybe it is just today that I am super-tired, but I learned that keeping my eyes closed for an hour makes me cry. I have my eyes really wet and I didn’t know that, that they are so sensitive. Of course, at the beginning, when we started, I thought, it is such a crazy idea, and such a challenge: nothing is going to come out. And I thought, *wow*: even just the *act* of keeping your eyes closed and focusing within, on your body, is such a big deal at first, until you get used to it.”

I have found that the occurrence of unexpected outcomes can partly be provoked by bringing a new feature into the little-me’s activity. One of these was, for example, that I started to ask participants to drink a sip of water, still with their eyes closed, at the point where they were beginning to mold the neck. This is a new component, which I first introduced in 2010, and have practiced a few times since. It is a rupture with the prior restriction of *only* working with clay as raw material. Next to the element *earth*, now comes also *water*. One participant, **Bjørn**, regards the drinking of the water as a “doorway,” an initiation act, that prepared him for commencing with the next phase of the sculpturing which was the sculpting of the head. **Laura**, at another occasion, also discloses that she found it quite interesting to drink the water: “That part was quite a high point, actually: you’re placing the neck and then suddenly you’re creating yet another element. Up to that point I had just been focusing on my breathing. That was quite a big shift for me. I was very aware of the throat, the inside sensations.” **Ivar**, reports, in contrast, that the drinking made him *refocus* on his breathing.

“You said we should drink mindfully. I felt it, the close contact with the clay. My first thought was: ‘O, this water is going to de-solidify the whole clay figure: how it runs down will make it fall apart. I don’t know if it was the drinking of the water itself or you instructing us to drink it mindfully. In any case it calmed me down a little bit. Not that I was very stressed, but it brought the focus back to the root, or to the body I was working on.’”

In the descriptions below, I present similar latent meanings that manifest themselves in the process. **Pirjo**, while looking at the back side of her little-me, mentions this side looks more like how it felt to her. From this angle she sees: “O, that’s *me*!” For **Hanna**, the whole process of making the little-me is “a turning from the outside to the inside.” Remarkably, she confides that this insight only dawned upon her at the

very moment that I have a one-to-one interview with her, a few days after she made her little-me. I have noticed this a few times with people, that multifaceted meanings of the little-me making only start to sink in much later. One mentioned even that this happened during a dream she had during the night that followed upon the activity. What I find is that certainly not all meanings can be expressed in the reflective session right after the time period during which the participants were engaged in making the clay sculptures. I assume that some meanings cannot be expressed at all, because, to the person concerned, they may feel as being too private or embarrassing to share in the group, but other meanings simply take more time to sediment in the conscious mind, or so it seems. Like **Hanna**, **Petra** is also an art teacher herself. She is struck by the fact that when she had to shape something, she first brought things in front of her eyes:

“I laughed at myself. But I kept doing it: holding it in front of my eyes. But I couldn’t see it anyway. In the beginning it was difficult for me to connect the things. How do you do this? How do you do that? It has been very nice to experience, that it *is* actually connecting. It gets more and more logical. I think I learned a lot. I got new thoughts on how to teach art differently. Kids need some other experiences than the kind of art they are taught today, to get them to look at art in a different way.”

For **Pirjo**, a marked change takes place in the course of the process. “When I got to the head and the shoulders, it became more meaningful; until then I wasn’t sure if I was really connecting with what I felt. Perhaps I didn’t find ways to express what I felt, because I didn’t feel the shape.” **Taimi** adds: “It was really endearing in the end to kind of feel the whole, holding yourself as this little thing! Kind of like holding yourself, like a mother holds a baby. Holding your own small hands!” **Craig** comments that, for him, while modeling the clay, he “saw” different shapes with his fingers than what he is seeing with his eyes open: “It looks very different now from what I felt while making it. I felt they were distinct when I made the shapes, but they are not as distinct as I thought I’d made them. I was thinking of circles, when making the stomach, and the chest, and now it is almost undifferentiated, the front of this little-me. It is gone.” For **Ivar**, there is a similar fascination with how things evolved:

“It gives so many insights. I think one will just continue, obviously, for a while, up here [he points to his head], at least I will. At one point, I had this sense of, ‘OK, I am making a voodoo doll of myself, just to make sure that my back doesn’t break.’ And obviously [laughs], one of the first things that happened since, is that it is sticking over. Working with this material is really soothing. During the process, it was fascinating and also a bit scary. I had no control over how the end product would look like. I mean, I had some kind of an image inside of my head but not the thing that I am seeing right now!

Also seeing things that I didn't actually feel at all, while making it. I had no clue that the back was so skewed. What is so surprising to me is that there are all these holes, because I thought that it would look much smoother. There are a lot of unexpected holes and gaps that I didn't notice with my fingers, actually. That's quite surprising."

Ria feels that the whole experience had quite an unexpected effect on her. "I literally had the feeling that I had to reveal something of myself, as if I was standing there in my naked body. I do not regard myself a shy person, but this was something new for me." On forehand, she wanted to keep at a distance, but, while doing it, it strongly affected her, and now she says she would like to do it more often.

6.3.3 Example: making clay little-me's on the island of Gotland, Sweden

Together with co-teacher **Mari von Boehm**, I organized the *Wind and Water* intensive course in April and May 2009. The course took place under auspices of EDDA Norden, a Nordic network of educational institutions that offer teacher training in art, media and design. Participants were students from Finland, Norway, Denmark and Sweden. Core of the course was a voyage with the sailing vessel Helena from Kiel, via the island of Gotland to Uusikaupunki in Finland.

It is a clear and sunny Saturday morning. The little-me making session is about to start. The participants have all carried with them their own chair from the accommodation to this spot at the shore, a kilometer away. When everybody is present at a grassy hillside overlooking the sea and the natural pillars of limestone (*raukar*) a little lower down the inclination, I ask the participants to form a circle and to spend a moment in silence with the eyes closed, just taking in whatever sensory perceptions come to them. After that, the participants on my request form a half circle with their chairs, and when all are seated we start with some drawing activities so that they become somewhat familiarized with working with their eyes closed and with expressing, through the art material, what they feel in different parts of their body.

When this activity is also finished, co-teacher **Mari** leads a warming-up exercise. It is still rather chilly on this April morning, despite the blue sky and intense sunlight. I have placed two bags of clay on the grass and when the movement session is concluded I ask everybody to gather two fist-size lumps of clay and to get seated again. They should have their hardboard plate on their lap, and put the two lumps of clay on it. When everybody had done that, I start out with my facilitation of making little-me's.

For me, being there at the rocky shore is an excellent location to do this activity. The climbing sun starts to warm us up and there were no immediate time constraints. We are perfectly on our own. In a slow pace, with long breaks in-between, I talk about the different parts of the human body. I invite them to express what they are feeling in those parts through and in the clay. At certain moments I make photographs and film recordings of the participants while they are fully engaged in working with the clay.



Figure 23: Images of little-me making session on Gotland

What I had not experienced at previous little-me making activities is that one of the participants suddenly, half-way the session, asks out loud why she is not allowed to make the little-me just the way she wants it, instead of doing it step-by-step along the sequence that I am taking the group through. I ask her to please continue the way we are doing it, even though it may raise some questions on her part or a desire to do





it otherwise. I also say that we will come back to this issue when the session is finished. Another new phenomenon is that somebody abruptly ceases to work with the clay and walks away – to return again after a while. Later I learn that this person had become cold and needed to move herself to get warm again.

Some work a bit faster, some slower than the rest. I ask that those who have finished making their little-me and have opened their eyes wait with talking until everybody else is ready too. And after a little while, everybody sits with open eyes with their little-me in front of him or her, many of them looking rather astonished by the result. We put the little-me's on a row beside each other and spend some time talking about the experience. Remarkably, a first impulse of many is to document the artworks as soon as possible with their digital cameras. After a while, I ask them to pay attention specifically to what is expressed through the backs of the finished little-me's.

Because some people have become a bit cold from sitting outside so long, I skip the reflective part that usually takes place right after the little-me's are completed. Instead, we talk about the experience together after dinner in the evening and I interview individual participants some days later, on the deck of the schooner Helena, when we are out on the Baltic Sea again. Some of the observations of participants in this particular little-me making session I have already presented above, as part of the thematically organized reflections. Below, I now specifically take up what some say about being outside, in the seashore environment.

Britta, for example, recounts:

“The clay felt more part of my body. It felt like home. It is nice to have it, safe maybe. Clay is really a nice thing to work with. I have memories of being at the beach, making sculptures on the rocks, at my father's place. It was recognizable. It has to do with a childhood thing. Art in the open. To dig out something and to do something with it: it is like giving birth to it. You just go out and find things, and you form them with your hands. But you *find* them: somehow you feel that you find the forms with your hands, that they almost *want* to be something. I haven't done it like that for many years.... The little-me's were very much shaped by the *raukar* (limestone stalks). If you looked close, they have the same color. They grow up from the ground. Clay is very much a nature material.... Working with clay in nature is so natural, so much part of being human, and nature is too. It is really easy to connect with that, with the clay and nature.”

One would assume that participants in this outdoor little-me making session would feel the circumambient universe more intensely than if we would have stayed within four brick walls. However, the art process demands such a degree of focused attention in and of itself that some participants even seem to forget, to some extent, where they find themselves. **Emilia** recalls that at times she felt a bit cold, and then “the thoughts went *there* instead of going to the main issue of concentrating on the senses.” If it had

been more relaxing, she says, it would perhaps also have been easier to discern the sounds of the birds, the smells, and so on. On the whole, however, “nature was more *present*.” **Fredrik** adds: “You feel the light through the eyes, the wind, the sound of the birds, the sound of the waves. You are aware and do your own thing, you are less disturbed.” The chilliness of this early spring day may have affected the exercise, says **Leif**. “I felt the coldness in the bones, in my body, like the wind blowing. My bones became really cold. The skin is just a layer. It affected me particularly when you were describing the head. The weather affected me; I had a bony feeling, of being cold.” Colleague art teacher **Hanna** comments that the place was quite important. She felt it was meaningful to carry the chair along to the place:

“In that way it was really easier to relate to nature. The chest was open, bending to the wind. I was bending my head backwards. The shoulder blades became important. The head was small; the winds just blew over it. The relationship to space changed. The wind became more . . . I don’t know. I was more aware of the wind. The birds were not important in the clay-making. I *was* aware of a bee coming by. The bees seek warmth during this part of the year. I also wondered: how will the others react? I was aware of the sea, and of the birds also. But I was not focusing on them. The wind was coming from the sea. When we started I was much more aware of all the sounds. My attention in the art process went to making the clay form.”

Greta adds that for her the chair was a connection to the earth (“my feet grew into the ground”). And, for **Britta**, the place where the activity took place *did* really matter:

“The air and the light, the sounds; there were many sensations. At the same time you are able to concentrate and thus get a clearer picture of yourself. Inside a room there is another feeling, it is closed. As a person you get more rubbed out. You have the hard shell of the room. It’s more like your own temperature, not so differently defined as outside. The sun was warming me up on one side, the skin was soft there. At that side there was not such a contrast with the air, but on the cold side it was another feeling. There, I felt a sharp edge to the air, the skin harder. A bigger contrast. It was nice to experience, with eyes closed. This way you get the deepest feeling for place, structure, light, the warmth, the heat, and all creatures living there. I heard birds, the bee, I thought it was summer.”

Iiris’s experience, however, is markedly different. She says that it is a hard question for her if it changed her state of being:

“I am not sure. I could not feel that I was connected to the environment. It could have been another space as well; the light, the temperature, the wind especially. I can’t remember any sounds. The wind blowing on my face. This specific exercise is one way of being there, but there are also other ways. The at-

tention was so much on ourselves. I don't know if it was meaningful to do that on that specific spot. It would maybe be different if we focused more on the environment and not on us."

It is remarkable how many participants connect the experience of being at the seashore with their experiences during the previous days on the schooner Helena. **Maria**, for example, says: "I felt a sense of place: the smell of the sea, the shore, the waves. It gives you a sense of where you are. Still, I think these sensations are stronger if I am alone, not caring about others. Therefore I liked sitting on the bowsprit in the front of the boat, being alone with my emotions." **Petra** makes the remarkable observation that during the making of her little-me she was "taken out of place" by doing it:

"I was not really in nature [during the activity], in contrast to before and after, like when we had this silent moment. By concentrating, I felt being taken out of it. I did not pay attention to other sounds. It was like being in two different places. The clay was so nice.... It was kind of a spiritual thing, which it wouldn't be if we didn't have our eyes closed. It was a mix of having one's eyes closed and the words you said. Because I had the clay in my hand, it was like being connected to the earth, the place. Through the clay it was brought together. It was a strange feeling for me, to hold it, to use the clay. The wind in the ear, blowing around me – it goes everywhere. The sounds of some birds."

Like **Petra**, **Inge** also mentions being in a different state once she had immersed herself in the activity: "When I had walked to the shore I was more aware of the birds and sounds. But when I got into [the activity], it became like a flow." At the beginning she was still very aware of the surroundings, and that came back at the end. "But not in the middle of it!" **Inge** is not sure if art helped to make another connection to nature:

"Actually, I don't think so. But *what* a place it was! In the stones one could almost read their age. I think, if I were the facilitator, I would have gone deeper to get that feeling. It has something to do with the respect for nature, and also because that place was so very special. I haven't seen anything like that before."

When I ask him if he felt a different connection to nature through this, **Fredrik** answers that he has to think about that a little more. "It's not obvious to me. It is 'art in nature,' and it is much about how we feel ourselves. For me, to be aware, is a different approach. What do we see as nature here? Is it our own human nature, or the beach, sea, and the stones?" **Iiris** affirms that, in her case, through this, she experienced feeling connected to nature: "It is a way of observing oneself. It is important for me to see how one feels in different spaces. That is how it is connected to art." **Bente**, however,

felt that it is a good way to connect one's senses to the environment but that, in the end, it isn't art:

"It is *not* an artwork. We are doing something. Listening to ourselves, the environment. However, it does not have to be art to be useful. *You* label it art, but I have associations with art therapy. I don't want to mix that with art. What one is doing in art therapy is different from what one is doing making art. One has different intentions. However, it did not feel stressed, imposed."

I ask them to comment of the overall structure of the little-me activity, i.e. its design from the start until its completion. **Emilia** says: "It would be interesting to do the same kind of things after one for example has been doing *Ashtanga*-yoga, because then you are more relaxed. It would also be interesting to do it after one has just been in nature for some time. If we were to do it again, I would like to have more relaxed time in the beginning." **Emilia** felt that she needed more time being on the beach, first; time with no talking, not expecting results.

Fredrik finds an unintended meaning in the way the workshop is carried out. He mentions that it was funny for him to sit with furniture on which one usually sits *inside*: "The walk with the chairs made it serious, not a picnic." **Bente**, in contrast, was disturbed by the chair element, as she'd much rather sit on the grass. She would have appreciated knowing on beforehand why people had to pick a chair: "You could have said: 'We need it, we are going to use it.'" When the clay molding was well on its way, she again felt a sense of frustration: "How long is it going to take, five minutes, or five hours? It doesn't have to be so precisely, but so that I can relax in the situation." The element of picking up a chair to carry to the shore proved puzzling to many. For **Iiris** the walk with the chairs to the stalks at the shore was "surreal": "I like mysteries, having surprises. I like it if someone surprises me."

It is remarkable that all participants have a different idea of what the appropriate amount of time would be that should be devoted to the making of the little-me's. It seems that to some participants I, as facilitator, have extended the session too long, to their frustration. Conversely, others found that I speeded it up too much to their liking. **Leif** reports that he got a little stressed because he needed much less time than others and also **Anna-Maria** found that it took far too long as she was getting cold. **Hanna**, on the contrary, comments that she and many others thought it went too *quickly*: "The practice was very meditative and I can understand that people want more time for this; it would have been good to slow it down." This may have to do with her view on my overall facilitation, about which she says: "You were leading quite a lot. You could have left more room to one's own imagination. Then it might be totally different."

Finally, I report here some of the comments that were made on the phase that followed immediately after the participants had opened their eyes and finished making the clay sculptures. **Maria** comments: "It would be good to stay at the place, but then we left." (The observations that I report on here were all shared days after the

little-me making session had taken place, on board of the Helena. It may be recalled that because people were getting a little chilly, the reflective session was moved from the seashore to an inside room and held later that day.) **Leif** suggests that we maybe, after the little-me making, could have taken up a theme like “find objects in nature, and build something out of it.” We could have done that individually or as a group, he adds. In that way, “you connect more to nature directly, as a follow-up to this exercise.” **Greta** regrets that when we were ready we didn’t put the little-me’s on the rocks. “It was breaking my feeling of being together, without an explanation. Afterwards I would have liked to talk about the question: ‘What could it be?’ For me it was part of the journey, a new way of going into myself.” Teacher **Hanna** also would have liked to discuss the results more fully at the beach.

“I missed that people could say something. You could have collected different approaches and then you could have tried to verbalize these: ‘Who has done it *this* way, and who has done it *that* way?’ We could also have shown the little-me’s to each other in the evening. Now, at the beach, someone said, in passing, ‘We look like people in an elderly home.’ There was laughing and to me that is a sense of immaturity, which you could have taken up.”

Like **Hanna**, **Maija** would also have appreciated it if I had explained the activity afterwards and then she would have liked to have shared with the others right away how it felt for her. **Britta** felt that it was fine to leave the small clay sculptures there, at the beach. To her, it was a kind of ceremony. “They [the little-me sculptures] should *be* out.”

6.3.4 Narrative account: being touched by artistic process

The way in which little-me making seems to have impacted particularly *one* participant – I call him **Robert** – made a profound impression on me. **Robert** had signed up for a course on children and nature that I co-teach with others and of which the little-me making activity is a part. It shows me the extent to which participating in a little-me session, lasting no longer than one or two hours at the most, can have a transformative impact. For this reason I present this narrative account here, adding contextual information which may help to throw the event into sharper relief.

Robert had a difficult childhood. In his own words, he was an “ADHD type” and he had spent much time on the streets. Eventually he signed up for the army. Being on mission in armed conflicts he winded up in several dangerous situations, and at some point he got severely injured. When he came back home, things went in the wrong direction; he started to use different kinds of drugs. What eventually got him out of a downward spiral was that he was able to work at a project with troubled youth who, as part of the treatment, were taken to nature. He got the job, even though he lacked the education and experience. His strong point was that he knew from his own experience what some of these kids were going through. When he got the assignment, he

started immediately, although he did not quite understand himself what his work was all about. He did not feel a connection to nature. But he noticed that he was very able to connect with the kids; he understood quite well where they were coming from. The fact that he could coach them gave him much self-confidence. After being outside with the teenagers the whole day and working hard physically, he would return home exhausted. But the project was of great value, both to the kids and to him. By working in this fashion he discovered that he had much difficulty – just like the children – to sit inside of a building, and to have to listen to others explaining things. He was much rather outside, busy. It was also in that respect that things became clearer to him: about his personality, and about how certain characteristics would probably be similar to those of a lot of youngsters. By working practically with teenagers he came to different insights about the importance of nature, and his own relation to it.

When we are about to start the little-me making session with a group of fifteen people under the canopy of a shady coniferous forest, **Robert** confides to me that he hopes the course that I co-teach will be different from what it has been up until that time, sitting inside and having to listen passively to speakers. The session takes place in the afternoon of the first day of the course. **Robert** works very concentrated on his little-me, he takes all the time he needs. He surrenders himself to the task and is keen to follow up attentively to how I guide the meditative journey through the body. While some of the other participants puff and sigh, he appears calm and engaged. When the little-me's are ready we carefully carry them inside the lecture room and together we reflect on the experience. Some people state that they felt it difficult to come inside their own body this way. **Robert**, much to everybody's surprise, suddenly clears his voice. It is the first time he speaks in front of the whole group. He says that it is always difficult for him to express what he feels, but that he wants to share now that it was the best thing he has done so far at the course. It was something that touched him deeply, he says, and it has allowed him to get a much better understanding of himself:

“It was not only that the activity was physical, that I worked with my hands, but I also aimed my attention specifically to my own body. It was nice to work with my eyes closed. If I wouldn't have done that I probably would have the feeling that I was not able to do it: the eyes of the others would be watching as well and that would withhold me from being able to finish it. For me it has been the most comfortable place I have been since I have arrived here. I was noticing how I could truly express how I actually feel. A lot has happened here.”

I had the idea that many things had fallen on the right place for him. He not only experienced his body in a new way, but also came to see the work he was doing with young people in a different light. There and then he saw clearer for himself what its meaning and importance was. At some point, **Robert** saw the connec-

tion, as he told me later. It was an eye-opener for him that artmaking had something to offer to him, that he could give expression via a medium that was outside of his life-world before.

Though **Robert** partakes in all the following group sessions, he leaves the course prematurely on the final day, four days later. He has left a small note on which he has written that he always finds it difficult to say goodbye and has therefore chosen to leave in silence, ahead of the others.

PART IV

7. Unpacking the process of an AEE activity

*When we get out of the glass bottles of our ego,
and when we escape like squirrels turning in the
cages of our personality and get into the forests
again, we shall shiver with cold and fright but
things will happen to us so that we don't know
ourselves.*

D.H. Lawrence (1929/1993)

This fourth part of the thesis comprises the analysis and interpretation of the results of my research. The structure of this part is analogous to the research questions, to the extent that chapters 7, 8 and 9 can roughly be seen as addressing respectively questions 1, 2 and 3. In the last part of the thesis, I will look at my research theme from a more abstract meta-level.

Here, I first turn back to the original point of departure in this study. When I introduced the concept of arts-based environmental education in section 2.7, I noted that there is no clear definition, let alone an extensive body of theoretical reflection, that could provide epistemological bearings to this approach. My starting point was Meri-Helga Mantere's description of AEE as a form of learning that aims to develop environmental understanding and responsibility by becoming more receptive to sense perceptions and observations and by using artistic methods to express and share personal environmental experiences and thoughts. The goal of practicing AEE is to facilitate learners to come to new understandings of the world *via* art. Learning takes place step-by-step, through them participating and immersing themselves in certain facilitated hands-on activities, the meaning of which can only be unfolded by

themselves in the course of action. My first research question speaks to the desire to get a fuller grasp of what AEE is about and what happens when it is practiced: *What is distinctive in the process of the AEE activities that I facilitate?* At some point, after having facilitated numerous AEE activities and having reflected on these, it dawned upon me that completing the full process of an AEE activity has many similarities with the unfolding of a story in the course of time.

This structure is for example discernable in Meri-Helga's Mantere's account of the way her teaching typically moves between three consecutive phases. In the phase of preparation, the pupils and teacher get together. (Here it is important, she explains, that the members of the group get to know who they are and why they are there. While they warm up and get relaxed, some ideas are brought up, questions posed, and perhaps some sensory or other experiments are done together.) In the second phase, participants work alone by themselves. Self-directed, they go into the topic or question as deep and free as possible. When working on their own, says Mantere, this preferably happens in the same space where the others work, but still alone and quiet, not disturbing the others working. In this, it is different than working alone at home, she explains. "While being in the same space and alone with your work there still is the togetherness. The others are working on the same questions or from the same point of departure in their personal ways and each of them is aware that they will have a chance to share and discuss afterwards. It gives extra meaning and motivation to the working process." In the final phase, they all come back to the group and each participant is invited to share his or her work, personal process and experiences, and possible discoveries and/or new questions. (M.-H. Mantere, personal communication, March 2, 2013).

Each of the three AEE activities that I explore here seems to share the same three-fold structure: it has a clear beginning (its preparation), an obvious middle-part (its execution), and a demarcated end (the reflection on what happened and integration of the new experience in whatever comes next). As such, they encompass, in a very elementary sense, the (archetypal) structure of story. In the following chapter, I will elaborate what the recognizing of this emergent theme (or, rather, *metatheme*⁶⁴) unearthed, when allowing it to provide pattern and structure to my findings.

7.1 The dramatic structure of an AEE activity

Stories in fiction often tend to share the same basic dramatic structure. The protagonist sets out on a journey, taking her away from her ordinary life-world. On her voyage, she meets and overcomes several challenges and trials. Finally she returns home, having become a wiser (or in any case *different*) person than the one she was when she commenced the (rite of) passage. Classically, a drama starts with the *exposition* or

⁶⁴ A *metatheme* refers to a major dimension, major aspect, or constituent of the phenomenon studied (Tesch, 1987, p. 231).

introduction of the setting, situation and main characters. Here, the background information is provided to the audience so that it properly understands the story. Then the tale is set into motion with an inciting moment or *complication*: the event that introduces the conflict or confrontation that needs to be faced. The next stage is the one of *rising action* where the protagonist has to surmount various obstacles, leading to a turning point or *climax*. This is the part with the most action and the moment of highest interest in terms of the conflict. From there the story moves to the falling action, the reversal and unraveling after the climax; the story starts to head to its conclusion. Finally, there is the last part, towards the actual ending of the drama, called resolution or *dénouement* (the “untying” of the plot). In these concluding events the conflict is resolved (cf. Freytag, 1863/2008). In this chapter, I will discuss AEE as the unfolding of process whereby I will use this basic structure as my organizing principle, distinguishing three main phases: (1) exposition and the stirring moment (“before”), (2) rising action, climax/turning point and falling action (“during”), and lastly, (3) resolution/dénouement (“after”). In my analogy, each participant in the AEE activity is his or her own protagonist in the progress and unpacking of the drama that a surrender to the experience entails.

7.1.1 *Before: exposition*

In an AEE activity, the part of preparation by both participants and facilitator – before the actual artmaking is set in motion – can perhaps be compared to the exposition phase. In that way this part would then be analogous to the first act of the “hero’s journey” (Vogler, 1992), in which the story’s protagonist (or, in my comparison, the AEE participant) still resides in what is commonly referred to as the *Ordinary World*. The participants meet each other and, being the facilitator, I plan and set the stage for what is to come in the soon commencing AEE session. The initial stage in breaking away from the world of common day starts with me providing the participants with the first bits of information that are meant to help them reach a basic understanding of the journey they are beginning to be part of. In the world of story, one does not easily move by oneself from the mundane, day-to-day world to the so-called *Special World*, which at first is new and alien. In this new environment, it is to be expected that participants will feel like fishes out of the water. The story is set into motion, as it were, when they are presented with a problem or challenge which they need to face and overcome. Christopher Vogler (1992) terms this the “call to adventure.” In this call, the “stakes of the game” are established. An elemental part of a meaningful AEE activity is that there *is* something at stake, both for participants and the facilitator.

In the “hero’s journey,” there is a specific moment that is called “crossing the first threshold,” when the protagonist enters the Special World of the story. In my analogy: our normal life may contrast too sharply with a “letting go” of oneself in the artistic encounter. When reflecting upon this threshold in the context of participating in AEE, I came upon the metaphor of a sluice, an in-between chamber one needs to

enter to be able to move from one environment to the next. When one is in a submarine and one wants to dive into the enveloping sea, one first enters a sluice which is slowly filled with water. Only when the sluice is completely filled can the door to the sea environment be opened and can one enter it. Conversely, when wanting to re-enter the submarine vessel, one has to enter the sluice again, which then first has to be emptied of water before one can come into the cabin space and normally breathe oxygen again. The point of this metaphor being, that it takes a period of adjusting, of familiarizing oneself to the new milieu, before one can fully engage. It is like an incubator phase, of getting ready for what is to come. Likewise, once one has fully immersed oneself in this strange new environment, one can neither hop straight back to the familiar place one was in before.

In this context, the concept of *set up time*, as it is used by the Swedish physicist Bodil Jönsson in her book *Ten Thoughts about Time* (2005), seems useful to me. Set up time (or *ställtid*, in Swedish) is the time one needs to prepare oneself for a task. Set up time is the time we need to arrange stuff around ourselves before we can actually start doing something. We need to prepare ourselves both practically and mentally on what we are about to do before we do it. One needs to allow for a certain start up or transition time before the activities themselves set in motion. Mentally we have adjusted ourselves to ways of thinking that the industrial age demands of us. Artificially construed time has us in its grips, hence a difference has grown between our experience of time (*kairos*, or time passing without notice) and sequential or clock time (*kronos*). In conventional thinking, set up time can easily be regarded as wasted time and it may be deemed better to take on the job as soon as one can. But Jönsson argues that set up time is needed for being able to work in peace and quiet, and for being able to sort out the thoughts we have – only then something meaningful may come out of it. Easy and enjoyable tasks demand relatively little or no time, whereas complex or dreary tasks require a lot of time before they can be carried out. (Correspondingly, *after* the activity, she says, one also needs time to readjust, *avställningstid*, to let the experience sink in, to digest it or allow it to ripen. I will come back to this latter phenomenon in section 7.1.3).

The importance of this phase of set up time is something that struck me as meaningful while reflecting back on the AEE activities I facilitated. It struck me that the process is not something that you can instantly ignite and set in full motion, it needs a run-up; moreover, I noticed that there are several factors that come into play and frame the phase of its unfolding, like the moment of the day that an AEE activity is to be carried out, the relative degree of alertness or fatigue on the part of the participants, and whatever activity (or lack of) has taken place prior to engaging with the artmaking. In that respect, the experience on the shores of Gotland stood out, as the participants walked quite a stretch to the shore, carrying with them the chair on which they would later sit. Such intervals are not irrelevant, I noticed. They allow the participants to gradually tune into doing something that is different from the ordinary.

Some participants commented on the aspect of “getting ready” for the artmaking activity. As we saw, **Emilia** affirmed that things that happen before the AEE activity do

have an important impact. She suggested that it could be interesting to make little-me's *after* first practicing some yoga exercises, because then participants would be more relaxed. She thought it would also be interesting to do it after first having been some time in nature already. Some people reported on their fear of feeling cast too swiftly into the unknown, as for example **Annet**, who participated both in a wildpainting *and* a little-me making activity: "Actually, I am deathly afraid of a white page and colors. Drawing is not something I do easily. I am probably more vulnerable there then in any other activity.... When we 'stamp' the [artistic] expression that we have made, by *judging* it, it is even more difficult to dare to do something."

However, perhaps it is only when participants are in one way or the other able to cross the threshold, to pass through the sluice, that they can actually meaningfully engage in the following stage, of phase of rising action.

7.1.2 ***During: rising action – climax – falling action***

In the basic structure of drama, there is the middle part of the storyline where the protagonist comes across all sorts of challenges, which, as the story evolves, build towards a climax. But before this can happen at all, engaging with (and eventually overcoming) the testing trials "prepares the ground" for the main character. It makes him or her more receptive to undergo the ensuing peak moment, which potentially can be transformative for the person concerned. In my data there are several examples of such trials. Participants in an AEE activity seem to be faced with confrontations and hardships which are brought about by artistic process. Such experiences particularly seem to take place when the taken-for-granted world becomes defamiliarized. At that point, phenomena that participants originally saw as ordinary may come to be experienced as extraordinary. As said before, it felt to me that several participants had some hesitation to readily leave behind them their accustomed state of being, i.e. the frame of reference that guided their actions *prior* to partaking in the AEE activity. Such unease – at least that is how I think I can interpret it – was expressed in comments by participants (e.g. **Fredrik**, **Hanna** and others) that they would have appreciated knowing more on beforehand about what was to happen, so that they would be more prepared. **Mabel**, a participant in a lines of the hand session, underlines that for her the world "out there" usually is compelling present and ordinarily inhibits her in initiating or partaking in activities like this. She doesn't know why, but she is quite sure that on her own she would never do such a thing. Others also indicate how the artmaking presented them with challenges: **Fredrik**, for example, had great difficulty in becoming aware of the bodily sensations that I emphasized: "I was controlling the body; that's what I usually do." **Maija** found the experience rather bewildering because of a misunderstanding of terms. When I talked about the upper body, she could not relate to that because for her the stomach and the back were the same thing: "They are always one whole." We saw how **Taimi** described her difficulties in considerable detail. When she tried to feel her foot she was too concentrated on the feeling

in her hand. The instructions that her mind picked up did not register in her hands: these seemed to chart their way forward autonomously.

Mary Catherine Bateson (1994) calls attention to the circumstance that what we call the familiar is built up in layers to a structure known so deeply that it is taken for granted and virtually impossible to observe without the help of contrast: “Seen from a contrasting point of view or seen suddenly through the eyes of an outsider, one’s own familiar patterns can become accessible to choice and criticism. With yet another return, what seemed radically different is revealed as part of a common space” (p. 31).⁶⁵ In this regard, David Wong’s (2007) criterion for what makes a good teacher is noteworthy: to him it is somebody who enables his or her students *to see the familiar as strange and the strange as familiar* (p. 205). Wong writes this in the context of his discussion of John Dewey’s views on what a powerful educational experience consists of. For it to be deeply compelling and transformative, Dewey held that they require *both* an active doing and receptive undergoing. For then, as Wong (2007) elucidates, we start to have new thoughts, feelings, and action; what happens is that “the world reveals itself and acts upon us in new ways” (p. 203). Both person and world are mutually transformed. If we call in mind the aspect of testing trials in the phase of rising action, the following observation of Wong seems very significant. For Dewey, he goes on to explain, there is a relation between receptive undergoing and suffering. It can indeed be painful to be acted upon by the world, and often this happens *against* our will. Compelling experiences seem to require more than just our own intentional actions. Quite basically, they involve *surrender*.

An open attitude

At this point in my analysis of the process character of AEE, I want to zoom in on the importance of an open attitude, both for the participants and for the facilitator. Reflecting back on my own experiences of interacting with the participants, I consider this element as a key characteristic of the kind of AEE activities that I facilitate. Of course, this can be seen as expressive of circular logic: the activities that are explored in this study were found or developed by myself *precisely because* I am interested in their open-ended aspect. I appreciate it as something that is integral to the open dialogue that is aimed for when we sense the depth of the world.

65 This is similar to what the Romantic poet Percy Bysshe Shelley (1821/1994) asserted about poetry, namely that it “acts in a divine and unapprehended manner, beyond and above consciousness.... It lifts the veil from the hidden beauty of the world, and makes familiar objects be as if they are not familiar.” Moreover, for him, the language of poetry “is vitally metaphorical; that is, it marks the before unapprehended relations of things” (pp. 637–642). As Bruce Woodcock (1994) elucidates: poetry, for Shelley, thus defamiliarizes the world and expands the mind, and it does so through the power of metaphor. Instead of suggesting that something is “like” something else, it states it “is” that other thing: “Shelley doesn’t say that dreams and the unconscious are like an ocean; he says they *are* an ocean: and the effect is more dynamic. In other words, poetry makes life fresh by the use of imagination” (p. iii).

I am not unique in this. This intertwining of inner and outer, between us and the more-than-human,⁶⁶ was also at the heart of the new orientation to art pedagogy about the environment which developed in Finland in the 1980s and to which I referred earlier as the second phase of AEE's nascence in Finland (cf. section 2.7.1). At that time, as may be recalled, the pupil's own participatory relationship with nature and the environment – the life-world approach – came to take center stage. As Pohjakallio (2007, p. 8) explained, the new guiding insight was that all the senses contribute to understanding, and that the environment is as much felt as understood. Such an approach to inquiry allows one to get to know life in terms of itself. In this dialogue with the environment the phenomena become active participants themselves. Dewey (1929/1958) held that in aesthetic undergoing, new insights are first *felt* with the senses. Sense-making through explicit reason may follow later. This direct way of making meaning is not mediated by conceptual or intellectual processing:

The sense of a thing ... is an immediate and immanent meaning; it is meaning which is itself felt or directly had. When we are baffled by perplexing conditions, and finally hit upon a clew [sic], and everything falls into place, the whole thing suddenly, as we say, "makes sense." In such a situation, the clew has signification in virtue of being an indication, a guide to interpretation. But the meaning of the *whole* situation as apprehended is sense. (p. 200)

Wong (2007) cautions us that it would be a misreading of Dewey to conclude from this that learning thus is a passive, irrational activity: "In any worthwhile aesthetic experience, meaning is not only apprehended as the 'sense of a thing,' but also cognitively mediated, signified, named, and associated with conceptual categories" (p. 207).

However, I would hold, additionally, that a participant in such a learning activity – especially if it is artistically mediated – needs to be able to not know and to hold something open for awhile. Otherwise he or she will only ever "know" what is already "known" (cf. Kidd, 2013). Further, as part of the open attitude with which both participants and facilitator engage in the AEE process, this can also come to mean – taken one step further – that, for a stretch of time, uncertainty and the unknown are *invited* into the space.⁶⁷ No presupposed, overall thematic coherence is provided and much is deliberately left unexplained.

When, for example, participants in a wildpainting activity are invited to depict the mountain first by using "wrong" colors (cf. section 6.1.3), they are, as it were, pulled

⁶⁶ Merleau-Ponty called this the paradoxical condition of all human subjectivity: that is, the fact that we are both a part of the world and coextensive with it, constituting but also constituted (2002, p. 453).

⁶⁷ There is an interesting resemblance here with purposefully allowing for open-endedness in AEE and "bracketing" in the phenomenological method: temporarily "shelving," as it were, one's prior understandings in the phenomenological method. In the AEE activities that I facilitate the participants are also encouraged to move away from the natural, "taken-for-granted" world, suspending their judgment and performing an *epoché*. It will be recalled (cf. section 5.1) that the method of *epoché* is to attain a state in which we analyze experience in such a way that we rid ourselves of any preconceptions that we carry with us about, for example, the world and other people.

out of the comfort zone of how they might usually go about painting a landscape. Here, in this AEE activity, I found that there are two threshold moments where I noticed that participants seemed to enter into a new “territory.”

The first threshold I identified is the moment of entering into the new space of using colors that one ordinarily would not use. Overcoming this threshold, I observed, takes effort. There are many sighs and other vocal and bodily expressions of struggle.

The second threshold that I distinguish is again a movement into a new and unfamiliar terrain, but this time it is, paradoxically, a fight with one’s own habitual ways of painting “by the book.” I noticed again and again, that several participants feel an inclination to “correct” the odd colors that they have just applied on the canvas, e.g. by covering them completely with the “appropriate” colors that they would have picked habitually if they had not first made the “detour” of using wrong colors. I compare this way of artmaking according to convention or ingrained habit as “painting by autopilot.” In this regard it is an interesting question to me why children, from about the age of seven upwards, start drawing trees according to a certain, almost universal model – at least, so it seems to be in the Western world. This common model is a straight tree trunk, indicated by two parallel lines the space between which is colored brown. On top of this is a green cloudlike shape, which is filled with green color. If the tree is an apple tree, then in this green cloud there are also red circles inserted. This seems to be the “archetypical” tree that we carry with us, analogous to the characteristic kind of horses most people tend to sketch when asked to “draw a horse” (head facing towards the left, the body not moving, with stiff, straight legs, etc. See also section 6.1.2).

Important to mention here is that the degree of openness to the new learning can be affected by the intentionality with which participants join in the AEE activity. At times, their expectations partly seemed to *inhibit* their full receptivity to what is to come. Occasionally it happened that (becoming or established) teachers apparently primarily opted for participation out of a desire to learn themselves a new method which they later could implement when working with learners in other settings. I found that such anticipation can potentially stand in the way of them allowing the activity, first of all, to impact their individual self. Teacher **Sarah** provided an example of this. Once, after a lines of the hand session, I asked the group if the activity they had just completed made sense to them in the context of seeking a connection to nature through art. In response, **Sarah** immediately exteriorized the issue by pondering directly on how it would be to do this kind of activity with children. She felt that it probably would be a difficult assignment for them as they would still lack deep lived experiences of place of the kind I alluded to when facilitating the activity. **Sarah** explicated as follows: “You’d ask them to imagine themselves in the landscape, and then it might be dragons.” Her own experience in teaching was that imaginations in children are “shut down a lot more than I would expect.” At times, participating teachers expressed their disappointment that I wouldn’t deliver ready-made educational packages. In response to this concern, I tended to emphasize that the experience of embodied participation in the AEE activity – coupled with their own ensuing con-

ceptualization of the potential power of art in seeking reconnection to nature – likely has its own impact. I suggested that their own sense of wonder, ignited in the process, might very well have a radiating and catalytic effect on the future learners they subsequently would be working with.

Liminality and initiation

One way to look at the crossing of thresholds in an AEE activity is to compare it to moving through a rite of passage, an initiation before immersing oneself deeper in the activity: the space must be cleared, purified, because entering the Special World requires a referential, attentive attitude which is not brought about that readily by itself. Initiation, in indigenous cultures, is the rite that helps youngsters into men and women. As such it is the transition from one stage of life to another. Initiations occur in a liminal space that is specifically created for this experience, apart from day-to-day life. In that characteristic there are semblances with an AEE activity in which the participants are also removed from their usual surroundings. In the special created reality of an initiation, the novice is placed in a unique environment where different norms and rules reign, which are quite alien for her or him. Often the rites occur in the dead of night. It is like being Alice in Wonderland, everything that isn't *is*, and everything that is *isn't*. But this aspect of disorientation is planned: the participants in the initiation rite are challenged to confront themselves and their fears. As Allen Berger (2009) explains, "They will discuss things that they have never discussed openly. This sacred atmosphere allows the elders to create experiences and ordeals that transform boys into men" (*ibid.*).

The initial stage of a process of initiation has been referred to as a transitory period of "liminality." The term is derived from the Latin *limen*, which means "threshold," the bottom part of a doorway that must be crossed when entering a building. In his seminal work, *Les rites de passage*. Arnold Van Gennep (1909) described coming-of-age rituals as having a three-part structure: *separation*, *liminal period*, and *reassimilation*. The initiate (that is, the person undergoing the ritual) is first stripped of the social status that he or she possessed before the ritual and then led into the liminal period of transition. After the ordeal is endured and successfully overcome, he or she is finally given a new status and reassimilated into society. In the second half of the 20th century the terms "liminal" and "liminality" gained popularity through the writings of Victor Turner, who first introduced his interpretation of liminality in 1967, drawing on Van Gennep's three-part structure for rites of passage. Turner's attention went specifically to the middle stage of rites of passage – the transitional or liminal stage. The status of liminal individuals is hazy: "Liminality may perhaps be regarded ... as a realm of pure possibility whence novel configurations of ideas and relations may arise" (Turner, 1967, p. 97). Turner defines liminal individuals as "neither here nor there; they are betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremony" (1969, p. 95). Thus, liminal phases provide

a stage for unique structures of experience. Detached as they are from mundane life, they are characterized by the presence of ambiguous ideas, ordeals and humiliations, esoteric and paradoxical instructions (Turner, 1986).

There are certain actions in life which, while we perform them, thoroughly shake our pre-understanding of the world, says Arthur Weymouth (2009): “Such actions attempt to drive a knife through the sheen of the everyday and prise it open, so for just a moment new spaces are revealed, and new forms of thinking can emerge. In this liminal space, at the threshold between the commonplace structures of the everyday, the whole paradigm by which we set the clocks of our lives is called into question.” Such a moment, he adds, is that which Turner called *anti-structure*, “the birthplace of art, of revolution, of religion, of genius” (p. 37).

Undergoing a transformative experience brings along that one is also cast in a liminal zone where one cannot operate on basis of methods that have proved their value and reliability through time. In effect, it implies a radical vulnerability to whatever the receptive undergoing may bring about. It involves an element of suffering in the sense that one is acted upon by the world, often against one’s own will. Wong (2007) points out that relinquishing control and thus being receptive to outside influence is an essential quality of compelling, deeply engaging experiences. To underscore this point, he traces the arcane definition of the word “passion.” In Latin, *pati* means suffering: “Both passion and suffering mean to experience intensely while being acted upon by the world” (p. 202).⁶⁸ There is also an element of inevitability here, as comes across in the expression, “no pain, no gain.” Compelling experiences are constituted by more than just our intentional actions. Only by fully undergoing the experience, by surrendering to this suffering, do we truly learn:

Perception is an act of the going-out of energy in order to receive, not a withholding of energy. To steep ourselves in a subject-matter we have first to plunge into it. When we are only passive to a scene, it overwhelms us and, for lack of answering activity, we do not perceive that which bears us down. We must summon energy and pitch it at a responsive key in order to take in. (Dewey, 1934/1987, pp. 59-60)

With regards to the AEE activities that I facilitated, I would hold that such transformative experiences took place for several of the participants. **Taimi**, for instance, regards the kind of experience she had during the little-me making, of connecting with one’s body in such a way, as something that is very rare in modern life: “To have an experience like this is groundbreaking, it’s powerful.” In **Greta**’s account, one can feel the struggle that being in a liminal zone apparently is for her.

68 Iain McGilchrist (2009) pushes the connection between experience and pain even further. Tracing the word pain to the Greek *pathos* (feeling) and *paschein* (to suffer), he writes that perhaps to feel at *all* is inevitably to suffer: “The more we are aware of and empathically connected to whatever it is that exists apart from ourselves, the more we are likely to suffer” (p. 85).

"When I was doing the clay thing I felt where it was hurting. The lower part of the leg, growing bigger and bigger. The knees were growing while I was doing that. When I reached the stomach I started to work in a different way. More holes. The upper part was different. When I came to my shoulders... I have a bad shoulder. I made them opposite to how I was thinking. I thought they would be big. My person collapsed. After that I changed my way of working. It fell, I molded it again. Something changed in my whole way of working. I put it more together. Why did I not feel so when I started? With the head, first I thought: I am not going to do it. I focused on the stomach part more than on other parts. It felt like an open hole. And then, O, should I do the back too? It was open. Strange how it changed. How the working process changed."

At times, the knife that cuts through the sheen of the everyday, to use Turner's metaphor, reveals new spaces in a rather subtle way, like it did for **Ann**. She mentions that working intensively with eyes closed and holding the charcoal in both hands during a wildpainting session, made her become aware of different tonalities in the sound of the river that she had never noticed before.

However, I would expect that such experiences of changes taking place at a deep level, more often than not, are of a transitory nature – that is, the moment of epiphany, evocation or revelation seems to last only for a short duration.⁶⁹ This of course wouldn't rule out that, in the course of its unfolding, a fundamental change may have been brought about in how we relate to the world. Also, my hunch is that such an effect can remain unregistered (stay *sub-liminal*) for a long time and perhaps only come back to us much later – in our afterthoughts, or even in our dreams. It has been my experience, in the short-term aftermath of AEE activities, that people's ordinary, day-to-day life typically tends to exert such a commanding influence (most of the time), that they soon seem readily reabsorbed in "the profane."

Bruce Baugh (1988) argues that we need a degree of defamiliarization to be open to the emanations that spring from the evolving or finished artwork that is in front of us. By allowing the artwork to organize our experience, it is given "a power over us sufficient to alter our experience of the world from its very foundations" (pp. 480-481). It is thus that it achieves its epiphany. This moment of transformation, however, will always be transitory, Baugh underlines. It is a momentary revelation, whose duration coincides with that of the manifestation of the artwork. We could not have brought this experience about on our own; it alters the basis of our understanding, says Baugh. Essential is that the artwork does this in terms of *its* ends, and not those of our own, and in that sense it is "the *necessary* basis of our

69 There are cases where a Dionysian surrender to transformative experience is so complete, that the person concerned transgresses a "point of no return," from which a reintegration in ordinary life is no longer possible: the liminal state of being and day-to-day existence have then grown too far apart. Elsewhere (cf. van Boeckel, 2011), in an essay on artistic transgression in the more-than-human world, I have explored this point at some length.

transformed experience of the world, being the source of an end outside our system of ends whose adoption produces that transformation" (p. 481).⁷⁰

Return to normal

Assuming that at least some participants may have achieved a fleeting instance of transformation or epiphany, such moments are soon bound to be followed up by what comes next. In plot structure, the falling action phase deals with events that take place right after the climax; they are, as it were, its after-effects. This is a moment in which there is a reversal: the conflict that the protagonist is entangled in unravels, and leads the hero to either win or lose. It is this act that ultimately leads to the resolution where things can return to normal. After the excitement of the climax, the falling action can seem to be something of an anti-climax. In storytelling, it is usually kept relatively short and used to tidy up the loose ends and bring the story's elements to a satisfying completion in the ensuing final resolution.

I showed in section 6.1.2 how, in wildpainting, the flow of artmaking is regularly and intently interrupted, to thus make room for a *genomgång*, a review, of what has come forth in the paintings up until that moment. I have come to learn that such breaks serve several purposes. The most obvious one is that participants have some time to recuperate from the arduous painting activity. But on a less manifest level, the breaks "force" the participants to look from some distance at their own work. When doing so, they may see aspects that are easily missed when one proceeds continuously and especially when one never treads backwards to allow oneself to assess what is growing on the canvas. However, I noticed that at moments that they *do* this they not only have the possibility to see their own work with fresh eyes, but they also – and I found this to be just as important – take attentive notice of the evolving works of others, who, each in their own way, are struggling with the very same assignment. To me, such a situation would be optimal if the making of such comparative observations of simultaneously maturing paintings would cause the participant to feel a

⁷⁰ In a similar vein, Matheu Abbott (2010) presents a Heideggerian explanation of the poetic experience of the world. In such a transformative encounter, there is an element of breakdown, an element of surprise and astonishment that the novelty of the experience brings about: "*something's becoming intelligible*, where the sound and even physical shape of words starts to become evocative, and something previously unarticulated to you (and until now inarticulable for you) shows up and surprises" (pp. 508-509). For Heidegger, in Abbott's reading, this is fundamentally an experience in which our "being-in-language" is temporarily suspended. We break out of it. The poetic experience is not one of learning that we are forever closed off in a sealed linguistic sphere. Rather, it is "an experience of a materiality that prevents the closure of that sphere. It provides an opening onto reality that allows for a returning to it." It is a way of being, that "forgets its being there" and "falls into existing as though its existing is not an issue for it" (p. 509). We are surprised exactly because we don't know what is coming. For a moment, in poetry, an experiential or phenomenological proof is provided of the existence of the world. After it, this recedes and we are reabsorbed in day-to-day reality. For Abbott, however, exactly the circumstance of the limitedness of this experience and the fact that the transformation is only temporary is "one of its conditions of possibility" (p. 510).

sense of equanimity rather than artistic failure. I have witnessed time and again that such “growing together” of the artworks represents, in a profound sense, a form of co-evolving in which the dynamics of each participant’s individual artmaking process reverberate and affect the process of others, both in positive and in negative ways. When participants mutter or give other verbal and non-verbal indications of being in a flow or of being stuck, others seem to pick this up. Concentric circles of “energy” (for lack of a more apt term) seem to expand outward, pretty much like waves spreading out on the surface of water when a stone is cast into it. I cannot escape noticing, at an intuitive level, that others are subtly affected. Occasionally such an effect is also diametrically opposed, as in the striking example of **Anne-Lene** ripping her painting to pieces shortly after her friend attained an apparent state of bliss caused by the over-load of appreciative comments on her incipient artwork from her co-participants.

In lines in the hand activities I identify a similar period of falling action when participants commence to relate their experience (of how they imagined themselves to be in a landscape evoked by drawn palm lines) to the other members of their small group. On basis of these shared disclosures, I set out to facilitate a discussion on how we relate to body, place and landscape in general. As I described in the previous chapter, the retrieval of storied memory of sensory experience seems to present different degrees of difficulty for each sense and for each participant concerned.

With regards to little-me making, there is only one evaluative phase in the whole session. Effectively, this phase is a conflation of falling action and the final stage in the dramatic structure of story, the resolution, into one continuous event. The winding-up of the whole AEE experience is the theme of the next section.

7.1.3 *After: resolution*

The phase of resolution pertains to the period when the hands-on artmaking itself is completed, but the participants are still together and share their reflections on the meaning of the experience they went through. The participants of lines of the hand have written and presented their haiku poems to each other, the little-me making sculptors have opened their eyes and look at their own and others’ clay figures. And the wildpainters put their resulting canvases up for display and have a last group-wise review. At such moments I am inclined to believe I’m witnessing a sense of catharsis, at the moment that the process is coming to its end. In the analogy to dramatic plot, there is a release of built-up tension and anxiety. The French word for this act is *dénouement*, which is derived from *denoer*, “to untie.” The complexities of the plot are unraveled, and the mysteries come to a solution. In my analogy here, I see this phase as a preparation of the participants for their re-entry in their day-to-day world, and of anticipation on how the experience and possible lessons can be integrated in the further unfolding of their lives. In a rite of passage, this would be the ambiguous phase of liminality, where the initiate is outside of society, but where he or she, at the same time, is also preparing to re-enter it (La Shure, 2005).

There are similarities here as well with the notion of closure, which, in psychology, refers to the moment when a particularly intense experience in a person's life is brought to a conclusion.⁷¹ Closure happens when a person comes to understanding and meaning is created. Such a state of attaining a sense of completion is reminiscent of Robert Pirsig's notion of the fixing of fleeting dynamic quality into static patterns (cf. section 2.8.3). John Dewey (1934/1987) speaks of the *consummation* of experience: its fulfillment, culmination and completion. Not just any experience, but *an* experience is integrated. When we have completed a work in a satisfactory manner and the activity thus comes to a close, this is not a cessation but a consummation: "through successive deeds there runs a sense of growing meaning conserved and accumulating toward an end that is felt as the accomplishment of a process" (p. 40). Dewey underlines that the "taking in" of any vital experience involves more than placing something on the top of consciousness over what was previously known. Necessarily, it involves reconstruction, and this may very well be a painful phase.

As I noted before, this transformation is not always bound to happen. When facilitating wildpainting, I noticed that participants often appear to be eager to return to the "safety" of painting in the way they were accustomed to. They may have set out to apply patches of orange color when making an effort to paint the bluish sky in its complementary ("wrong") color, or they may have painted areas in red when they looked for the most opposite color to the green of the trees. When this is completed, however, several participants are inclined to cover up this first layer of "wrong" colors completely with the "factual" colors that they attribute to the landscape in front of them, thus effectively eliminating the dynamic that their prolonged interplay may have afforded them. The dramatic tension, with which they struggled in the previous phase of confrontation, is resolved by eradicating the disturbances. Hence, I often make photos of their artworks at different stages in the process to show them later how they slowly resumed following more conventional patterns (cf. fig. 16). On the other hand, some participants also ponder upon the lingering sensations, and some suddenly discover something new. As I noted in the previous chapter, many participants report that the process helped them to see the interacting of colors in a new way. They have struggled and the reward to them is the discovery of some of the potentials of color, and their own ability to work with these. More than one participant who at the beginning of the course said that he or she could not paint ended up painting for long stretches of time, sometimes even without wanting to stop. Participants in lines of the hand were repeatedly amazed about how they could be enticed to engage with their own imagination and storied memory of sensorial experience in ways that they would never do out of themselves: like **Mabel**, who said after a session that if she wouldn't be sitting there in this circle with other people, she would never con-

⁷¹ Looking at it more comprehensively, it can be said that a person in need of closure has a desire in some way for a firm solution as opposed to enduring ambiguity. This need may be different for different people and in different situations. Typically, when we experience tension, we tend to drive towards its resolution. The pleasure that tension may give us is the anticipation of closure, in the hope we may close the doors on the confusion of the past.

template doing such a thing on her own accord. And **Robert**, the participant whose experience with little-me making I highlighted in a narrative account, reported that a lot had happened to him during the process and that he, like **Mabel**, probably would not have the feeling that he was able to do it if he had not immersed himself physically in undergoing the process.

My hunch is that the dynamics of closure and integration, for a major part, are bound to take place some time after the actual experience, when it has had a chance to sink down and when there is more room for private, detached reflection. On occasion, especially with the little-me making, participants report to me that its impact unexpectedly stayed for some time with them. At any rate, it should not be ruled out that transformative impacts may manifest themselves even long after the actual art-making experience has taken place; they can remain dormant or latent, as it were, until they are evoked by a context or situation giving cause to it.

To me, that part of the phase of resolution where the whole group is still present is an integral part of the AEE activities that I facilitate. It would not only be incomplete to skip this part – thereby not offering the full experience – but it would also be unwise. The participants have dwelled in a liminal space in which the new could manifest itself – be it in the form of epiphanies, feelings of frustration or paradoxes. Exactly because of this non-habitual state, they may also lack the tools to make meaning of what they experienced, and perhaps even more so, be deprived of an ability to integrate that meaning-making in their regular life.

7.2 Discussion

In my first research question, I inquired what is distinctive in the process of the AEE activities that I facilitate. I was interested to find out which elements I could distinguish in such a process and what participants would tell about their experiences in each of these. In this chapter I used the dramatic structure of story as a heuristic device to differentiate between phases in the unfolding AEE activity. I believe there is a meaningful analogy between the archetypal structure of drama and an AEE process, as similar successive phases can be distinguished in both. The trajectory leads from the run-up in the exposition phase, to the middle part of the confrontation (with its potential peak moment of transformation), to the “unting” of dramatic events in the final *dénouement*. My findings suggest that the set up phase requires specific attention and an appropriate amount of time, as participants are not readily attuned to a “surrender” to the imminent dynamic art process. The activities that participants were immersed in prior to engaging in the AEE process inevitably cast a shadow and have their impact. Therefore, it seems to me that participants need – in one way or the other – to pass a sluice or threshold before they can feel at ease and are confident enough to leave the autopilot mode of their habitual ways temporarily aside. In the AEE activities that I facilitate participants often have no idea on beforehand of what may happen, a circumstance that I refer to as “open-endedness” in the process. To

enhance the participants' propensity to face this uncertainty, it seems helpful to create a situation in which the ordinary world is defamiliarized. Through the catalytic element of estrangement, habitual ways are of less use to the participants and the best recourse available is to be open and vulnerable to the new. I found that this element of the process has much in common with rites of passage in indigenous cultures. The moments of epiphany that participants may experience in this space – *if* they happen – can be understood as dynamic instances of transformation, which the participants then later need to integrate in already established (and therefore more static) patterns of understanding. As a mirror image to the attentiveness that the preparatory phase requires before the actual artmaking is set in motion, I found that it is equally important that the new experiences are reflected upon together – in evaluative or reviewing sessions – and an effort is made to integrate them in a meaningful way into whatever may follow after the AEE activity is completed.

Another way of stating this is that engaging in the full intensity of the artistic activity may cause participants – dwelling in the eye of the storm – to experience a profound sense of uncertainty. Such a state of temporarily residing in a state of being “betwixt and between” can have a deep impact as several of them have testified of. This circumstance brings along a critical responsibility on the part of the facilitator, demanding from him or her to safeguard that the phase of preparation leading up to such a potential apotheosis and, afterwards, the phase of seeking to regain balance and integration of the new, are shaped and guided in the most adequate manner. This will be the theme of the next chapter.

8. Facilitating AEE activities

No man can reveal to you aught but that which already lies half asleep in the dawning of our knowledge. The teacher who walks in the shadow of the temple, among his followers, gives not of his wisdom but rather of his faith and his lovingness. If he is indeed wise he does not bid you enter the house of wisdom, but rather leads you to the threshold of your own mind.

Kahlil Gibran (1923/2006)

This chapter tries to address the question what the specific competencies are that can be identified for a facilitator of AEE activities. If we keep the analogy between an AEE activity and the fundamental structure of drama up a little longer, we see that the facilitator shares remarkable characteristics with the figure of the protagonist's *Mentor* in storytelling, who often is a wise old man or woman. This common theme in mythology, says Christopher Vogler (1992), is rich in symbolic value and stands for the bond between parent and child, god and man, and – relevant for my purposes here – for the relationship between teacher and student. The function of the Mentor is to prepare the story's hero (in my analogy, the participant) to face the unknown – through advice, guidance and/or equipment. Importantly, “the Mentor can only go so far with the hero. Eventually the hero must face the unknown alone” (p. 22). To me, the facilitator of AEE activities shares some basic characteristics with this mentor figure.

So, then, what *is* the role of this facilitator? Asking the question this way gives, at best, an incomplete picture, if we are to agree with Gregory Bateson that we live in a world that is *only* made of relationships. Most often, in our Western world, we try to attach causation to an individual. This is the way we are *trained* to think, as Bateson's daughter Mary Catherine explains in the film *An Ecology of Mind* (2010). Later-on

in the same documentary, Gregory Bateson remarks that if one is going to study the role of a certain person, say, a doctor in a family setting, doing so would breach a holistic structure: “A role is a half-assed relationship; it is *one end* of a relationship. You cannot study one end of a relationship and make any sense. What you will make is disaster” (G. Bateson, cited in Bateson, 2010, my transcript). Heeding this warning, I will engage in the autoethnographic analysis of my “role” as facilitator with some caution, and try to foreground its relational dimensions in and through my interactions with the participants.

There is, from the very outset, and for each facilitator of an artistic group process, an interesting dialectical tension between two forces. On the one hand, there is the urge to actively interfere in and influence what will happen in a session and, on the other, the wish and need to “step back.” I see my own contribution as facilitator ideally as that of a catalyst which brings about the optimal conditions that, in their turn, enable participants to engage in their own artistic process. A metaphor I sometimes use to illustrate what I mean with this is that I, in best cases, are able to assist them in “opening a window” inside themselves of which they were not aware that it was closed. When this happens, I can indeed withdraw or take distance from the scene, thus allowing for the experience to be one that stems from and provides meaning to the participant concerned.

This position, however, should not be misunderstood as negligence or lack of interest but rather one of practicing a paradoxically sounding *active non-activeness*. For participants who engage in making art, there is a continuous interplay between the creative and the receptive, the two oscillating currents that feed each other. I believe there is an analogous calibration between “active acting upon” versus “stepping back” on the part of the facilitator during an AEE activity (cf. section 2.8). Just as this is the case for the participants, also for the facilitator there are different moments when intervening – or, conversely, *refraining* from action – will need to get more weight.

My experience has been that in the preparation of the activity most attention my will tend to go to the design of the encounter (“setting the tone”) and to making an effort to anticipate what may happen in its execution. Once the AEE activity is underway, the focus will be more on the facilitation itself, on finding ways to best encourage the participants to engage in the process as fully as possible, to accommodate for unforeseen circumstances, and whenever necessary to develop a new plan forward. When the artmaking process reaches a certain intensity and starts to attain its evocative dimension (where new meanings may start to manifest themselves to the participants), the facilitator can step back and thus switch from acting upon to letting go, thereby retaining a state of “active passivity” (or *wu wei*, as it is called in Taoism), intervening only at those moments where he or she deems it is really desirable. I will return to the notion of active non-activeness in section 8.5.

In the course of facilitating numerous AEE activities I learned that for me as facilitator an important value resides in approaching the upcoming artistic process in a state of mind where oneself is “on the edge.” What I mean with this is that I strive to retain a sense of freshness to what is going to happen, looking for a somewhat differ-

ent point of departure, a new setting, or searching for novel elements that might be included in the activity. This improvisational aspect – this time on the part of the facilitator – brings along a certain excitement, which I believe is mirrored by a coevolving curiosity among many of the participants: they observe this sense of excitement, of looking for something new, a thing not done before, and it seems to ignite their creative energies as well.

An example of this is when I introduced the drinking of a cup of water as a new element in a little-me making session. I asked participants to do this precisely at the moment when they were about to sculpture the neck of their little-me. As we saw, for one participant, **Bjørn**, this instance of drinking water exactly at that time turned out to be a “doorway” before proceeding with the next phase of the sculpturing which was the molding of the head. He referred to it as “a reverential gesture” – a meaning that I had not come upon myself previously but which I consider as very appropriate. My aim was to facilitate an experience of attentively becoming aware of the water entering one’s bodily system at the very point in the sculpturing where one is making the organ that does the swallowing; however, this interpretation to me is a valuable enrichment. For me it is an “emergent property” that evolves out of doing the activity with engaged participants, which cannot be planned for on beforehand.

Not everyone appreciates this “improvising-as-we-go-along” on the part of the facilitator. I have noticed too that for others such a mode of mentoring the process primarily seems to create feelings of anxiety and frustration. Some people may take it to be an indication of a totally unstructured, sloppy, “anything-goes” educational activity, and consequently interpret it as carelessness and disdain for the participants. Yet, from my perspective, in truth the *opposite* is the case: most often, the activity *is* highly structured in its seemingly unstructured character. The circumstance that there is hardly any prescription and explanation provided to the participants on beforehand is neither neglect nor disregard; the underlying intention, rather, is to not take the space on beforehand and to allow instead for a full evocation of the creative potential they may carry themselves as practitioners.

A common denominator in the AEE activities that I facilitate is their partial open-endedness. I intentionally leave at least part of the outcome open, so that it will be informed by and given shape through the participant’s own encounter with the natural world in its widest sense, including his or her own body and storied memory of embodied sensory experience. I believe the circumstance of me as facilitator not-knowing fully what the outcome will be reflects back on how the participants engage in the activities.

8.1 Handling open-endedness in an artmaking process

One of the remarkable things that came forward in the interviews with participants in little-me making on the island of Gotland is that there is a clear difference in people between those who would have preferred to get clear instructions about what the

activity would be about and what its relation with AEE is, and those who liked the fact that we “jumped right into it,” as it were, without any of them having a clue about what is going to happen. Below are some quotations that are illustrative. Co-teacher **Hanna** expresses disappointment about the lack of prior information: “I liked it. But what I missed was the introductory things. It would have been good to hear what environmental art is about, a short introduction. It might have helped me to orientate myself if I had a little backing and information. What is the point of these practices? The body, movement, how important are these is when you define arts-based environmental education? It should be a small introduction, but not too much, to leave it open.” Student **Bente** adds: “I felt a little bit a sense of frustration. How long is [the AEE activity] going to take, five minutes or five hours? It doesn’t have to be so precisely, but, with that, I can relax in the situation.”

Just as well, there are also those who enjoy the *not-knowing*. Participant **Britta** recalls her eagerness to get going at once: “It felt calm, full of expectation.... I like it when you do things and you know: *now it is starting!*” And **Petra** says, similarly: “It was exciting to start. Let’s go see what we do with the chair. Something new, unexpected.”

These different responses to the way the assignment is initiated – on the one hand the people who like to have the purpose of it clearly spelled out on beforehand, and, on the other hand, those who enjoy the excitement of not-knowing – form an important aspect of the first phase of the AEE activities that I facilitate. To what extent does one need or want to accommodate for these different ways of entering into the forthcoming activity?

In this context, the differentiation that Sandra Seagal and David Horne (2000) make between types of personality dynamics seems instructive. Their theory of *Human Dynamics* allows them to identify fundamental distinctions in the way people innately process information, learn, communicate, problem-solve, become stressed, maintain health, and in general advance along their path of development. Seagal and Horne have explored three (what they hold as) universal principles – the mental, the emotional and the physical – which combine in a dynamic interplay to form each person’s distinct way of functioning. They have found that some people function as “mentally centered” systems, some are “emotionally centered,” while others are “physically centered.” The personality dynamics of a person are hard-wired according to the two researchers – they don’t change when growing up from child to adult. In *Every Child has Specific Needs*, Berit Bergström (2004) points out how relevant it is for a teacher to have a keen eye for the way in which these principles are operative in people:

Some of us like to start by seeing, preferably reading information, before moving on to discuss what we have read. Others prefer to begin by listening to someone talk about a topic, which makes them interested in going to read about it. Yet others like to start by being in a situation, experiencing something tangibly, and then moving on to more abstract tasks. (p. 20)

A mental-physical child, in this typology, needs to carefully consider everything before it is able to take on an assignment. People with this personality dynamic – children as well as adults, for the principle is said to remain unchanged through life – never heedlessly throw themselves into a task. They first have to be certain *that* they can do it. The mental-physical child grounds its actions preferably on the most factual data it can get. They want to know how things fit together and work. Thus, it is vital that teachers are “as exact and clear as possible when communicating with such children. The meaning of each word is crucial” (p. 67). Similarly, for physical-mental persons, the close association of the physical and mental principle causes them to perceive their surroundings in a tangible and realistic conceptual way. Bergström points out that it is important to these types of children that plans are made and that these are also completed, since changing a plan can create difficulties for them. They need a structure with a specific purpose for what needs to be done, and this can make it difficult to deal with surprises. “Unless you clarify the purpose, the child may not be able to enter a state of mind receptive to learning” (p. 58). Physical-mental children need clear and applicable instructions. And then there are also people who like to start as quickly as possible, sometimes even before the instructions are finished. This seems to be the case with the emotional-mental and emotional-physical persons. As said above, the emotional principle is related to our interactions with others; it gathers up the world of feelings, our own and others. In their personality dynamic, the emotional principle is the central one. An emotional-mental child, says Bergström, likes to toss around ideas and quickly jump to action. It is a “pioneer on the untrdden path” (p. 35). It will tend to hurry to reach its goal and leave the finishing touches to others, for there are always many new and exciting things that can be done instead.

In the context of my discussion of process in AEE, it is important to acknowledge and underscore that there can indeed be very different ways in which people approach the activity that they are invited to join in, and Human Dynamics seems to offer me a plausible angle when trying to get a better grasp of how these differences act out and how I can respond most adequately. In my case, several participants in little-me making for example indicated afterwards that they would have appreciated an explanation or at least an introduction at the beginning, like **Frederik**: “I expected to be guided. Not in detail, but at least the title, the kind of thinking behind it.... Then it is easier to connect.... If you are more prepared you are more aware of what you should pay attention to.” Co-teacher **Hanna** provides me with the following feedback, pointing in the same direction: “For some people it is easy to find a red line, for some it is not. If some people are hesitant, then you could say: ‘I see it so. You could say then why *you* have selected this. And then they could say: ‘OK’ and they look themselves for connections. Not feeding your opinion.”

Though differences in participants’ personality dynamics can be identified, it remains a question how one goes about addressing them. Should one’s approach be tailor-made to suit each participant’s individual needs, or is there value in practicing a way of facilitation that implies expressing and reaffirming the same attitude towards *all*? I believe in the latter. For while it is meaningful to be conscious of the way in which learners may respond to the activity on basis of their assumed personality dynamic – e.g. by trying to be prepared, as well as one possibly can, for expressions of

frustration or, conversely, of unrestrained eagerness – I regard it as important that each and everyone simultaneously meets a common frame of “rules of the game” that is established (but not necessarily completely manifest) at the start of the AEE activity. It seems to me that there is value in entering the process on equal (“beginner’s”) terms, shared with the rest of the members of the group. Together the participants set out on a journey, co-evolving in a learning experience in which all are basically ignorant about what is to come.

When one leaves an art activity unstructured, one could say that one’s aim is not that participants work towards a prior determined outcome. In that sense it is, what I have frequently called here, open-ended. This open-endedness I now want to break down into two distinct types: framed and open open-endedness. In a paradoxical *framed* open-endedness, the goal of the activity is clear and anticipated from the outset by the facilitator, and in that sense it is closed (and only has the *appearance* of being unstructured). The open-endedness resides in the wide range of directions in which the artmaking process can involve within the parameters set by the facilitator (this is the open aspect of it). All three AEE activities that I facilitate are examples of this. By way of illustration: in the case of the making of little-me’s the persons partaking in the activity are told at the start that they will be sculpting a miniature version of their own seated body, but they have no idea yet how it will be to do this in practice. Whereas, as their facilitator, I have a fair sense of the likely outcomes that are to follow, based on my acquired experience (though I may give the impression that there is an endless wide array of potential outcomes).

In the most radical form of open-endedness (what I refer to as *open* open-endedness) the facilitator is *just* as unaware of possible outcomes as the participants are, thus inviting for possibilism, in the meaning that Arne Naess gives to this notion: *anything* can happen! (cf. Whitaker, 2006).⁷² This form may be on the brink of inviting chaos and confusion, as participants may easily get a sense of a complete lack of structure and preparation.⁷³ At any rate, from my art teacher experiences with children, I recall that leaving assignments completely open usually does not tend to lead to an evocation of untapped energies or the unpacking of emergent properties. For the purposes of this thesis, however, I present open open-endedness mostly as a theoretical construct that allows me to articulate the relative degree to which open-endedness in AEE activities is actually framed.

In the analogy with the dramatic structure of story that I explored in the previous chapter, I noted that already in the phase of *exposition*, the participants get a sense of commencing something of which the outcome is unexpected: the purpose of the

72 Naess celebrates the open-ended nature of our daily lives. Devall and Drengson (2006) write about him: “As a possibilist he realizes that each moment is both great and deep in possibilities to be realized. We can make possibilities manifest by our own actions and choices.... We are limited mainly by our lack of imagination and by taking ourselves too seriously” (p. 6).

73 Interestingly, (and tellingly for how we relate to dimensions of “wild”), it is this what people sometimes expect when they hear of wildpainting: that it will involve a wild unleashing of creative Dionysian energies, along stereotypical ideas of the artist as bohemian and outcast, breaking with all social and moral conventions.

activity is not given away by me as facilitator, and they receive only some elementary information as to the “what, why and how” of that which is bound to happen. In this type of AEE I consider it important that –within certain parameters and rules – the process “decides.” It can happen that in this dynamic interplay between the participants, me and the environment in which we find ourselves, new potentials open up in the encounter, and that is where it can happen that momentarily a form of open open-endedness sets in. By way of example: when I facilitated a combined lines of the hand and little-me making session with Reggio Emilia pedagogues on the island of Kuusiluoto in Helsinki in 2008, I decided on the spot that I could take the process a step further. As I described at length in section 6.2, I commonly invite participants to imagine themselves as being in a landscape formed by the drawn lines of the hand of another participant. This time, however, I added to this the suggestion that they would afterwards try to respond to the other participant’s rendition of being in that landscape by composing a haiku. Ever since that moment, the creating of a small poem has remained an element of the overall lines of the hand activity. This attentiveness to the potentials one has with a given group calls for a certain flexibility on the part of the facilitator, him or her being able to open up to such possibilities and to shift the process accordingly.

In this context it may be meaningful to elaborate a little further on the meaning of the notion of improvisation. One could argue that even (or *especially*) in improvisation some sense of framing or imposition of rules is necessary, to allow for maximum freedom within those. This point is made, amongst others, by jazz improviser Keith Jarrett, who, in the film *The Art of Improvisation* (2005), says the following about working with his colleague musicians: “[They] will not hesitate to follow something if it is in the zone.... If what’s happening is in the zone, they’ll go there.” In colloquial understandings, the idea of improvisation evokes associations of mystery, of embracing of the unknown. Sam Y. (2011) states that a common misconception about improvisation is that one first needs to learn the rules, and then one can break them. But he holds that this is actually not the case. Rather, it is learning all the rules and concepts, and then improvising on how to apply them. One would never break the rules. Improvising is figuring out all the other ways to apply a rule without breaking it. In a similar vein, Stephen Nachmanovitch (1990) suggests that improvisation can convey the same sense of structure and wholeness as a planned composition:

It is sometimes thought that in improvisation we can do just anything. But lack of a conscious plan does not mean that our work is random or arbitrary. Improvisation always has its rules, even if they are not *a priori* rules. When we are totally faithful to our own individuality, we are actually following a very intricate design. This kind of freedom is the opposite of “just anything.” (p. 26)

One could make the case that the same holds for *any* play activity – at least that is what Johan Huizinga (1944/1980), author of *Homo Ludens*, suggests. Inside the play-

ground, says Huizinga, an absolute and peculiar order reigns. Moreover, play “creates order, is order” (p. 10). For the Dutch historian, this profound affinity could be a reason why play seems to lie (to a large extent) in the field of aesthetics and has a tendency to be beautiful. Huizinga goes on to note that all play has rules which determine what is permissive in the temporary world that is circumscribed by the play. Rules are so important and present that one can say that as soon as the rules of the game are transgressed, there is a collapse of the “play-world” – Huizinga’s term for the fragile magic circle that the players constitute together. The participants generally have a feeling of belonging to a play-community; there is a shared feeling of “being ‘apart together’ in an exceptional situation” (*ibid.*). Something is shared and the group temporarily withdraws from the rest of the world. The usual norms are rejected. All these circumstances together bring along, according to Huizinga, that the group feeling retains its magic even a period after the game has ended. In play, the ordinary world is temporarily abolished: “We are different and do things differently” (p. 12). Inside the circle of play the laws and customs of the rest of society no longer count. Perhaps the rules in improvisation and those in play, as understood by Huizinga, are similar to the kind of framing that a facilitator provides to an open-ended activity.

The importance of creating the right context (the appropriate zone) for an artistic process to take off is well-articulated by Lars Krantz, a Swedish teacher in horticultural design. In an interview, I asked him to comment on the value of open-endedness, of *not* knowing the outcome on beforehand, in his own field when working with students. This is what he answered me:

A seed is the screenplay to a drama; there is an image that is planted in the soil.... A major part of the farmer’s art is that one can only to a certain extent influence the result. You don’t really know. But there is an image there that will manifest itself in quite different results, depending on how the outside world – sun, rain, fertilizer – simply meets this seed image – the script, so to speak. I mean, it will *always* be a marigold, but it will appear in many different ways. I believe respecting the different ways that a marigold may look like is essential when talking about the processes. I notice, as a gardener, that people often say that they grow flowers or vegetables. But they grow *neither* of them. They grow *space* for flowers, a *place* for vegetables. It creates the preconditions, a cultural environment. (L. Krantz, personal communication, February 18, 2010, my translation)

To me, part of the quality of open-endedness is connected to the fact that the materials that the participants use are very basic (except perhaps for the acrylic paints in wildpainting) and thus allow for multiple uses – they involve a lump of clay, a piece of paper and pencil, some paints, and that is all. What I thereby implicitly communicate is that the quality and intensity of an experience of artistic engagement – or, for that matter, any deep experience at all – is not a function of the exquisiteness and complexity of the tools or working materials. It is a cliché, but the elementary nature of the materials I use can be seen as an genuine example of “less is more.”

Another dimension of fostering open-endedness for me resides in determining the exact content of the activity only in the last instance, thus being more “on the edge” and dwelling longer in keen excitement about what *may* happen. In that mode, one can take factors into play such as a subtle change in the weather, or intuitive perception of changes in mood and concentration in the group. It may also entail having an open eye for affordances (Gibson, 1979, cf. section 2.4.2), those elements of the place or landscape that lend themselves to be used in the artmaking activity. One thus improvises at the spot, as it were, with all the “loose parts” that are available.⁷⁴

8.2 The tightrope between control and letting go

However, we should bear in mind that a degree of mindful directing (or, alternately, of purposive steering) of the artmaking session seems inevitable. In my discussion of improvisation above, I noted that some frame of rules, or perhaps of something as subtle as an implicit, tacit demarcation of a shared “zone” (as Keith Jarrett called it) is indispensable. Otherwise put, the *absence* of such a context does not enhance the full maturation of improvisational qualities but rather seems to subdue them in presenting the participant with too many options (cf. Nachmanovitch, 1990; Peters, 2009).

Part of fostering an undetermined outcome is that I tend to leave the instructions before starting a session to a minimum, preferring not to explain on beforehand what the purpose is of what we are going to do. I presume that the meaning of the activity will manifest itself along the way, most likely in a different manner to each and every individual participant. I attempt to avoid, as much as possible, a “filling it in” for them. Another aspect of allowing for open-endedness is that the facilitator refrains from asking leading questions which already solicit certain types of answers, thus augmenting the ability of participants to dwell a little longer in a liminal space of uncertainty than they may be accustomed to from previous experience in other educational settings. Yet, at the same time, I don’t want either that participants have a sense of being cast out into chaos without having any clue about what is happening. It requires effort to strike a proper balance.

A good example of how this walking on a tightrope between control and letting go is played out can be found in the unfolding of a wildpainting course. Here, on the first day, participants engage in what are, in effect, highly structured and disci-

⁷⁴ The notion of affordances can thereby even be stretched from the spatio-geographical domain (the natural objects and processes, the types of landscapes, etc.) to other spheres such as the temporal and the meteorological: tuning in to the possibilities that a certain moment or time of the day, combined with a certain type of weather, lends or impedes. The same holds for loose parts. On an elementary level, it are for example the stones, twigs, acorns, etc. that can be found in the woods, but on more inclusive levels, I would hold that these may also include parts that are found at a microscopic scale (e.g. insects and fungi), and those on a macrocosmic scale of landscapes and ecosystems. Turning inward, these potentialities may encompass the corporeal world of our organs and bodily functions in general as well.

pline-based exercises of blending colors – which is seemingly totally in contrast with the “wild” pathos of the course. Would it not be better for the facilitator to take the participant’s primal intuitive sensitivity to the experience of color as starting point? Perhaps. My reasoning, however, for commencing the course this way is that I have experienced as art teacher previously that presenting participants with the full range of color options to choose from does not necessarily bring about a meaningful or aesthetically interesting artistic process. Rather, I have come to learn that such “freedom” tends to lead to even more hesitation before starting to make art at all and, once these inhibitions are overcome, to difficulties in handling the material. In a situation where *anything goes*, colors are often mixed too rigorously, leading to “dirty” brownish and grayish hues. Paradoxically, the degree of open-endedness can be regarded as a function of the imposed rules and restrictions in which qualities of “wildness” can flourish.

Art educator and Reggio Emilia pedagogue Vea Vecchi suggests that “a color is not a color if it does not possess an expressive identity.” She tells of a three-year old child who, when painting, says that “orange is a laughing color,” or of a toddler of two-and-a-half that gets excited by a drip of blue paint that is rolling down a sheet of paper, “Look!” the child exclaims. “Look what this blue is inventing!” For Vecchi (2010), these are expressions of the poetics of color and of their evocative and expressive power: “It is no small thing, believe me.” And then she goes on to say:

But what usually happens? Colors grouped together in elementary ways, without distinguishing quality or shade and no care taken.... Or children are given the opportunity to discover that together red and yellow make orange, red and blue create purple, yellow and blue make green, in the belief that this constitutes a vaguely scientific, easily reproducible technique, giving simplified, uninteresting information that lacks the wonder of discovery and immediately sets up elementary, simplified categories – reassuring for some – where the extraordinary and *subversive* vitality of color is imprisoned. (p. 30)

Perhaps, in my own facilitation, I at times also extinguished the fire of wonderment in the course of some of the wildpainting sessions. Possibly, through my structured phasing of the process, I incarcerated the life force of colors, or may have limited the participants’ possibilities of experiencing the power of color themselves. After a one-day wildpainting session out in the forest, one of the participants, **Eliza**, provides the following criticism in a one-to-one conversation with me, questioning the presumed “wild” character of the activity. The following rendering of her words is based on my quickly scribbled notes afterwards:

“To me, in fact, it was not left open *at all*; it felt very much like the teacher had certain expectations that we needed to meet. It was not wild, but very prescribed. When I got stuck and frustrated, you should have inquired more what I wanted to do *myself*, rather than trying to get me into the preconceived idea

again. It is telling to me that you called it an *assignment*. It was like being back in the schooldays. To me it felt a bit like when I made a painting as a young girl: if I would get frustrated, my mother would often finish it for me.

I figured you wanted me to do everything in the opposite colors, which I tried to do, and then for me the opposite for the color of the dark water was yellow. But it was unclear what to do next. You said that in my painting I should aim to “dance with the trees,” which I tried to do, but you say those kinds of things and then walk away to the next person. I just didn’t know how to proceed.”

Here my application of rules to frame the improvisational activity may have tipped over into its harnessing, at least from **Eliza’s** perspective. Summarizing, it is clear that there can be significant differences between participants regarding the extent to which they want to have the artmaking activity structured on forehand or not. They are unlike in their ability of undergoing and handling a new experience unprepared. The same holds for the opposite: some find it harder than others to overcome a (for them paralyzing) feeling that I, as facilitator, have *over*-prepared the activity for them.

Leaving them in the uncertainty of what it all is about can be very challenging, both to the participant concerned and to the facilitator. In the following, I first focus more closely on what it takes of the facilitator to be able to handle this radical openness to a fluid process in an ongoing AEE activity.

8.3 Withholding judgment, holding the space and bearing witness

The often troublesome dilemma if (and when) a facilitator should intervene or should better refrain from action, comes forth *because* of his or her presence in a real, ongoing, and – due to its relation with artmaking – extremely dynamic situation. Phenomenologist Hubert Dreyfus (2001) holds that when we teach in real presence of learners – instead of, say, presenting a prerecorded lecture on a screen – we share a world together and in this situation something is *at stake* for its participants. Ideally, all participants allow for a degree of vulnerability, and thus effectively take a risk. This risk entails that one may come upon a certain understanding that was not given on forehand. Education, in Dreyfus’s view, is not the transfer of information and the rules according to which this information should be processed. In essence, education is a situation in which something is of concern to us, namely, the potential of acquiring new insights, which may or may not come. The endeavor may also fail, as the outcome is not given. Both teacher and learner have to do their best, precisely because something is at stake to both of them. To develop learning skills – motor and sensory abilities – humans require embodiment, being present with things and with people in order to learn. In a learning situation, people are actually and actively present to one another, and this is an essential factor, according to Dreyfus, for the learning process to come about. Irrespective of the context, people and things must matter to us in

order that we learn; moreover, our involvement with people and things *determines* the ways in which people and things are meaningful to us. This view has implications for the position of the facilitator. For him or her something is at stake as well: “[I]f the teacher shows his involvement ... and emotionally dwells on the choices that have led him to his conclusions and actions, the students will be more likely to let their own successes and failures matter to them” (Dreyfus, 2001, pp. 38-39).

Part of fostering such a learning environment, to me, is to encourage participants to embrace a mutually respectful attitude, as art educator Peter London pointed out to me. He taught me that it is extremely important that a facilitator, already at an early stage of his or her interactions with participants, encourages them to withhold or at least suspend their judgments. Ideally, they should avoid praising or criticizing each other's work, and instead put their efforts into providing a welcoming space to whatever the other would want to share (if and when the latter has the inclination to do so). At Schumacher College, London asked us (i.e. the participants in the course *Art in Place*) if we, during the week, would hold back judgments of good and bad: “When we use old criteria, then only the old will be good. There is no opportunity to explore the features of the emerging new. Try to be indifferent to: ‘I like it – I don't like it,’ because if you approach it that way, you will veil it with your opinion” (P. London, personal communication, September 25, 2006). In practicing such an attitude, the specific circumstances of the situation of course play a key role as well. E.g. the aspect of having one's eyes closed while making the little-me's leaves participants no other choice than to withhold judgment of one's own work as well as the work of others – at least for the time the evaluative eye is kept shut.⁷⁵ In essence, an AEE activity, as I see it, is not about who manages to make the most aesthetically pleasing or naturalistic artwork. Rather, it is about approaching the world anew with the help of art, through a process of making connections, discovering patterns, finding analogies, and using the senses. The impact of the AEE activity, it seems to me, is often correlated to the extent to which the facilitator is able to “step back” and open the floor, thus holding the space for the participants. For London, the difference between conventional and holistic education is that in the former, learners often get a sense that they are lacking something, that they are somehow insufficient: “There is a distance between one's ‘poor self’ over here, and the accomplished thing over there.” In holistic teaching, by contrast, “you know already what you need to know to become that accomplished person. It is not about adding, but about *revealing* qualities that you have and which up until that point are not brought to bear” (P. London, personal communication, September 25, 2006).

When I meet Peter London again in New York, six years later, I ask him if he could comment on my rendering of the particular experience with **Anne-Lene** (see

⁷⁵ For art educator Lisa Lipsett (2009) there can be intrinsic value in keeping one's eyes closed while making art: “If we can't see what we're doing, then judgments soften and expectations fall away. Other senses kick in and we pay more attention. We can move beyond surface details and seeing Nature as simply another pretty picture” (p. 39).

narrative account in section 6.1.4), who, during one of the wildpainting sessions, ripped her own artwork apart before completing it. This is his thoughtful response: “When she destroyed her painting, that may have been a piece of genius. Unless a thing dies, there is no room for anything else.” If Medievalism for example did not die, there would be no room for the Renaissance. According to London, this is part of all the great mythologies. The withering of the old is necessary to make room for the new.

A crack is needed in something. It is a rigorous thing, for if you destroy what you have made, it is an injury. But injurious in another way. It is about knowing what it was like to be an adolescent again: to create something on your own without your mom and dad attending. It is not necessarily just about *adding* to the person you already are, but rather to make a turn around the corner. It is the dance of Shiva. (P. London, personal communication, March 2, 2012)

London learned it the hard way himself when his painting teacher, many years ago, said to him, “What you made is a nice painting, but it is not art. I ask you to have the courage, the audacity, to destroy it.” At that point in time, London had several years of practice behind him in how to create, but no practice in how to destroy. Nevertheless, learning to do exactly this was necessary too, he says: “An artist does *both*.” Out of the ashes of the destruction the new may arise. For one doesn’t stop at the moment of destruction, but one then makes a new thing, based on everything one knows at that point in time in one’s life, as both a creator and a destroyer. But in the new thing one makes, one uses elements of what was there earlier. Most likely, London asserts, in the new thing there will be something that acknowledges the journey. He adds that he nowadays only rarely employs this in his teachings, because he has found that people need to recuperate from such an intense experience: “If one is working with a class, one needs to build a supporting zone, a community, that is strong enough. Then it can be done, if there is sufficient time.”

Returning to the narrative account on **Anne-Lene’s** experience, London makes another observation. In the art activity that a teacher facilitates, it can happen that suddenly a trauma comes to the surface. In such cases, the teacher is also responsible to attend to the wound before the person concerned leaves the artmaking session. “To do otherwise would be unethical and unprofessional. If one invites for vulnerability, one stays with the person concerned long enough until that wound has sufficiently healed and the group or the person can go on independently of the facilitator.” What often tends to happen when a participant comes across something that is profound to him or her, London noticed, is that an “autonomous process of self-regulation” takes place. When such a situation arises, “the idea is not that one weakens [one’s presence as facilitator], but rather that one gets out of the way.” (P. London, personal communication, March 2, 2012). For him, holding the space boils down to this: “When someone has something important to say, just listen, don’t flee. Don’t help him or her out of it, just listen. Don’t judge. Be patient. For if one would push, a healthy person would choose to retreat” (P. London, personal communication, September 25, 2006).

When I share Peter London's comments on the case of **Anne-Lene** with Meri-Helga Mantere, she agrees that in some cases the destruction of an evolving artwork can lead to something new:

It is not necessarily negative; it can be liberating as well. But it is hard to generalize about this. It depends so much on the person concerned! One never knows what people have with them when they come to an art course. Each brings their own history and experience. One has to keep in mind however that an art course is not an art therapy session. When people come to an art therapy session there is a prior agreement on what it is about. On beforehand one asks the participants to acknowledge that something unexpected may come up. One uses the art to explore some of the inner levels. In an art lesson the focus is not on self exploration as in therapy but on making art.

I agree with the point of Peter London, that if *nevertheless* somebody gets into emotions that are hard to handle in an artmaking session, you stay with the person until he or she has found enough balance again. When it comes up in an ordinary art session, one rule of the thumb is to never psychologize but instead to stay with the artwork itself. It means that you discuss about the artwork, not about the artmaker. One could ask **Anne-Lene** for example how the work looks now when it is in scraps. Are any of the pieces interesting enough to use in a collage or something? Or you may suggest that she makes an abstract mosaic of pieces or that she preserves them in a portfolio. If she still wants to throw them away you accept it and stay by when she does it. And help her to start a new work if she wants to. If she does not, you accept that too. (M.-H. Mantere, personal communication, March 16, 2012)

I have experienced that in whatever kind of artmaking session, participants can at any moment (and often quite unexpectedly) touch upon aspects of their inner being that take them by surprise. This may even take place when a participant is engaged in the Goethean method of attending to a phenomenon "with new eyes," e.g. by making drawings of a certain plant and evoking its growth process through exact sensorial imagination. On the surface this may seem detached from the person's inner being, but my experience has been that even here some of the person's deeper levels may manifest themselves at unforeseen moments. A teacher trained in the facilitation of science education may not always be ready to respond adequately to this. In such circumstances it seems all the more important to me that he or she asks from the group to withhold judgments on each other's work – both criticism and praise, as the sharing of the image that is made and the words that are used to describe it imply degrees of vulnerability on the part of their creator which can easily be violated – even unwontedly.

When it happens that a participant is confronted with something that stirs his or her emotions in unexpected, surprising ways, it is important, it seems to me, that a facilitator responds as adequately as possible. Facilitators usually don't have a formal

training in art therapy. Not having the label of being a therapist is both a invigorating factor (as the relationship is not immediately defined by the context markers of “therapist” vis-à-vis “client”). In my view, the therapist insignia often is bound to define the relationship with the person seeking help. The circumstance that the latter enters the setting with a preconceived idea that he or she is going to meet a therapist is likely to qualify what is going to happen.

Conversely, the factor that an art educator/facilitator is *not* a therapist lends him or her a certain freedom of action. (And it remains the case that *some* therapeutic dimensions may manifest themselves in whatever artistic group process takes place, especially when it touches deeply upon the inner being of the persons concerned.) The difficulty could be that when participants in an AEE activity, through their art-making, encounter a troubling or unsettling part of their psyche and professional therapeutic intervention *de facto* is warranted, the art teacher then may lack the competence or not be qualified to provide this. The danger may be that in such cases the facilitator *pretends* that he or she is an art therapist and takes on that role out of a desire to help, without being trained to do this. **Bente**, a participant in a little-me making session, commented that, to her, it was first and foremost an exercise to connect one's senses to the environment, and thus it wasn't “art.” She added, however, that it doesn't have to be art to be useful: “You label it art, but I have associations with art therapy. I don't want to mix that with art. What one does in art therapy is different from what one does when making art. One has a different intention.”

Holding the space doesn't imply being disconnected or staying at a distance; a facilitator may interact so that participants are able to undergo more deeply what they are experiencing. As Chris Corrigan (2006) suggests in his *The Tao of Holding Space*, it is “the art of being completely present, and totally invisible” (p. 8). For him, holding the space is ultimately an act of courage and leadership, as it takes resolve to stand still and trust that the people with whom you are working know what to do. Paradoxically, when doing so, one may seem to act contrary to what a leader conventionally is called to do: “You invite rather than compel, cherish diversity rather than a single view, see clarity in the generative nature of complexity” (p. 70). Parker J. Palmer, in *The Courage to Teach* (1998), states that opening a learning space requires “more skill and more authority than filling it up” (p. 133). In essence, it entails an ability to “hear people to speech.” In making space for the other, being fully aware of his or her presence, one cultivates one's dexterity to listen to a voice before it is spoken: “It means not rushing to fill our students' silences with fearful speech of our own and not trying to coerce them into saying things that we want to hear. It means entering empathically into the student's world so that he or she perceives you as someone who has the promise of being able to hear another person's truth” (*ibid.*, p. 46). One bears witness to every aspect of the situation that arises, and this cannot be done, says Zen master Bernie Glassman (1998), from a place of knowing:

When we think we know something, we don't listen. We have to empty ourselves over and over, return to unknowing, and just listen. And listen. Listening means

seeing the ingredients in front of us.... If we can listen not just with our ears but with our eyes, our noses, our mouths, and every pore of our bodies, then we not only see all the ingredients in front of us, we are those ingredients. (p. 78)

Essentially, bearing witness, to Glassman, implies merging with an individual, situation or environment, thereby deeply taking in their essence. From this intimate knowing, a facilitator can then choose an appropriate response to the person or situation, which can also be, as said before, to refrain from taking action.

Part of the ability to hold the space is to respond adequately to expressions of fear about the artmaking process, especially by people who purport they have never done it before. In that respect it is remarkable that when participants work with clay in the little-me making sessions, they, in some deeper sense, *cannot* do it wrong, because it is not about whether or not the sculpture in the end is beautiful or is an anatomically accurate depiction of a human being. Because of this aspect, the threshold to engage in little-me making for participants is lower, I noticed, than the one they have to cross when they are invited to commence with drawing or painting. Also, due to the fact that the eyes of all participants are closed, there are no other people that could ascertain that one possibly isn't "succeeding." The inner fears do not seem to play out to the same extent as they could when a person would be painting or drawing with eyes wide open in the company of the whole group. (However, eventually, when the little-me's are finished and the participants look at their and other's results, they of course do expose themselves as well.) This is what Antony Gormley, the originator of little-me making, says about fear and working with clay:

When you give six-year olds a piece of paper and a pencil or a lump of clay, they don't think, they just *do*. They make something, they draw something. At a certain point in our lives, we begin to self-censor our expression in this area, an area which I believe is a fundamental human characteristic. We are *homo faber*, we are making bodies. We have bodies and we make other bodies. And we make other things. We make a world out of the earth. Curiously, very many people, after a certain age, they *stop*. They say: "I can't draw. O no, I don't do that." Even though we continue to speak, and we continue to walk, those things we learned as part of being human, and yet the making we forget. (Gormley, quoted in Cavén, 2009, my transcript)

In little-me making, one is expressing whatever one is feeling in one's body and, through that, one inevitably exposes oneself. Sometimes people make the belly very big and at other occasions people even make an open hole in their torso; they report feeling some kind of emptiness there. Because participants have their eyes closed they seem to allow themselves to be more open and vulnerable, they present themselves more transparent. In contrast, if one is painting, similar inner processes may be going on, but one is more able to hide these if one would want to. As an art teacher, I often come across people saying: "I cannot draw," or "I cannot paint." They feel that

they are incompetent. Because participants have their eyes closed and *everybody* is struggling while doing it, little-me making to me is an example of holding the space “in action,” as it enables people to engage in artmaking without being in a judgmental mode. If the small sculpture doesn’t look like the participant had hoped or doesn’t resemble him or her anatomically, and even if it collapses during its making or after it is visible to all, this doesn’t imply disqualifying oneself. For it is a genuine outcome of a process; it can be received as the result of a committed – and therefore truthful and authentic – effort that is carried out together with others. Again, the activity is not about who is most skillful, but about allowing the process to take one in whatever direction it does, whereby participants and facilitator together provide a safe space.

Research has shown that working in a garden can have a healing effect on people suffering from stress or trauma (see e.g. Kaplan & Kaplan, 1989; Ulrich, 1999; Stigsdotter & Grahn, 2003). Something similar is at stake, it seems, when they work with clay, and maybe this has something to do with the fact that this material comes directly from the soil, the earth. When we were children we loved playing with dirt. As humans we seem to connect immediately to that, somehow. Perhaps this is because from time immemorial our forefathers have worked the land? Clay is a very tactile material: using one’s senses, one touches earth. Maybe we have carried this with us – even across generations – as a sensorial memory of the body. Touching clay, is as much clay touching *you*. One feels its relative moistness or crumbliness directly. David Abram (1996b) describes how Merleau-Ponty, in his *The Visible and the Invisible* (1968), shifts his attention from the body to “the Flesh.” The latter encompasses the whole of the sensuous world, of which the body is but a single expression. For Merleau-Ponty, “Flesh” is both “my flesh” and “the Flesh of the world.” The sensible, for him, is both that which is sensed and that which senses: “Here [Merleau-Ponty] places emphasis upon the mysterious truth that one’s hand can touch things only by virtue of the fact that the hand, itself, is a touchable thing, and is thus thoroughly a part of the tactile landscape it explores.... [T]o touch the world is also to experience oneself touched by the world” (Abram, 1996b, p. 99). Abram goes on to explain that Merleau-Ponty coined the term *reversibility* to give expression to this reciprocal aspect that is inherent in all perception. This reversibility is expressed by Merleau-Ponty as follows, “I am the world experiencing itself through this body” (Merleau-Ponty, in Abram, *ibid.*, p. 100). What is found at every level of experience is an ongoing exchange between aspects of a single Flesh.

8.4 Patterns of relationships

I noticed an interesting difference between presenting a lecture to an audience and facilitating an AEE activity. With the oral presentation, participants typically tend to sit and conduct themselves as an audience does when somebody gives a lecture. What happens then quite naturally is that they shift to an “audience mode” of engaging; they behave as students are “supposed” to behave when listening to a teacher. But if they are encouraged to do something radically different, to interact and to be more

present in what is going on, this can exert an energizing influence and I found that this can open them up to new grounds of interacting – both with each other and with me as their facilitator.

In our efforts to better understand the relationships between participants and facilitator in AEE activities, it is important to bear in mind whose point of view and whose agency is brought to the fore. The participant, through her artmaking, is acting upon her environment. But she, at the same time, is being acted upon by that same environment and through the facilitation that the teacher provides. Part of her undergoes or is receptive to what is offered to her. Put differently, she is invited by the facilitator to improvise on her own terms, but she is also being directed through the way the facilitator guides the process. In the encounter, this is not the only way in which surrender to process and actively intervening (taking action) alternate. These states are also played out (albeit in perhaps more subtle ways) between any one of the participants and the co-participants, and also in the relationship the participant concerned has, while being in a specific environment, with his or her evolving artwork.

In figure 24, I have mapped some of the relationships that are maintained in the unfolding process of arts-based environmental education – its “choreography of interactions in time” (Harries-Jones, 1995, p. 264). The arrows in the scheme represent parts of the multiple interfaces between the actors in this myriad of relationships. As each person is both *part* of his or her environment (alternately, the more-than-

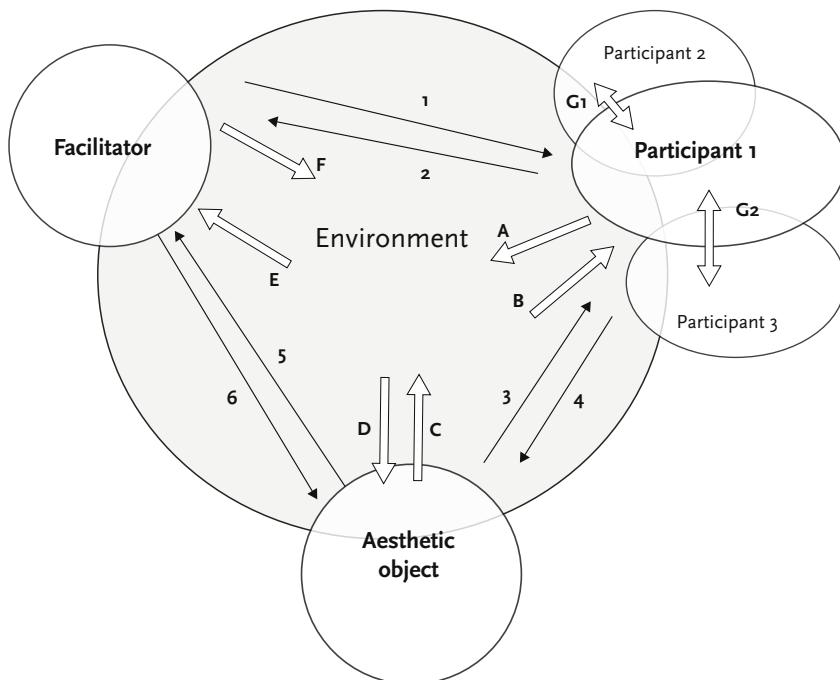


Figure 24: Relationships between facilitator, participants, artwork and environment

human world or circumambient universe) *and* stands outside of it, the boundaries between persons and environment are left opaque. The same holds true for the interfaces between artwork and environment. (This is perhaps most clearly seen in the clay of which the little-me's are made: the material comes directly from the earth below us – the nonhuman –, but through the ages it is invested with layers of cultural meaning, of which the little-me sculpture at that point is just one of the latest manifestations.) In the following, I will elaborate on each of the interfaces that are depicted in the model.

Arrow 1 represents the “acting upon” that the facilitator exerts on the participants: they receive hints and directions throughout the AEE activity and are supported in their efforts during the whole process. This acting upon entails “holding the space” and can imply deciding to *refrain* from action, bringing to bear a (paradoxically sounding) activeness-*through*-inactivity. Arrow 2 serves to indicate that the participant, through her joining in the process, may manifest different states of engagement, ranging from fear or frustration to flow or bliss, and a range of conceivable conditions in-between. The task of the facilitator is to be attentive to these states and to accommodate for them if and when they occur. The artwork or aesthetic object grows in the imagination and at the hands of the participant; in its maturation, it communicates multiple meanings (arrow 3), some of which may be ambiguous or even contradictory. Emergent properties may be evoked in the process of artmaking and in the reflective session afterwards in which both the artmaking and the completed aesthetic object are the focus of dialogue. Arrow 4 indicates the way in which the participant “acts upon” the material (paper, paint, clay, etc.) which is to become her artwork. The facilitator is continuously mindful of and attentive to the nascent artworks that the participants make (arrow 5). This alertness allows the facilitator to calibrate the way he moves along in the facilitation of the artmaking process: perhaps allowing for more time at some point, or conversely, speeding up things when needed. Attending to the creative engagement of the participants in making their art piece, which is partly reflected in the way their aesthetic objects themselves evolve, gives him important feedback on the overall dynamics of the process. At times, the facilitator needs to step in to assist the participants in their interacting or imaginal dialogue with the evolving artwork. This is represented by arrow 6. It can be that additional clay is in demand, new paints need to be supplied, etc. It may also involve making a digital picture of the painting as it is developing, to enable participants to later retrieve the composition and colorfulness their painting had acquired at exactly this point in time (but since may have lost). The photographic image then shows the work as it was *before* they proceeded further and at least some of them (as I noticed often happens), followed up on a felt inclination to change their rendering of the landscape “back to normal” by removing most of the wild colors and color juxtapositions.

Another set of arrows, larger in size, depict the relationships with the circumambient environment. Arrow A shows that, as part of her artistic interaction with the environment, the participant sharpens her organs of perception, cultivating

a state of attentive mindfulness, being ready to receptively undergo what nature may communicate. This however, does not preclude an active acting upon her surrounds; it may involve a dynamic oscillation between the two states. The more-than-human world also issues its “imprint” on the participant (rendered by arrow **B**): qualities, meanings, are emitted but these “need” the active percipient to bring them to the “screen” of consciousness and thus available for integration. At that point, the participant may choose to respond or not to these emanations in her developing artwork, in whatever manner or form. I have – rather hypothetically and coarsely – allowed room for a possible relationship between the aesthetic object itself and the environment from which it came forth (arrow **C**). Together with arrow **D**, which depicts the way in which nature is seen as “expressing herself” through the artwork, **C** and **D** are probably the most enigmatic (or at any rate most poetic) workings of the aesthetic object in its intertwining with the environment. This is what Paul Cézanne tried to put into words when he said “The landscape thinks itself in me … and I am its consciousness.” Or, as Merleau-Ponty (1945/1993a) interpreted the way a landscape painting would evolve at Cézanne’s hands, “The image saturated itself, composed itself, drew itself, became balanced; it came to maturity all at once” (p. 67). Arrow **E** indicates the way in which the facilitator takes account of what the environment seems to offer him. This lending of possibilities has been referred to by Gibson as *affordances* and by Nicholson as *loose parts* (cf. section 2.4.2). In principle, the latent potentialities that the environment renders are limitless; it is our imagination which sets the boundaries. The presence of our circumambient universe invites for making choices on the part of the facilitator (expressed through arrow **F**), putting limitations on the endless potential. Here are some examples. When rain clouds are visible at the horizon, should the activity be speeded up or terminated? Are there risks of injury when developing an AEE activity at this or that location? Would the local ecosystem be negatively impacted if the activity is carried out there, and if so, can these effects be mitigated?

Finally, arrows **G1** and **G2** correspond to the impact of one participant on the other. Participants tend to be quite affected by encouraging or criticizing remarks of others, and for this reason art educators like Peter London encourage an attitude of withholding judgment on each other’s work. This mutual influence is not always easily discernible. I have noted that an electrifying energy can start radiating out among members of a group, if one of the participants achieves a state of creative flow. Conversely, one participant’s sense of frustration or being stuck can spread out just as well, affecting others. In an intriguing way, a mood of conviviality that arises during a coffee or dinner break tends to have a lasting effect during the sessions of artmaking that follow immediately afterward. This has led me to the thought that participants are even engaging in artmaking *during* the breaks, without having tools or art materials at hand. This anticipatory creative engagement is carried forth when the pencil, clay or paint is taken up again. And at times there is a marked *lack* of impact of the other participants, e.g. when they are molding clay with the eyes closed and they don’t feel the “controlling eye” of others judging their own evolving artwork.

8.5 Discussion

In my second research question I asked which specific competencies could be identified for a facilitator of an AEE activity. One obvious capacity I *didn't* discuss thus far in this chapter is the facilitator's skill in art education *as such*. Partly this is because for me it would go without saying that a facilitator of an artistic group process must have his or her bearings in art pedagogy and have acquired some of the basic skills that are required from any art teacher. However, an intriguing question is whether or not the quality of open-endedness in the kind of AEE that I facilitate brings along – because of the value that is lent to a state of non-purposiveness and of inviting the unforeseen – that in fact *anybody* could facilitate such activities. Here I think it is important to underline, as noted before, that non-interference should not be mistaken for neglect or turning one's back on whatever happens. On the contrary. The attitude that is demanded perhaps comes closest to the kind of contemplative “non-acting action” that Simone Weil encouraged. For her, the attentive receptivity of *action non-agissante* constitutes an action that is undertaken with no attachment to its results or consequences.⁷⁶ Alexander Irwin recounts that Weil had transcribed the following verses of the Bhagavad Gita for herself: “He who can see inaction in action and action in inaction, he among all men is wise; he remains in balance even as he pursues action (Weil, cited in Irwin, 2002, pp. 179-180). This insight is reminiscent of the earlier mentioned Taoist concept of *wu wei*, which involves “non-doing,” or the art of letting-be. Such an attitude does not imply a dulling of the mind, rather, it is a “creative quietude,” explains Ted Kardash (1998). He adds that it refers to behavior that arises from a sense of being connected to others and to one's environment: “It is action that is spontaneous and effortless. At the same time it is not to be considered inertia, laziness, or mere passivity. Rather, it is the experience of going with the grain or swimming with the current.” Kardash goes on to explain that our contemporary expression “going with the flow” is a direct expression of the *wu wei* principle. One of the aims is to act without effort and to attain the state of doing without doing. The opposite of this would be when a person exerts his or her will upon the world, thereby disrupting the existing harmony.

The state of *wei wu wei* is an interesting variation, close to Weil's notion of non-acting action, for here one paradoxically seeks “action without action,” or active *non-action*. One accomplishes what is needed, but one leaves no trace of having done it. In teaching for example, *wei wu wei* could mean that no course of action is dictated to students. They may have the idea that they were taught nothing, while the whole point is that they integrate their own learning in their lived experience.

I found that it is required of a facilitator that he or she is able to hold the space for (and bear witness to) whatever unfolds in the encounter between participant and co-

⁷⁶ One can take the example here of the contemplation of beauty. In a Kantian vein, Weil held that the contemplation of beauty *implies* detachment – to seize the beautiful object would be to destroy it. The attraction of beauty is exactly that it holds at a distance.

participants, between participants and their emerging artworks, and between participants and the circumambient, more-than-human world. The skill to both register – even intuitively – what happens at these different levels *and* to prepare the ground for what may manifest itself, asks for a versatile position of concentrated non-interfering and *yet* being ready to act swiftly and through improvisation when the flow of the process or the wellbeing of the participants would require so.

Important as well is that the facilitator both demonstrates and fosters an attitude of withholding judgment, in consideration of the vulnerability that the participants' presentation of their artworks may entail. Thus, rather than considering the value of art as residing in its finished results, the focal point becomes the meaning-making that takes place in artmaking as process. Part of this is a shift of attention from the roles of individual persons (participants *and* facilitator) to their patterned mutual relationships. My experience leads me to conclude that an attitude of attentive receptivity, which I find essential in the facilitation of the AEE activities, is grounded in one's ability to trust the process and to not interfere too rashly. For the building of this self-confidence, it seems to me, the developing of practice and skills in teaching art is an important factor: such experience not only brings along a familiarity with the handling of art materials but, more significantly, a lived experience of how to respond to different situations that may occur in artistic group processes.

There are of course other important background skills for an AEE facilitator that can be pointed out, but several of these seem crucial for *any* facilitator of a dynamic group process. To name a few of the more obvious ones: experience of and skill in facilitation methods; flexibility; openness; love of the work; attentiveness to the body language of participants; being respectful and open to learning while the activity unfolds, etc. In short, such facilitation comprises the aptitude to listen and observe carefully and to offer encouragement and advice at the right moments, but also the ability to deal with disrupters or dominating people, the problematic and complex dynamics present within groups.

Though each and every session that one facilitates will be unique, a facilitator of AEE can expect, I would argue, that he or she will have to deal with amplified expressions of fear and need for safety and containment compared to group activities in which the vulnerability of the participants' inner selves is less at stake. Therefore, I regard the ability to hold the space so that participants can decide themselves what they want to share (and *not* share) of their work as absolutely fundamental, with a parallel capacity to bear witness to whatever will be manifested.

Ultimately, one has to build a practice in facilitation which resonates with one's own identity and integrity, with what Parker J. Palmer (1998) calls "the teacher within." Here it would be instructive, I would suggest, to attend AEE activities as a participant oneself – on a continuous basis – thus being able to approach the process again and again from the inside out, and not to stiffen in routine forms of educational practice. A consideration here – which I believe holds true for any pedagogue, in the arts, in environmental education or elsewhere – is that such immersion in process as participant, in best cases, renews and feeds one's own indis-

pensable excitement about learning. In the early days of nature study, Liberty Hyde Bailey, one of its founders, saw it as, essentially, the “[training of] the eye and mind to see and to comprehend the common things of life.” The result of cultivating this process, he held, is “the establishing of a living sympathy with everything that is” (1904, p. 11).

9. Experiencing the natural environment through AEE

You must give birth to your images. They are the future waiting to be born. Fear not the strangeness you feel. The future must enter you long before it happens. Just wait for the birth, for the hour of the new clarity.

Rainer Maria Rilke (1929/1986)

In my third and final research question, I ask myself whether joining in the AEE activities that I facilitate enhanced the ability of participants to have a direct experience of feeling connected to the natural world. Before presenting my findings here, I first like to offer an intriguing – and in this context very relevant – perspective on Gregory Bateson's approach to teaching. Typically, Bateson would ask his students to contemplate the world of living things in a way that was free from thinking in material and logical terms. This presented them with great challenges, according to one of his students, Stephen Nachmanovitch. “To express non-dualistic thoughts, or basic matters of pre-verbal learning, in the language of almost any academic discipline is just about impossible.” Doing this proved so hard “not because it's too complicated but because it is *too simple*” (Nachmanovitch, 2001, p. 7, emphasis added). As Nachmanovitch elaborates, we – that is, people in Western society – commonly tend to think of knowledge as a kind of pyramid. What we learn as baby is at the base, and what we learn in kindergarten is added on a higher layer, and so on, all the way up to the top of the pyramid. We have a propensity to put those ideas that we regard as “difficult” higher up in the pyramid than “common sense.” Bateson, however, focused his attention in another direction, to a level that was *under* the pyramid – a plane *below* common sense – as Nachmanovitch describes it, to expose the basic assumptions or axioms that underlie it.

We had ... to unlearn a great deal of what we had absorbed from kindergarten up. It was quite something to experience this, and later as his assistant to help subsequent roomsful of people giving themselves up (fighting every step of the way!) to the intensity of what was going on around that table, "getting their roots rattled." Getting their roots rattled not by Gregory alone, but by each other and the whole process. His "little heart," he freely confessed, "was going pitterpatter along with the rest of us" (Nachmanovitch, 2001, p. 8)

Elsewhere, Nachmanovitch provides an interesting report of how his mentor would initiate such a probing learning experience. Probably very different from anything they might have anticipated of what would happen, the students were invited to practice radical new ways of looking at the relational aspects of things, e.g. how one part of an organism is related to another, or the whole organism to its environment and other organisms. This is what Nachmanovitch (2007) remembers of the session:

He would slap down on the table the remains of a crab or some other organism, and challenge us to examine it as the visible portion of a biological process. We would quickly be nudged toward an understanding of pattern and relationship, of what it is to be part of a living – and therefore sacred – world. The next week, he would bring in something quite different as a way into the same issues: a painting by Blake or Goya, a poem by Eliot. And very quickly we would enter into the essence of Bateson's world view as a biologist when he told us that art is *secreted* by organisms. Form is secreted by process; art is secreted by living beings. We would begin to share his fascination with the rich, complex, and fluid relationships between science and art, and to see them as aspects of an essential unity. (p. 1122)

What Bateson effectively practices here, as art/science teacher, is what Rebecca Solnit (2006) terms, "inviting the unfamiliar." In her view, it is precisely the job of artists to open doors and to invite in prophesies, the unknown, the unfamiliar. "To calculate on the unforeseen," she asserts, "is perhaps exactly the paradoxical operation that life most requires of us" (pp. 5-6). Bateson's students stand baffled as they enter this new universe. By asking deeper and deeper aesthetic questions and bracketing his students' and his own preconceived knowledge, Bateson effectively evokes new understandings. It seems to me that the act of taking such a *cut below common sense*, which Bateson encouraged his students to make, shares some interesting characteristics with participants in an unfolding AEE activity who are invited by the facilitator to enter a liminal space. The participants gropingly cross the threshold into a territory that is strange and different because it is so close to the ordinary, but yet has several aspects which, without the artistic process, may have gone largely or wholly unnoticed. Such a (facilitated) attending to the new is at the core of what I strive for with the kind of AEE that I facilitate. In the following sections, I will discuss if such an "opening of a new door" to the world indeed took place.

9.1 Discovering one's body in a new way

My point of departure in my attempts to facilitate participants in possibly attaining a direct experience of the natural environment through art is that these essentially need to originate from their own embodied presence. Interoception is the term for our awareness of what goes on inside of our body: the movement of our internal organs, the perception of hunger, of pain, et cetera. As Ritchie and Carruthers (2011) define it, interoception is the collection of sensory systems that monitor the physiological state of the body, in order to maintain its internal homeostasis.

Our sensitivity to stimuli originating inside the body is at the centre of the little-me making. It represents a mode of affective mapping that is receptive to and foregrounds the participants' corporeal experiences, as they explore their intimate, subjective and imaginative spaces. In short, as they engage with the clay, they inhabit their embodied sensations through their artmaking.

One of the pre-suppositions for me in this activity is that our awareness of what goes on inside of us is related to what we perceive of the outside, and that the two are continuously intertwining. When introducing the concept of little-me making in chapter 6, I mentioned how impressed I was by the way teacher Antony Gormley situated this activity in the context of a course (at Schumacher College) on the theme of art and *place*. It struck me that little-me making can be understood as a mindful negotiation of the space between inner and outer, through working with clay. Thereby, the notion of "environment" is no longer merely something that is "out there." When Gormley visited Finland three years later, in the context of the art project *Clay and the Collective Body*, he reflected in a similar vein on the deeper meaning of creating sculptures. The participants in his workshops in Helsinki were invited to use their imagination and make impressions on a "receiving material," as Gormley put it, which also here was clay. For him, this endeavor was all about process, as the participants worked "both as investigator, the curious mind, and as producer, the creative mind."

Clay is earth.... This [work] is about reconnecting flesh with earth, through touch. It has a mythic dimension and whether taken from the creation stories of Mesopotamia, Judaism or Christianity the moment of modeling with clay is a primary generative event. It is strange and powerful that something connected to landscape and geology, distant both in terms of time and space, comes into your intimate, subjective zone when formed by the hand, first being worked on at arm's length before being brought into the inner orbit of the maker's body. You work on the clay in this zone between the place of speech and the heart, before placing it away from you and, once again, standing apart. (A. Gormley, interviewed by Paulo Herkenhoff, 2009. My transcript, post-edited by the artist)

On a metaphysical level, the participants in the project brought a material close to themselves that was "forgotten," because clay resides, literally, *below* the surface of things. As Gormley explains, most of the world's population now live within conur-

bations and urban grids, far removed from the earth. Working with clay, then, gives contemporary expression to the fact that the earth has always supported us. For Gormley, re-connecting or making a basic connection with the earth, through touch, is very important. He refers to Heidegger's distinction between the earth, as something we inherit, and the world, as something we make: "Even in a post-religious, post-political and ideological vacuum, [it is about] the recovery of this agency, the fact that we are making a world from the earth." Interestingly, this leads Gormley to suggest that on a very basic level, "we are all makers," reminiscent of Joseph Beuys's statement that "everybody is an artist."

When we have a conversation, we re-translate our experience into something to give back to the world and that is a creative act. This process is undervalued in our highly materialistic world but I have enormous faith in the ability of people. This is just about opening the door of a studio and that studio can also be inside the minds of others. If you open the door by suggesting "come in, let's do something," then you can reconnect with the excitement of origination. It's like giving a piece of paper and a pencil to a six year old. You say "let's do something" and they are off.... The project *Clay and the Collective Body* is a shared adventure of discovering an objective correlative for the way we feel.... Somehow all of us can help each other to discover what we fear and what we love. (A. Gormley, interviewed by Herkenhoff, 2009. My transcript, post-edited by the artist)

As Tim Ingold (2000/2011) convincingly argues, perception takes place in the *interrelation* between perceiver and his or her environment. Based on his extensive research among hunter-and-gatherer peoples, Ingold insists that our human condition is such that from the very start we relate to the world through active, practical and perceptual engagement. Ingold is primarily interested in how our embodied life enables us to come to an improved understanding of the nature of human existence. Perception for him is a function of movement and, by consequence, "what we perceive must, at least in part, depend on how we move. Locomotion, not cognition must be the starting point for the study of perceptual activity" (p. 116). It is by moving in and through the environment, by our proprioceptive awareness of the surroundings, that we develop experience and skills. Ingold contends that the perception of the environment is not so much a matter of the mind defining how we perceive, but of acting *in* the world and in that way learning about it.

9.2 Thinking with our hands

In his book *The Thinking Hand*, Finnish architect Juhani Pallasmaa (2009) shows how our embodied interrelation with the world can be enhanced through artmaking. To him, artistic work can only be fully realized in the unity of mind and body.

It depends on the union of mental and manual skills. Through artistic experience the existential boundary between the self and the world may start to blur. In the words of British novelist Salman Rushdie, it is during the creative act that “this borderline softens, turns penetrable and allows the world to flow into the artist and the artist to flow into the world” (Rushdie, quoted in Pallasmaa, 2009, p. 19). This fusion of object and subject takes place in *every* meaningful artistic work and experience, says Pallasmaa. He speaks of a “silent knowledge,” which unfolds beyond the limits of consciousness. It is the duty of education to cultivate and support the human capacity for imagination and empathy; what is needed is a “re-sensitization of the boundaries of the self”: “The intelligence, thinking and skills of the hand … need to be rediscovered. Even more importantly, the unbiased and full understanding of human embodied existence is the prerequisite for a dignified life” (Pallasmaa, 2009, pp. 20-21). We “think” with all our sensory systems, in the sense that we structure our relation with the world that way. Though our hands are our reliable servants, he says, they now and then seem to take command as well: Thereby it is as if they “lead their independent lives and demand their own liberties” (p. 27). In this he leans on the work of neurologist Frank R. Wilson (*The Hand: How Its Use Shapes the Brain, Language and Human Culture*, 1998). Wilson argues provocatively that the human brain does not live inside the head, even though formally it is located there. For him, the brain is thoroughly embedded, reaching out to all parts of the body. Reminiscent of Bateson’s notion of mind he says: “Brain is hand and hand is brain, and their interdependence includes everything else” (Wilson, *ibid.*, p. 307). Pallasmaa suggests that the hand is such a vital organ, that it may well be that the functions of the hand are not the result of the development of the human brain through evolution, but that the links of causation go counter wise, i.e. that the evolution of the human brain is perhaps the *consequence* of the evolution of the hand.

If Wilson and Pallasmaa are right, then “the independent life” of our hands, for example when we make a little-me with our eyes closed, steers our actions in its own way, to which the brain, as it were, follows, rather than the other way round. Both Wilson and Pallasmaa are keen to point out that this is by no means unidirectional. In reality, there is a continuous eye-hand-mind fusion, in which feedbacks and calibrations revolve in endless cycles. But what I would like to suggest is that our corporeal interaction with our environment and the way in which the surface of our “thinking hand” responds to the surfaces and textures it touches (and our sensory perception in general intertwines with the world), may give cause to evocations which – *in* and *through* the artmaking – might take the conscious mind “by surprise,” and to which it, as it were, lags behind. This then is different from a conceptualization of imagination that steers the creative hand according to its directives.

Here are two reports of participants in a little-me making of their thinking hands at work. The first is of **Diwata**: “For me it was interesting to see how different senses work. Initially I tried to visualize all the parts of the body, but at one point I didn’t do that anymore; my hands were just working their own. And then at the end I was really impressed; I thought my figure would be small and slim but actually it wasn’t at all. It is strange how you get different images.” And **Jovelyn** adds: “What I really enjoyed

was the fact that with my eyes closed, that critical voice wasn't there. I didn't have a clue, basically, I was just following my hand sense. That was great, because when you opened your eyes, I was just surprised and happy."

A striking example of a seemingly autonomous life of the hand happened when I facilitated an AEE workshop in Oslo in 2011. I asked the participants to work with their eyes closed and to make a hand of clay that would represent one of their own hands, in an open-folded position. The task was that they would "scan" one of their hands with their other hand, in order to receive information on how to proceed in the further careful ongoing modeling of a sculptured hand. Of course, when doing this, both of one's hands get rather clayey from working with this plastic and granular material. Interestingly, however, in the process, the clay hand starts to acquire about the same temperature and "feel" as the body, and the same balance of dryness and moistness as a human skin would have upon touch. One participant was completely overwhelmed by the sensation of suddenly (mis)taking the clay hand to be her own real hand – for a moment she could not tell them apart.

The immersion in and surrender to the activity seems to evoke new ways of engaging the senses and to stimulate the imagination in unforeseen ways. By encouraging participants to approach phenomena indirectly instead of head-on, by inciting them to "think" with their hands and spurring them to expand on the affordances that the crude materials they work with allow for, they encounter openings to new and direct experiences.

Interestingly – and to many participants surprisingly – the heightened embodied awareness in the case of little-me making and lines of the hand, if it evokes *something* in them, this primarily seem to be epiphanic moments and crude new understandings that primarily pertain to their own body, their inner world, their storied memory of earlier sensory experience, and less new revelations of or insights in how this body might have engaged with the circumambient environment that is present at hand. The encounter with the place itself, the location where the AEE activity is performed, seems secondary.

However, there are *some* hints of a felt connection with their environs that participants report on. **Petra** mentions that through having the clay in her hands she felt connected to the earth: the clay brought it together. She heard the birds above and tasted the salt in the inland wind. **Emilia** mentions that to her, nature was more *present*. And **Fredrik** recalls being specifically aware of the wind and the sound of the birds and waves while working with the clay. Participant **Paul** discerned a red thread through the lines of the hand activity, whereby, as he understood it, loose parts connect the different elements and him to the place where he's at and tie the elements of the workshop together. He sums it up as follows: "Somebody else's interpretation of my hand; the stick in the woods that resonates with my lines: it's all kind of 'grabbing' to create." Also the sensory experience of the built environment was at times amplified in unexpected ways. For **Pirjo**, for example, the humming of the air-conditioning and computer became a huge thing: it made her feel that her head was bigger than she thought and full of electricity.

In this regard, I think it is important to bear in mind that the AEE activities are, in most cases, one-off sessions lasting a couple of hours at the most, and one perhaps

shouldn't expect too pertinently to find new openings to nature within such a limited time frame. Art educator Lisa Lipsett (2009) underlines the importance of the factor time. In her method of "creating with Nature," she found that it can take a few seasons of painting, before one may actually start to notice that one's images change: "Over time, our sensitivity, perception, attitude, and behavior all begin to shift, interweaving Nature into more daily moments" (p. 70). Interestingly, for Lipsett, when this happens, practitioners access a state of consciousness that experiences the universe as one indivisible whole. This is our natural fit, she says, "the connection that has been there all along" (p. 177). So, communing *with* nature this way, ultimately, is not a "re-connecting" to nature, but the retrieving of a relationship we have grown oblivious to.

After a full day of little-me making and other AEE activities in Freiburg, Germany, in 2011, I noted in my research journal:

"Environmental art can also take place in kind of a square concrete building like this. When not engaging your visual faculty, not having the eyesight [in little-me making], you probably get a different sense of what your body consists of, of how your internal organs hold together or how your muscles are carrying your bones, and so on. It allows one to open one's senses and to pay attention to processes that are going on. If you would move on from this to, say, partaking in a more cerebral discussion on sustainability issues, this would probably from the very start be different because your whole body has become more present. We are embodied beings, through our bodies we learn and relate to the world."

Regarding the kind of metamorphosis in the dynamic of the group to which I allude here in my journal, I have come to experience that I often only register such change through a kind of tacit knowing on my part. For example by noticing a shift in a particular participant's way of moving, through his or her body language and/or via a suddenly more inspired way in which persons talk with each other. An example of this "space of potentiality" opening up in the wake of the AEE activity comes across in **Sheila's** remarks shortly after a little-me making session. She had unexpectedly noticed, she said, while walking back from the forest where the session had taken place, that there were specific sounds audible around her and she became very aware of a subtle change in the wind. **Sheila** found it highly interesting to notice that she was so much more attentive to her surroundings on her way back.

My impression of the participants' engagement is often that it is quite different *after* a completed AEE activity compared to how it was before. It can feel as if the experience has been invigorating for the group as a whole; that something has happened which is hard to identify or to attach to any particular person and much harder even to explicate satisfactorily through descriptive words. It comes across like some new ground has been broken. And now it is up to the individual participants themselves to integrate these new experiences in their lives, and the

challenge for the teacher might be to capitalize on the effects of this evolved sensitivity (through the AEE activity) in whatever is to take place subsequently. The circumstance that the activity is *arts*-based by no means rules out that in any such follow-up activities science may be called in to complement or deepen the new understandings that have been acquired – e.g. to study the functioning of the human bodily organs or to further explore the ways in which combinations of colors can have an amplifying or weakening effect in the composition, to name just two, very dissimilar themes that could be taken up.

9.3 Discussion

My analysis of the impacts of the AEE activities that I facilitated leads me to conclude that it is doubtful whether these *in and of themselves* do indeed result in demonstrable and prolonged direct experiences of the natural environment or circum-ambient universe around them. My findings show that they, first and foremost, help bring about the ignition and augmentation of the participants' fascination and curiosity, which is centered in an increased awareness of their own body and its interactions with the natural world. My findings show that embodied learning through art, whereby the inquisitive hand seems to perform its own unique “thinking,” can help participants in breaking away from too one-sidedly cognition-centered approaches. This corporeally experienced sense of wonder I read and interpret as a first spark of reconnection with nature, “a resurgence of the real,” in a situation where most of them embark in the AEE process from an initial condition of schism, of being deeply disconnected from nature. In short, it leads me to identify a successful AEE activity as an incubator, in which, as it were, sleeping seeds are activated, which then can possibly germinate in follow-up activities. My hunch is that the newly sparkled excitement, interest and energy allow for new ways of becoming aware of and engaging with the natural phenomena we see, smell, hear, touch and taste in our environment. I believe that this new learning potential can be tapped in whatever educational activity that follows, but how educators can do this most meaningfully remains open and is a point of further study. Ultimately, AEE’s promise, to me, is that it may deeply transform the way we go about environmental education, as it sets out from the learner’s own direct experience of and wonderment about what it means to be alive and part of the living world.

From one point of view, the primary preoccupation of the participants with their own body and what they register happening in it during the AEE activities can be seen as a confirmation that no profound connection with (external) nature was established. Naturally, one could argue that this was to be expected, as the three AEE activities indeed encouraged participants to first and foremost tune their focus to their own body, their memory, or to their own way of handling colors and making compositions. In other words, the activities were not as much about engaging with the outdoors as other forms of seeking connection with the natural environment

through artistic activity can be, as for example making land art together with a group. Norwegian art educator Jan-Erik Sørenstuen (2011) is one of the people who have facilitated and developed such workshops, which he shares in his book *Levende Spor: Å oppdage naturen gjennom kunst, og kunsten gjennom natur* (“Living traces: To discover nature through art, and art through nature”). In such hands-on workshops, the objective is often to make an aesthetic object that elegantly blends in with its natural environment, thereby using the loose parts one finds at the location itself. In this, the teacher/facilitator usually doesn’t strive to “wrong-foot” people; rather, the objective is to blend with the environment as sensitively as possible.⁷⁷

However, I want to steer clear of a too simplistic juxtaposition of approaches. Naturally, I also had the option of facilitating AEE sessions in which participants would work primarily with found natural objects which could then for example be rearranged in sculptured installations. However, I chose to develop activities in which the element of estrangement and the presence of one’s own body are important elements. It is also here that art educator Lisa Lipsett provides a useful insight. In her “artful ecological education” (2009, p. 283), Lipsett wants practitioners to move beyond thinking about nature to learning *with* and *through* nature.” Thus, it constitutes a form of “inside-outside-in exploration of self and nature through creating” (p. 167). In the developing of this approach she is inspired by Australian environmentalist John Seed, who suggests that we can extend our identity into nature: “the nature within and the nature without are continuous” (Seed, cited in Lipsett, p. 169). Her way of phrasing this same idea in the context of “communing with nature artfully,” is that we thus “lose ourselves to nature’s flow and become more ourselves in the process” (p. 178). The concept of inside-out learning reminds us that any learning of an outside environment inevitably is grounded in our own body coming to awareness of itself in a reciprocal relation with the more-than-human.

The perhaps most valued contribution of AEE to me is that it may cause participants to appreciate that another way of being involved with the natural environment, a different way of conceiving one’s relationship with the circumambient universe, *is* indeed possible (or at least imaginable). For me, the real value of the openness that is created in the AEE activities that I facilitate is that they potentially may set the stage (and thus allow) for such a sense of reconnection to manifest itself. As I argued before, the catalytic aspect of bringing this about feels much like supporting them in

⁷⁷ The art in nature of Andy Goldsworthy – a key source of inspiration to numerous facilitators of land art workshops with both children and adults – is often dismissed by art critics for presenting “a kind of populist decorativeness and a dewy-eyed sentimentalisation of nature” (Thornes, 2008). In my view, such prevailing opinion miss out on many of its deeper layered meanings and don’t look beyond its (perceived) surface value. As Simon Schama has observed, Goldsworthy is often criticized for being an ornamentalist, “fiddling with nature,” who made the – for a contemporary artist – serious mistake of “hunting beauty.” In contrast to such verdicts, Schama asserts that his work has a moral intensity and is expressive of scientific curiosity. Further, for Schama, it is conceptually rich, and metaphysically suggestive, rendering smart meditations on decay and mortality (Schama, 2003).

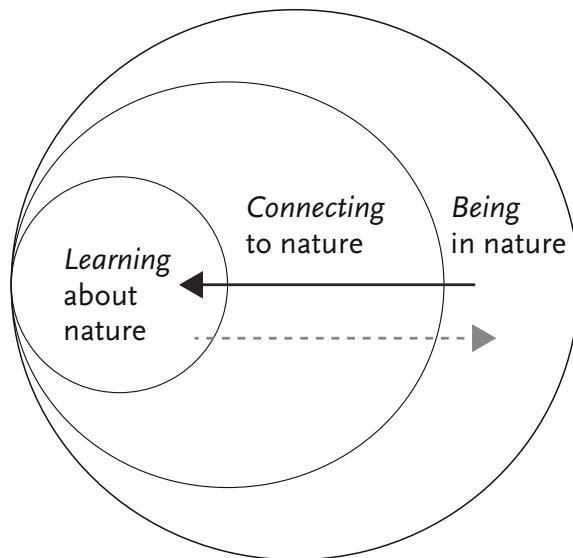


Figure 25: Intensification of the relation to nature through participating in AEE

opening a “window” that the participants have held locked themselves. The *actual* work they do themselves; and then I, as their facilitator, step back.⁷⁸

The type of learning that participants possibly cultivate themselves when engaging in and later reflecting back on an AEE activity I believe entails a form of incubation.⁷⁹ This new type of cognition can be the beginning of learning to learn, or meta-cognition, as it breaks so radically with established patterns. The learner may not necessarily be aware yet him- or herself that any form of learning whatsoever is taking place. It may also involve a sense of awe which lends the person a tacit knowing (that neither needs to have sunk in cognitively), that one, ultimately, will *not* know.

In figure 25, I present how I see the way in which the relationship of a participant with the natural environment can intensify in and through partaking in the AEE pro-

⁷⁸ This was well-formulated by Gary Peters, Professor of Critical and Cultural Theory, who holds that a teacher's primary task is to mobilize bodies of knowledge “convincingly enough” to draw their students into them. At that point his job is done, Peters suggests: “Nietzsche said that the worst compliment that any pupil or student can pay their teacher is to follow them. The one thing you must do is ensure that they don't. So in a way what you do is you try and teach students not to follow you”(G. Peters, transcript from lecture, 19 March, 2012).

⁷⁹ In its colloquial meaning, to incubate means to promote embryonic development and the hatching of young. The root of the word is the Latin *incubare*, literally “to lie down on.” Originally, this meant sleeping in a temple in expectation of oracle dreams. Incubation once had the sense of sleeping in a sacred place or temple for oracular purposes. Correspondingly, one of the meanings of incubator is an apparatus in which environmental conditions can be controlled, providing suitable conditions for a (chemical or biological) reaction. More broadly understood, an incubator can be conceived of as a place or situation that permits or encourages the formation and development of new ideas.

cess. In my graphic representation I have tried to conceptualize this as a movement between three gestalts nested in each other, the higher gestalt embracing the lower one.

The figure depicts different levels of engagement with nature that are “embedded” in larger wholes. I conceive the relationship between a participant in an AEE activity and his or her circumambient universe as encompassing different degrees of inclusiveness. The gestalts set the overarching context (and determine the horizon) in which specific opportunities can emerge (or be evoked) at the subordinate levels. Starting from a wider and more inclusive bond (a sense of *being* in nature) there is a progressive fine-tuning and narrowing down to more focused (and therefore also more specific) relationships, respectively to *connecting with* nature, and, from there, to coming to a personal *understanding* of nature. Ideally, participants are able to retain (and bring to bear) the awareness and sensitivity that is aroused within the more-encompassing gestalt when their perceptive faculties subsequently tune in to particulars. When they, at the level of the smallest gestalt, pay attention to natural phenomena in a more contracted and focused mode, they thereby employ what I speculatively identify as a very primary and tentative form of apprehension. And this kind of learning, that seems to take place in the AEE activities that I facilitate, I tentatively call “rudimentary cognition.” The term refers to a crude, basic or minimal ignition of mental processes, to an elementary and nascent form of cognition that comes forth from and in an initial affective and embodied reaction to being immersed in an artistic process, but may move on to more intentional and conscious cognitive activity in processing this information and applying the acquired knowledge in other contexts. James Elkins pointed at something similar when he observed that “emptying of the brain through painting creates a vacuum that attracts real spontaneous knowledge” (Elkins, cited in Lipsett, 2009, p. 44).

But in the act of learning this way, they – in principle – bring along all the attentiveness that is awakened in prior, more encompassing gestalts of feeling connected to and grounded in the natural world. The direction of the uninterrupted arrow represents the fine-tuning and narrowing down of attention. This direction can also be reversed, represented by the discontinuous arrow. New forms of understanding that evolve in the most focused mode – raw “chunks” or emanating patterns of rudimentary cognition – may have an impact on ways in which the participant subsequently perceives his or her connection to and being in nature. (In reality, I believe the movement in two opposing directions – the narrowing or expanding of focus – can happen simultaneously and it may in fact be impossible to neatly disentangle them from one another.) **Level 1** comprises *being in nature*: the awakening of awareness, perception, receptivity; and perhaps the first initial moves towards opening up to nature. Moving to **Level 2** entails a deepening of focus into a sense of *connecting to nature*: this is a step towards engaging in a reciprocal relationship, of focusing the attention and reacting upon, answering to, influencing and being influenced by one’s natural environment. Attaining **Level 3** constitutes a further narrowing – into a more specific *learning about nature*: the attentive awareness leads to the idea of having grasped some of the underlying relationships, and having acquired possible new understand-

ings of “the pattern which connects.” Paradoxically, such intensified attentiveness can also entail a *lessened* embodied and sensorial (“felt”) connection to the natural world. It can happen that at some point, for example, certain species, organs or other parts of the living world with which the group has worked are properly identified by their proper given names. These names can pop up in the individual participant’s *mind’s eye* or be pointed out at some point by one of one’s co-participants. Their mere utterance, however, can bring along a host of context markers (cf. section 2.5) which together may start to “overrule” possible intuitional perceptions of sensing something of a “wide identification” with non-human nature (Naess, 1989) or of having an “ecological self” which looks beyond the present to the “deep time” (Mathews, 1991). Then the hazy rudimentary cognitions may have to yield to more established and therefore likely more reassuring rational explanations. (The other side of the coin is that in cases *when* something impresses us deeply, like for example the intricacy of a spider’s web, we are, quite literally, *moved*; it triggers a reaction that is emotional, from the Latin *emovere*, to move out. At such instances, our perception isn’t very clear. Overwhelmed, we no longer perceive very keenly and sensitively – for this seems to require a certain degree of detachment. I will look into this theme more deeply in the final chapter of this thesis.)

9.4 Some suggestions for further study

Given the emphasis that I lend here to the process character of AEE and its dramatic unfolding, it would be meaningful to research further what the importance is of the unit of time immediately preceding an AEE activity, leading up to the initial phase of moving into the activity itself (what I have termed the entering of the sluice). How are processes set in motion in the most meaningful way? To me it seems that the embarking moment is so critical that whatever happens here can constructively impact or deeply overshadow every activity that is to follow. Some participants suggested that doing yoga exercises or walking together in silence for an extended period of time before commencing the artistic activity might positively alter one’s receptivity and attentiveness. Additional research could explore if performing such activities would indeed have an impact, and if so, to which aspect of the preluding activity this difference can possibly be attributed.

Another meaningful subject for further inquiry is at the *other* end of the AEE activity. How would a science-based educational program that follows immediately after an AEE activity is completed be affected by it? Is there indeed – as I would assume – a new energy, a new curiosity and openness due to the artistic engagement with the natural world, that can be built upon in other forms of seeking to come to knowledge about the living world? In the case of the AEE activities discussed here, I can think of several conceivable follow-up study programs. For wildpainting, one could move from the painting of the landscape to themes such as landscape aesthetics in general, landscape ecology, and even geophysics and atmospheric light. Similarly, with lines

of the hand, one could explore more deeply our sensorial interacting with the world and the role of memory in this. To what extent are our recollections of early experiences in life tainted by later ones, or by the sheer operations of the human brain? Exploration could also be directed to the actual lines of the hand, from a more metaphysical level (the discipline of palmistry through the ages), to the concrete functioning of muscles and the movement of skin tissue in the palm of our hand. With the clay little-me's, the meditative imaginal scanning of one's own body would provide a host of entries to explore further – with eyes wide open, such as the different functions of our bodily organs and how they interrelate with each other. As part of that one could also inquire more deeply how we can become aware of our own corporeal processes and how we could act upon that information.

In all the examples mentioned, however, there is the danger that the unveiling of the raw facts through the scientific approach (what the Romantic poet Keats famously referred to as “the unweaving the rainbow”)⁸⁰ blurs or replaces the initial, “naïve” appreciation and apprehension of the same phenomena. But this then is also an opportunity to explore if participants find that such is indeed the case. It seems to me that it would be critical that the outcomes of the AEE activity are documented in some way by the participants themselves. This would then provide reference material allowing them and the researcher(s) concerned to assess to what extent the scientific explanations did take away or, contrarily, enhanced the original experiences.

Finally, a third theme for future inquiry that I want to suggest here has to do with the social dimension of learning. Several participants mention that they feel their experience of artmaking would have been different if they had done it alone and in silence. Therefore, I believe it is important to be aware of the qualitative difference between working on an artwork alone, in silence, in one's own intimate space, or doing this collectively, as member of a group. To some participants, the mere circumstance that the activity was carried out together with others, and was in response to (what was felt to be) an assignment, necessarily meant that the outcome would never be art. As I mentioned in the beginning of chapter 7, Meri-Helga Mantere holds that the circumstance that the AEE activities are carried out in a group rather than individually

⁸⁰ The poem from which these words stem is called *Lamia* and was written by Keats in 1820. This is the stanza concerned:

*Do not all charms fly
At the mere touch of cold philosophy?
There was an awful rainbow once in heaven:
We know her woof, her texture; she is given
In the dull catalogue of common things.
Philosophy will clip an Angel's wings,
Conquer all mysteries by rule and line,
Empty the haunted air, and gnomed mine
Unweave a rainbow, as it erewhile made
The tender-person'd Lamia melt into a shade.*

at home, has a strong impact on the overall experience, that is, both on the process and the kind of learning that takes place. Linda Jolly reported the same on the botanical excursion; the pupils learned as much from each other – the older children helping the younger – as they learned from their teachers. In my study, I have taken the social learning aspect (Wals, 2007) perhaps a little too lightly as a “given,” as participants in my AEE activities practically all of the time worked in groups, though these may have varied in size from two to thirty or more people. One interesting point for further study would be to explore the difference between doing specific AEE activities solo or as a group. Of course, in both cases a facilitator would provide the frame, but he or she could isolate participants from each other and also make him- or herself more invisible, for example by visiting the locations where the individual participant is working only with very long periods in-between, so that the person concerned is on his or her own most of the time.⁸¹



Figure 26: Wildpainting session along a river in Kandal, Norway

⁸¹ One additional reason why it would be interesting to research the differences is the Romantics' view that reconnection to nature could best be sought alone. As we saw, several Romantics shared a strong belief and interest in the importance of nature. They anticipated its effect upon the artist particularly when he or she is surrounded by it, and preferably when being alone. In general, Romantics preferred a distance to “the world of men,” and tended to believe that a close connection with nature was mentally and morally healthy.

PART V

10. Sketches of an emerging AEE pedagogy

I'd like to paint space and time so that they become forms of color sensibility, since I sometimes imagine colors as great noumenal entities, living ideas, beings of pure reason. With which we can commune. Nature isn't at the surface; it's in depth. Colors are the expression, on this surface, of this depth.

Paul Cézanne, 1921/1991

In this final part, I will make an effort to take a leap ahead, away from the more inductive approach in the previous three chapters in which I predominantly leaned on the analysis and interpretation of participants' and my own experiences when engaging in arts-based environmental education. Here, I try to make meaning of what I learned in the process on a higher level of abstraction. By providing hints of what I see as an emerging AEE pedagogy, I disclose aspects which I regard as special to this way of approaching the natural environment through art. These claims, of what such principles comprise, are inevitably more speculative. They are provisional at the most, and first of all reflective of probing my way forward theoretically into the new territory. I begin this quest by revisiting the theme of education.

10.1 AEE and sustainable education

One of the aims of this study was to find out what the significance and potential role of AEE activities could be in developing new forms of sustainable education. Reflecting upon what my findings brought forth, I see that there are strong parallels with the kind of learning that Stephen Sterling (who coined the term sustainable education in 2001, cf. section 2.5.1) and Arjen Wals call for. Formulated in a nutshell, Sterling strives after nothing less than a cultural reorientation towards an essentially relational worldview. Achieving this would require *unlearning, new learning and relearning* that moves beyond what “education for sustainability” thus far encompassed. For it is ultimately about

a shift of personal consciousness and educational culture, involving movement in three interrelated areas of human knowing and experience: perception (or the affective dimension), conception (or the cognitive dimension), and practice (or the intentional dimension). In essence it entails an extended and participatory epistemology, a connective ontology and an integrative praxis – affording a deeply relational sense of what it is to be human at this most challenging of times. (Sterling, 2012, p. 514)

Along the same lines, Arjen Wals argues that tomorrow’s education should equip new generations to be able to somehow live in a “systemic world,” characterized by high levels of uncertainty and complexity. The major environmental, social, financial, economic and ecological disruptions we face and which most likely will deepen and widen, are interconnected and unpredictable. Yet, the dominant structures in our society, including science and education, are still for the major part based on fragmentation and thinking in terms of management and control (Wals, 2010). In a similar vein, Don Michael, professor of planning and public policy, argued as early as 1973 that “real learning” requires three things: admission of uncertainty, error-embracing and deep self-understanding (Meadows, 2000).

Like Wals and Michael, but then specific for art education, Graeme Sullivan (1989) held – already two decades ago – that future curriculum development in art education ought to be built on the principle of uncertainty, for the nature of art is contradictory. For him, this was not about a lack of direction or imprecise goals and had nothing to do with vague notions of teaching and learning. What was needed, he maintained, was that curriculum structures should also include the intrinsic elements of uncertainty, unpredictability, serendipity, and conjecture: “Such a curriculum would be ‘chaotic’ in the sense that the model would be a non-linear network of concepts and ideas, while movement through it would be variable and involve intelligence and intuition” (pp. 234-235). Sullivan’s plea kept resounding in the years to follow.

Clinical psychologist and educator Maureen O’Hara, for example, asserts in 2005 that the current existential predicament of humanity in fact offers a learning oppor-

tunity – that is, if we are also prepared to take steps to avoid possible cultural and psychological meltdown. What is needed, she says, is a cultivation of the necessary capacities of mind to live well in an unavoidably fundamentally uncertain world. She suggests that we ought to invent new socializing experiences which learn us “to see the world through new eyes and to take in its complexity without becoming overwhelmed by it.” At this point in time, however, it is hard to foresee what will help us to stay *within* the tension of a certain question or issue and not rush for easy solutions. What will allow us, O’Hara wonders, to “live in the messiness for longer than is comfortable in order that creative new forms can emerge?” To me, this provides an important rationale for seeking and developing new forms of sustainable education in which AEE could provide a meaningful contribution. O’Hara has a resolute sense of urgency:

We must reconnect. We need to cultivate intuition and appreciation of the non-rational; not as substitutes for reason and skepticism, but as a complement to them. We need to cultivate both/and thinking, enhance our capacity for holistic perception, gestalt awareness, network logic and pattern recognition. Along with a capacity to focus, we need to be at home with fuzziness and a wide-angle view. We will need to balance a fear that we have not enough information with the problems of having too much. People will need to become comfortable in a world of fluid boundaries, understanding the world as a continuous web of relationally connected integrities. (p. 7)

Next to an ability to handle uncertainty, ambiguity and fuzziness, it seems also important that we develop our aesthetic capacity, which, as Bateson maintained, is our point of entry when looking for the pattern that connects. Italian educational researcher Luigina Mortari believes that in order to change anti-ecological conceptions of nature into an ecological view which acknowledges its value, it is important to promote aesthetic thinking capable of expressing appreciation of the surrounding world. The outstanding characteristic of ecological aesthetic thinking is the capacity of admiring the elements and phenomena of the surrounding living world. According to Mortari, this capacity has its generative source in the disposition to let the mind be seized by the wonder of the world in front of it. Mortari introduces the Greek word *thaumazein*, which means “to wonder.” *Thaumazein* does not mean a mere astonishment or puzzlement, but a kind of “seeing which admires.” This mental disposition, she goes on to say, is not an interruption of the rational life of the mind, but is rather the origin of the thinking involved. From a pedagogical standpoint, she suggests, the kind of thinking generated by the experience of wonder is an ecological way of approaching the surrounding world because it safeguards things from an instrumental perspective: “Indeed, wonder sees not only timber in the tree but also the sound of leaves in the wind. The disposition to admire is the source of an ‘affirmative thinking,’ which acknowledges that things have an intrinsic value” (Mortari, 2003, p. 117).

If one is working within the field of EE and one wants to implement an arts-based approach in one's teaching, I think a good point of departure is to nourish one's own sense of wonder, one's own opening of the senses, next to encouraging others to do so. It can be instructive to pay attention to one's own being in a new situation, and the curiosity, the excitement, that the act of going over a threshold into new territory brings along. In the first and last instance, it boils down to bringing one's awareness to what it means to exist and be part of the living earth. This sensation was expressed well by **Lily**, a participant in a little-me making activity. As may be recounted, she reported that for her it was first very challenging to be asked to keep her eyes closed and then to be put to the task of doing something with her hands. Initially, she didn't really know if she would manage to come up with anything. Towards the end of the artmaking, however, she could start to relax and regain her confidence: "... the body form just started coming up, and the pieces were not falling off.... working on the head, I was so excited that I really wanted to see *what* was going to come out of it. It was quite an interesting experience!" **Rowena Zapanta** is a scholar from the Philippines, participating in the Master of Environmental Governance program at the University of Freiburg in Germany. In 2011, she partook in the conference "Inspiring Change towards a Green Economy." This is the evaluation of the facilitated AEE activities she put on paper afterwards:

"[In this workshop] we acted with our inclinations and got in touch with our inner self. It was so evident in the way we expressed ourselves through art. You have planted in us the seed to appreciate the world we live in. It is only a matter of nurturing and propagating this seed to benefit a greater number of people. I dare say that, through this workshop, we have achieved the essence of 'inspiring change towards a green economy'."

The new learning that sustainable education would embrace is not – and probably never will be – a fixed curriculum. To me, it seems that exactly the ability to handle rapid change, uncertainty, paradox and fuzziness is intrinsically part of what this learning is about. Having said this, I don't believe that, for that reason, *any* attempt to chart some of the contours of this unfamiliar territory would be in vain. On the contrary, I applaud efforts to discern in more concrete terms what it may mean in practice, to cultivate intuition and an appreciation of the non-rational (Mortari). The following sections comprise what I found along the path, in my own search for a clearing (Heidegger) – that open space in which phenomena or ideas could show themselves unconcealed, allowing me to come to new understandings.

10.2 Alternating foreground and background

When we perceive the environment around us, we tend to foreground certain elements and background others. Taking all the visual information in at the same time

would be too overwhelming. We cannot help but to prioritize and focus only on certain parts at the expense of others. In that way, when we try to make meaning of a given landscape, we bring to the conscious mind those elements that we deem most relevant. Most of the times this is an unconscious affair, to a large part culturally learned and ingrained. But this circumstance also means that our Western and modernist hierarchies of what we deem as more and what we regard as less important are not universally valid. In our culture, there seems to be a bias towards treating objects as distinct entities, rather than that we, literally, have an open eye for relationships *between* objects and their mutual involvement when they are part of the same process.

According to Canadian artist-philosopher Beth Carruthers, it is in fact through our foregrounding and backgrounding that we are able to make sense of the world. When we for example have a phone conversation on a train station, the only way we can have that conversation is through backgrounding all the other data that come in our direction; only in that way we can focus. We background all of the information that is not immediately culturally relevant, or relevant for survival, where we are, embodied in the world. Part of it is an acculturation, says Carruthers. “You learn as you go; you are not aware of it.” She believes that a set of automatic framing is operative, of which the implication is that there are things that we don’t even see unless we come to that moment where we have the opportunity of seeing what we haven’t noticed at all. She tells of the moment when Europeans first came to North America; legend has it that the only people who could actually see the ships were the shamans. For other peoples these were just not within the realm of possibility; they simply couldn’t *see* them.

Only at moments of “aesthetic arrest,” the guard of judgment, of consciousness, is tipped off. Then something new can happen:

I once came around the corner of a trail in nature and from one moment to the other there is this cougar, right in front of me. At that moment, that’s all there is. Everything else is backgrounded, right there. Before, when I was walking, I could cast a broad sensory net and hear all of kinds of things going on in the background of my awareness. But at this very moment it is cougar and everything else drops back, instantly. Time seems to change too, everything just seems to eventually stop. And then it can flow and it suddenly seems there is a lot of time, whether this is a dangerous situation or not. At that moment there is choice; it provides an opening. I see that in a Heideggerian sense, where *Dasein* perceives beings as beings and is able to make judgments about worlds and on what beings are or not. Before that moment of judgment, one could make a conscious effort to look for that liminal space, rather than following the road we have already. But that would be different. (B. Carruthers, personal communication, May 29, 2010)

For Carruthers, this dropping out off the scene, for however long it may take, is like a short circuit which we might value as a window of opportunity as well. She suggests

that it can have the effect that it suddenly allows the living earth, the other animals, to present themselves. All of a sudden we can come to perceive them more as they are, rather than how we expect them to be. In her own art practice, for example when she is drawing something, Carruthers can be in that zone, as she calls it: "It's like the expansion of self; through the perceptual process of my gaze, I actually feel like if I am touching things which in reality could be across the room." When sculpting, she is also mindful of the importance of the "relational space" around the artwork:

When you, as a sculptor, carve stone, it wants a certain space. And as you walk around it, it changes. What you *see* changing is not the sculpture, but the shapes around it. It's like in the wintertime when you see those beautiful tree branches against the sky; you see the shapes of sky. That's what I see. (B. Carruthers, personal communication, May 29, 2010)

In the Western world we seem to share a culturally conditioned gaze which causes us, for example when we contemplate a painting of, say, cows in a meadow, to focus on the distinct animals rather than on the space in-between them. What is usually seen as background, or backdrop, from the point of view of our cultural predisposition, is only there to service as a décor for the elements that are truly deemed important in the painting, and more often than not these tend to be the distinct objects (expressive of the "noun"-bias that guides both our language and awareness to confined persons, things, places or ideas).

Rebecca Hossack, a London-based curator of Aboriginal art, suggests that African Bushmen artists may have a different way of prioritizing the elements of their paintings. To them, the space in-between their painted antelopes and elephants is just as important – if not more – than the demarcated animal shapes themselves:

I believe this comes from their need to look long into the distance and to see animals silhouetted against the desert or against trees. I guess it was a survival thing for hunting, but then it later came to reflect that everything, even the negative space, has value. The whole of nature is one holistic thing, you can't put foreground and background as we do in Western art. I've only seen this in one other non-Western culture and that is in the art of the Torres Strait Island people where the negative spaces between the main subject matter of the picture are filled with a teaming mass of patterns. When you look closely you will see that actually these patterns are not just abstract patterns but filled with minor organisms such as fish, octopus, birds, again reflecting the holistic nature of nature.

I really believe that this way of painting reflects an absolute intrinsic, equivalent and equal relationship between the creator and the land. There is no distinction. They put themselves in the same picture plane as the picture rather unlike [the 18th century English portrait and landscape painter] Gainsborough, who puts the human fixed in the front. (R. Hossack, personal communication, October 23, 2010)

For me, this dynamic of foregrounding and backgrounding may in some profound sense imply a reversal of our cultural encoding, of what we are biased to take as being the meaningful foreground, and the less interesting background. We are so trained to see the foreground in a painting as the most relevant part, but if one switches this and encourages people to pay more attention to the background, background may actually become foreground.

To me, this shifting between foreground and background in some sense also happens in wildpainting. The participants start out using the “wrong” complementary colors. Later they slowly cover this underpainting with the actual colors they perceive in the landscape. Here, the primary layer of wrong colors, which tends to be a composition of screaming red and orange hues, is first foregrounded. In the next phase, the participants soften this vibrant first painting by applying, on top of it, the more neutral green and brown colors that they see around them in the landscape. Only at the point when they strike a new balance between earlier and later applied colors (through the subduing of at least part of the shouting wrong colors) can the somewhat unnerving articulation of what was foregrounded and backgrounded (in the first phase of the painting activity) find a new balance.

In this process of engaging with (and being attentive to) how foreground and background are articulated against each other in a dynamic play of forces, the in-between space – which we are culturally disposed to overlook – is fully involved and acquires new prominence. In this regard, Swedish visual artist Marius Wahl Gran speaks of the phenomenon of *reverberation* (“etterklang”).

The old haiku poems of Japan are very minimalist; they consist of only a few lines and it is precisely in the in-between space that the poem occurs. We become its co-creators; we add those things which were left unsaid. The in-between space creates reverberation. It is the same with the reverberation of what I have seen in nature. Those reverberations occur partly due to something that is purely visual. We have, for example, some sort of agreement with one another that certain colors belong to specific phenomena in nature: trees are green, the sky is blue, the sun is yellow, etc. But trees are red! They are as much red as they are green. The after image, the visual reverberation to the green, comes forward as the complementary color red. I look for what is complementary, the opposite, in nature. The forces in nature – not only the colors – have their reverberations, and with those I try to make art. On the whole, I try to come closer to the sensual as a gate to the spiritual, to a language, to an expression. (Wahl Gran, cited in Hestnes, 2004, my translation, p. 25)

Through undergoing a shift in what is highlighted, a reversal in what is called to stand out, our awareness is activated. Before, it seems we have difficulty seeing the trees for the wood. But the switch-over through art can help us suddenly see a particular tree with fresh eyes.

During an interview I held with Meri-Helga Mantere in 2007, she pointed to a maple bush outside, with leaves in red autumn colors.

If you are very conscious of having red leaves on trees and bushes in autumn, you have already a concept of “seeing red leaves.” However, they are never the same red. Now, when the light comes through them, it is a very special red; in every leaf it is different. Today, there are exactly these leaves to be seen; tomorrow we don’t know. We can expect, but we don’t know. Right now, here and now, it’s just once in the life of the world as it is there.

When you connect this with scientific or ecological knowledge, you can keep that thought kind of alive too. It is very nice to know *why* the leaves become red in autumn. How it’s connected with the life circle of the bush, and why it’s red and not green any longer or something else. All that stuff is extremely interesting. However, in order to get your feelings connected, you have to *see* it. You have to see it as a special individual, a special bush, *this* bush. So that you can love this phenomenon of nature and it can be a personal connection. To love bushes and leaves in general is not very strong. Can one love birch trees in general? Can one love the circles of life? Or people in general? It all becomes more lovable when you follow, get to know, an individual phenomenon, of which there is only one in the whole world. Then you can really be in love with it. And your connection can be as strong as love can be life-enhancing, and life respecting and life-saving.

One understands the very individuality of every phenomenon of life and nature, but at the same time you need to remember that they are all connected. (M.-H. Mantere, personal communication, September 24, 2007)

In wildpainting, I encourage participants to shift their focus away from the object at hand, say a bouquet of flowers in a vase, and to instead pay attention to the negative space around and in-between the individual flowers, rather than to the flowers themselves. If one does this, it often entices them, I noticed, to concentrate more fully on what is in front of them. I believe that due to this heightened presence, brought about by the turning of the “familiar” into something new, the resulting drawing or painting is often more expressive. One thus approaches the phenomenon sideways, in an oblique way; hence I call this “the principle of indirectness.”

10.3 The principle of indirectness

In little-me making, participants, for a major part of the process, don’t use the sense of sight. However, in an interesting way, the other senses seem to compensate for the temporary deficiency of the eyes, constituting a “presence in absence.” What this brings to light, are remarkable habituations, like the tendency of participants to hold the clay with their hands at a point in space right in front of their (closed) eyes, as

they would be accustomed to do when working with an art material – despite them not being able to see *what* they are doing. In the AEE activities that I facilitate I find it important that participants can also engage with what is *not* there (or, at least, is not readily available). This aspect seems to cause initial confusion on the part of many participants, and raises the question of “why,” like: “Why do you suggest that we use ‘wrong’ colors?” “Why do we work the clay with our eyes closed?” “Why do we start making the clay figure from the foot upwards?” “Why are we encouraged to retrieve recollections of sensory experience from memory?” etc. This presumed lack of framing is meant to help participants make meaning of the experience in less obvious ways, as it is meant to enable them to perceive the situation of their subjectivity in the natural environment differently than they would on basis of preconceived expectations. It may help them to realize that this might be different from anything else they have done previously. For Dewey, when compelling experiences imbue a situation with personal significance and new meanings, such enrichment would be nothing less than “a gift of the gods.” According to Phillip W. Jackson (1998), he would regard it as such because the added meaning is not sought: “It happens effortlessly and without notice – like a bolt from the blue” (p. 15).

When participants relate to phenomena in the natural world, such estrangement can be of fundamental importance, as it encourages them to move away from a taken-for-granted attitude, or from what D.H. Lawrence (1936) called “the know-it-all state of mind” (p. 141). The point of gravity may shift from meeting the phenomenal world “head on,” to a more delicate, blurry perceiving from the corner of one’s eye (through, what Mary Catherine Bateson called, “peripheral vision,” cf. section 2.5.2).

At the other side of the principle of indirectness is what could be called “the principle of immediacy.” When we meet phenomena instantly, they stand out in the illuminating spotlight that guides our attention unequivocally to what is exposed in front of us. Their unrestrained availability then may make any effort on our part redundant and, precisely because of this, these phenomena can elude us. This idea is allegorically contained in an intriguing old myth of the Greeks about King Midas, who had once helped an old satyr. The creature, half human, half goat, had become so intoxicated that he had fallen asleep. Upon awakening, he was unable to find his way back to his group again. Dionysius is so glad that Midas had taken such good care of the satyr that he offers him to utter whatever wish he wants. Whereupon Midas wishes that everything he will touch should immediately turn into gold. And so it happens. When he walks through the forest and breaks of a twig of a tree, it turns into gold, as well as the oars of wheat that he touches. When he returns to his castle with big appetite, he asks his servants to prepare him a full meal. Of course, what is to be expected is that when Midas tries to put the food to his mouth, it turns to gold as well. The king grows hungry and thin. In despair and fearing that he will die, he calls upon Dionysus to free him from the gift that only brought him misfortune. Dionysus takes pity on him and grants his request. In this myth of transformation, the hubris of King Midas is brought to catharsis and is followed by the redemption by Dionysus (Parker, Mills & Stanton, 2007, pp. 85-86). Transposed to the context of our theme of

connecting to nature through art, the moral the fable teaches us that the very desire to immediately and purposively get to the phenomena (*our* “touch of gold;” as it were) may hinder these to become manifest to us in the tempo, at the time and at the location where their presencing (Heidegger) would do most justice to their full meaning.

Bateson liked to quote a statement that was attributed to the American dancer Isadora Duncan. When she was asked to explain the meaning of her dance, she said: “If I could say it I wouldn’t have to dance it.” To him, the essence of a work of art is metaphor and interconnectivity. This is how Bateson reflects on what Duncan may have tried to communicate:

If this were the sort of message that could be communicated in words, there would be no point in dancing it. But it is not that sort of message. It is, in fact, precisely the sort of message which would be falsified if communicated in words, because the use of words (other than poetry) would imply that this is a fully conscious and voluntary message, and this would be simply untrue (Bateson, 1972, p. 138).

Put differently, for Bateson at least part of the message of an artwork is unconscious and unintentional. In the following I will look more closely at this quality of emergence, which follows its own indirect path, and is not present-at-hand by an act of will.

10.4 Emergent properties

My assumption about the AEE activities that I facilitate is that, through these, participants (while being in a natural environment or focusing on their own body-in-environment) are opening themselves up to insights that stem from the artmaking process itself. In my view, such a process may evoke and engender emergent properties, that is, qualities that are not directly traceable and reducible to the system’s components, but rather to how those components interact. The idea of “emergence” is understood here as the arising and manifestation of a “radical novelty” that was previously not observed in a system (Goldstein, 1999; Lauglin, 2005). Latent or potentially emergent properties may lay dormant in the artwork and manifest themselves in the process of making it and at the moment of its completion, when it is released into the world. Nachmanovitch (1990, p. 4) mentions the famous example of Michelangelo’s theory of sculpture: “The statue is already in the stone, has been in the stone since the beginning of time, and the sculptor’s job is to see it and release it by carefully scraping away the excess material.” Pertaining to nature, the same idea was encapsulated by American photography critic Nancy Newhall: “The wilderness holds answers to more questions than we yet know how to ask” (Newhall, cited in Dunaway, 2005, p. 139).

When we contemplate an artwork that someone else has made or the aesthetic object that is evolving in our own hands – e.g. when we partake in a guided AEE activ-

ity – it can be felt as a form that generated spontaneously, ambiguous and multi-layered in its meanings. It can catch the artist/participant by surprise; as if it came “from behind one’s back.” Expressive arts therapist Shaun McNiff (2004, p. 2) suggests that our art pieces, once finished, may become angels or messengers. In *Art Heals*, McNiff describes how he facilitates sessions with groups of participants who are encouraged to enter in a conversing mode with the paintings they make. He contends that images generate stories, and that we can enter into an “imaginal dialogue” with them; we can respond to pictures in ways that correspond to what he calls their “spirits.” Explaining what he means with this he says that “[t]he angel is the surprise, the infusion of spirit that arrives unexpectedly” (p. 105). At that point, the controlling mind relaxes its grip and allows spontaneous expression to form itself into fresh structures. This is how Kandinsky put it:

In a mysterious, puzzling, and mystical way, the true work of art arises “from out of the artist.” Once released from him, it assumes its own independent life, takes on a personality, and becomes a self-sufficient, spiritually breathing subject that also leads a real material life: *it is a being*. It is not, therefore an indifferent phenomenon arising from chance, living out an indifferent spiritual life, but rather possesses – like every living being – further creative, active forces. It lives and acts and plays a part in the creation of the spiritual atmosphere....

(Kandinsky, cited in Lindsay & Vergo, 1994, p. 210)

For Kandinsky, a “true” work of art leads a full inner life. The word he used for this life force was *Klang*, spiritual reverberation. McNiff, however, underlines that he is speaking of angels in a metaphoric and imaginal sense, rather than as literal appearances of supernatural beings (*ibid.*, p. 113).⁸² Though McNiff’s focus is primarily on imagination as a healing instrument, I suggest the metaphor of “an angel talking back” may be extended beyond the domain of expressive arts therapy. The great advantage of the angel metaphor to McNiff is that it personifies the image and brings it to life in a way that opens up many new possibilities for interaction: “All of these creative methods require one to establish an emphatic connection with the expressions of an image” (p. 101). This mode of artistic process is a way of interpreting through an ongoing and active imagination, thus accessing the imaginative expression and potential of the artwork we have released in the world. Images are often ahead of our thoughts about them, says Lisa Lipsett (2009, p. 61).

82 It is worth, in this regard, to contemplate the root of the word “angel,” which comes from the Greek *angelos*, which means “messenger.” For Jay Griffiths, artists can be conceived of as messengers from the invisible world. Quoting American playwright Arthur Miller, she notes that art carries to its audience news of the inner world. If people would go too long without such news, Miller held, they would “go mad with the chaos of their lives” (Miller, quoted in Griffiths, 2011, p. 11). When a person says that a work of art has “touched” him, this reveals a subtle transformation of mind, according to Griffiths: “For the greatest artists do not make their best works of art in clay or paint or sound or words: they make them right inside us, within the heart of the reader or audience.... We are each other’s works of art” (*ibid.*).

The idea that the purpose of art is to make the familiar unfamiliar was articulated first by Russian critic Viktor Shklovsky in 1917. “[A]rt exists that one may recover the sensation of life,” he wrote, “it exists to make one feel things, to make the stone stony.” Its true purpose “is to impart the sensation of things as they are perceived and not as they are known.” The technique that art employs to achieve this is “to make objects ‘unfamiliar’ to make forms difficult, to increase the difficulty and length of perception because the process of perception is an aesthetic end in itself and must be prolonged” (Shklovsky, 1917/1965, p. 12). Without art, “[t]he thing rushes past us, prepacked as it were; we know that it is there by the space it takes up, but we see only its surface” (Shklovsky, cited in Cornwell, 2001, p. 165).

The defamiliarization, however, may also provoke a moment of transformation, after which the world as it was before is not quite the same anymore. In his paper *Authenticity Revisited*, Bruce Baugh (1988) argues that the distinctive function of works of art is to reorient the experience of the perceiving subject. Peculiarly, the artwork *itself* determines the organization of this experience: “the world of the work of art … is none other than that of the perceiving subject as transformed by the work. An artwork makes this world its own according to the depth and singularity of the transformation it effects” (ibid.). A work of art, says Baugh, is something “that exists in order to be perceived.” This aspect of “perceivability,” to me, resonates with the idea of latent properties that lay dormant in the artwork and which only manifest themselves if and to the extent that we are receptive to them. We need a degree of defamiliarization to be open to the emanations that spring from the evolving or finished artwork that is in front of us. By allowing the artwork to organize our experience, it is given “a power over us sufficient to alter our experience of the world from its very foundations” (pp. 480-481). And thus it achieves its epiphany. This moment of transformation, however, will always be transitory, Baugh asserts. It is a momentary revelation from the standpoint of the work’s existence, rather than our own, and its duration coincides with that of the manifestation of the work.⁸³ Key for Baugh is that an authentic work of art must have an end that cannot be understood in terms of our own. It “resists” our every-day understanding of the world. By consequence, arts-based experiences of the living earth may redefine our conceptualization of nature and the manifestations of life we find there. Art, through its unique power to transform experience, reveals new possibilities of existence to us (ibid., p. 485).

Baugh’s reflections on how the artwork “makes the world its own,” which I have summarized here, implicitly seem to presuppose that there is an intentionality, a willfulness, on the part of the percipient of an artwork. The moment of transformation that the artwork brings about, the moment of epiphany it achieves, seems to be a consciously sought affair: we set out to undergo a momentary revelation when we engage

⁸³ Others have called such moments *peak* (Maslow, 1964) or *flow* (Csikszentmihalyi, 1990) experiences. In flow, Csikszentmihalyi held, there is a loss of awareness about oneself. The person no longer perceives his or herself as a separate entity acting upon something else. What remains is the event only and of that one is an integral part. In a deeply engaging flow experience, the person is neither the center nor origin.

in meeting the artwork. To me, however, it is not self-evident that such purposiveness in encountering art and artistic process is mandatory for transformation to happen.

Baugh focuses his attention on the percipient of an artwork, not on the process of making art oneself – in solitude or as part of a group of participants. Yet I believe his understanding of how the aesthetic object transforms our experience is meaningful as well for understanding the impact of artmaking as process. As we saw, McNiff provides an illustration of how such transformation is brought about in artmaking, through a dialogue with the nascent artwork, as it matures further and further. Gerhard Richter once conceded that when he is working on a picture, he feels that “something is going to come, which I do not know, which I have been unable to plan, which is better and wiser than I am” (p. 155). Like Richter, Rainer Maria Rilke held that his *Duino Elegies* reached out “infinitely” beyond him. Rilke notes that his poetic works “imposed themselves tempestuously” and that this was not in his plan; it happened without him *willing* it (Rilke, 1947, p. 373). Another compelling example of a radical novelty arising in an artistic process is the story behind the tempera painting entitled *Nicholas* (1955) that Andrew Wyeth made of his son. It is a portrait of a young boy *en profile*. Wyeth had been working on a winter landscape for months. The panel was half-finished and he loved its colors. Yet it was not really expressing the way he felt, he recounts to his interviewer, Thomas Hoving. At some point in time, while working on the tempera painting, his son Nicky came in from school and sat down in a corner of his studio, lost in a waking dream. It had a sudden electrifying impact on Wyeth, which he remembers as follows:

And he looked – my God. And I said, “Nicholas, stay where you are.” And I hauled the easel over in the corner and I painted Nick in right over the landscape very slowly and gently. He seemed to express more about the hill itself than the landscape. He was in this coat with fur on the collar and with this fey face that he had, he seemed to express the winter mood to me very powerfully. (Wyeth, cited in Hoving, 1976, p. 28)

One of the most intriguing examples of the manifestation of emergent properties in artmaking that I encountered (and which fringes on the absurd) is from an interview with Dutch expressionist painter Karel Appel that was broadcast on Dutch television. In it, Appel relates how latent meanings can even arise and provide him a sense of closure *without* any further physical artmaking activity on his part:

It often happens that a painting is not ready. I have to stop working; I am tired or it is late and I go to bed. And then, when I am awake again, I sit down and I look at it, and then I *watch* it ready. *Because watching is also painting.* I stay at the same spot, without touching the canvas, and I just look for as long it takes until it is ready. And then the painting suddenly *is* ready, even though I haven’t touched it anymore. I *watch* it ready. (Appel, cited in Kayzer, 2000, pp. 163-164, my translation and emphasis)

In the AEE activities that I facilitate it may occur as well that emerging properties are evoked, though less dramatic than in the examples above. It happened poignantly during a relatively recent little-me making session. As I mentioned before, I occasionally try to bring in a new element in the AEE sessions of which the outcome is unknown to me. This prevents the process from ossifying, and feeds my own curiosity as facilitator – and which I in turn find reflected in the excitement of the participants who feel that some new territory will be entered. One of such novelties was to introduce the drinking of a cup of water, again with the eyes closed, at the moment in time where the throat and neck are being molded from clay. One participant, **Bjørn**, confided to me afterwards that he felt that in the making of a little-me there was an element of “bearing witness”: one is amazed, he said, when one at last opens the eyes and actually sees the figure that one has made which, is so to speak, “looking back at you.” In other circumstances, he added, the process of artmaking is much more based on “stepping-back” from time to time from the emerging artwork, to make judgments and, if necessary or desirable, to adjust or add something along the way. **Bjørn** perceived the drinking of the water as a “reverential gesture,” a threshold experience before commencing with the formation of the clay head. It is as if there was a latent meaning in the swallowing of the water (that I, as the person who introduced this element, had never thought of myself), which manifested itself through the process.

In the context of this theme, Paul Ricoeur’s distinction between referent and generative metaphors is relevant. A referent metaphor is a one-for-one exchange whereby the metaphor simply stands in for the other thing: they are interchangeable. A generative metaphor, in contrast, opens out into multiple images and meanings. It generates clusters of possibilities and the way these relate to each other will continually generate new messages. British artist and curator Alan Boldon, to whom I owe this explication, is particularly interested in those kind of stories that are not straight but rather messy and that have double or even multiple meanings. For him such deeper stories are always “eternally becoming,” they are never finished. Essentially, they are narratives with complexity, “that resonate, that disturb, that haunt,” and this can be very unsettling. Boldon wants to distance himself from what he calls “utilitarian narratives,” the closed stories that simply serve a purpose and that don’t leave space for imagination or alternative versions. He invites us to leave enough imaginative space to engage with a work, and in doing so, to acknowledge uncertainty, loose ends, or manifold possibilities.

To illustrate his point through personal experience, Boldon tells of a specific drawing he made which typifies his own artmaking process. For me it is a clear example of an artwork as an “angel talking back”:

While I prepare the surface, I think about a couple of starting marks. This is interesting for me because this is how little I know of my intentions.... I’m interested in my thoughts, the ideas that concern me. So I make a few marks and then I try and simply observe this emerging “ecology of marks” and see what the work seems to need. People who make works talk about getting *into*

their work. When I make work I feel as if I generally merge with the thing. At a certain point I see no separation between me and the thing I'm making. At another point I emerge out of that work; I see what has resulted.

One time I was simply drawing an irregular form and filling it with other forms and looking at relationships and ecologies of mark-making. At a certain point I studied this drawing and I thought that actually something compelling is here; something wants to emerge, so I have to draw it out. I drew it out and I was surprised by this figure. I was curious about how much this would tell me of my prejudices, or how much these prejudices may be something beyond me. I needed to know more about this drawing. One thing that had happened was that, as I finished it, I remembered a poem by Mary Oliver, called *In Blackwater Woods*. The last part of it is: “*To live in this world / you must be able / to do three things: / to love what is mortal; / to hold it / against your bones knowing / your own life depends on it; / and, when the time comes to let it go / to let it go.*” So I spent a lot of time with this drawing, looking up references, reflecting on this poem, making drawings in response to the drawing, trying to deepen my relationship and come to know something about the relationship of my intentions to the thing that emerged.... What I did was to encounter this drawing as an Other that I was now meeting. I wanted to see how much it would reveal to me of what I know and what I am preoccupied with, the kind of stories that are informing my life.

It is this kind of process of making, merging with an emerging from, that informs all of my work.... I start out with an intention to make a painting about something or to include certain elements, current interests. But if we are to experience a rich encounter we have to be wary of imposing intentions too firmly. If we do, we risk missing what *else* is going on. We cannot understand, without wanting to understand, that is, without wanting to let something be said. (A. Boldon, lecture at the *Gentle Actions* seminar in Oslo, October 29, 2010, my transcript)

In the interview I held with David Abram, a few days later at the same gathering in Oslo, I asked him if he could relate to this moment, when one is creating an artwork such as a painting or a poem, when one looks at it and one has the sensation that it is looking back at you. One may think that one is the author, the one in control, but in some sense one perhaps is not. This is how Abram responds:

It's not you. *It's not you!* What we create out of ourselves is never just created by ourselves alone. It is always this co-creation with the wider life of the Earth. And so, in some way, it is the otherness that sometimes we find looking back at us from the canvas that we have started dabbing with our pigments, or from the rock or the stone, or from a poem that I've started crafting, or the page. It partakes of the otherness of wild nature itself. It is like another animal staring back at me, and examining *me*. Or at least it is borne from the interaction

between myself and the strange self of the world. (D. Abram, personal communication, November 12, 2010)

Leslie Marmon Silko, the Native American novelist and poet (to whom I also referred in sections 1.5 and 5.3), attests to the same idea, that on the level from where she writes, in a profound sense, it is *not* hers:

The imaginative on that other level, that doesn't belong to me, that's bigger than me, that lives whether I live or not. That exists in other people. I'm not the only one. So I feel in a very personal sense I'm totally free in working with the stories. They make me. They have their integrity. They have their life separate from me. Narratives have a separate life. Once narrative comes into being, it has a separate life. It has a separate life because it lives inside the memories of everybody today. They will remember it in their very own way. (Silko, cited in Evers, 1992)

In the Western mystery tradition, the concept that perhaps comes closest to this idea, of images and narratives acquiring their own integrity, is *evocation*, the act of calling a supernatural agent. The word *evoke* stems from the Latin *ex* ("out") and *voco* ("call"). For anthropologist Stephen Tyler (cf. section 5.3), evocation is nothing less than "the discourse of the post-modern world" (p. 123): "Evocation is neither presentation nor representation. It presents no objects and represents none, yet it makes available through absence what can be conceived but not presented.... It overcomes the separation of the sensible and the conceivable, of form and content, of self and other, of language and the world" (1986, p. 123). When asked in an interview if there is a mystical connection in evocation, Tyler responds that when something is imaginatively created out of the process of reading and one cannot trace one's own mental machinations or experience, it falls within the domain of the mystical. But it is a kind of mystery that informs, "not by giving you a kind of discursive knowledge. It's a mystery that informs you by enabling you to think *in-between* things" (Tyler, cited in Lukas, 1996, p. 19, emphasis added).

To elaborate a little further on the subtle reciprocal nature of the phenomenon, I want to make mention here of a discussion I had with psychiatrist Iain McGilchrist, author of *The Master and His Emissary: The Divided Brain and the Making of the Western World*. In November 2011, I presented a paper in Ayr, Scotland, at the symposium *Shorelines: place, creativity and wellbeing*.⁸⁴ One of the keynote speakers at this gathering was McGilchrist and in the discussion with the audience after the presentations, he commented as follows on the idea of emergent properties coming forth through the making of art – the phenomenon of "angels talking back," as I had termed it in my presentation:

84 The title of my presentation was "Angels talking back and new organs of perception: Art making and intentionality in nature experience" (publication forthcoming).

It touches on a really, really important idea, which is that you can't *make* the creative act happen. You have to do certain things, otherwise it *won't* happen. But it *won't* happen while you are doing *them*. *They* create the terms on which the thing will arise. So it is actually about a kind of very attentive state...

To underscore his point, McGilchrist referred to a passage in George Steiner's book on Heidegger, where he talks about this attentive listening and refers to Fra Angelico's *The Annunciation*. In this painting this idea is contained of the ear that is listening and receptive to the message that comes:

It's like your angels. And in a way you've got to have an intimation of what it is that's coming, because otherwise it couldn't come. On the other hand, you can't actually close down too precisely on what sort of thing it is, because then it *won't* come! So it is basically remaining open, and yet being able to receive something which is in fact, in the end, quite specific and particular. We were having this conversation earlier, about what the arts are doing – are they communicating something – and we got slightly at cross purposes, because it's *neither* that they're definitely communicating something, nor that they are *not* communicating something. They *are* communicating something, but what that is, is in fact, very much determined by what comes *through* that artist as well as by what comes *through* the person that's receiving. But that doesn't mean it is indeterminate in the sense that it could be just *any* old thing. Far from it. The really difficult thing to get over is this: people think that just *because* it is not precise, it could be anything at all! No, the reason it's not precise is that this is the very nature of the thing. It, *in itself*, is very much what it is and not something you've made up or ever could have made up. (I. McGilchrist, personal communication, November 15, 2011)

10.5 The ability to inhabit uncertainty

On a December day in 1817, Romantic poet John Keats (1795-1821) wrote a letter to his brothers in which he first expressed his theory of "negative capability." Asking himself what quality went to form a "Man of Achievement" such as Shakespeare, he came upon the view that such a man is, first and foremost, "capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact and reason." Basically it is the ability to accept that not everything can be resolved. As such, negative capability can be compared to Heidegger's *Gelassenheit*, as Nathan Scott (1969) has argued, for it is "the spirit of disponibilité [availability] before What-Is which permits us simply to let things be in whatever may be their uncertainty and their mystery" (p. xviii). It is, as Scott points out, like the situation of waiting in Heidegger, where man learns how to wait, and even how to wait without needing to know precisely what it is he waits for. Similarly, Keats had a high regard for receptive intuition, for which the intellectual

self could be standing in its way. Negative capability has been defined as “the ability to contemplate the world without the desire to try to reconcile contradictory aspects or fit it into closed and rational systems” (*Keats’ Kingdom*, ND). If one is to make true poetry, Keats held, one should be open to the imagination and be able to remain in a state of restlessness and uncertainty – without impatiently looking for facts or reasons. There is a certain quality in having tolerance for doubt. In the words of Os Guinness (1976), author of *In Two Minds*, “To believe is to be ‘in one mind’ about accepting something as true; to disbelieve is to be ‘in one mind’ about rejecting it. To doubt is to waver between the two, to believe and doubt at once, and so be ‘in two minds’” (p. 25).⁸⁵

The capability to be in two minds is, I believe, something that can be nourished through AEE. There are several instances where participants are encouraged to dwell, at least for some moments, in the doubt of how to go on. They are faced with new, unknown contradictions. I shall give a few examples. When participants in wild-painting are asked to paint the landscape “as wrong as possible” (i.e. in the complementary colors of the hues that they actually perceive in nature) this does not make sense directly. It is only by immersing oneself in the activity, “without any irritable reaching after fact and reason,” that later-on they perhaps can begin to understand the meaning of this – in the context of their own evolving painting. This way of facilitating could of course be done differently; one could have explained why one is asked to paint in this odd way, and what its purpose is. But, to me, there is a meaning in not disclosing the aim. Similarly, when working with the lines of the hand, the negative capability that is asked of the participants is to go along with the “absurdist” suggestion that the few lines on the square piece of paper actually represent a landscape in which one can situate oneself. If they would approach this solely in a rational way, many of them would probably immediately cast it aside as a children’s game of make-believe. Participating then means also to surrender oneself to the process, without knowing where it will go. My third case, of little-me making, pertains to the impossibility of expressing in outward (clay) form what one perceives going on inside one’s body – tensions, pain, contractions, a sense of heaviness or lightness, etc. By that invitation to the group, they have to work out how something inner would look (or may manifest itself) in the surface of the clay body sculpture. Again, I offer them no help to solve this riddle.

Here is what I wrote down in my research journal after one little-me making session in Oslo:

“These things were not released in the world before – the painting this morning, the little-me’s – something grows and is suddenly there and acquires in a way its own meaning. This has become its own carrier in a way. The longer

⁸⁵ It is in this respect worth taking a closer look at the word *doubting*. Its most common meaning is the act of hesitating between two things. Doubt stems from the Latin *dubitare*, which on its turn comes from the Aryan root *two* (this origin is also found in the German word for doubt, *Zweifel*, that also comes from *zwei*, or “two”).

you look at it, the painting, the more you will be seeing in it. Art has many more meanings than just one, and meanings might be revealed over time. They might add up to each other. And that is part of the beauty also when dealing with sustainability issues: often people force you to have an either-or answer. One position or the other. And in art you sometimes can play a little longer with opposing viewpoints, with ambiguity, with contradiction. You can juggle in a way with different viewpoints, different meanings, that might be in this painting and you don't have to choose, this painting means this or it means that. That you can live with more dimensions a little longer. In the times we are living today, we need that capacity, to be more flexible. For me this also a form of learning which we do far too little."

Juggling with the contradictions, accepting them, is key to telling a good story. Indian cinematographer Shekhar Kapur explains:

Ultimately, what is a story? It's a contradiction.... And all of us are constantly looking for harmony. Harmony is the notes that Mozart didn't give you, but somehow the contradiction of his notes suggests harmony. It's the effect of looking for harmony in the contradiction that exists in a poet's mind, [and] in a storyteller's mind. A storyteller's mind is a contradiction of moralities. In a poet's mind, it is a conflict of words. In the universe's mind, it's between day and night.... The acceptance of contradiction is the telling of the story, not the resolution. The problem with a lot of the storytelling ... is that we try to resolve the contradiction. (Kapur, 2010)

Earlier on in this thesis, I sketched the contrast between purposiveness and open-endedness in education (cf. section 2.8.1). Here, I want to revisit this opposition from another angle and look at the phenomenon of being stuck, being confronted with contradictions that allow no escape (which Bateson calls "double binds") as actually being *helpful* in the learning process: through such profound confusion we may actually *achieve* transformational learning. In the moment of stumbling upon seemingly insurmountable obstacles, one is surprised by the experience of suddenly *not*-knowing. This may cause a sense of frustration (if not nausea), which inhibits continued engagement in the process in a satisfying and reassuring fashion. Suddenly, there seem no alternatives at hand, and one gets stuck down a singular line of thinking. Overcoming this state can be difficult and even painful, for if no one else intervenes, one has to pull oneself up "by one's own hair."

However, there is also another path, and that is to dwell a little longer in stuckness itself. In an interview, Robert J. Pirsig (1974), author of *Zen and the Art of Motorcycle Maintenance* tells of the importance of the state of being stuck:

When you get stuck ... that is not a bad moment. That's actually a pretty good moment. The times I have been stuck I have been able to catch myself at be-

ing stuck and instead of getting mad I've just gone off and had a cup of coffee. I noticed that whenever I am stuck like that, if I look at the clouds, the clouds are much more beautiful.... At the very moment of stuckness, if you just stop and look around you, you find the world is very real.... When it comes you should welcome it because it won't last long.... Stuckness is kind of what you call "non-doing." Our whole society is set up for *doing*; unless you are doing something, something is wrong.... To become skilled at non-doing is quite as difficult as becoming skilled at doing. (Pirsig, interviewed by Goldman, 1974, my transcript and emphasis)

Many years later, in 1991, when his next novel *Lila* has appeared, Pirsig is again interviewed and this time the theme is "writer's block." Once more, the bestselling author has an uncommon view on the phenomenon: "I think when one is blocked, one in fact *is* writing. The blockage is a part of the writing. If a person writes without any blockage it means he is writing off the top of his head and is likely to write something that is rather quick and probably superficial" (Pirsig, interviewed by Adams, 2005, my transcript).

The pivotal challenge, it seems to me, is to be able to find an exit point *out* of the stuckness, through which it actually may transform into an ignition switch to (renewed) creativity. Such a possibility is also at hand for a participant that has got stuck in an AEE activity. It may, however, not be so manifest to the person who gets blocked. In such a case there are at least two alternatives for the facilitator. The obvious one for him or her would be to have recourse to what his or her "natural" role is, which is to *facilitate* the stuck person in finding a way out. The more difficult alternative is to open the space in such a way that the participant concerned allows him- or herself to inhabit this sense of being blocked even longer, for an extended amount of time, so that, possibly, out of the non-doing – and through the participant's own struggling with this condition – something new may arise.

In the situation of **Anne-Lene**, who ripped her painting apart during a wildpainting session, her "way out" of her stuckness was to destroy her work, which did not seem to offer me options to intervene in the stuckness itself. But to herself (as discussed in section 8.3), her own intervention may actually have been transformational.

Important triggering events that may lead to a sense of stuckness, it seems to me, are moments when participants feel they have made a "mistake": the parts of the clay little-me don't hold together, or the colors in wildpainting turn out to have lost their radiance due to mixing them too far. But such mistakes can be blessings in disguise, and therefore I am inclined to put the word between quotation marks. Here is what American photographer Sally Mann says about making errors:

All these little flaws . . . You see all these little pieces of dust in there? They all show up. I love the serendipitous aspect of all the mistakes I make. They turn out to be good things in the end. I am so worried that I am going to perfect this technique some day.... I have to say, it is unfortunate how many of my pictures

do depend on some technical error. It is not something I do to the negatives.... Proust once wrote that what he prayed for, in his work, was the angel of certainty. But I am sort of praying for the *angel of uncertainty*, to visit my plate. (S. Mann, cited in the film *What Remains*, 2005, my transcript and emphasis)

As I see it, there is a difference between serendipitous mistakes such as Mann describes, and mistakes that are intentionally provoked by the AEE facilitator. An illustrative example of the latter is when I, during one of the initial sessions of a wild-painting course, ask participants to paint a color circle. I described in section 6.1.2 that this, almost inevitably, tends to go “wrong,” in the sense that most participants fail to mix the colors proportionally in a right balance. But this error contains important lessons. This “learning by doing” conveys the need for attentiveness in color mixing much stronger than any merely verbal account would be able to accomplish. As I argued before, I believe, in general, that there is an intrinsic quality of having an art exercise that puts the participant on the “wrong foot.” The participant is intentionally taken by surprise, caught off guard, challenged, provoked by actions of the facilitator.

Serendipitous mistakes – the appearances of Sally Mann’s *angel of uncertainty* – are an other type of mistakes (though by the individual participant they may be experienced similarly as mistakes provoked through wrong- footing). Important to note is that here again there is a further bifurcation into two types of serendipitous mistakes: those that the participants themselves acknowledge as errors, and those that the facilitator (perhaps wrongly) would interpret as fruitful mistakes that the participant has unknowingly stumbled upon. In the latter case, it is extremely important that the facilitator tries to make an adequate assessment as to whether or not to intervene.

In cases where the participant indicates that a mistake is made, I have come to experience that it can have a marked impact on the overall flow of the artistic process whether or not the participant expresses (verbally or through body language) that he or she has indeed erred. This can be done subtly, for example through a sigh, but also overtly, like by making a scream, which may indicate a need for help or guidance. In wildpainting sessions, the facilitator then always has a choice whether or not to intervene and to facilitate the person concerned to overcome the “mistake” (if he or she indeed would wish to have that happen). The facilitator could then for example encourage the participant concerned to try to use the possible creative potential of the mistake by letting it guide the way to proceed further, or take the event of the appearance of the mistake as a trigger to suggest to the participant to perhaps consider starting over again. In some cases, when the artmaking is done in silence, like in little-me making, it can be that a participant expresses through a gesture like sighing or groaning that he or she has made a (supposed) error and would appreciate help, but a meaningful intervention of the facilitator is difficult if not impossible. Any interference would easily violate the spell of attentive silence in the room or at the outdoor location where the little-me making is taking place. One way in which

the facilitator can try to impact such situations nevertheless is by simply allowing for more time, so that feelings of stress don't build up so easily.

In my view, an important epistemological dimension of any artistic process resides in encouraging the temerity of daring to make mistakes. As quoted before, Scott Adams (1996) poignantly observed that "Creativity is allowing oneself to make mistakes. Art is knowing which ones to keep" (p. 324). Errors become ways to re-assess, to calibrate, thus spinning the learning activity in a new direction which may not have happened if the mistake wasn't made.

In *Rivers and Tides*, Thomas Riedelsheimer's film on Andy Goldsworthy's artmaking, the latter gives a striking example of how the actual failures help him to achieve increased understanding. The viewer sees Goldsworthy at the rocky shores of the Canadian province of Nova Scotia, creating a stone cone of the pebbles that he and his assistants collect at the beach. The Scottish artist has just explained that for him there is a huge contrast to the more controlled way of working inside the walls of the art school, which he finds exciting. As soon as he makes something outside there is this breathlessness and uncertainty. "Total control can be the death of a work," Goldsworthy says. We see a shot of him getting to the level where the lower part of what is to become a neatly stapled two meter tall cone is at its broadest width. Here the structure needs to narrow in, as Goldsworthy wants to achieve the shape of a cone which narrows upwards to a very small pinnacle. Suddenly there is some unforeseen movement in the pile of stones that Goldsworthy has stacked up until that point. "*Oops. The stone speaking.*" Goldsworthy exclaims. It is the fourth time the sculpture collapses. With some frustration, he reflects as follows:

The moment something collapses, it is intensely disappointing. This is the fourth time it has fallen, and each time I got to know the stone a little bit more. I got higher each time, so it grew in proportion to my understanding of the stone. And that is really one of the things my art is trying to do: it is trying to understand the stone. I obviously don't understand it well enough yet. (Goldsworthy, 2001, quoted in *Rivers and Tides* by Riedelsheimer, my transcript)

For Goldsworthy, artmaking here is clearly a way of learning, and one which takes place in and through trial and error. This example, like the one on Sally Mann's photography, may serve to show that in learning processes mistakes can paradoxically turn out to be blessings in disguise; from at first being perceived as errors they may be visitations of angels that turn stuckness into (resumed) flow. Here there is a relationship between getting stranded in paradox (understood as an apparent contradiction that in truth is not real), which I will take up in the following.

Bateson held that encountering paradoxes is a basic part of life and of evolution, a thought that is concisely expressed in the title of Stewart Brand's 1973 printed interview with him, *Both Sides of the Necessary Paradox*. For Bateson, a paradox is a contradiction in which you take sides – *both* sides. One half of the paradox proposes

the other. Dwelling a little longer with paradoxes, and not opting for one side at the expense of the other too soon, is like embarking on a sort of voyage, in his view: “you come out knowing something you didn’t know before, something about the nature of where you are in the universe” (Bateson, cited in Brand, 1973, p. 35). If one excludes one half of a dialectic tension (instead of clinging on to it – Bateson speaks of “riding with the dichotomy”), one settles for rational or conscious purpose, serving only its own convenience or plan. As an alternative, Bateson suggests that researchers try to step out of their “clinical bias” which prevents them to link up seemingly disparate phenomena. He gives the example of schizophrenia and humor, whereby the former is regarded as clinical, and the latter is hardly considered within psychology. For Bateson, however, the two phenomena *are* closely related, and both of them are on their turn closely related to art, poetry and religion. It is in this way that he uncovers the pattern that connects: “you’ve got a whole spectrum of phenomena, the investigation of any of which throws light on any other.” Paradox, in Bateson’s view, is healthy; the truth for him is always one of complexity, of engaging in the dance of Shiva, in which the whole of good and evil gets wrapped up. Good and evil are so intimately joined, he holds, that they can never be disentangled: “The first evil evidently was the separation of good and evil” (Bateson, cited *ibid*, p. 32). Nora Bateson learned from her father that, paradoxically, for a system to be really complete, *incompletion* must be included in it. Through (and because of) this incompleteness, it retains its flexibility. As she understands it, “It’s learning to learn. Anything else is just static, not evolving, finished. I eventually realized that even in *death* relationships continue to grow. I am *still* learning things from my father” (N. Bateson, 2010).

The psychologist Carl Rogers defines openness towards experience as the opposite of the psychological attitude of defense. For him it involves a “lack of rigidity and a permeability of the boundary lines of the spheres of concepts, perceptions, and hypotheses.” It means a tolerance of ambiguity, where ambiguity exists. This signifies, says Rogers, “the ability to receive very conflicting information, without forcing the closure of the given situation” (Rogers, 1959, cited in Pitruzzella, 2009, pp. 28-29). This way of looking at openness matches novelist F. Scott Fitzgerald’s (1936) “test of first-rate intelligence.” Its trial, he held, was “the ability to hold two opposed ideas in the mind at the same time and still retain the ability to function.” One should, for example, “be able to see that things are hopeless and yet be determined to make them otherwise.”

In the following, I want to zoom in more extensively at the phenomenon of making, what could be termed, “lucky” mistakes: the phenomenon of serendipity, of stumbling upon something while you were searching for something else.

Almost forty years ago, a relatively obscure book appeared with the title *The Message in the Bottle: How Queer Man Is, How Queer Language Is, and What One Has to Do with the Other*, by American author Walker Percy (1975/1983). He opens his first chapter, “The Delta Factor,” by asking dozens of rather unusual questions, one after the other. In the context of my discussion here, there are two of such questions which I find particularly relevant when looking at making fortunate errors in AEE:

Why is it harder to study a dogfish on a dissecting board in a zoological laboratory in college where one has proper instruments and a proper light than it would be if one marooned on an island and, having come upon a dogfish on the beach and having no better instrument than a pocketknife or bobby pin, one began to explore the dogfish?

Why is it all but impossible to read Shakespeare in school now but will not be fifty years from now when the Western world has fallen into ruins and a survivor sitting among the vines of the Forty-second Street library spies a moldering book and opens it to *The Tempest?* (p. 5)

Further on in the book, Percy revisits these intriguing questions. His elaboration is illuminating. To make his first question more concrete, he tells of a young Falkland islander who is walking on a beach and discovers a dead dogfish. With his jackknife he starts to investigate it “in a fashion wholly unprovided in modern educational theory.” Thus, he has a great advantage over a pupil at the (proverbial) high-school of Scarsdale, who finds the dogfish on his laboratory desk. If the latter student has the desire to get at a dogfish, he or she may have the greatest difficulty in salvaging the creature itself from the educational package in which it is presented, or so Percy suggests. What is at stake is that the student, in a fundamental way, is placed *in* the world; being a pupil at Scarsdale High makes him a consumer receiving an experience-package. It is, in Heideggerian terms, “ordered” (*bestellt*). A “loss of being” has occurred under his very nose. In contrast, the Falkland islander who sets out to explore the dogfish with his own knife is, as Percy puts it, “a person exercising the sovereign right of a person”: “He too could use an instructor and a book and a technique, but he would use them as his subordinates, just as he uses his jackknife. The biology student does not use his scalpel as an instrument; he uses it as a magic wand! Since it is a ‘scientific instrument,’ it should do ‘scientific things’” (*ibid.*, p. 58). Effectively, the dogfish has been rendered invisible by a shift of reality from concrete thing to theory, Percy proposes. Thereby he makes reference to Whitehead’s notion of “the fallacy of misplaced concreteness” (thematized shortly in chapter 5), that is, to mistake an idea, a principle, an abstraction, for the real. The consequence of this shift, says Percy, is that the “specimen” is seen as less real than the theory of the specimen. When a student enters a laboratory where the conditions seem optimum for having an educational experience, this very design of the setting – the neatly arranged laboratory manual, dissecting board, instruments, and, of course, one “specimen of” *Squalus acanthias* – works “to conceal the dogfish forever.” By this procedure, the ontological status of the individual dogfish has been radically devaluated, Percy holds (p. 58).

Swedish professor in pedagogy Bo Dahlin calls this spoliation by the theoretical method (thereby following Harvey, 1989) *the ontological reversal* (Dahlin, 2001, p. 458). This reversal is brought about when an abstract model takes on a higher ontological status than experience itself. The model is believed to point to a supposedly hidden reality that is *behind* the concretely experienced phenomena. Dahlin argues that in science teaching and learning, such an ontological reversal creates a rupture

between the students' intuitive life-world experience and the scientific knowledge they acquire. And once this split is there, it is hard to bridge.

Walker Percy, however, tries to find a way to overcome this dualism. He identifies two traits of such a rare achievement. The first is "an openness of the thing before one"; the learning exercises should ideally not take place according to an approved mode, but be "a garden of delights which beckons to one." The second feature is that the learner is able to maintain his or her sovereignty instead being "a consumer of a prepared experience" (Percy, 1975/1983, p. 60). Of course, in some occasions, a student can be strong and brave enough to just take the dogfish and to obtain control of it from the educators and the educational package. And what holds here for learning about the dogfish also pertains to studying a sonnet of Shakespeare, in Percy's view: "If we look into the ways in which the student can recover the dogfish (or the sonnet), we will see that they have in common the stratagem of avoiding the educator's direct presentation of the object as a lesson to be learned and restoring access to sonnet and dogfish as beings to be known, reasserting the sovereignty of knower over known." The lives of scientists and poets show us, Percy goes on to say, that they commonly have discovered "the indirect approach, the circumvention of the educator's presentation" (p. 59).⁸⁶

But, in other cases, it seems that first a dramatic change needs to have taken place. Therefore he proposes that students of English poetry and of biology should, at irregular intervals, be put in situations that shake up the conventional practice. Poetry students should find dogfishes on their desks and biology students should find Shakespeare sonnets on their dissecting boards. Provokingly, Percy suggests that an English major who began poking about in a dogfish with a bobby pin would learn more in thirty minutes than a biology major in a whole semester.

Percy holds that the very means by which a thing is presented for consumption, the techniques to make it available, operate to remove the thing from the sovereignty of the knower; "As a result of the science of botany, trees are not made available to every man. On the contrary. The tree loses its proper density and mystery as a concrete existent and, as merely another *specimen* of a species, becomes itself nugatory" (p. 63).

Percy recalls a formative experience he had when he was a boy, out in the woods hunting with his father, his brother and a guide. Suddenly they saw a wonderful bird. He asked the guide what the name of the swiftly moving bird was, upon which he answered that it was a blue dollar hawk. Later, his father told him – much to his disappointment at the time – that the guide had it wrong and that the bird, which flew by at a dazzling speed, in fact had been a *Blue Darter Hawk*. For him, this is an example of a mistake – a misnaming, misunderstanding, or misremembering – which paradoxically resulted in an authentic poetic experience. Remarkably, this excitement, this

86 Note how Percy lends weight here to the value of indirectness, a theme which I took up in section 10.2 (and elsewhere).

heightened sense of being, was notably absent *before* the mistake was made. He had, as it were, “stumbled into beauty without deserving it or working for it” (p. 67). Percy then goes on to suggest that a characteristic feature of metaphor, namely that it seems to be “wrong” – asserting of a thing that it is something else – is often the very reason for its beauty, and that this beauty seems proportionate to its wrongness or outlandishness. In fact: “It is wrongest when it is most beautiful” (p. 66). Percy is careful to stress that he is not thinking more highly of the poetic against the technical, or of feeling against science. He warns that we should be wary in applying the binaries of right *or* wrong, or poetic *or* discursive. The misplaced name lends richer “overtones of meaning,” and he proposes that in conceiving a thing under a “wrong” symbol (like using the “erroneous” name of the blue dollar hawk), “we somehow know it better, conceive it in a more plenary fashion, have more immediate access to it, than under its descriptive title” (p. 68).

Percy returns to his example of the boy (that he actually was himself) and the unknown bird, and asks: what does the boy want to know, when he asks, “What is that bird?” Why does he want an answer *at all*, for he has already apprehended the hawk in the most vivid way. What more will he know by having the bird named? For Percy, the situation the boy is in is much like what Ernst Cassirer has called the “mythico-religious Urphenomenon,” of coming face to face with something that is both entirely new and strikingly distinctive. For Cassirer, such phenomena generate metaphor and myth, the naming of the thing is the way “the primitive” conceives it and makes sense of it. We cannot know anything at all unless we symbolize it. What, then, is right or wrong with respect to the blue-dollar hawk or blue darter hawk? The boy, says Percy, cannot help but be disappointed by the logical modifier (the *Blue Darter Hawk*). He feels that while he asked what the bird *is*, his father has only told him what it *does*.

[T]he mysterious name, blue-dollar hawk, is both the “right” name – for it has been given in good faith by a Namer who should know and carries an *ipso facto* authority – and a “wrong” name – for it is not applicable as a logical modifier as blue darter is immediately and univocally applicable. Blue-dollar is not applicable as a modifier at all, for it refers to a *something else* besides the bird, a something which occupies the same ontological status as the bird. Blue darter tells us something about the bird, what it does, what its color is; blue-dollar tells, or the boy hopes it will tell, what the bird is. *For this ontological pairing, or, if you prefer, “error” of identification of word and thing, is the only possible way in which the apprehended nature of the bird, its inscape, can be validated as being what it is* (Percy, 1983, pp. 71-72, emphasis in original).

It is for this reason, according to Percy, that a person, when he or she asks what something is, is more satisfied to be given a name even (or *especially*) if the name means nothing to him or her, than to be given a scientific classification. Percy maintains that it is possible for humans to engage in (what sounds paradoxically) “an *accidental* blundering into *authentic* poetic experience” (p. 81, emphasis added).

10.6 Metaphor as the logic of the biological world

For Walker Percy, metaphor (“saying about one thing that it is something else”) is the true maker of language. He distinguishes metaphor from what he calls the inscape, i.e. reality as it is apprehended, and suggests that both are in a creative relationship with each other. A metaphor may help discover aspects of things which had gone unformulated before. Here there is an interesting aspect of the likeness (or unlikeness) of the metaphor to which it refers. If a writer describes clouds for example as woolly or fleecy, he doesn’t tell us anything new: a fleecy cloud is a tautology. However, if he were to speak of, say, “a white shire of cloud,” the mind at once starts to seek analogies and connections. One casts about to see how a cloud could be a shire: “Trusting in the good faith of the Namer, I begin to wonder if he means thus and so – this particular sort of cloud. The only ‘shire’ I know is a geographical area and what I more or less visualize is the towering cumulus of an irregular shire-shape” (ibid.).

Metaphors are fundamental in our symbolic orientation in the world. As Percy understands it, their supposed “wrongness” ought not to be seen as a whim of poets but rather as an act of symbolization – what he calls “a special case of that mysterious ‘error’” – which in fact is the *very condition* of our knowing anything at all: “[We] must know one thing through the mirror of another” (p. 82).

Gregory Bateson points to the tension between the object of the metaphor (that which is metaphorized) and the metaphor. This difference is contained in the notion of an “as … ifness.” It is asserted that a description of a subject is, on *some* point of comparison, the same as another object, but that the two are otherwise *unrelated*. Also for Bateson, metaphor is a key concept, and it pertains first and foremost to relationships between things. He regards logic and lineal systems of causation as ways of describing biological events as elegant but ultimately utterly unsuitable tools, as they inevitably generate paradoxes when describing circular causal systems. Bateson suggests that a kind of thinking that looks for associations, that combines phenomena in metaphoric terms, is of better help. “The major problems of this world,” he would often argue, “are caused by the difference between how men think and how nature works” (G. Bateson, cited in N. Bateson, 2010). Thinking “in terms of nature” would be radically different than what we are accustomed to. To make his point, Bateson brings up the contrast between two types of syllogisms. The first is called a “syllogism in Barbara,” and goes like this:

Men die.
Socrates is a man.
Socrates will die.

Bateson’s alternative is what he has termed a “syllogism in grass”:

Grass dies.
Men die.
Men are grass.

The common response to the latter syllogism would be that it “does not hold water”; that is, it could be condoned if it were the lyric lines of a poet, but it would be regarded as utter nonsense if one states it as a biologist. For Bateson, however, such a syllogism in grass is actually more true to the way he himself thinks, as it uses the language of metaphor: “while not always logically sound, it might be a very useful contribution to the principles of life. Life, perhaps, doesn’t always ask what is logically sound. I’d be surprised if it did” (1991b, pp. 240-241). The syllogism in Barbara identifies Socrates as a member of a class; this kind of syllogism deals with subjects, nouns, things. The grass syllogism, in contrast, is concerned with the equation of predicates: “that which dies is equal to that other thing which dies” (*ibid.*, p. 241). This is the way poets think. Bateson believes that the syllogism in grass is the way organisms manage to organize themselves: “It became evident that metaphor was not just pretty poetry, it was not either good or bad logic, but was in fact the logic upon which the biological world had been built, the main characteristic and organizing glue of the world of mental process....” (*ibid.*).

Bateson’s term for this way of reasoning by metaphor is *abduction*. As Peter Harries-Jones (1995) explains in *A Recursive Vision*, he regarded it as a method of constructing knowledge that is based upon bringing together consistencies in the evidence. Resemblances between components of events (which might occur in very different contexts) that fall under the same rule are considered through comparison of their differences. This is done in such a way that, as Bateson put it, “certain formal characteristics of one component will be mirrored in the other.” (Bateson, quoted in Harries-Jones, 1995, p. 177). There is resemblance between the differences: two contexts may be different but the ordering proposition in both can be the same. Harries-Jones quotes the following example that Bateson himself provided when speaking of comparing a tobacco plant with a crab:

[W]hat I look at in the woods, are *resemblances between the differences*. Or is it resemblances between the differences between the resemblances between the differences? ... Each [crab] contains within itself many, many different decisions that somehow had to be made as it was growing.... If we could find some set of differences in the crab’s anatomy [and in the anatomy of the plant] and show that both sets of differences are cases of the same rule ... [that is] what is called abduction. (Bateson, quoted in Harries-Jones, 1995, p. 178)

In contrast to induction or deduction, abduction is not recognized within science as a valid method, as it yields tautology. Abduction appeals to the validity of one statement in order to make the terms of other statements necessary true, and this may run counter to logic (“Men are grass”). Bateson stated that “Metaphor, dream, parable, allegory, the whole of art, the whole of science, the whole of religion, the whole of poetry, totemism ..., the organization of facts in comparative anatomy – all these are instances or aggregates of instances of abduction, within the human mental sphere” (Bateson, 1979, p. 158). Whereas science does not permit tautology, nature does; it

does not “think” in either inductive or deductive terms. Through “guesswork,” verified by the search for the same rule in very different contexts, abduction opens up to “the secret of how living forms ‘think’” (P. Harries-Jones, personal communication, February 27, 2013). In the search for resemblance, for a shared matching – in short, by practicing abduction as method – a certain tension remains, similar to how, in metaphor, something is *as* something else, but not quite the same.

To me, the ability to live with this predominance of matches rather than complete identifications between phenomena, that Bateson identifies as an organizing principle both in nature and in his own thinking, may as well be a core feature of the AEE activities that I facilitate. For, as teacher/facilitator, I often seek ways to encourage participants to discover similarities between things that appear to be utterly foreign to one another. Participants can be encouraged to dwell a little longer with what appears to be contradictory, paradoxical or nonsensical, such as statements like “men are grass.” The poetry of the incomprehensible can be both the starting point and outcome of meaning-making in a creative process that aims to meet the natural environment (with which we assumingly are so familiar) from a fresh, “beginner’s mind” perspective.

Gianni Rodari (1996), in his book *The Grammar of Fantasy*, tries to explore what the place of the imagination is in the context of education. He believes that children benefit most when they learn in a communal context. In all his pedagogical projects he underlines the social context and the importance of sharing and assisting others. Different types of children can collaborate and use their imaginations together, to attend in that way to their personal or social problems. An impetus to do so is to entice them to develop stories together, thereby uncovering new skills as they go along. A catalytic intervention to set such a process in motion that Rodari suggests is the juxtaposition of two highly unrelated words: one must be “sufficiently strange or different from the other.” The unusual coupling triggers the imagination to establish a relationship between the two. Our mind aims to construct a new, *fantastic* whole, “in which the two foreign elements can live together.” The two words (ideally utterly at odds with each other) can always be linked, says Rodari, and thus become fertile for guiding the imagination further. As he matter-of-factly argues, one electrical pole is not enough to cause a spark; it takes two. A single word acts only, he says, when it encounters a second word “that provokes it and compels it to leave the track of habit, and to discover new possibilities on meaning” (p. 12). He refers to Paul Klee, who, in a similar vein, held that a concept is impossible without its opposite. Concepts do not exist alone for themselves, Klee asserted, rather, “they are, as a rule, ‘conceptual binominal’” (Klee, quoted *ibid.*). This leads Rodari to his notion of a “fantastic binomial,” of two words which have a certain distance to each other – pretty much like grass and men, in Bateson’s syllogism. In this way, the whole space is shifted; one word is thrown into a completely unrelated context. In this practice, words are not taken in their colloquial meaning, but freed from the verbal chains that hold them together on a daily basis. They are estranged or, as Rodari puts it, “thrown against one another in a sky *that has never been seen before*” (p. 13, emphasis added). In that way,

they are in the best possible condition for generating a story, he suggests. Bateson argued analogously that the kind of thinking, of which the syllogism in grass is an expression, was more true to his specific and unusual way of approaching the living earth. Patterning is done through analogy, and thus indeed men *are* grass to the extent that what unites them is an underlying and shared pattern of the living world. It takes effort to find this “pattern that connects,” as it often is not readily discernible at an obvious level.

I believe part of my practice of AEE can be seen as employing the fantastic binomial in action. An example of this is what happened at an environmental art workshop at a conference on Environmental Governance in Germany. The participants have just finished a little-me-making session and I ask them if they themselves can see *any* relation between the theme of the gathering and the activity they just partook in. Such a link is by no means obvious. At the conference, most presenters address the theme of environmental governance through bulleted PowerPoint presentations to which people in the audience attend in “audience-mode” – a format that is played out indefinitely around the world. But the lack of any evident meaning in sculpting one’s own body at a conference like this, is exactly what seems to trigger them now to seek such a relation themselves. **Lily** says: “What we did today was making ourselves re-enchanted with nature. Seeing the miracle and seeing the fun in it. Seeing our connection and our possibilities of being creators, in connection with ourselves *as* nature, I would say. Feeling the nature within us. I hope next time to do it outdoors.” Another woman, **Melanie**, adds: “I see another connection. If you don’t have respect for yourself, than it is really hard to show love and respect for the environment that we are connected to. So it has to start there, in my view.”

Overcoming one’s original resistance to fantastic binominals, to the bringing together of what is seemingly unrelated and doesn’t seem to make sense, is one of the principles “at work” in for example the lines of the hand activity. The invitation to the participants to place themselves in a landscape of the lines of someone else’s hand seems pointless, and one does not have any help; it may just seem ridiculous. As various participants have mentioned, they would never do such a thing on their own! For them to be able to engage in the activity, they first have to overcome the idea that there *is* no landscape there. Drawn hand palm lines are after all merely drawn hand palm lines. But once they *do* surrender themselves to the process, it is like entering a new territory. Likewise, the participants in little-me making, by having the eyes closed when molding the clay, seem to overcome their inhibitor (if they have one), that inner voice which tells them “I cannot sculpture,” or “I am not an artist.” Now, *nobody* is watching – they don’t even see themselves working!

10.7 New organs of perception and unexpected outcomes

When reflecting about the role of artistic process in connecting to the natural environment, one can, on the whole, distinguish between two major orientations or para-

digms. One of them starts from the point of aesthetic sensibility: the tuning in with the senses, or with “a new organ of perception” (Goethe), in order to perceive “the more-than-human” with fresh new eyes. This tradition can be traced back (but is by no means limited) to the Romantic Movement (cf. chapter 2). Art in this context may help to amplify the receptivity of the senses.

The other major orientation builds on a view of artistic process as leading to unexpected outcomes and “emergent properties.” The fundamentally singular experience of making a work of art may evoke an aesthetic object that becomes a “self-sufficient, spiritually breathing subject” (Kandinsky). The artwork can be spontaneously generative and multi-layered with meanings, some of which even ambiguous and paradoxical. But perhaps more importantly: it can catch the participant of an AEE activity by surprise; overwhelm him or her as “coming from behind one’s back.” The element of improvisation, of taking in the new and unanticipated and accommodating for it, is the core quality here.

These two orientations, when practiced as part of AEE, have implications for how we relate to nature through art. The center of gravity for the first is nourishing a state of receptivity, of aesthetic perception and appreciation of phenomena in the natural world. Here the focus is to encourage the participant to be observant, non-interfering, and attentive to the world around her. The other takes its point of departure in a view on artistic process as active engagement with the circumambient universe. The participant is stirred to act upon the world around and in him, and the goal is to seek a dynamic open-ended immersion in a fundamentally improvisational undertaking. At one side of the spectrum is an approach to artistic process as a way of heightening the aesthetic sensibility of participants through art. Art, then, may help to amplify the receptivity of the senses (in the case of the visual arts this obviously mostly pertains to our sense of seeing). In the mid-nineteenth century, Henri David Thoreau wrote in his *Journals* that he was continuously struggling to meet nature in its elementary directness, unmediated by conventions, categories, concepts, and scientific knowledge.

It is only when we forget all our learning that we begin to know. I do not get nearer by a hair’s breadth to any natural object so long as I presume that I have an introduction to it from some learned man. To conceive of it with a total apprehension I must for the thousandth time approach it as something totally strange. If you would make acquaintance with the ferns you must forget your botany. You must get rid of what is commonly called knowledge of them. Not a single scientific term or distinction is the least to the purpose, for you would fain perceive something, and you must approach the object totally unprejudiced. You must be aware that no thing is what you have taken it to be.
(Thoreau, quoted in Shepard, 1961, p. 210)

We cannot help but bring our fore-conception – our prior experiences, assumptions and preconceptions – to the encounter with the living world. This *fore-structure* as Heidegger called it, is always there and can thus also be an obstacle getting in our

way. In a profound sense we are blind and deaf to the living world; our “common sense” pre-understandings, our suppositions, assumptions and the existing bodies of scientific knowledge all predispose us to interpret a phenomenon a certain way (Van Manen, 1990, p. 46). Gregory Bateson’s oldest daughter Mary-Catherine points out that the central question for her father was, what caused humans to be so destructive of natural ecological systems. He wondered what it is in our way of perceiving that makes us not see the delicate interdependencies in the ecological system that give it its integrity. And then she added, “We don’t see them, and *therefore* we break them” (M.C. Bateson, cited in Bateson, 2010, emphasis added). This interpretation resonates with Andy Goldsworthy’s honest observation about his own artmaking process which he shares in the film *Rivers and Tides* (2001), mentioned in section 10.4. While he has just finished an installation of driftwood that will soon be taken away by the incoming tide, he confides: “You feel as if you have touched the heart of the place. That’s a way of understanding for me. Seeing something you never saw before, that was always there, but that you were blind to.”

In AEE activities that aim at fostering a receptive and aesthetic awareness of the natural world, the kind of fresh perceiving that Thoreau and Goldsworthy sponsor, the imaginative part seems to be delimited to sensory imagination in service of an unprejudiced way of looking; these kinds of activities seem to offer new understandings of the natural world but may background the quality of improvisation. On the other hand, artmaking that comprises a dynamic acting on the world (with the aim or effect of evoking emergent properties) may miss out on phenomena, as it is more preoccupied with meaning-making in its own right. The first mode is a meeting of nature in an almost intuitionist if not naïve sense, unclouded by reason or prior knowledge. In the second mode there is a shift from the object of one’s creative engagement – i.e. nature – to the artistic process itself and the objectified shapes that stem from it: the angels that talk back, and that start to surprise us during and through their own maturation (cf. McNiff, 2004).

But does this dualism imply that the two wholly different modes of exploring the natural world through art are incommensurable? Perhaps they are two sides of the same coin; at least, that is what John Dewey maintained. He described these two approaches, of being receptive and acting upon, as actually being two parts of *one* experience of art. Moreover, he argued that transformative experiences require both active doing and receptive undergoing (Dewey, 1934/1987, p. 44). In David Wong’s explanation, an aesthetic experience is for Dewey a transactional phenomenon where both the person and the world are mutually transformed:

We do something, we undergo its consequences, we do something in response, we undergo again. And so on. The experience becomes educative as we grasp the relationship between doing and undergoing. The experience is transformative as we have new thoughts, feelings, and action, and also as the world reveals itself and acts upon us in new ways. (Wong, 2007, p. 203)

In fact, Dewey held that although undergoing may be receptive, it has no existence separate from active doing. Both intentional and spontaneous activity are part of his aesthetic perspective on learning. But that does not preclude that when we are in the grip of a compelling experience, we relate to it for a large part without exercising conscious thought and effort. Its meaning, Dewey held, is immediate and immanent, and its quality may be perceived as “a gift of the gods.”

Perhaps the true challenge is to explore how our heightened sensitivity to nature through combining art and environmental education can be expanded by allowing our artistic creations to “talk back,” and conversely, how our defamiliarization through the encounter of emergent properties can be grounded and embedded in a receptive contemplation of the natural world, thus enriching our understanding in unexpected ways. If we recall the participant in the little-me making session who perceived the drinking of the water with his eyes closed as a threshold moment before commencing the final part of the session, which was the molding a miniature head in clay, I think we may assume that his understanding of his head, his bodily processes and the relationship of his body to the circumambient universe, was thoroughly impacted – in a manner that may not have come about if the person concerned had “limited” himself to an intentional contemplation of the phenomenon in a Goethean sense.

As we saw, it seems that only by being fully in the receptive mode one can truly be open to the new. For if one is active too eagerly, then one is too preoccupied with oneself. However, on closer inspection, it may be that some activeness, some “acting upon,” is needed *in* the receptive undergoing, to counter drifting too far towards passivity. And likewise, when we are in our state of highest creativity, of interfering in the world, we also may be in need for a centre of quietude. An abstract rendering of this idea is found in the well-known Taoist symbol of Yin and Yang, called Taijitu. Whereas the yin principle is characterized as slow, soft, yielding, reflective, diffuse, cold, wet, passivity, water, moon, the feminine and night, yang is associated with fast, hard, solid, shining, active, focused, hot, dry, aggressive, fire, sun, the masculine and daytime. In the martial art of Taijiquan, one trains in moving from attack to defense, and in shifting from movement to a state of stillness.

Hypothetically, the refraining from action by a participant in a state of reflectivity (*yin*, the white half of the circle depicted in figure 27) could be carried so far that it runs the risk of turning into stagnation. The chance of such non-action flipping into virtual paralysis, is mitigated through the ignition and activation of a residue of creativity (a display of “*active* non-action”) *within* this state of increased passivity.

Similarly, when the person finds him- or herself in a state of intense activeness, there is a danger that acting upon the world (*yang*, the black half of the circle in the figure) becomes too dynamic and may lead to delirium and hallucinations. At this point of almost chaos – in the proverbial eye of the storm – there is a countervailing refuge (a state of “letting be”) where one can immerse oneself in a receptive undergoing. Practitioners of Zen yoga seek an ongoing flow between yin and yang. As Aaron Hoopes (1997) explains, the two poles of existence are opposite but complementary.

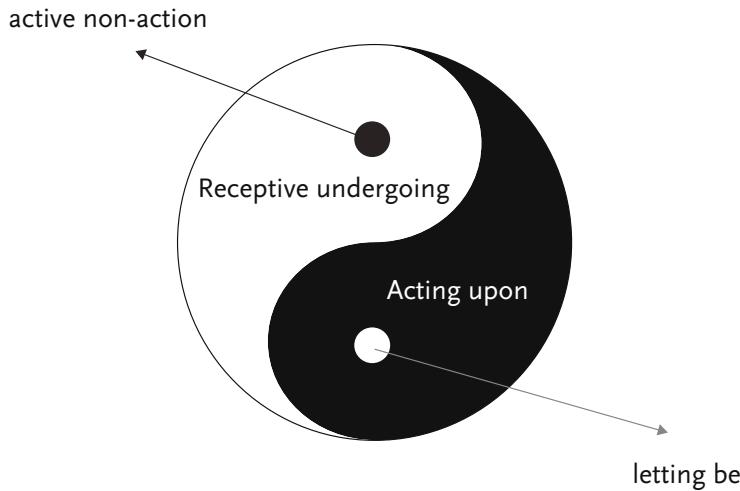


Figure 27: The complementarity of receptive undergoing and acting upon

They depend on each other and flow in a natural cycle. As two aspects of a single reality, they always seek balance: “Each contains the seed of the other, which is why we see a black spot of Yin in the white Yang and vice versa. They do not merely replace each other but actually become each other through the constant flow of the universe” (p. 25).

The skill of oscillating from a state of receptive undergoing to a state of acting upon in artistic process in relation to nature is perhaps the core of biologist and anthropologist Gregory Bateson’s principle of “double description,” with which he meant that two or more information sources come together to give information of a sort different from what was in either source separately (Bateson, 1980, p. 21). Double description looks past superficial similarities and differences to consider the underlying processes. Looking beyond an assumed dualism between aesthetics and science, he would define aesthetic as in essence “being responsive to the patterns which connects.”

According to Dutch philosopher Ton Lemaire it may well be that by far the most difficult challenge is to put into practice an attitude of compassionate attentiveness which is at the same time detached and matter-of-factly: “to acknowledge the inhumanity of nature, her grandiose indifference with respect to our fate, and yet not having the feeling of being excluded.” What is called for, he surmises, is that we intensify our presence among the phenomena of the world and simultaneously abolish it: “To perceive the earth as if she is not being perceived; to rejoice in nature’s seemingly lack of purpose: which resides in the slow flow of a river stream, in a distant shriek of a lonely bird and even in the beauty of a flower not seen by any human eye” (Lemaire, 2002, pp. 216-217, my translation). The richest knowledge of the tree, Gregory Bateson would argue, “includes both myth and botany” (Bateson, quoted in M. C. Bateson, 1987, p. 200). Artistic process allows us to move from one domain to the other, but they need not be mutually exclusive. According to Merleau-Ponty, Cézanne’s process

of painting “denies neither science nor tradition.” As the French phenomenologist describes in his famous essay *Cézanne’s Doubt*, Cézanne would start his artistic process by discovering the geological foundations of the landscape. At that point, as recounted by his wife, he would stop and look at everything with widened eyes. In effect he was then, she said, “germinating” with his natural surroundings. In Merleau-Ponty’s understanding he thus developed an *intuitive science*.

The task before him was, first, to forget all he had ever learned from science and, second, *through* these sciences to recapture the structure of the landscape as an emerging organism. To do this, all the partial views one catches sight of must be welded together; all that the eye’s versatility disperses must be reunited; one must, as Gasquet put it, “join the wandering hands of nature.” (Merleau-Ponty, 1945/1993a, p. 67)

10.8 Thrown into wonder

When I practice “wrong-footing” in the AEE activities that I facilitate, that is, when I deliberately cause confusion on the part of the participants with the aim to bring about defamiliarization, I try to evoke in them their imaginative capacity, which they need to face and overcome this unexpected threshold. In a basic sense, wrong-footing can thus be conceived of as one of the epistemological foundations of AEE. In that regard, however, it is quite different from the sense of wonder that a person may have when she meets a new phenomenon completely on her own terms, at a location, a time and in a tempo that I haven’t “organized.” Clearly, there is a fair degree of purposefulness to my (framed) open-ended educational approach. With Heidegger, it could be characterized as yet another form of *bestellen* (ordering), of holding the natural phenomena in a standing-reserve (cf. section 1.4), available for my own purposes in facilitation. Wrong-footing in AEE could be seen perhaps as a high-pressure cooker, igniting a sense of wonder and spurring the imagination, which possibly wouldn’t happen (or, if it did, in a very differently fashion) if the participants would meet the same natural phenomena and location or landscape on their own terms and not in the company of others. (I assume it is also for this reason that many Romantics underlined the importance of solitary experience of sublime nature, unaffected by the moods and comments of fellow human beings.)

If we look again at the pair of the receptive and the creative, as a revolving movement in artistic process, I am inclined to situate the aspect of imagination in the “acting upon” move of creation. Conversely, the sense of wonder, it seems to me, is primarily situated in the receptive phase. It is by openness, keen attentiveness, and by “letting be,” that wonder befalls on us. As Dutch philosopher Cornelis Verhoeven (1972) put it in his book *The Philosophy of Wonder*: “Wonder is not yet an attitude or an emotion, but a concentration out of which possibly an attitude or emotion may

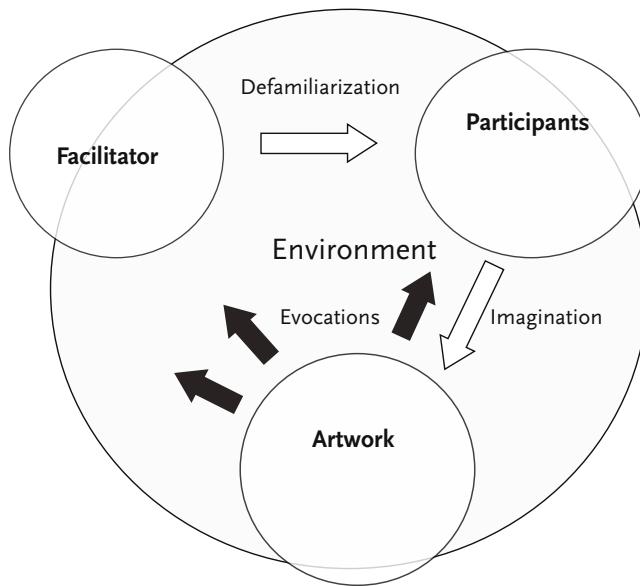


Figure 28: Encountering direct experience

arise.... Wonder is an experience which had not yet identified itself as a determined and aimed emotion" (p. 30, my translation). Wonder represents openness and vulnerability. A state of being where one is closed rules it out. The implication of this, for Verhoeven, is that when one introduces others to wonder, it means that they are "thrown" into it. In some sense this is an aggressive act, to the extent that it necessary is a breaking open of a state of closing off. Like enthusiasm or inspiration, it is not something that one can induce artificially or mimic: "It is something that befalls a human being, an adventure of which we cannot see the end" (ibid., p. 32, my translation).

Reflecting further on the principles of an emerging AEE epistemology, I think that an important element is the circumstance that, in the facilitation of the process, one does not try to "organize" or "order" a sense of wonder to come about. (This, I believe, with Verhoeven, would in fact be impossible to accomplish.) Rather, I see my contribution as creating the optimum conditions for a sense of wonder to manifest itself. These conditions do not only depend on external circumstances, they also – and probably even more so – are related to the readiness of participants to invite the unforeseen themselves. Such readiness is brought about both by cultivating an attentive receptivity and by putting taken-for-granted practices and understandings on their head, through defamiliarization. In Viktor Shklovsky's words, by "recovering through art the sensation of life," so that we – once again – *may feel the stone as stony*.

In figure 28, I have tried to depict the different stages of engaging with the living world through art as I have come to distinguish them. There are three main movements of engaging in AEE which I recognize. However, these do not necessarily have

to happen in a sequential order. I have termed them, respectively, defamiliarization, imagination, and evocation. In this heuristic representation, I have deliberately left out other possibly relevant levels. The arena of action, the environment, extends from one's inner world to the more-than-human world.

Defamiliarization involves "shaking up" the context ("wrong-footing") in which the participant will engage in the artistic encounter. Essentially, the facilitator assists the participants in breaking away from autopilot mode. They are encouraged to open "a window in themselves" of which they might not have been aware that it was locked. Experiencing the familiar becoming unfamiliar is like undergoing a rite of passage. Enduring this first assumes enhances their ability to get beyond habitual modes of responding.

Imagination. It is through the imaginative process of engaging his or her imagination that the participant's evolving artwork gets its shape, in response to the sensorial experiences that are undergone while taking part in the AEE activity. I will elaborate further on the faculty of imagination in the final chapter.

Evocation. Once the artmaking experience is underway, the process may bring about emergent properties in the evolving artwork that were not foreseen when the participant commenced with making it. As these rise, he or she may choose to enter in an imaginal dialogue with them, so that the artistic manifestations become like "angels" talking back to their creator (McNiff, 2004). It can happen that in the process, something unknown, something hidden, latent or forgotten, is evoked by the aesthetic object which speaks to its maker and/or to other participants. Because of the elusive character of each evocation I have put in more than one (black) arrow emanating from the artwork. These arrows serve to indicate that these evocations, as they arise, can go in any direction and can affect anyone partaking in the activity. Ultimately an arrow is of course a poor symbol of what is going on, as evocations manifest themselves primarily in a relational field, and thereby they overcome, as Tyler (1986) pointed out, our usual separations.

11. Epilogue: The art of looking sideways

I go forth to see the sun set.... I witness a beauty in the form or coloring of the clouds which addresses itself to my imagination, for which you account scientifically to my understanding, but do not so account to my imagination. It is what it suggests and is the symbol of that I care for, and if, by any trick of science, you rob it of its symbolicalness, you do me no service and explain nothing.... You tell me it is a mass of vapor which absorbs all other rays and reflects the red, but that is nothing to the purpose, for this red vision excites me, stirs my blood, makes my thoughts flow, and I have new and indescribable fancies, and you leave not touched the secret of that influence. If there is not something mystical in your explanation, something unexplainable to the understanding, some elements of mystery, it is quite insufficient. If there is nothing in it which speaks to my imagination, what boots it? What sort of science is that which enriches the understanding, but robs the imagination?

Henry David Thoreau (1851/1962)

At face value, this final chapter⁸⁷ pertains the least directly to the research questions that guide this study and to the endeavor of formulating indications of what would constitute AEE as a unique pedagogy in its own right. In a way, this chapter takes its own place, its purpose being to (hopefully) shed additional light, from another angle, on the theme of connecting to the natural environment through art.

Figuring prominently throughout this thesis is the quintessential Romantic concept of imagination. In my exploration and unpacking of this key concept, I will try to show here that the early Romantics' conceptualization of this rather elusive human faculty was in fact extremely rich; effectively they seemed to have pioneered the view that art-making can be seen as a way of coming to understanding of nature in its own right, next to seeking insights through science-centered approaches. At closer inspection, it were precisely the Romantics that pointed to the possibility of embracing an expanded apprehension of the faculty of human cognition, in which intuition and imagination allow us to open "new organs of perception." In order to deepen our understanding of artistic process as a possible point of entry in efforts to reconnect with nature, I think it may be helpful to zoom in a little further on these early allusions to the importance of the realm of imagination in our meeting with rest of the living world.

11.1 The eye of imagination

Contestably, of all the Romantics, William Blake (1757-1827) had the most remarkable conceptualization of the human imagination (as I alluded to in the beginning of section 6.2). For Blake, nature *is* imagination: "...I know that *This World is a World of Imagination & Vision. I see Every thing I paint in This world, but Every body does not see alike.... to the Eyes of the Man of Imagination, Nature is Imagination itself*" (Blake, 1799/2008, p. 702). One of the things Gregory Bateson found appealing in Blake's writings was, according to Peter Harries-Jones (who wrote the biography *A Recursive Vision* on Bateson's ecological epistemology), that he would conceive of imagination as being a part of our faculties of perception. Blake had made a profound shift away from standard scientific interpretations of perception. In his conceptualization, we enter the process of perception *through*, rather than *with*, the eye. And the eye that performs this task is the "eye" of imagination. Bateson interpreted this point of Blake, as Harries-Jones elucidates, as meaning that poets are capable of raising "submerged features of the unconscious as an aid to our conscious understanding" (p. 265). We thus get a more complete picture and achieve a more participatory consciousness. Moreover, Bateson had even discovered that Blake – two centuries before he himself took this up as one of his central themes – had written about "the need to correct conscious interpretation through a *synthesis* of the polarities of consciousness and the imaginary" (Harries-Jones, 1995, p. 265, emphasis added).

87 I borrow the title of this chapter from the book with the same title by Alan Fletcher (2001).

In a letter that he wrote in 1802, Blake develops a striking metaphor on basis of a thistle that he once stumbled upon while strolling a path, and kicks in bad temper. In the letter to Thomas Butts, in which he looks back on the walk, the “frowning Thistle” becomes “an old Man grey” who predicts trouble to him, causing him to write, “*For double the vision my Eyes do see / And a double vision is always with me / With my inward Eye 'tis an old Man grey / With my outward a Thistle across my way*” (Blake, 1802, cited in Keil, 2001). In these lines, Blake seems to be alluding to an enlarged mode of consciousness, in which there is no place for either reductionism or superstition, as Blake scholar Northrop Frye (1991) suggests. Rather, in this double vision, the spiritual world and physical world concur. For Gregory Bateson, this expanded mode of consciousness was first of all *aesthetic*.⁸⁸ Bateson was concerned with how double vision may be able to uncover meanings on the interface of metaphor and unconscious perception. Bateson’s reading of Blake is that, for the latter, the poetic imagination is the *only* reality; it is a creative imagination that is open to direct perception:

[Blake] believed the creations of the imagination to be real, while the bread he bought from the baker was merely symbolic.... [He] would focus his ear and let his auditory voices dictate his poems, or he would focus his vision upon the paper in front of him and draw or paint according to the outlines he saw. Blake knew the difference between the everyday world and the creative imagination, but reversed their relative importance. Yet he was no schizophrenic; his imaginings were a matter of self-discipline, a focusing of otherwise submerged or unconscious processes in order to aid conscious interpretation. (Bateson, cited in Harries-Jones, 1995, p. 319n)

To be sure, this represents a highly different way to think of imagination, which usually is understood as our ability of forming images and sensations when they are *not* perceived through sight, hearing, or other senses. Moreover, as Emily Brady (2003) explains, imagination is usually associated with the creation and experience of art and not with the appreciation of nature. When we approach an artwork, we tend to see it as product of the human imagination. And when we then engage in an aesthetic appreciation of its content, we, as it were, try to unlock its imaginative content. Brady holds – similarly to Bateson’s appreciation of Blake’s creative imagination – that imagination ought to be assigned a much broader place in the whole of human experience. She understands it, primarily, as being a capacity we bring from the everyday into the aesthetic domain. Yet, it does not originate in the latter, she maintains: “imagination is present in a range of human experiences, and art is only one of them” (p. 147).

Having thus articulated her own position, Brady has her hands free to connect imagination to human encounters with the natural environment. From Ronald Hepburn she gains a deeper insight into Kant’s understanding of imagination in rela-

⁸⁸ In *Mind and Nature*, Bateson (1979) defines “aesthetic” in his own specific way, namely as “being responsive to the pattern which connects” (p. 9).

tion to nature. For Kant, imagination is a core part of aesthetic judgments of nature, freeing the mind as it were from the constraints of intellectual and practical interests. Hepburn expands on this and calls attention to imagination's power to shift our attention flexibly from one aspect of the natural objects before us to the other, "from close-up to long shot, from textural detail to overall atmospheric haze or radiance; to overcome stereotyped grouping and clichéd ways of seeing" (Hepburn, cited *ibid.*, p. 147). The important point here is that imagination not only enables us to look at the world from different perspectives, but that it may also suggest entirely new points of view. As Brady summarizes, imagination essentially facilitates free play, it allows for a creative approach that leads to the discovery of aesthetic qualities. Thus, imagination brings more meanings to bear than if we would solely rely on the perceptual capacities of the senses. In short, it provides a more intimate aesthetic experience.

In reigning theories of imagination, according to Brady, usually two categories are distinguished: sensory imagination and creative imagination. Through sensory imagination, we are able to bridge the gap between the concepts we use and what our sense perceptions tell us. This, says Brady, may include bringing together past and present perceptions of the same object. Creative imagination, in contrast, pertains to the creative power that is responsible to reach beyond the ordinary. In this form of imagination, we bring together elements of experience in novel ways: in considering new possibilities, in inventing things or in solving problems.

In Kant's understanding (again, as Brady explains it), imagination makes connections and associations in relation to the aesthetic object, free from the laws of understanding. For him, there is no cognitive aim in aesthetic judgment. This position, however, should not be taken to mean that imagination in the aesthetic response has "free rein": "Kant is not putting forward imagination as 'fancy,' i.e. the power behind fantasy. Although free from the laws of the understanding, imagination operates within a relationship with the understanding and the very basic concepts of cognition" (p. 151). This is also how philosopher Roger Scruton understands imagination; for him it is basically a rational activity that is not reducible to fantasy. "A man who imagines," he says, "is ... trying to relate his thoughts to their subject-matter: he is constructing a narrative.... It is necessary that he should attempt to bring what he says or thinks into relation with the subject: his thoughts must be entertained because of their 'appropriateness'" (Scruton, cited in Brady, p. 2003, p. 150). Brady comments that the emphasis here is on how imagination works along the lines of relevance, rather than on basis of complete arbitrariness.

Brady takes issue with a common objection against imagination that it may produce personal fantasies that distract one's attention from the aesthetic object and possibly lead to the trivializing and sentimentalizing of nature. For her, imagination is a far more sophisticated power than such a claim suggests. "The ways in which it operates are distinct from fantasy, and our appreciation of nature draws in valuable ways on the power of imagination without distorting or disrespecting it" (p. 158).

In section 3.2, I discussed a distinct phase in the practice of Goethean science which is referred to as *exakte sinnliche Phantasie*. I've always found it intriguing that

Goethe used the word *Phantasie* here, and then in combination with “exact.” Initially for me this seemed like an oxymoron, as fantasy always seems to bring in contrived and thus fuzzy elements which don’t seem to fit very well with the notion of exactitude. Goethean scientist Craig Holdrege, however, provided me with the following explanation:

Exakte sinnliche Phantasie is “exact” in Goethe’s sense, because one is not making something up. Rather, in one’s imagination, one forms a precise inner picture of a phenomenon or process. Of course, if one pictures the way a leaf grows and unfolds or the way a flower wilts, one fills in the gaps – so one is not glued to the actual momentary appearances but pictures them – based on careful observation – in their process and transformation. In a sense this is an exercise to live into the formative potential and formative powers of an organism. It is not exact in the sense of cut out and cut off from the larger context, but exact in its desire to do justice to the phenomena. (C. Holdrege, personal communication, March 29, 2011)

Goethe’s notion of *Phantasie* is different from “fancy,” of simply and arbitrarily “making things up,” using the material of memory pictures to construct an entirely new scene – “free” of the world as it were. It is rather about getting a more accurate grasp of this world. In his *Biographia Literaria*, Romantic poet Samuel Taylor Coleridge (1834) distinguished imagination from fancy.⁸⁹ Of the two, imagination is for him superior as image-forming faculty: “Fancy... has no other counters to play with, but fixities and definites. The Fancy is, indeed, no other than a mode of Memory emancipated from the order of time and space, and blended with, and modified by, that empirical phenomenon of the will which we express by the word Choice. But, equally with the ordinary memory, it must receive all its materials ready made from the law of association” (pp. 172-173). Fancy typically evokes the image of drawing false pictures.

Leaning on Webster’s definition of the term, Robert Dilts (1998) points out that imagination involves forming a mental image of something that “is not necessarily related to one’s past experience, nor in the ongoing environment.” It relates to mental representations which have been internally generated or constructed. Imagination, according to Webster’s Dictionary, is the “act or process of forming a conscious idea or mental image of something *never before wholly perceived in reality by the imaginer* (as through a synthesis of remembered elements of previous sensory experiences or ideas as modified by unconscious mechanisms)” (cited in Dilts, 1998, emphasis added). Through these mental images, imagination is able to arrive at certainties, British novelist Iris Murdoch asserted. But, when doing so, it is neither able to explain how it

⁸⁹ Coleridge made a further division between so-called primary and secondary imagination, which I will not go into here, other than mentioning that the distinction is between creative acts that are unconscious and those that are intentional and deliberate (Engell, 1989).

did that nor what their nature is. For her, imagination should not be relegated to the passive side of the mind. She asserted that we are imagining all of the time. (A view reminiscent of Blake's encompassing conceptualization of imagination.) Imagination, Murdoch insisted, affects *all* cognition and perception and is central to our lived existence, as we inhabit a world not of facts but of our own creation (Altorf, 2008; Elkholz, 2009).

Though the words fancy or fantasy may have a ring to them of something contrived, construed, on basis of what one already has "at hand" in one's memories, the latter is exactly what I ask participants to bring to bear when they engage in a lines of the hand activity. I invite them to evoke a mental image of being bodily present in a landscape, while "in bare fact" they are merely contemplating a drawn pattern of a few rather abstract lines. In doing so, they are in fact encouraged to "fantasize" about their storied memory of prior sensorial experience.⁹⁰ I assume they thereby shift from conceptualizing an imaginary landscape in the mind's eye to revisiting episodes and locations of sense experience earlier in life. (In Coleridge's terms, all its materials are ready made, yet it is a mode of memory emancipated from the order of time and space.)

With making little-me's, in contrast, it seems to me that participants practice a form of exact sensorial imagination. They perceive their own corporeality, through scanning and tuning in carefully to tactile and haptic sensations at different parts of their body. To be precise, this mode of perception can then "overflow" into some form of "fantasy," when they no longer put efforts in forming "a precise inner picture" (Holdrege) of what goes on in their respective body parts. But at least potentially they open up for something larger, different, intimate, when entering the liminal space where the artmaking process leads them and where it takes its own, more independent course. Then it may suddenly happen that a person makes a little-me with a hole in its stomach without him necessarily being able to articulate why this happened or what it may represent. Again, something similar may take place when a wildpainting participant suddenly notices that she starts to paint a motive such as a mountain radically different than she has ever done before, and that it still holds and "makes sense." Are these participants indeed merely trying to relate their thoughts to their subject-matter, as Scruton puts it, and thus actively constructing a narrative and of which they assess its "appropriateness"? Or is something different taking place, in which they are less "in control"? And if the latter is the case, can one then still consider it imagination?

It may be helpful here to take a closer look at the way Emily Brady distinguishes between five basic forms of imagination in relation to the natural environment:

⁹⁰ The psychological phenomenon that comes closest to this is perhaps *pareidolia*: seeing something which is not there. Pareidolia commonly involves a vague and random stimulus such as an image or sound that is being perceived as significant. An example is seeing images of animals or faces in clouds. The word comes from the Greek words *para* ("beside, alongside, instead") and the noun *eidolon* ("image, apparition, shape"). Pareidolia is a form of *apophenia*, seeing patterns in random data. However, an important difference with the lines of the hand activity is that it is me as the facilitator who invites participants to approach the drawing as a stimulus and to perceive a landscape in it; this doesn't happen spontaneously.

respectively metaphorical, exploratory, projective, ampliative and revelatory imagination. *Metaphorical imagination* involves bringing together two different things in novel ways. Starting from our experience of the qualities of one thing, we work towards a creative comparison to another thing. *Exploratory imagination* is deeply tied to perception, but reaches beyond this in a free contemplation of the object (p. 154). Brady provides the example of one's encounter with the bark of an old locust tree. Walking to the tree and touching the bark with its deep ridges may bring associations with the features of an old man with wrinkles of age. Less grounded in perception is *projective imagination* which draws on "imagining on to" what is perceived. This implies that what is actually there is replaced or overlaid with the projected image.⁹¹ One form of this is our inclination to project geometrical shapes on to a set of individual stars on which we focus our attention at night. An altogether different form of projective imagination is when we project *ourselves* into natural objects and scenes. An example of the latter is when we appreciate the aesthetic qualities of an alpine flower, and we – through our own corporeality – imagine what it may be like to live and grow in these cold conditions. At such moments it may be very meaningful to make this imaginative leap of projecting, because, *without* imagining such conditions, one might not be fully able to "appreciate the remarkable strength hidden so beautifully in the delicate quality of the flower" (p. 155). It is this type of imaginative activity, says Brady, that also facilitates a sympathetic or empathetic identification with nature. Following R.K. Elliott, she holds that empathy is the capacity for entering imaginatively into the situation of another person or animal, and assuming its expression. *Ampliative imagination*, the fourth form that Brady identifies, pertains to the inventive powers of imagination. What is given in perception is amplified, in a way that it reaches beyond merely projecting images on to objects. "Ampliative imagination enables us to expand on what we perceive by placing or contextualizing the aesthetic object with narrative images" (ibid.). Brady provides the example of American painter Andrew Wyeth, who, talking about a white mussel shell on a gravel bank in Maine, imparts that it thrills him "because it's all the sea – the gull that brought it there, the rain, the sun that bleached it there by a stand of spruce woods" (Wyeth, quoted ibid.). What Brady sees as typical for ampliative imagination is its heightened creative powers and also its special curiosity in its response to a natural object. It is, she says, imagination in its most active mode in aesthetic experience" (p. 156). The fifth form – *revelatory imagination* – stretches the power of imagination to its limits: "an idea, belief or value is crystallized through heightened aesthetic experience, where perceptual and imaginative engagement with nature facilitates the kind of close attention that

⁹¹ The use of the notion of "projection" is an interesting phenomenon in itself. For this Freudian concept presupposes an "I" which does the projecting of an inner thought, emotion, desire, on an external surface. One is said to "attribute" one's own feelings onto someone or something else. The use of this metaphor inserts as it were an image in the mind of a "slide" that is projected on to the screen of the external object. In using this metaphor and acting upon it in life, we might be committing the fallacy of misplaced concreteness (Whitehead), in that the mental construct is reified and treated as something concrete and almost tangible. One may wonder whether the phenomenon of psychological projection did indeed exist *before* Freud disclosed it for us.

leads to revelation" (p. 157). Brady is careful to point out that she means revelation in a non-religious sense. Contemplating natural phenomena imaginatively may lead to new ways of seeing and thus allow for a poetic apprehension, "beyond the limitations of literal language" (*ibid.*). In some cases, Brady suggests, deep encounters with nature may even lead to the opening out of new metaphysical ideas.⁹² It is this last form of imagination that I think most closely characterizes how emergent properties may come forth in the artmaking process during the AEE sessions that I facilitate and that may take the participant concerned completely by surprise. At any rate, Brady makes convincingly clear that the inventive capacity of imagination involves an array of valuable ways of engaging with nature, and through its revealing and amplifying capacity, it moves beyond what fantasy can muster.

Nevertheless, imagination has a bad reputation among certain environmental aestheticians, Brady contends. In their view, it is not primarily concerned with truth but rather with considering (often false) possibilities. They hold that aesthetic appreciation of nature must be guided by knowledge that is provided by science. One of such aestheticians is Holmes Rolston III – the "father of environmental ethics" – as speaks from this quotation:

Forests have to be, in a certain measure, disenchanted to be properly enjoyed, although, as we shall insist, forest science need not eliminate the element of the sublime, or even the sacred. Indigenous and premodern peoples typically enchanted their forests. After science, we no longer see forests as haunted by fairies, nymphs, or gnomes. Forests are biotic communities; we have naturalized them. (Rolston III, cited in Brady, 2003, p. 92)

Imagination may have some positive role but it should be constrained, these aestheticians assert, by the necessary condition of scientific knowledge. In a discussion that Emily Brady had with philosopher and aesthetician Robert Fudge, the latter questioned whether seeing the tree bark as the wrinkled face of an elderly man is an appropriate imagining: "Although 'seeing' tree bark as the skin of an old man may lead to our noting previously ignored aesthetic properties of the bark, it may also *mislead* our appreciation, as wrinkled skin and tree bark are only *incidentally related*" (Fudge, 2001, p. 282, emphasis added). Here it is science that is allowed to assign the standard of appropriateness by giving us knowledge of trees (that we then, through imagination, transform into appropriate images). This kind of reasoning, Brady fears, runs the risk of burying imagination under the weight of knowledge. For her, in her example of the tree bark and its likeness to the face of an old man, something more than

92 Such imaginative revelations need not always be pleasant, they can also be horrifying, such as when horror and suffering in the natural world are revealed to us. This aspect reminds me of what Meri-Helga Mantere said about her aim to encourage students to be open and sensitive, and practice new and personal ways to articulate and share their environmental experiences. She emphasizes that the latter might be "beautiful, *disgusting*, peaceful or *threatening*" (Mantere, 1998, p. 32, emphasis added; cf. section 2.7).

an incidental relationship exists. She insists that there is a connection established “through the resemblance between the perceptual qualities in the bark and the face, coupled with recognition of the tree as old.” It is exactly this resemblance that gives cause to the evocation of the image of an old man. Nevertheless, Brady – and this view she seems to share with Fudge – maintains that in imagination a relevant connection *must* exist between the aesthetic object and our imaginative activity. When, in our process of imagining, our associations become too strained, and when there is not sufficient resemblance to evoke imagining, it can become irrelevant or trivial, she feels.

Summarizing, we see that the concept of imagination can be understood in several ways, ranging from conceptualizations in which it remains close to and possibly amplifies what is given through perception, to more suggestive conceptions where metaphor and even revelation evoke new meanings. (The latter start to border on fantasy, and we saw how in the course of history efforts were made to disentangle and delimit the domains of imagination and fantasy.⁹³) In the many conceptualizations I see a bifurcation between, on the one hand, forms of imagination that foreground new evocations and, on the other, those that first and foremost affirm the already known. In AEE, in my view, imagination that seeks resemblance and relatedness between phenomena is of course self-evidently meaningful. Next to this, another important type of imaginative capacity may be triggered and sparked exactly through *not* seeking resemblances but by wrestling with contradictions, double binds and fantastic binominals – in short by bringing together what is (or appears at first sight to be) highly heterogeneous.

In my discussion of the different conceptualizations of imagination, I mentioned that there seems to be a watershed division between, on one side, the primarily attentive, receptive, and explorative forms of imagination (such as Goethe’s concept of exact sensorial imagination), and on the other side the kind of imagination that starts to converge with fancy, and which is about evocation of something completely new, freed from the condition that a relevant resemblance must insist. In my view, the latter form of artmaking can in certain cases be a form of learning that is moving away from the head and its reasoning brain as primary locus of creativity. This thought goes along with embracing a more encompassing conception of mind (involving what Bateson would call the basic unit of “man-*plus*-environment”) as the catalyst in processes of imaginative probing.

An important question when contemplating the possibility of connecting to nature through art is in what way such efforts are colored and affected by all the learned knowledge of the world that we have acquired in the course of our life and carry with us: are these pre-understandings a limiting factor, clouding our ability to perceive the new, or are they a blessing? Anaës Nin (1969) would argue for the latter: “The possession of knowledge does not kill the sense of wonder and mystery,” she said. “There

93 In that regard it is noteworthy that Goethe’s *Phantasie* is usually translated as imagination, suggesting more overlap between the terms in Goethe’s era.

is always more mystery" (p. 155). And besides, it is of course an inevitable part of life to lose one's naiveté, the uninformed, untroubled outlook onto the living world. In the following, I want to look at this question more closely: to what extent does accumulated (static) knowledge impact the ability of students/participants to dynamically experience nature afresh? I will open this inquiry on a more general level and from there zoom in on the reflections of specific thinkers and writers. Each of them has, in his or her own way, problematized how we conventionally are instructed to learn about the plants and animals around us.

11.2 Science and art: second naiveté

Emily Brady (2003) holds that it is the active detachment brought about by a non-practical and non-instrumental form of aesthetic appreciation of the natural environment (for which she uses the term "disinterestedness") that can open space for the free activity of imagination (p. 159). For her, disinterestedness is a key feature of the aesthetic experience: "It does not refer to indifference, but to the absence of purpose that attaches to the aesthetic response. We do not approach the object in order to use it as a means to some end, nor are we interested in discovering its function or use. Our approach is free from these concerns" (p. 10). With this view, she comes close to the notion of *wei wu wei*, or "active passiveness" (cf. section 8.5). However, Brady adds that the state of disinterestedness also helps to keep imagination "in check," preventing for example self-indulgent responses. By adhering to a guideline of disinterestedness, thoughts or imaginings are prevented from wandering off, away from an aesthetic focus in one's appreciation of a natural object. Aesthetic value, as an intrinsic and non-instrumental value, is attributed to objects because of their aesthetic qualities, rather than for some purpose, such as the production of pleasure or knowledge. For Brady, the aesthetic value of the environment is therefore *emergent*: it arises out of the perception of aesthetic qualities but it is still linked to certain structural properties. When approaching nature through disinterested aesthetic appreciation, aesthetic valuing is achieved through backgrounding personal preferences and utilitarian concerns, and by foregrounding the appreciation of nature's qualities.

Brady goes on to discuss the relationship between disinterestedness and knowledge. Following Kant, she states that the aesthetic appreciation for example of the beauty of a rose does not arise from facts about its biological functions but simply from perceptual-imaginative reflection on its color, form and fragrance. That appreciation is different from scientific appreciation, for it has no aim. Kant's point is that what a rose "is" in terms of its function or purpose – the facts about its existence – does not determine the appreciation of its beauty. By this, he doesn't assert that knowledge or concepts *couldn't* be part of the backdrop of the aesthetic response. Brady suggests that when we come upon knowledge (e.g. when reading an information board on a nature trail), we may intently take notice of it and let it supplement our perception. But doing so does not imply that our appreciation therefore is direct-

ly grounded or determined by that knowledge. Rather, “the knowledge may enable an expansion of perception of aesthetic qualities” (p. 138).

When we appreciate a butterfly, another example that Brady gives, our admiration may be shaped not only by our associations but also by our background knowledge of butterflies. However, aesthetics and science are not entirely merely supplementary to one another:

Knowing that a butterfly emerged from a caterpillar in a cocoon may increase my appreciation of the vibrant colors if it enables me to recognize the colors before and after the metamorphosis. This knowledge is part of the story of the butterfly, yet it becomes a legitimate part of aesthetic appreciation because it adds meaning to the perceptual qualities I enjoy. But some knowledge clearly conflicts with the condition of disinterestedness.... Scientific knowledge can supplement the aesthetic response, as my point about metamorphosis shows, but it can also dominate appreciation in ways that divert attention from aesthetic qualities.... Scientific value is grounded in wonder and curiosity and aims at acquiring knowledge, while aesthetic appreciation is grounded in the experience of aesthetic qualities, but it has no explicit aim; it is not *for* knowledge, nor *for* sensory gratification.

Disinterested aesthetic appreciation, for Brady, is a state of *will-lessness* in which we are cut off from desire and fully absorbed by the object. Moreover, it “supports a less human-centered approach to aesthetic appreciation of nature” (p. 142). This is compellingly articulated by Arthur Schopenhauer, when he writes about a different kind of perception which is free from the command of the individual will. Instead the whole power of our mind is devoted to perception:

[We] sink ourselves completely therein, and let our whole consciousness be filled by the calm contemplation of the natural object actually present, whether it be a landscape, a tree, a rock, a crag, a building, or anything else. We *lose* ourselves entirely in this object ... we forget our individuality, our will, and continue to exist as pure subject, as clear mirror of the object, so that it is as though the object alone existed without anyone to perceive it, and thus we are no longer able to separate the perceiver from the perception, but the two have become one, since the entire consciousness is filled and occupied by a single image of perception. (Schopenhauer, 1819, cited in Brady, pp. 140-141)

When we allow ourselves to be fully absorbed by the natural object, we do this while part of us “knows better”: we have lost the naiveté we had as a child. Our scientific knowledge cannot be so easily shelved or bracketed, and perhaps we should not even do so, for completely forgetting our individuality, as Schopenhauer suggested, may expose us to other problems. It may involve, as Gregory Bateson argued, the exchange of one epistemological mistake (such as “one-eyed vision”) for another.

According to Stephen Nachmanovitch (2007), who combines being an educator and improvisational violist, both the artist and the scientist are in the business of uncovering reality. Though the relationships between science and art may be rich and complex, they are *also* fluid; together with his teacher Gregory Bateson, Nachmanovitch believes that the two domains are aspects of an essential *unity*. In popular understanding, however, science and art remain utterly incommensurable. “Science” is commonly regarded as a set of logical and precise procedures and facts. “Art,” on the other hand, is seen as the domain of inspiration, subjective understanding, of taking intuitive leaps that cannot be taught or quantified. Nachmanovitch stresses that art is especially strong in communicating what is *unsaid*. The artist is able to participate in information of which both the artist and his or her audience are *unconscious*. Nachmanovitch juxtaposes this characteristic to scientific inquiry. “The scientist,” he says, “must write for his or her audience in such a way that everything is unequivocally laid out, all the data and its interconnections held in conscious awareness. Since the information in any culture, in any human or biological interaction, is recursive, multilayered, and multidimensional, *something essential always gets squashed or cut out*” (Nachmanovitch, 2007, p. 1123, emphasis added). The artist, on the other hand, uses story, image, and movement, “to evoke layers of reality that cannot be explicitly stated, but which are ever-present” (*ibid.*, p. 1124).

As said above, the circumstance that art and science may have wholly different relations to the information that is made explicit or that remains unconscious, does *not* imply that there isn’t *any* common ground between the two activities. On the contrary, neither art nor science can do without reference to larger patterns and contexts, says Nachmanovitch. One of Bateson’s central contributions, in his eyes, is that he not only challenged fundamental dualisms like mind/body, self/other, organism/environment, conscious/unconscious, thought/feeling, but he also offered a way to bridge such splits. Bateson was aiming for what he called “simple thinking.” As Nachmanovitch’s mentor stated in a lecture in 1980, “creativity finds a simple pattern that can contain the great complexities and contradictions *without diminishing them*” (Bateson, cited *ibid.*, p. 1128, emphasis added). A scientist typically collects information and makes connections and patterns explicit. To Bateson, however, the complexity and multidimensionality of the world could only *partly* be explained and encapsulated in the simple formulations of discursive thought. He distrusted what others have since called the “logocentrism” of the Western philosophical tradition.⁹⁴ Cognition, according to Nachmanovitch (2007, p. 1128), is always partial. Of its very essence, it “leaves out the complexity and multilevel nature of the world around us.” With our consciousness, we are able to focus on a single detail of our perceptual world. But in doing that, as he explains, we run the risk of reducing a feedback loop in nature to a line segment, and then we erroneously take that segment to represent all that is going on. It is as though we, with our Western (purposive) consciousness,

94 Logocentrism is understood here as an overarching concern with truth, rationality, logic, and “the word” (Searle, 1983).

have somehow been acculturated to prefer straight line cause-and-effect thinking.

Similar to taking the line segment for what is in reality a cyclical phenomenon is our Westernist bias to *mis*-take the name for the thing and the metaphor for what it refers to. The name is not the thing named, says Bateson.⁹⁵ The confusion of levels may hinder us in meeting the world through direct experience, as our labels come to stand in our way.

Jan Kluskens is a Dutch nature guide. In his review of Richard Louv's *Last Child in the Woods* he tells about the efforts of his organization of environmental educators to increase children's care for nature through organized activity. Although such initiatives make perfect sense, he says, one may wonder whether the goal isn't overshot by doing this. To illustrate his point, he tells of the experience he once had with a Native American friend who called his attention to a black bird with a funny red cap:

"Look, over there, on that tree, a black bird with a funny red cap!" "Yes, nice, it's a Black Woodpecker!" I said, confirming his observation. The Indian tried once more. "Look, a black bird with a funny red cap!" Feeling hopeless, I explained the man again that it was quite positively the Black Woodpecker. He put an end to the conversation by saying that I had not understood. An annoying situation...

Some months later, I happened upon a group of children that had just found a salamander. The group grew in size, and so did their curiosity. They were amazed about its colors ("could it not be a dinosaur, a Diplodocus?"), and they doubted its realness ("probably there are batteries in it!"). All kinds of fantasies about their find abounded. Then a naturalist explained to them that it was a male Alpine salamander. And because the little creature was red-listed, it had to be put back. With that, he broke the spell. By giving a name to their discovery he not only made it "his"; by saying what *ought* to happen with the amphibian, he neglected the protectiveness that the finder had already demonstrated for it.

Suddenly I understood the Indian. He wanted to share something nice with me, not hear a name. I had effectively inhibited him in developing his own (or our shared?) experience of being in the presence of that bird. (Klusken, 2008, p. 110, my translation)

In an article for *Orion Magazine*, entitled "The Failure of Names," James Prosek (2008) recounts how he, as a boy of four or five years of age, would draw birds at the kitchen table and would ask his mother to write the (made up) names of the birds beneath the pictures. When he could write himself, he added the scientific names beneath his animal drawings. At nine, Prosek had developed a passion for painting trout and he began to compile a list of all the diverse types. At that time he believed

⁹⁵ In similar fashion he would pointed out that the class is of a different logical type than that of its members; there is a hierarchy between them (Bateson, 1972).

that an animal was distinct from others if it had been assigned its own scientific name. Further, if the classification of creatures was figured out by “authority figures,” one ought to defer to that authority. In the course of time, however, Prosek found that – given the enormous diversity of fishes in the *Salmonidae* family – even the authorities could not agree on the proper names. Some trout for example had been named a separate species and later on was renamed a subspecies. At the time, he had not yet explored the idea that naturalists named things because they wanted to create a legacy for themselves, or wished to be published more, or various other reasons. On the basis of seventy watercolors that he had made, Prosek made his first book, called *Trout: An Illustrated History* (1996). While Prosek continued painting trout through his late teens, major shifts took place in trout taxonomy. For example, in the early 1990s it was discovered that rainbow trout (*Oncorhynchus mykiss*) from the Pacific Coast and brown trout (*Salmo trutta*) from Europe were not as closely related as was once thought. Some of these changes were so fundamental that for Prosek it was no longer correct even to call the book he was working on at the time *Trout*. It led him to wanting to ignore the namers, “because they were getting in the way of his own personal vision”:

I began to understand that species were less static than the fathers of modern taxonomy – those like Carl Linnaeus – once believed. That nature was static and classifiable was an idea perpetuated by the natural history museum (repository for dead nature), the zoo (repository for living nature), and the book (repository for thoughts and images related to nature). These mediums were all distillations of nature, what individuals of authority deemed an appropriate cross section to present to the public. None had adequately represented Nature – at once chaotic, multifarious, and interconnected. (Prosek, 2008)

Prosek is caught in a dilemma. He loves the names that had first led him to recognize the existence of diversity among trout, but the more he learns the more he wants to throw away the names and to “step beyond those constraints, in order to preserve a sense of wonder....” His way out of this quandary is to innovate his way of artmaking. He starts to work with curvilinear lines. In the following words he describes his new artistic approach, in which he tries to look at things with a fresh perspective:

The first paintings I did with lines emanating from creatures were meant to be imaginings of what God’s or Nature’s blueprint of a particular creature might look like. After drawing curvilinear lines, first emanating from the points on the body of a seahorse, I realized the lines were helpful as visual aids to point out particular parts of a creature that I wanted to bring attention to. The lines activated the space around the animal in a satisfactory way, erasing the need for the name to be written beneath. In this way, the lines became a very personal visual taxonomy, replacing the lingual one. (ibid.)

In short, the lines become Prosek's way of acknowledging that nothing is absolute: "Naming gives us the illusion that nature is fixed, but it is as fluid as the language used to describe it. It is a challenge of the artist (if no one else) to un-name and re-name the world to remind us that fresh perspectives exist" (Prosek, 2008). In a response to Prosek's piece, naturalist and artist Rosemary Conroy comments approvingly as follows:

I too was obsessed with knowing the names of the plants and animals and birds around me. But I slowly came to realize that knowing the name of something was almost an excuse to check it off and move on to the next one. I thought that knowing the name of something meant I knew it, but as the author [James Prosek] implies, that's not true at all. If anything, it's merely the beginning. But all too often, having the name is enough and makes most people stop paying attention any longer. Which is too bad and rather indicative of our culture's relationship to nature at this point and time. (Conroy, 2008)

In marked contrast to Prosek's lamentations on names "getting in the way" are the reflections of Britain's "foremost nature writer" Richard Mabey in the chapter "The Naming of Parts" of his book *Nature Cure* (2006). Here, Mabey discloses that even when he is botanizing by himself, he still finds himself wanting "to put a name to things." For him it seems to be a basic human reaction, indeed "the first step in beginning a relationship." In a *monologue intérieur*, Mabey asks himself why he should bother finding the names of some plants, which often proves to be such a struggle. These are his contemplations:

Why not simply relish the spring's new life ... its exquisite variegation, the interplay of the yellow moss-ground, the filigree sedges, the solid mass of tussocks, the growningness of it all? Well I can, I think, but don't find it easy to stop there. Some inner tic – not just an intellectual reflex – makes me want to know who they all are. Maybe it's just a hangover from whatever impulse makes boys collect stamps. *But some kind of naming is a prerequisite of talking about plants*, and I'd make a strong argument in favor of its cultural (let alone scientific) importance. (Mabey, 2006, p. 148, emphasis added)

For his friend John Fowles, "the name of a plant is a pane of dirty glass between you and it." Though Mabey understands what Fowles was getting at, he has never been able to share that feeling. He takes the contrary position: for him, the naming of the plant, and for that matter of any living thing, is a gesture of respect towards its individuality and "its distinction from the generalized blur." In this, the kind of name – be it the scientific, the popular, or even a made up name – scarcely matters. What is important is that someone can communicate it (Mabey, 2006, *ibid.*).

Underneath the contrast espoused here between how Prosek and Mabey relate to the naming of things is the difference in how they, each of them in his own way, have

personally come to terms with the gradually expanded body of (scientific) knowledge they have acquired of the living world. For it seems that once we have used a rational-scientific explanatory grid to disclose and classify phenomena in nature, the ensuing “naturalist gaze” tends to stick. From there onwards it takes effort to move beyond it.

The novelists Mark Twain and Herman Hesse, each in his own way, have wrestled with this dilemma as well. In his *Life on the Mississippi* (1883), Mark Twain talks about his own experience as an apprentice riverboat pilot. In the course of his education, the face of the water becomes “a wonderful book” to him, though for an uneducated passenger it remains “a dead language.” Every day, this book had a new story to tell to the becoming pilot. But there is a price exacted too:

Now when I had mastered the language of this water, and had come to know every trifling feature that bordered the great river as familiarly as I knew the letters of the alphabet, I had made a valuable acquisition. But I had lost something, too. I had lost something which could never be restored to me while I lived. All the grace, the beauty, the poetry, had gone out of the majestic river! (Twain, 1883/2004, p. 78)

Twain had nevertheless retained the image of a wonderful sunset in his mind, which he had witnessed when steamboating was still new to him. At the time, he found it a bewitching experience; the world appeared as new to him and he had never seen anything like this at home. But, then, as riverboat pilot, at one point the day came when he began to cease noting

the glories and the charms which the moon and the sun and the twilight wrought upon the river's face. Then, if that sunset scene had been repeated, I should have looked upon it without rapture, and should have commented upon it, inwardly, after this fashion: “This sun means that we are going to have wind tomorrow; that floating log means that the river is rising, small thanks to it; that slanting mark on the water refers to a bluff reef which is going to kill somebody's steamboat one of these nights, if it keeps on stretching out like that.” (ibid., p. 79)

Twain goes on to note the different meanings he reads in the natural phenomena that he perceives as learned pilot. It creates a state of melancholy which he describes as follows: “No, the romance and the beauty were all gone from the river. All the value any feature of it had for me now was the amount of usefulness it could furnish toward compassing the safe piloting of a steamboat” (ibid., 80).

In *Steppenwolf*, Herman Hesse tells the story of main character Harry Haller, who has a Faustian two-fold nature of man and wolf within him. He would like either to overcome the wolf and become wholly man or to renounce mankind and at last live wholly a wolf's life. The latter recourse, however, proves impossible, as we read in the “Treatise on the Steppenwolf,” a booklet given to Haller:

There is no way back at all, not to the wolf, not to the child. At the beginning of things there is no innocence and simplicity; each created thing, even the seemingly most simple thing, is already guilty, already manifold, thrown into the dirty stream of becoming and can nevermore, nevermore swim against the current. The way to innocence, to the uncreated, to God does not lead back but forward, neither to the wolf nor to the child, but ever further into guilt, ever deeper into human development.... Instead of narrowing your world in order to simplify your soul, you will have to take more and more world, finally the whole world, into your painfully enlarged soul, in order to possibly come to rest at last for once. This is the road of Buddha, the road every great man has taken, some knowingly, some unknowingly.... Every birth means separation from the All, means restriction, seclusion from God, painful new development. (Hesse, 2010, pp. 49-50)

Hesse describes here the process of individuation as a painful but inevitable disconnection.⁹⁶ This seems to be our predicament. Paul Ricoeur (1967) held that ultimately we can never go back to a primitive naiveté, characterized by an uncritical, childlike acceptance of the world. He suggested that only after passing through an intensely rational and critical stage, we could achieve a *second naiveté*. Only by first moving through a stage of critical distance could we enter this (paradoxically sounding) mature innocence.

In every way, something has been lost, irremediably lost: immediacy of belief. But if we can no longer live the great symbolisms of the sacred in accordance with the original belief in them, we can, we modern men, aim at a second naiveté in and through criticism. In short it is by interpreting that we hear again. (p. 351)

Paul Ricoeur suggests that if we want to come to grips with a rich piece of text like the Bible, this necessarily requires a kind of naiveté. For these old writings appear strange and foreign to us moderns – if not absurd. Modern historical critical methods do much to enhance our understanding of the context and history of the texts and our relation to that history, but it seems like our immediacy to the text is initially lost through criticism. Ricoeur argues that this circumstance shouldn't change the final goal of interpretation. As modern peoples, with our demand for certainty and empirical truth, we can – in cases where we read things that seem odd or foreign to us – allow ourselves to be guided by second naiveté. For Ricoeur, when we make an effort to interpretation, the aim of criticism is not the destruction of belief but rather establishing it in a new way. *We hear again.*

Such a mature innocence comes across poignantly in this old teaching in Mahayana Buddhism (also referred to as Ch'an), that is attributed to Master Qingyuan:

96 Hesse may be indebted here to Friedrich Nietzsche and his meditations on the Apollonian drive in humans. For Nietzsche, the god Apollo champions the unshaken faith in the individual. Implicit here is the concept of the *principium individuationis* (the “principle of individuation”), which foregrounds the boundaries that separate men from the world and from each other. These boundaries are necessary in order to ensure the healthy functioning of society.

Thirty years ago, before I practiced Ch'an, I saw that mountains are mountains and rivers are rivers. However, after having achieved intimate knowledge and having gotten a way in, I saw that mountains are not mountains and rivers are not rivers. But now that I have found rest, as before I see mountains are mountains and rivers are rivers. (Master Qingyuan, 1252, quoted in App, 1994, pp. 111-112)

For Master Qingyuan, it is essential for his completion of the practice to come to the insight that mountains are *just* mountains and that waters are *just* waters, thus realizing that emptiness and existence are the same thing. His transformation is constituted by moving from seeing the world through primal ignorance into seeing the world through awakened awareness (Garfield & Priest, p. 6). The same path to deepened understanding was expressed by T.S. Eliot: “*We shall not cease from exploration / And the end of all our exploring / Will be to arrive where we started / And know the place for the first time*” (Eliot 1959, p. 59).

11.3 A resurgence of the real?

In the first chapter, I discussed what use there still is to refer to something as evasive as “the real.” It is an unsettling thought, Elias Canetti’s assertion that we may have passed the point in time after which history was no longer real, and that we, indeed, as an inevitable consequence of that we have moved beyond this moment, are no longer able to retrieve the real. It now seems, irrevocably, beyond our grasp. Any time you try to nail it, it seems to evade you, as the food became unreachable for gold-craving King Midas in the Greek myth (cf. section 10.2). But perhaps humans were never really able to access the real in the first place and maybe the longing for an authentic real has always been no more than a lingering, nostalgic yearning. (And after all, the concept of the real, like anything else in our semantic universe, inevitably is a social construction.)

Nevertheless, within the context of this thesis, I choose to adhere to the idea that there is such thing as a real, though this thought is entertained perhaps only at an intuitive, visceral level and is hard if not impossible to substantiate without getting trapped in all kinds of semantic pitfalls. To me, maybe the essential element of keeping up this idea of the real is to allow for a “domain of the unexpected,” of that which is not pre-ordered, framed, or constructed. It is present but it may catch us off guard, by surprise. We know it when we feel it. A reality of “live things, things lived and conscient of us,” as Rilke put it (but of which he feared he belonged to the last generation to have known these qualities, cf. section 1.4).

One thinker who has made it her project to retrieve the real is ecological thinker Charlene Spretnak (1997). In her *The Resurgence of the Real* she seeks the roots of the modern crisis in the ideas that were formed during the Renaissance, the Reformation, the Scientific Revolution and the Enlightenment. Spretnak holds that at its core the

crisis stems from a world-view founded merely upon economic expansion and technological innovation. As a countervailing power, she identifies an “other history” of the modern era, consisting of an array of movements that resisted the damaging effects of the industrialized modern world, of which the Romantic Movement was the most prominent. Her book can be read as a harsh critique of deconstructive postmodernism which, she asserts, rejects any sense of the real.

Whether or not the real, in our media-saturated modern world, has indeed moved more and more to the periphery of awareness and appears to be wholly out of reach, is a subject of discussion and of course depends on how we define the real. Nevertheless, several authors who make this observation in their own specific ways – people like Jean Baudrillard, Jacques Ellul and Charles Taylor – *also* add that any nostalgic attempt to move the clock backwards is not only futile, but does not help us in our current predicament. We have to deal with the world as it is today and no other.

Perhaps we should acquiesce to the unbelievable reversal (Ellul) of having moved, irreversibly, from biotope to technotope. Out of touch with the real of nature, we can surely seek to absorb other types of experiences which may be just as meaningful.

Such a view, however, would be too relativistic to me. My position is that there is an intrinsic relationship between the extinction of direct experiences of nature on the one hand, and our inability to face and address the current ecological crisis on the other. Because we don’t *see* the delicate interdependencies in the ecological system that give it its integrity, *we break them*. This was the conviction of Gregory Bateson, according to his daughter Mary Catherine (M. C. Bateson, cited in N. Bateson, 2010). For Gregory Bateson, seeing these biological patterns was the true meaning of aesthetics. With Alan Boldon (2008), I would hold that we not only find ourselves in an ecological crisis but also in an aesthetic crisis and that the two are fundamentally related. It is for this reason that Boldon puts hope in the capacity of the arts and artists to feel out the connections and complex relationships between phenomena that may appear to be separate. To make sense of our situation, it is fundamental that we not only see the thing before us but also try to discern its web of social, mental, economic or connections: “In this way we come to know *that we are our environment*; this is the way to empathy and must be part of the solution to the environmental and aesthetic crisis we face.” Putting his argument into a larger perspective, Boldon refers to the following statement by psychologist James Hillman:

We must first be moved by beauty. For then love is aroused. When you love something, then you want it near, not to be harmed. What evokes love? As has been said in many places and felt by any one of us. It’s beauty... Beauty astounds and pulls the heart’s focus toward the object, out of ourselves, out of this human-centered insanity toward wanting to keep the cosmos there for another spring and another morning. This is the ecological emotion, and it is aesthetic and political at once. (James Hillman, cited in Boldon, 2008)

It is at this nexus, I would argue, reminiscent of Arne Naess's plea for the cultivation of beautiful actions (cf. section 1.6) where I regard the further development of emerging practices of AEE to be of particularly relevance in our current time and age, as one way of seeking new ways of being receptive to the living world.

We saw that imagination, for the Romantics, was as a gateway to connect to the truth of nature. A key element in this engaging is the shelving of preconceived ideas, in order to be receptive to the new. Such "bracketing" of our day-to-day understandings does not happen automatically. Rather, it seems likely that we first need to be pulled out of the static patterning (Pirsig) that provides guidance and a sense of security in our daily lives. It is through some form of estrangement that a new state of attentiveness is potentially fomented to whatever would manifest itself in the arts-based encounter with the natural world. This is not a way of engaging we are very familiar with and it may call forth a sense of humility on our part.

When I asked Antony Gormley if he would agree with me that art (as a process and a mode of engagement, or learning) can, potentially, provide us with a form of knowledge that no other endeavor can, he responded like this:

I am worried about that notion of "knowledge." Eliot said: "Where is the understanding we have lost in knowledge?" "Knowledge" suggests defined quantities whilst "understanding" suggests a degree of uncertainty, of *not*-knowing and indicates an open-ended process. I think that art can absolutely be a catalyst for a process of understanding and, through engagement, maybe even of empathy, too. (A. Gormley, personal communication, February 1, 2010)

Bibliography

Abbott, M. (2010). The poetic experience of the world. *International Journal of Philosophical Studies*, 18(4), 493-516. Retrieved from <http://philpapers.org/rec/ABBTPE>

Abram, D. (1985). The perceptual implications of Gaia. *The Ecologist*, 15(3), 96-103.

Abram, D. (1996a). *The spell of the sensuous: Perception and language in a more-than-human world*. New York: Vintage Books.

Abram, D. (1996b). Merleau-Ponty and the voice of the earth. In D. MacAuley (Ed.), *Minding nature: The philosophers of ecology* (pp. 82-101). New York: Guilford Press.

Abram, D. (2010). *Becoming animal: An earthly cosmology*. New York: Pantheon.

Adams, N. (Producer). (2005, April 21). Discussion of "Lila: An Inquiry into Morals" with Robert Pirsig. [Audio podcast]. Retrieved from <http://www.npr.org/templates/story/story.php?storyId=4612367>

Adams, S. (1996). *The Dilbert principle: A cubicle's-eye view of bosses, meetings, management fads & other workplace afflictions*. London: Boxtree.

Allison, J. (2003). *A way of seeing: Perception, imagination, and poetry*. Great Barrington, MA: Lindisfarne Books.

Altorf, M. (2008). *Iris Murdoch and the art of imagining*. London: Continuum.

Anderson, H. (2010). *Art education and eco awareness: A teacher's guide to art and the natural environment*. Fresno, CA: Heather Anderson Publishing.

Angus, I. (1997). Free nature. *Alternatives Journal*, Summer 1997. Retrieved from http://findarticles.com/p/articles/mi_hb6685/is_n3_v23/ai_n2869111

App, U. (1994). *Master Yunmen: From the record of the Chan teacher Gate of the Clouds*. New York: Kodansha International Press.

Armitage, K.C. (2009). *The nature study movement*. Lawrence KS: University Press of Kansas.

Arnheim, R. (1969). *Art and visual perception: A psychology of the creative eye*. London: Faber and Faber. (Original work published 1954).

Bailey, L.H. (1904). What is nature-study? In State of New York - Department of Agriculture (Ed.), *Cornell nature-study leaflets* (pp. 11-20), Albany, NY: J.B. Lyon.

Ball, P. (2003). *Bright earth: Art and the invention of color*. Chicago: University of Chicago Press.

Barlow, Z., & Stone, M.K. (2005). *Ecological literacy: Educating our children for a sustainable World*. San Francisco: Sierra Club Books.

Barrett, M.J. (2007). *Beyond human-nature-spirit boundaries: Researching with animate EARTH* [Dissertation]. University of Regina, Saskatchewan, Canada. Retrieved from <http://www.porosity.ca/index.html>

Bateson, G. (1972). *Steps to an ecology of mind*. New York: Ballantine.

Bateson, G. (1980). *Mind and nature: A necessary unity*. New York: Bantam.

Bateson, G. (1991a). Last lecture. In R.E. Donaldson (Ed.), *A sacred unity: Further steps to an ecology of mind* (pp. 307-313). New York: HarperCollins.

Bateson, G. (1991b). Men are grass: Metaphor and the world of mental process. In R.E. Donaldson (Ed.), *A sacred unity: Further steps to an ecology of mind* (pp. 236-242). New York: HarperCollins.

Bateson, G., & Bateson, M.C. (1987). *Angels fear: Towards an epistemology of the sacred*. New York: Macmillan.

Bateson, M.C. (1994). *Peripheral visions: Learning along the way*. New York: HarperCollins.

Bateson, N. (Director). (2010). *An ecology of mind: A daughter's portrait of Gregory Bateson* [Motion picture]. United States.

Baudrillard, J. (1983a). *Simulations*. (P. Foss, P. Patton & P. Beitchman, Trans.). New York: Semiotext(e).

Baudrillard, J. (1983b). *In the shadow of the silent majorities* (P. Foss, J. Johnston, P. Patton & S. Kendall, Trans.). New York: Semiotext(e). (Original work published 1978).

Baudrillard, J. (1983c). The ecstasy of communication. In H. Foster (Ed.), *The anti-aesthetic: Essays on post-modern culture* (pp. 126-134). Seattle, WA: Bay Press.

Baudrillard, J. (1988). Fatal strategies. (J. Mourrain, Trans.). In M. Poster (Ed.), *Jean Baudrillard: Selected writings* (pp. 185-206). Palo Alto, CA: Stanford University Press.

Baudrillard, J. (1989). Beyond the vanishing point of art. (P. Foss, Trans.). In P. Taylor (Ed.), *Post-Pop Art*. Cambridge: MIT.

Baudrillard, J. (1990). *Fatal strategies* (P. Beitchman & P. Niesluchowski, Trans.). New York: Semiotext(e). (Original work published 1983).

Baudrillard, J. (2000). *The vital illusion*. J. Witwer (Ed.). New York, Columbia University Press.

Baudrillard, J. (2010). *Simulacra and simulation*. (S.F. Glaser, Trans.). Ann Arbor, MI: University of Michigan Press. (Original work published 1981).

Baugh, B. (1988). Authenticity revisited. *Journal of Aesthetics and Art Criticism*, 46(4), 477-487.

Becks-Malorny, U. (2001). *Cézanne*. Cologne: Taschen.

Behar, R. (1997). *The vulnerable observer: Anthropology that breaks your heart*. Boston: Beacon.

Belinda, C. (2007). Loose parts: What does this mean? *Better Kid Care, January issue*. Retrieved from <http://betterkidcare.psu.edu/ENewsletters/ENews0701Jan.html#FeatureArticle>.

Benjamin, W. (1936/1969). The work of art in the age of mechanical reproduction. In H. Arendt (Ed.), *Illuminations*. New York: Schocken Books.

Bensusan, H. (2004). Mind and (bracketed) world (could there be an externalist epoché?). In J. Marek & M. Reicher (Eds.), *Erfahrung und Analyse Beiträge des 27. Internationalen Wittgenstein Symposiums* (pp. 31-33). Kirchberg am Wechsel: Österreichische Ludwig Wittgenstein Gesellschaft.

Berger, A. (2009). *Recovery as an initiation rite*. Retrieved from http://www.angelscommunity.com/EN/the_best_of_counsellor%27s_corner/recovery_as_an_initiation_rite

Berger, J. (1986). *Ways of seeing*. London: British Broadcasting Corporation. (Original work published 1972).

Bergström, B. (2004). *Every child has specific needs* (R. Foreman, Trans.). Stockholm: Runa Förlag.

Berman, M. (1981). *The reenchantment of the world*. London: Cornell University Press.

Blake, W. (2008). *The complete poetry and prose of William Blake*. Berkeley: Univ. of California Press. (Original work published 1779).

Blake, W. (2007). Letter to Thomas Butts (dated 22 November, 1802). In W.H. Stevenson (Ed.), *Blake: The complete poems* (3rd ed.). Harlow, UK: Pearson Education.

Blake, W. (2008). *The complete poetry and prose of William Blake*. Berkeley: CA, University of California Press. (Original work published 1799).

Bockemuehl, J. (Ed.). (1992). *Waking up to landscape*. (A. Meuss, Trans.). Dornach, Switzerland: The Goetheanum.

Boeckel, van J. (1995a). Ergens tussen de berg en de mier. In *Oefeningen in duurzaamheid: Perspectieven naar 2040* (pp. 117-138.) Utrecht, The Netherlands: Jan van Arkel.

Boeckel, van J. (1995b). Interview with Norwegian eco-philosopher Arne Naess. Retrieved from http://www.naturearteducation.org/Interview_Arne_Naess_1995.pdf

Boeckel, van J. (2006). Forget your botany: Developing children's sensibility to nature through arts-based environmental education. *The International Journal of the Arts in Society*, 1(5), 71-82.

Boeckel, van J. (2009). Arts-based environmental education and the ecological crisis: Between opening the senses and coping with psychic numbing. In B. Drillsma-Milgrom & L. Kirstinä (Eds.), *Metamorphoses in children's literature and culture* (pp. 145-164). Turku, Finland: Enostone.

Boeckel, van J. (2010). Hidden agendas and utopian wanderings: Trying to be conscious of epistemological challenges and errors in doing research in art education. In *Synnyt/Origins 4*, 65-78. Retrieved from http://arted.uiah.fi/synnyt/4_2010/4_2010boeckel.pdf

Boeckel, van J. (2011). A point of no return: Artistic transgression in the more-than-human world. In A. Aarø & J. Servan (Eds.), *Environment, embodiment and gender* (pp. 293-314). Bergen, Norway: Hermes Text, in cooperation with Research Group in Phenomenology and Existentialism, University of Bergen.

Boeckel, van J. (forthcoming). *Angels talking back and new organs of perception: Art making and intentionality in nature experience*.

Boldon, A. (2008). Climate change – an aesthetic crisis? Retrieved from: http://www.naturearteducation.org/Articles/Climate_Change_An_Aesthetic_Crisis.pdf

Bortof, H. (1996). *The wholeness of nature: Goethe's way toward a science of conscious participation in nature*. Hudson, NY: Lindisfarne Press.

Bowers, C.A. (2000). *Let them eat data: How computers affect education, cultural diversity, and the prospects of ecological sustainability*. Athens, GA: University of Georgia Press.

Brady, E. (2003). *Aesthetics of the natural environment*. Tuscaloosa, AL: The University of Alabama Press.

Brady, R. (2000). Perception: Connections between art and science. Retrieved from <http://natureinstitute.org/txt/rb/art/perception.htm>

Brand, S. (1976). "For God's sake, Margaret": Conversation with Gregory Bateson and Margaret Mead. *CoEvolution Quarterly*, 10, 32-44. Retrieved from <http://www.alice.id.tue.nl/references/bateson-mead-1976.pdf>

Brand, S. (1973). Both sides of the necessary paradox. *Harper's Magazine*, November 1973, 20-37.

Brewster, D. (1832). *The Edinburgh encyclopaedia, Volume 12*. Philadelphia, PA: Joseph and Edward Parker.

Brook, I. (1998). Goethean science as a way to read landscape. *Landscape Research*, 23(1).

Brook, I. (2006). Can Merleau-Ponty's notion of 'flesh' inform or even transform environmental thinking? *Environmental Values* 14(3).

Bruner, E. (1986). Experience and its expressions. In V. Turner & E. Bruner (Eds.), *The anthropology of experience* (pp. 3-32). Urbana, IL: University of Illinois Press.

Bryman, A. (2008). *Social research methods*. (3rd ed.). Oxford: Oxford University Press.

Buber, M. (1950). *I and Thou*. (R.G. Smith, Trans.), Edinburgh: T. & T. Clark. (Original work published 1937).

Burnette, M. (2012). Ranger Rick goes digital! Introduces the first truly interactive magazine for kids. Retrieved from: <http://www.nwf.org/news-and-magazines/media-center/news-by-topic/get-outside/2012/12-5-12-ranger-rick-goes-digital.aspx>

Burns, N., & Grove, S. (1993). *The practice of nursing research: Conduct, critique & utilization* (2nd ed.). Philadelphia, PA: W.B. Saunders.

Burridge, S. (2003). *Arts-based approaches to creative teaching and learning*. [Paper]. Retrieved from <http://www.aare.edu.au/03pap/buro3114.pdf>

Cannatella, H. (2007). Education through art. In *Philosophy of Education Society of Great Britain Annual Conference*. Oxford: New College Oxford. (Unpublished).

Cantor, S. (Director). (2005). *What remains: A documentary portrait of photographer Sally Mann*. [Motion Picture]. United States: Stick Figure Productions.

Capra, F. (1996). *The web of life: A new scientific understanding of living systems*. New York: Anchor Books.

Carroll, L. (1871). *Through the looking-glass, and what Alice found there*. London: Macmillan.

Carr, N. (2010). *The shallows: What the Internet is doing to our brains*, New York: W.W. Norton and Company.

Carson, R. (1998). *The sense of wonder*. New York: Harper & Row. (Original work published 1965).

Cavén, T. (Director). *Antony Gormley, YLE Teema* [Motion Picture] Broadcast on April 5, 2009, viewed online at <http://areena.yle.fi/toista?id=2079022>

Charlton, N. (2008). *Understanding Gregory Bateson: Mind, beauty, and the sacred earth*. New York: SUNY Press.

Chase, S. (2005). Narrative inquiry: Multiple lenses, approaches, voices. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed.), (pp. 651-679). Thousand Oaks, CA: Sage.

Chawla, L. (2005). The ecology of environmental awareness and action. In B.B. Jensen & A. Reid (Eds.). *Critical international perspectives on participation in environmental and health education*. Copenhagen: Danish University Press.

Chawla, L. (2006). Learning to love the natural world enough to protect it. *Barn*, 2006(2). 57-78.

Chevreul, M.E. (1981). *The principles of harmony and contrast of colors*. (C. Martel, Trans.). New York: Van Nostrand Reinhold. (Original work published 1854).

Clifford, J., & Marcus, G.E. (Eds.). (1986). *Writing culture: The poetics and politics of ethnography*. Berkeley, CA: University of California.

Cobb, E. (1959). The ecology of imagination in childhood. *Daedalus*, 88(3), 537-548.

Cobb, E. (1993). *The ecology of imagination in childhood*. Dallas: Spring Publications. (Original work published 1977).

Coleridge, S.T. (1834). *Biographia literaria: Or, biographical sketches of my literary life and opinions*. New York: Leavitt, Lord and Company.

Conroy, R. (2008). *Discuss: The failure of names*. Retrieved from <http://www.orionmagazine.org/index.php/articles/discuss/2868/>

Cormack, D.F.S. (Ed.). (1991). *The research process in nursing* (2nd ed.). Oxford: Blackwell Scientific.

Cornell, J. (1989). *Sharing nature with children II*, Nevada City, CA: Dawn Publications.

Corrigan, C. (2006). *The Tao of holding space: 81 short chapters on facilitating Open Space*. Retrieved from <http://www.chriscorrigan.com>

Coutts, G., & Jokela, T. (Eds.). (2008). *Art, community and environment: Educational perspectives*. Bristol, UK: Intellect.

Crane, J., & Egan, M. (2009). *Natural protest: Essays on the history of American environmentalism*. London: Taylor & Francis.

Crapanzano, V. (1992). *Hermes' dilemma and Hamlet's desire*. Boston: Harvard University Press.

Crichfield, G. (1978). The Romantic madman as hero: Nodier's Michel le Charpentier. *The French Review* 1.1(6).

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper and Row.

Dahlberg, G., Moss, P., & Pence, A. (2007). *Beyond quality in early childhood education and care*. London: Routledge. (Original work published 1997).

Dahlin, B. (2001). The primacy of cognition – or of perception? A phenomenological critique of the theoretical bases of science education, *Science and Education*, 10, 453-475.

Dahlin, B., Østergaard, E., & Hugo, A. (2009). An argument for reversing the bases of science education: A phenomenological alternative to cognitionism. *NorDiNa*, 5(2), 185-199.

Daskolia, M., Dimos, A., & Kampylis, P.G. (2012). Secondary teachers' conceptions of creative thinking within the context of environmental education. *International Journal of Environmental & Science Education*, 3(3), 269-290.

Davidson, C.N., & Goldberg, D.T (2009). *The future of learning: Institutions in a Digital Age*. Cambridge, MS: MIT Press.

Dawkins, R. (1998). *Unweaving the rainbow: Science, delusion and the appetite for wonder*. Boston: Houghton Mifflin.

Dawson, T. (2008). Rousseau, childhood and the ego: A (post-)Jungian reading of *Emile*. In R.A. Jones, et al. (Eds.), *Education and imagination: Post-Jungian perspectives* (pp. 52-63). London: Taylor & Francis.

Dean T., & Millar, J. (2005). *Place*. London: Thames & Hudson.

Deleuze, G., & Guattari, F. (2004). *A thousand plateaus*. (B. Massumi, Trans.). London: Continuum. (Original work published 1980).

Denzin, N.K. (1997). Evocative autoethnography: Writing emotionally about our lives. In W.G. Tierney & Y.S. Lincoln (Eds.), *Representation and the text* (pp. 115-139). New York: State University of New York Press.

Denzin, N.K., & Lincoln, Y. (Eds.). (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage.

Devall, B., & Drenson, A. (2006). Arne Naess, his life and work part two: The continuing development of the long-range, deep ecology movement. *Trumpeter*, 22(2), 2-7.

Dewey, J. (1910) *Democracy and education*. New York: McMillan.

Dewey, J. (1958). *Experience and nature*. New York: Dover. (Original work published 1929).

Dewey, J. (1987). Art as experience. In J.A. Boydston (Ed.), *John Dewey: The later works, 1925-1953*, Vol. 10: 1934. Carbondale, IL: Southern Illinois University Press. (Original work published 1934).

Dibb, M. (Director). (2005). *Keith Jarrett: The art of improvisation* [Motion picture]. Germany: Euroarts.

Dilthey, W. (1976). *Wilhelm Dilthey: Selected writings*. (H.P. Rickman, Trans.). Cambridge: Cambridge University Press. (Original work published 1910).

Dilthey, W. (2006). Einleitung in die Geisteswissenschaften. Versuch einer Grundlegung für das Studium der Gesellschaft und Geschichte. *Gesammelte Schriften, Bände I bis XXVI*. Göttingen: Vandenhoeck & Ruprecht. (Original work published 1883).

Dilts, R. (1998). *Harnessing the imagination*. Retrieved from <http://www.nlpu.com/Articles/artic16.htm>

Drenson, A., & Y. Inoue (Eds.). (1995). *The deep ecology movement: An introductory anthology*. Berkeley: North Atlantic Publishers.

Dreyfus, H.L. (2001). *On the Internet*. London: Routledge.

Dunaway, F. (2005). *Natural visions: The power of images in American environmental reform*. Chicago: University of Chicago Press.

Edwards, B. (1979). *Drawing on the right side of the brain: How to unlock your hidden artistic talent*. London: Fontana/Collins.

Edwards, B. (1989). *Drawing on the artist within: An inspirational and practical guide to increasing your creative powers*. New York: Simon & Schuster.

Edwards, C., Gandini, L., & Forman, G. (Eds.). (1994). *The hundred languages of children: The Reggio Emilia approach in early childhood education*. Norwood, NJ: Ablex Publishing.

Eernstman, N., Boeckel, van J., Sacks, S., & Myers, M. (2012). Inviting the unforeseen: A dialogue about art, learning and sustainability. In A.E.J. Wals & P.B. Corcoran (Eds.). *Learning for sustainability in times of accelerating change*. Wageningen, Netherlands: Wageningen Academic Publishers.

Eisner, E. (1981). On the differences between scientific and artistic approaches to qualitative research. *Educational Researcher*, 10(4), 5-9.

Eisner, E. (1998). *The kind of school we need: Personal essays*. Portsmouth, NH: Heinemann.

Eisner, E. (2002). *10 Lessons the arts teach*. Retrieved from <http://www.omart.org/education/lessons-arts-teach>.

Elders, F. (1990, June 22). Het denken van Arne Naess. *Trouw, Letter & Geest*.

Eliot T.S. (1959). *Four quartets: Little giddings*. London: Faber and Faber.

Elkholy, S.N. (2009). Review of Marije Altorf, Iris Murdoch and the art of imagining. *Notre Dame Philosophical Reviews* 2009(6). Retrieved from <http://ndpr.nd.edu/review.cfm?id=16346>.

Ellen R., & Katsuyoshi, F. (Eds.). (1996). *Redefining nature: Ecology, culture and domestication*. Oxford: Berg.

Ellul, J. (1980). Nature, technique and artificiality. In *Research in Philosophy & Technology*, 3 (K. Temple, Trans.). Greenwich, CT: JAI Press.

Ellul, J. (1989). *What I believe* (G.W. Bromiley, Trans.). Grand Rapids, MI: William B. Eerdmans Publishing Company. (Original work published 1987).

Ellul, J. (1990). *The technological bluff* (G. W. Bromiley, Trans.). Grand Rapids, MI: William B. Eerdmans Publishing Company. (Original work published 1987).

Engell, J. (1989). *Forming the critical mind: Dryden to Coleridge*. Boston: Harvard University Press.

Everden, N. (1999). *The Natural alien: Humankind and environment*. Toronto: University of Toronto Press.

Evers, L. (1992). *Leslie Silko. Poetics and politics*. Retrieved from <http://poeticsandpolitics.arizona.edu/silko/silko.html>.

Fabian, J. (2002). *Time and the other: How anthropology makes its object*. New York: Columbia University Press. (Original work published 1983).

Fairchild, D. (1995). *Palm reading: A little guide to life's secrets*. Philadelphia: Running Press.

Fernandez, J. (2009). Tropical foundations and foundational tropes of culture. In I. Stecker & S. Tyler (Eds.), *Culture and rhetoric* (pp. 166-181). Oxford: Berghahn Books.

Fimrite, P. (2007, October 22). Children detach from natural world as they explore the virtual one. *San Francisco Chronicle*.

Fitzgerald, F.S. (1936). The crack-up. *Esquire Magazine* (March 1936).

Fjørtoft, I. (2000). *Landscape as playscape: Learning effects from playing in a natural environment on motor development in children*. [Dissertation]. Oslo: Norwegian University of Sport and Physical Education.

Fletcher, A. (2001). *The art of looking sideways*. London: Phaidon Press.

Flyvbjerg, B. (2006). Five misunderstandings about case-study research, *Qualitative Inquiry*, 12(2), 219-245.

Freytag, G. (2008). *Freytag's technique of the drama: An exposition of dramatic composition and art* (E. J. MacEwan, Trans.). Charleston, SC: BiblioBazaar. (Original work published 1863).

Friedman, T. (2006, July 5). The age of interruption. *The New York Times*.

Frye, N. (1991). *The double vision: Language and meaning in religion*. Toronto: University of Toronto Press.

Fudge, R.S. (2001). Imagination and the science-based aesthetic appreciation of unscenic nature. *The Journal of Aesthetics and Art Criticism*, 59(3), 275-285.

Funtowicz, S.O., & Ravetz, J.R. (1993). Science for the post-normal age. *Futures* (25)7, 739-755.

Furlong, W. (2002). herman de vries. In M. Gooding & W. Furlong (Eds.), *Artists land nature* (pp. 48-71), New York: Harry N. Abrams.

Gablik, S. (1984). *Has modernism failed?* New York: Thames and Hudson.

Gablik, S. (1995). *Conversations before the end of time*. London: Thames & Hudson.

Gaitskell, C.D. (1949). *Arts and crafts in our schools*. Toronto: Ryerson.

Garfield, J., & Priest G. (2009). Mountains are just mountains. In J. Garfield, T. Tillemans & M. D'Amato (Eds.), *Pointing at the moon: Buddhism, logic, analytic philosophy* (pp. 71-82). New York, Oxford University Press.

Gasquet, J. (1991). *Joachim Gasquet's Cézanne: A memoir with conversations*. [C. Pemberton, Trans.]. London: Thames and Hudson. (Original work published 1921).

Gauthier, D.J. (2004). *Martin Heidegger, Emmanuel Levinas, and the politics of dwelling*. Retrieved from http://etd.lsu.edu/docs/available/etd-11052004-163310/unrestricted/Gauthier_dis.pdf

Geertz, C. (1988). *Works and lives: the anthropologist as author*. Stanford, CA: Stanford University Press.

Geuss, R. (2005). *Outside ethics*. Princeton, NJ: Princeton University Press.

Gibran, K. (2006). *The prophet*. Middleton: The Echo Library (Original work published 1923).

Givens, T. (2010). *When souls had wings: Pre-mortal existence in Western thought*. Oxford: Oxford University Press.

Glassman, B. (1998). *Bearing witness: A Zen master's lessons in making peace*. New York: Bell Tower.

Glazzard, J. (2010). Summarizing learning and development at the end of the early years foundation stage. In J. Glazzard, D. Chadwick, A. Webster, J. Percival (Eds.), *Assessment for learning in the early years foundation stage*. London: Sage, 124-142.

Goethe, J.W. (1970). *Theory of colors*. C.L. Eastlake (Trans.) Massachusetts: The MIT Press (Original work published 1810).

Goldman, C. (Producer). (1974, July 12). *Interview with Robert Pirsig* [Audio podcast]. Retrieved from <http://www.npr.org/templates/story/story.php?storyId=4612364>

Goldstein, J. (1999). Emergence as a construct: History and issues. *Emergence: Complexity and Organization*, 1(1), 49-72.

Gooding, M., & Furlong, W. (2002). *Artists, land, nature*. New York: Harry N. Abrams.

Goody, J. (1992). *The domestication of the savage mind*. Cambridge: Cambridge University Press. (Original work published 1977).

Gradle, S. (2007). Ecology of place: Art education in a relational world. *Studies in Art Education*, 48(4), 392-411.

Graham, M.J. (2007). Art, ecology and art education: Locating art education in a critical place-based pedagogy. *Studies in Art Education*, 48(4), 375-391.

Griffiths, J. (2011). The exile of the arts: Thirsting for metaphor in an age of literalism. *Orion*, 30(5), 10-11.

Groenier, G. (1986, July 1). Interview with Jerry Mander in program Buiten Beeld. [Radio broadcast]. Hilversum, Netherlands: VPRO.

Grün, M. (1996). An analysis of the discursive production of environmental education: Terrorism, archaism and transcendentalism, *Curriculum Studies*, 4(3), 329-347.

Guinness, O. (1976). *In two minds: The dilemma of doubt and how to resolve it*. Downers Grove, IL: InterVarsity Press.

Gurevitz, R. (2000). Affective approaches to environmental education: Going beyond the imagined worlds of childhood? *Ethics, Place and Environment*, 3(3), 253–268.

Harding, S. (2006). *Animate Earth: Science, intuition and Gaia*. Totnes, UK: Green Books.

Harries-Jones, P. (1995). *A recursive vision: Ecological understanding and Gregory Bateson*. Toronto: University of Toronto Press.

Harrington, A., Marshall, B., & Müller, H. (2006). *Encyclopedia of social theory*. London: Routledge.

Harrison, H., Wood, P., & Gaiger, J. (1998). *Art in theory, 1815-1900: An anthology of changing ideas*. Hoboken, NJ: Wiley-Blackwell.

Hart, E., & Bond, M. (1995). *Action research for health and social care: A guide to practice*. Philadelphia: Open University Press.

Heidegger, M. (1971). *Poetry, language, thought*. (A. Hofstadter, Trans.). New York: Harper & Row. (Original work published 1950).

Heidegger, M. (1982). *The question concerning technology*. (W. Lovitt, Trans.). New York: Harper. (Original work published 1953).

Heikkinen, R. (2002). From woodlands to rainforests. *Lehti Art Education Journal*. Published as part of InSEA's "How nature speaks" seminar in New York, August 2002.

Hepburn, R. (1984). *Wonder and other essays*. Edinburgh: Edinburgh University Press.

Hervey, L. (2000). *Artistic inquiry in dance/movement therapy: Creative research alternatives*. Springfield, IL: C.C. Publishers.

Hesse, H. (2010). *Steppenwolf*. (T. Wayne, Trans.). New York: Algora Publishing. (Original work published 1927).

Herkenhoff, P. (2009). Interview with Antony Gormley, in the context of the IHME Project in Helsinki, Finland. [Motion picture]. Available online at <http://www.youtube.com/playlist?list=PL7EAE68717E862DA1>

Hestnes, E.B. (2004). Forvandling og substans. Samtale med Marius Wahl Gran. *Cogito*, 9, 20-27.

Hoffman Nelson, E., & Nelson, M.A. (1999). Shifting patterns, changing stories: Leslie Marmon Silko's Yellow Women. In L.K. Barnett (Ed.), *Leslie Marmon Silko: A collection of critical essays* (pp. 121-134). Albuquerque, NM: UNM Press.

Hölderlin, F. (1966). An Zimmern (To Zimmer). *Poems and fragments*, (M. Hamburger, Trans.). London: Routledge and Paul. (Original work published 1812).

Hollis, C. (1997). On developing an art and ecology curriculum. *Art Education*, 50(6), 21-24.

Holmertz, M. (2000, April 7). Magnus Lönn tar oss tillbaka till naturen. *Barometern*.

Holt, N.L. (2003). Representation, legitimation, and autoethnography: An autoethnographic writing story. *International Journal of Qualitative Methods*, 2(1). Retrieved from http://www.ualberta.ca/~iijqm/back-issues/2_final/html/holt.html

Hoopes, A. (1997). *Zen yoga: A path to enlightenment through breathing, movement and meditation*. Tokyo: Kodansha International.

Hoving, T. (1976). *Two worlds of Andrew Wyeth: Kuerners and Olsons*. New York: The Metropolitan Museum of Art.

Howes, D. (1991). *The varieties of sensory experience: A sourcebook in the anthropology of the senses*. Toronto: University of Toronto Press.

Howes, D. (2011). The senses: Polysensoriality. In F.E. Mascia-Lees (Ed.), *A companion to the anthropology of the body and embodiment* (pp. 435-450). Chichester (UK): Wiley-Blackwell.

Huckle, J., & Sterling, S.R. (Eds.) (1996). *Education for sustainability*. London: Earthscan.

Huizinga, J. (1980). *Homo ludens: A study of the play-element in culture*. London: Routledge & Kegan. (Original work published 1944).

Hurd, B. (2003). *Stirring the mud: On swamps, bogs, and human imagination*. Boston, MA: Houghton Mifflin Harcourt.

Hurson, T. (2007). *Think better: An innovator's guide to productive thinking*. New York: McGraw-Hill.

Husserl, E. (1973). *Experience and judgment: Investigations in a genealogy of logic*. (J.S. Churchill & K. Ameriks, Trans.). London: Routledge & Kegan Paul. (Original work published 1939).

Husserl, E. (1997). *Psychological and transcendental phenomenology and the confrontation with Heidegger (1927-1931)*. Dordrecht, The Netherlands: Kluwer. (Original work published 1962).

Hymes, D.H. (1981). "In vain I tried to tell you": Essays in Native American ethnopoetics. Philadelphia: University of Pennsylvania Press.

Hymes, D.H. (1972). *Reinventing anthropology*. Ann Arbor, MI: University of Michigan Press.

Illeris, H. (2012). Nordic contemporary art education and the environment: Constructing an epistemological platform for Art Education for Sustainable Development (AESD). *Information*, 1(2), 77-93.

Ingold, T. (1996). Hunting and gathering as ways of perceiving the environment. In R. Ellen & F. Katsuyoshi (Eds.), *Redefining nature: Ecology, culture and domestication* (pp. 117-155). Oxford: Berg.

Ingold, T. (2011). *The perception of the environment: Essays on livelihood, dwelling and skill*. New York: Routledge. (Original work published 2000).

Irr, C. (2001). The timeliness of Almanac of the Dead, or a postmodern rewriting of radical fiction. In L. Barnett & J. Thorson (Eds.), *Leslie Marmon Silko: A collection of critical essays* (pp. 223-244). Albuquerque, NM: University of New Mexico Press.

Irwin, A. (2002). *Saints of the impossible: Bataille, Weil, and the politics of the sacred*. Minneapolis: University of Minnesota Press.

Jackson, P. (1998). *John Dewey and the lessons of art*. New Haven: Yale University Press.

Jameson, F. (1979). Reification and utopia in mass culture. *Social Text*, 1 (Winter), 130-148.

Johnson, G.A., (1993). *Phenomenology and painting: "Cézanne's doubt."* In G.A. Johnson (Ed.), *The Merleau-Ponty aesthetics reader*. (J. M. Edie, Trans.). Evanston: Northwestern University Press.

Joicey, H.B. (1986). *An eye on the environment: An art education project*. London: Unwin Hyman.

Jokela, T. (1995). From environmental art to environmental education. In M.-H. Mantere (Ed.), *Image of the earth: Writings on art-based environmental education* (pp. 18-28). Helsinki: University of Art and Design.

Jolly, L. (1996). Agriculture main lesson and botanical excursion. *Paideia* 12. Retrieved from http://pyrites.org/publications_files/Paideia%202012%20Linda%20Jolly.pdf

Jolly, L. (2011). Reflections on the Doli seminar by Linda Jolly. In E. Østergaard & L. Jolly (Eds.). *Researching art and science. IMT-Rapport Nr. 44* (pp. 89-94). Ås, Norway: Universitet for Miljø og Biovitenskap.

Jolly, L., Slætli, S., & Boeckel, van J. (2011). Biologi, bilder og bærekraft. *Norsk Pedagogisk Tidsskrift* 4, 299-313.

Jönsson, B. (2005). *Ten thoughts about time* (T. Nunnally, Trans.). London: Robinson Publishing. (Original work published 1999).

Kahn, P.H., & Kellert, S.R. (Eds.). (2002). *Children and nature: psychological, sociocultural, and evolutionary investigations*. Cambridge, MA: MIT Press.

Kaplan, R. & Kaplan, S. (1989). *The experience of nature: a psychological perspective*. Cambridge University Press.

Kapur, S. (2010). *We are the stories we tell ourselves*. TED Talk, March 2010. Retrieved from http://www.ted.com/talks/shekhar_kapur_we_are_the_stories_we_tell_ourselves.html

Kardash, T. (1998). *Taoism: The wu-wei principle, part 4*. Retrieved from <http://www.jadedragon.com/archives/june98/tao.html>

Kauppinen, H. (1972). Preface (VII). In H. Kauppinen (Ed.), *Environment and art education. InSEA 1971*. Helsinki: Finnish Art Teachers' Association.

Kayzer, W. (2000). *Het boek van de schoonheid en de troost*. Amsterdam: Uitgeverij Contact.

Keats, J. (1899). *The complete poetical works and letters of John Keats*. Cambridge: Houghton, Mifflin and Company. (Original letter written in 1817).

Keats, J. (1970). Lamia. In J. Keats. *The poetical works and other writings of John Keats: Lamia, Isabella, and other poems, 1820*. New York: Phaeton Press. (Original work published 1820).

Keats' kingdom. Retrieved from <http://www.keatsian.co.uk/negative-capability.htm>

Keil, C. (2001). Blake's Four Fold Vision explained. Retrieved from <http://www.128path.org/pathtimes/article4.html>

Kellner, D. (1994). *Baudrillard: A critical reader*. Cambridge, MA: Blackwell.

Ken Robinson says schools kill creativity. TED Talk. February 2006. Retrieved from http://www.ted.com/talks/lang/eng/ken_robinson_says_schools_kill_creativity.html

Kendall, R. (2004). *Monet by himself*. (B.S. Romer Trans.). London: Time Warner.

Kidd, E. (2013). *Living Inquiry – Getting to know the world in terms of itself*. [blog]. Retrieved from <http://sensinglife.net/2013/01/25/living-inquiry-getting-to-know-the-world-in-terms-of-itself>

King, A. (1998). A critique of Baudrillard's hyperreality: Towards a sociology of postmodernism. *Philosophy & Social Criticism*, 24(6), 47-66.

Kirkkoppelto, E. (2008). New start: Artistic research in Finnish Theatre Academy, *Nordic Theatre Studies* 20. Retrieved from http://artesescenicas.uclm.es/archivos_subidos/subcontextos/119/NewStart-Kirkkoppelto.pdf

Cluskens, J. (2008). Richard Louv: Het laatste kind in het bos. Een andere legitimatie van natuur- en milieueducatie. *De Natuurgids* 4, 109-111. Retrieved from http://www.everyoneweb.com/WA/DataFilesaafmgoesgreenz/het_laatste_kind_in_het_bos.pdf

Kodapally, J. (2006). *Design, evolution and biological nature*. May 10, 2006. Retrieved from: <http://in.groups.yahoo.com/group/designindia/message/4205>

Kohlstedt, S.G. (2010). *Teaching children science: Hands-on nature study in North America, 1890-1930*. Chicago: University of Chicago Press.

Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Upper Saddle River, NJ: Prentice-Hall.

Korten, D. (1995). *When corporations rule the world*. San Francisco: Berrett-Koehler.

Krech III, S. (1999). *The ecological Indian: Myth and history*. New York: W.W. Norton & Company.

Krieger, M.H. (1973). What's wrong with plastic trees? Rationales for preserving rare natural environ-

ments involve economic, societal, and political factors. *Science*, 179(4072), 446-455.

Krueger, R.A. (1988). *Focus groups: A practical guide for applied research*. Newbury Park, CA: Sage Publications.

Kvale, S., & Brinkmann, S. (2008). *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.). London: Sage.

La Shure, C. (2005). *What is liminality?* Retrieved from <http://www.liminality.org/about/whatisliminality>

LaChapelle, D. (1988). *Sacred land, sacred sex: Rapture of the deep*. Durango, CO, Kivaki Press.

LaFountain, M.J. (2008). Obscene ethics: A Baudrillardian view of Spurlock's Super Size Me. *International Journal of Baudrillard Studies* 5(2). Retrieved from www.ubishops.ca/baudrillardstudies/vol-5_2/v5-2-marc-lafountain.html

Lane Fox, R. (2010, February 6) Love, not anger: Van Gogh's letters and paintings reveal a lover of flowers and gardens. *Financial Times*. Retrieved from <http://www.ft.com/intl/cms/s/0/2b25ebf4-111e-11df-a6d6-00144feab49a.html#axzz29McsSGll>

Lankester, E.R. (1970). *Diversions of a naturalist*. Freeport, NY: Nooks for Libraries Press. (Original work published 1915).

Laughlin, R. (2005). *A different universe: Reinventing physics from the bottom down*. New York: Basic Books.

Lawrence, D.H. (1936). New Mexico. In E.D. McDonald (Ed.), *Phoenix: The posthumous papers of D.H. Lawrence*. London: William Heinemann.

Lawrence, D.H. (1993). Escape. *Complete poems*. London: Penguin. (Original work published 1929).

Lawrence, D.H. (1985). Morality and the novel. *Study of Thomas Hardy and other essays*. Cambridge: Cambridge University Press. (Original work published 1925).

Lemaire, T. (1976). *Over de waarde van kulturen*. Baarn, Netherlands: Ambo.

Lemaire, T. (2002). *Met open zinnen: Natuur, landschap, aarde*. Baarn, Netherlands: Ambo.

Lewin, T. (2010). If your kids are awake, they're probably online. *The New York Times*, 20 January, 2010. Retrieved from <http://www.nytimes.com/2010/01/20/education/20wired.html>

Lindsay, K., & Vergo, P. (Eds.). (1994). *Kandinsky: Complete writings on art*. New York: Da Capo Press.

Lipsett, L. (2009). *Beauty muse: Painting in communion with nature*. Salt Spring Island, BC, Canada: Creative by Nature Books.

Lomberg, S. (2011, June 6). Utrymmet för tanken är borta. *Svenska Dagbladet*. Retrieved from http://www.svd.se/naringsliv/karriar/spaning-kreativitet_6220525.svd

London, P. (2003). *Drawing closer to nature: Making art in dialogue with the natural world*. Boston: Shambhala.

Lönn, M., & Ed, B. (1997). *Palaver på grenesiska: Inspirationsbok*. Stockholm: Riksutställningar.

Louv, R. (2005). *Last child in the woods. Saving our children from nature-deficit disorder*. New York: Algonquin Books.

Lovitt, W. (1977). Introduction. In Heidegger, M., *The question concerning technology*. New York: Harper.

Lukas, S.A. (1996). Beyond alphabets: An interview with Stephen A. Tyler, *POMO Magazine*, 2(1), 11-30. Retrieved from <http://www.ltcconline.net/lukas/publications/pomointerview.pdf>

Lutz, I. (1984). Jean Baudrillard: Een gesprek. *Skrien* 132, 8-11.

Mabey, R. (2006). *Nature cure*. London: Random House.

MacDonald, M. (2010). *Elwyn Richardson and the early World of art education in New Zealand*. [dissertation].

MacLagan, D. (2001). *Psychological aesthetics: Painting, feeling and making sense*. London: Jessica Kingsley Publishers.

Malaguzzi, L. (1998). No way. The hundred *is* there. (L. Gandini, Trans.). In C. Edwards, L. Gandini & G. Forman (Eds.), *The hundred languages of children: The Reggio Emilia approach – advanced reflections* (2nd ed.). Greenwich, CT: Ablex Publishing Corporation.

Mantere, M.-H. (1992a). Ecology, environmental education and art teaching. In L. Piironen (Ed.), *Power of images*, Helsinki: InSEA-Finland.

Mantere, M.-H. (1992b). Phenomena of the 80's: Post-modern art education? *Images in time: Essays on art education in Finland* (pp. 89-97). Helsinki: University of Art of Design.

Mantere, M.-H. (1992c). Phenomena of the 80's: Post-modern art education? In M. Laukka, M. Lähteenaho, & P. Pohjakallio (Eds.), *Images in time: Essays on art education in Finland* (pp. 89-97). Helsinki: Faculty of Art Education, University of Industrial Arts.

Mantere, M.-H. (1995a). Foreword. In M.-H. Mantere (Ed.), *Image of the Earth: Writings on art-based environmental education*. (M. Barron, Trans.). (pp. 1-2). Helsinki: University of Art of Design.

Mantere, M.-H. (1995b). Tracking a course in the landscape of environmental education. In M.-H. Mantere (Ed.), *Image of the Earth: Writings on art-based environmental education*. (M. Barron, Trans.). (pp. 3-17). Helsinki: University of Art of Design.

Mantere, M.-H. (1998). Art and the environment: An art-based approach to environmental education. In L. Rubinstein Reich (Ed.), *Rapporter om utbildning*, 3 (pp. 30-35). Malmö, Sweden: Lärarhögskolan. Retrieved from <http://www.naturearteducation.org/Articles/Art%20and%20the%20environment.pdf>

Mantere, M.-H. (2004). *Coming back to the senses: An artistic approach to environmental education*. Retrieved from: <http://www.naturearteducation.org/Articles/Coming%20Back%20to%20the%20Senses.pdf>

Maslow, A. (1964). *Religion, values and peak experiences*. New York: Viking.

Mathews, F. (1991). *The ecological self*. London: Routledge.

McCrone, J. (2000). "Right brain" or "left brain": Myth or reality? *The New Scientist*. Retrieved from <http://www.rense.com/general2/rb.htm>

McGilchrist, I. (2009). *The master and his emissary: The divided brain and the making of the Western world*. London: Yale University Press.

McNiff, S. (1998). *Art-based research*. London: Jessica Kingsley Publishers.

McNiff, S. (2004). *Art heals: How creativity cures the soul*. Boston: Shambhala.

McNiff, S. (2008). Art-based research. In G. Knowles & A.L. Cole (Eds.), *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues* (pp. 29-40). Thousand Oaks, CA: Sage Publications.

Meadows, D. (2000). *A message to new leaders from a fallen giant*. Retrieved from <http://www.donellameadows.org/archives/a-message-to-new-leaders-from-a-fallen-giant>

Medina, J. (1995). *Cézanne and Modernism: The poetics of painting*. Albany, NY: SUNY Press.

Merchant, C. (1980). *The death of nature: Women, ecology and the Scientific Revolution*. New York: Harper & Row.

Merleau-Ponty, M. (1968). *The visible and the invisible*. (A. Lingis, Trans.). Evanston: Northwestern University Press. (Original work published 1964).

Merleau-Ponty, M. (1993a). Cézanne's doubt. In G.A. Johnson (Ed.), *The Merleau-Ponty aesthetics reader*

(pp. 59-75). (M. Smith, Trans.). Evanston: Northwestern University Press. (Original work published 1945).

Merleau-Ponty, M. (1993b). Eye and mind. In G.A. Johnson (Ed.), *The Merleau-Ponty aesthetics reader* (pp. 121-149). (C. Dallery & M. Smith, Trans.). Evanston: Northwestern University Press. (Original work published 1961).

Merleau-Ponty, M. (2002). *Phenomenology of perception*. (C. Smith, Trans.). London: Routledge & Kegan Paul. (Original work published 1962).

Minter, B. A. (2006). *The landscape of reform: Civic pragmatism and environmental thought in America*. Boston: MIT Press.

Moffett, C.S. (1984). Monet's haystacks. In J. Rwald & F. Weitzenhoffer (Eds.), *Aspects of Monet*. New York: Harry N. Abrams.

Momaday, N.S. (1977). *House made of dawn*. New York: Harper & Row. (Original work published 1968).

Morgan, D.L. (1996). *Focus groups as qualitative research*. London: Sage.

Morton, T. (2007). *Ecology without nature: Rethinking environmental aesthetics*. Cambridge, MA, Harvard University Press.

Morton, T. (2010). *The ecological thought*. Cambridge, MA: Harvard University Press.

Muncey, T. (2010). *Creating autoethnographies*. London: Sage.

Nabhan, G.P., & Trimble, S. (1994). *The geography of childhood: Why children need wild places*. Boston: Beacon Press.

Nachmanovitch, S. (2001). *Gregory Bateson: Old men ought to be explorers*. (Original work published 1981). Retrieved from <http://www.freoplay.com/Writings/GregoryBateson.pdf>

Nachmanovitch, S. (1990). *Free play: Improvisation in life and art*. New York: Tarcher/Putman.

Nachmanovitch, S. (2007). Bateson and the arts. *Kybernetes*, 36(7/8), 1122-1133.

Naess, A. (1972). *The pluralist and possibilist aspect of the scientific enterprise*. London: Allen and Unwin.

Naess, A. (1989). *Ecology, community and lifestyle* (D. Rothenberg, Ed. and Trans.). Cambridge: Cambridge University Press. (Original work published 1976).

Naess, A. (1993). Beautiful action: Its function in the ecological crisis. *Environmental Values* 2, 67-71.

Neisser, U. (1967). *Cognitive psychology*. New York: Appleton-Century-Crofts.

Nicholson, S. (1971). How not to cheat children: The theory of loose parts. *Landscape Architecture*, 62(1), 30-34.

Nilson, S. (2003, January 10). Vad betyder sms på gresiska? *Nerikes Allehanda*.

Nin, A. (1969). *The Diary of Anais Nin. Volume 1: (1931-1934)*. Boston: Houghton Mifflin Harcourt.

Nobel, A. (1996). *Educating through art: The Steiner School approach* (P.J. Roberts-Leijon, Trans.). Edinburgh: Floris Books. (Original work published 1991).

O'Hara, M. (2005). *The challenge for education in uncertain times*. Retrieved from http://maureen.ohara.net/pubs/zagreb_final.pdf

Okely, J. (1994). Vicarious and sensory knowledge of chronology and change: Ageing in rural France. In K. Hastrup & P. Hervik (Eds.), *Social experience and anthropological knowledge*. London: Routledge.

Ong, W. (1982). *Orality and literacy: The technologizing of the word*. New York: Methuen.

Orr, D. (1992). *Ecological literacy: Education and the transition to a postmodern world*. Albany, NY: State University of New York Press.

Østergaard, E., & Jolly, L. (Eds.). (2012). *Researching art and science*. IMT-Rapport Nr. 44. Ås, Norway: Universitetet for Miljø- og Biovitenskap.

Pallasmaa, J. (2009). *The thinking hand: Existential and embodied wisdom in architecture*. Chichester, UK: Wiley.

Palmer, J. (1998). *Environmental education in the 21st century: theory, practice, progress and promise*. London: Routledge.

Palmer, P.J. (1998). *The courage to teach*. San Francisco: Jossey-Bass.

Parker, J., Mills, A., & Stanton, J. (2007). *Mythology: Myths, legends and fantasies*. Durban, South Africa, Struik Publishers.

Parsons, G. (2008). *Aesthetics and nature*. London: Continuum.

Pas, J.F. (1995). *Visions of Sukhāvati: Shan-tao's commentary on the Kuan Wu-Liang Shou-Fo Ching*. Albany, NY: SUNY Press.

Pawlett, W. (2007). *Jean Baudrillard: Against banality*. London: Taylor & Francis.

Pearce, J.M. (1992). *Magical child*. New York: Plume. (Original work published 1977).

Percy, W. (1983). *The message in the bottle: How queer man is, how queer language is, and what one has to do with the other*. New York: Farrar, Strauss and Giroux. (Original work published 1975).

Perry, L.C. (1927) Reminiscences of Claude Monet from 1889-1909, *American Magazine of Art*, 18, 119-125

Peters, G. (2009). *The philosophy of improvisation*. Chicago: The University of Chicago Press.

Petri, G. (2002, January 19). Ur hans bilder kommer språk. *Barometern*. Retrieved from http://www.barometern.se/noje_o_kultur/ur-hans-bilder-kommer-sprak%286363%29.gm

Piironen, L. (Ed.). (1992). *Power of images*. Helsinki: InSEA Finland and the Association of Art Teachers in Finland.

Pink, S. (2009). *Doing sensory ethnography*. Thousand Oaks, CA: Sage.

Pitruzzella, S. (2009). *The mysterious guest: An enquiry on creativity from arts therapy's perspective*. New York: iUniverse.

Pohjakallio, P. (2007). *Mapping environmental education approaches in Finnish art education*. [Paper]. Retrieved from <http://www.naturearteducation.org/Articles/Pohjakallio.pdf>

Porteus, D. (1990). *Landscapes of the mind: Worlds of sense and metaphor*. Toronto: University of Toronto Press.

Prosek, J. (1996). *Trout: An illustrated history*. New York: Knopf.

Prosek, J. (2008). The failure of names: An artist puts his faith in diversity over taxonomy. *Orion Magazine*, March/April 2008. Retrieved from <http://www.orionmagazine.org/index.php/articles/article/2868>

Pyle, R.M. (1993). *The thunder tree: Lessons from an urban wildland*. Boston, MA: Houghton Mifflin.

Rauhala, O. (2003). *Nature, science and art*. Helsinki: Otava Publishing Company.

Read, H. (1946). *Annals of innocence and experience*. London: Faber and Faber.

Read, H. (1966). *The redemption of the robot: My encounter with education through art*. New York: Trident Press.

Read, H. (1967). *Education through art*. London, Faber and Faber. (Original work published 1943).

Reason, P., & Hawkins, P. (1988). Storytelling as inquiry. In P. Reason (Ed.), *Human inquiry in action* (pp. 79-101). London: Sage.

Reed-Danahay, D. (Ed.). (1997). *Auto/Ethnography: Rewriting the self and the social*. Oxford: Berg. Retrieved from: <http://arrow.dit.ie/lcart/5/>

Rewald, J. (1973). *The history of Impressionism*, New York: Museum of Modern Art.

Richardson, E.S. (2001). *In the early world*. Wellington: The New Zealand Council for Educational Research.

Richardson, L. (2000). New writing practices in qualitative research. *Sociology of Sport Journal*, 17, 5-20.

Richter, G. (1995). Interview with Benjamin H. D. Buchloh, 1986. In H.-U. Obrist (Ed.), *The daily practice of painting: Writings and interviews, 1962-1993*, Cambridge, MA: MIT Press.

Ricoeur, P. (1967). *The symbolism of evil* (E. Buchanan, Trans.). Boston: Beacon Press.

Riedelsheimer, T. (Director). (2001). *Rivers and tides* [Motion picture]. Edinburgh, UK: Skyline Productions.

Rilke, R.M. (1947). *Letters of Rainer Maria Rilke, Vol. 2, 1910-1926*. (J. Bannard Greene & M.D. Herter Norton, Trans.). New York, Norton & Company.

Rilke, R.M. (1965). Worpswede. In R. Ellman & C. Feideslon Jr. (Eds.), *The modern tradition: Backgrounds of modern literature*. New York: Oxford University Press. (Original work published 1902).

Rilke, R.M. (1985). *Letters on Cézanne* (J. Agee, Trans.). New York: Fromm International. (Original work published 1952).

Rilke, R.M. (1986). *Letters to a young poet*. (S. Mitchell, Trans.). New York: Vintage (Original work published 1929).

Rilke, R.M. (2004). *Auguste Rodin*. Brooklyn, NY: Archipelago Books. (Original work published 1903).

Rinaldi, C. (2006). *In dialogue with Reggio Emilia: Listening, researching and learning*. Oxon: Routledge.

Ritchie, J.B., & Carruthers, P. (2013). The bodily senses. In M. Matthen (Ed.), *The Oxford handbook of the philosophy of perception*. Oxford: Oxford University Press (forthcoming). Retrieved from <http://www.philosophy.umd.edu/Faculty/pcarruthers/The%20Bodily%20Senses.pdf>

Roberts, B. (2002). *Biographical research*. Buckingham: Open University Press.

Rodari, G. (1996). *The grammar of fantasy: An introduction to the art of inventing stories*. New York: Teachers & Writers Collaborative.

Rooney, P. (2005). Researching from the inside – does it compromise validity? – A discussion. *Level*, 3(3), Retrieved from <http://arrow.dit.ie/lcart/5>

Roosbroeck, van G.L. (1919). *Guido Gezelle: The mystic poet of Flanders*. Vinton, IA: The Kruse Publishing Co.

Rousseau, J.-J. (1979). *Emile, or on education*. (A. Bloom, Trans.). New York: Basic Books.

Ruskin, J. (2005). *Modern painters. Part II*. Whitefish, MT: Kessinger Publishing, (Original work published 1905).

Russell, C.L. (1999). Problematizing nature experience in environmental education: The interrelationship of experience and story. *Journal of Experiential Education*, 22(3), 123-137.

Safranski, R. (1999). *Martin Heidegger: Between good and evil*. (E. Osers, Trans.). Cambridge, MA: Harvard University Press.

Sauvé, L. (1999). Environmental education between Modernity and Postmodernity: Searching for an integrating educational framework. *Canadian Journal of Environmental Education*, 4, 9-35.

Schama, S. (1996). *Landscape and memory*. New York: Vintage.

Schama, S. (2003, September 20). The stone gardener: A land artist comes to lower Manhattan. *The New Yorker*. Retrieved from http://www.newyorker.com/archive/2003/09/22/030922craw_artworld

Schoch, R. (2002). A conversation with Carolyn Merchant, *California Monthly*, June 2002. Retrieved from www.bluefish.org/merchant.htm

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

Scott, Jr. N. (1969). *Negative capability: Studies in the New Literature and the religious situation*. New Haven: Yale University Press.

Scott-Hoy, K. (2003). Form carries experience: A story of the art and form of knowledge. *Qualitative Inquiry*, 9(2), 268-280.

Seagal, S., & Horne, D. (2000). *Human Dynamics: Samen leven, samen werken*, Schiedam, Netherlands: Scriptum Publishers.

Searle, J.R. (1983, October 27). The word turned upside down. *The New York Review of Books*, 30(16).

Seremetakis, C.N. (1994a). *The senses still: Perception and memory as material culture in Modernity*. Chicago: University of Chicago Press.

Seremetakis, C.N. (1994b). The memory of the senses: Historical perception, commensal exchange and modernity. In L. Taylor (Ed.), *Visualizing theory*. London: Routledge.

Shelley, P.B. (1994). *Selected poetry and prose of Shelley*. Ware, Hertfordshire: Wordsworth Editions. (Original work published 1821).

Shenton, A.K., (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information* 22, 63-75.

Shepard, O. (Ed.). (1961). *The heart of Thoreau's journals*. New York: Dover Publications (Original work by Thoreau published 1859).

Shepard, P. (1995). Virtually hunting reality in the forests of simulacra. In M.E. Soulé & G. Lease (Eds.), *Reinventing nature? Responses to postmodern deconstruction*. Washington DC: Island Press.

Shklovsky, V. (1965). Art as technique. In L.T. Lemon & M.J. Reis (Eds.), *Russian Formalist critique: Four essays*. Lincoln: Nebraska University Press. (Original work published 1917).

Shklovsky, V. (2001). The resurrection of the word. In N. Cornwell (Ed.), *The Routledge companion to Russian literature*. London: Routledge. (Original work published 1914).

Silko, L.M. (1996). *Yellow woman and a beauty of the spirit: Essays on Native American life today*. New York: Touchstone.

Slager, H. (2009). Art and method. In J. Elkins (Ed.), *Artists with PhDs*. (pp. 49-56). Washington DC: New Academia Publishing.

Slåttli, S. (2011). Reflections on the Doli Seminar by Solveig Slåttli. In E. Østergaard & L. Jolly (Eds.), *Researching art and science. IMT-Rapport Nr. 44* (pp. 85-89). Ås, Norway: Universitetet for Miljø- og Biovitenskap.

Smith, J.A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London: Sage.

Snow, C.P. (1993). *The two cultures*. Cambridge: Cambridge University Press. (Original work published 1959).

Sobel, D. (1996). *Beyond ecophobia: Reclaiming the heart in nature education*. Great Barrington, MA: The Orion Society and the Myrin Institute.

Sobel, D. (2004). *Place-based education: Connecting classrooms & communities*. Great Barrington, MA: The Orion Society.

Sobel, D. (2008). *Childhood and nature: Design principles for educators*. Portland, ME: Stenhouse Publishers.

Solnit, R. (2006). *A field guide to getting lost*. Edinburgh Penguin Books.

Somby, Å. (1995). Yoik and the theory of knowledge. In M. Haavelsrud (Ed.). *Kunnskap og utvikling*. Tromsø: University of Tromsø.

Sontag, S. (1978). *On photography*. New York: Farrar, Straus and Giroux.

Sørenstuen, J.-E. (2011). *Levende spor: Å oppdage naturen gjennom kunst, og kunsten gjennom natur*. Bergen, Norway: Fagbokforlaget.

Spretnak, C. (1997). *The resurgence of the real: Body, nature and place in a hypermodern world*. Reading, MS: Addison-Wesley.

Spry, T. (2001). Performing autoethnography: An embodied methodological praxis. *Qualitative Inquiry*, 7(6), 706-732.

Sterling, S. (2003). *Whole systems thinking as a basis for paradigm change in education: explorations in the context of sustainability*. [Dissertation]. Bath: University of Bath. Retrieved from www.bath.ac.uk/cree/sterling/index.htm

Sterling, S. (2012). Afterword: Let's face the music and dance? In A.E.J. Wals & P.B. Corcoran (Eds.). *Learning for sustainability in times of accelerating change* (pp. 511- 516). Wageningen, Netherlands: Wageningen Academic Publishers.

Stigsdotter, U.A. & Grahn, P. (2003). Experiencing a garden: a healing garden for people suffering from burnout diseases. *Journal of Therapeutic Horticulture*, 14, 38-48.

Stoller, P. (1989). *The taste of ethnographic things: The senses in ethnography*. Philadelphia, PA: University of Philadelphia Press.

Stone, L. (2005). *Continuous partial attention*. Retrieved from <http://lindastone.net/qa/continuous-partial-attention>

Stone, M.K., & Barlow, Z. (Eds.). (2005). *Ecological literacy: Educating our children for a sustainable world*. San Francisco: Sierra Club Books.

Strauch-Nelson, W. (2012a). Transplanting Froebel into the present. *International Journal of Education Through Art*, 8(1), 59-72.

Strauch-Nelson, W. (2012b). Reuniting art and nature in the life of the child. *Art Education*, 65(3), 33-38.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing Grounded Theory*. London: Sage.

Sullivan, G. (1989). Curriculum in art education: The uncertainty principle. *Studies in Art Education*, 30(4), 225-236.

Sullivan, G. (2005). *Art practice as research: Inquiry in the visual arts*. Thousand Oaks, CA: Sage.

Tallis, R. (2005). *The knowing animal: A philosophical inquiry into knowledge and truth*. Edinburgh: Edinburgh University Press.

Tarkovsky, A. (1987). *Sculpting in time: Reflections on the cinema*. (K. Hunter-Blair, Trans.) Austin, TX; University of Texas Press.

Taylor, C. (2007). *A secular age*. Cambridge, MS: The Belknap Press of Harvard University Press.

Tedlock, D. (1983). *The spoken word and the work of interpretation*. Philadelphia: University of Pennsylvania Press.

Tedlock, D. (2011). Syllabus. "English 699: Ethnopoetics" Colleges of Arts and Sciences. University at Buffalo. Retrieved from <http://poetics.buffalo.edu/courses/ENG699.htm>

Tesch, R. (1987). Emerging themes: The researcher's experience. *Phenomenology + Pedagogy*, 230-241. Retrieved from: <https://ejournals.library.ualberta.ca/index.php/pandp/article/view/15058/11879>

Thomson, K.S. (1988). Marginalia ontogeny and phylogeny recapitulated. *American Scientist*, 76(3), 273-275.

Thoreau, H.D. (1962). *The Journal of Henry David Thoreau*. B. Torrey & F.H. Allen (Eds.). New York: Dover Publications. Original journal entry: December 25, 1851.

Thornes, J.E. (2008). A rough guide to environmental art. *The Annual Review of Environment and*

Resources, 33, 391–411. Retrieved from: <http://www.annualreviews.org/doi/pdf/10.1146/annurev.environ.31.042605.134920>

Throop, C.J. (2003). Articulating experience. *Anthropological Theory*, 3(2), 219-241.

Toadvine, T. (2011). Ecophenomenology and the resistance to nature. In A. Aarø & J. Servan (Eds.), *Environment, embodiment and gender* (pp. 49-68). Bergen, Norway: Hermes Text and The Research Group in Phenomenology and Existentialism, University of Bergen.

Touch of memories (2004). Helsinki: Helsinki Art School. Retrieved from <http://www.animusproject.net/eng/files/uploads/Helsinki/touchofmemories.pdf>

Tranströmer, T. (2011). March 1979. *New collected poems* (R. Fulton, Trans.). Terset, UK: Bloodaxe Books.

Trifonova, T. (2003). Is there a subject in hyperreality? *Postmodern Culture* 13(3). Retrieved from <http://pmc.iath.virginia.edu/issue.503/13.3trifonova.html>

Tuan, Y.F. (1974). *Topophilia: A study of environmental perception, attitudes, and values*. Englewood Cliff, NJ: Prentice-Hall.

Turner, V. (1967). *The forest of symbols: Aspects of Ndembu ritual*. Ithaca, NY: Cornell University Press.

Turner, V. (1969). *The ritual process: Structure and anti-structure*. London: Routledge and Kegan Paul.

Turner, V. (1986). *The anthropology of experience*. Chicago: University of Illinois Press.

Twain, M. (2004). *Life on the Mississippi: The authorized uniform edition*. Rockville, MD: Wildside Press LLC. (Original work published 1883).

Tyler, S. (1986). Post-modern ethnography: From document of the occult to occult document. In J. Clifford & G.E. Marcus (Eds.). *Writing culture: The poetics and politics of ethnography* (pp. 122-140). Berkeley, CA: University of California.

Ulrich, R.S. (1999). Effects of gardens on health outcomes: theory and research. In C. Cooper Marcus & M. Barnes (Eds.), *Healing garden: Therapeutic benefits and design recommendations*. New York: Wiley & Sons.

Van Gennep, A. (1977). *The rites of passage*. London: Routledge and Kegan Paul. (Original work published 1909).

Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. New York: SUNY Press.

Van Matre, S. (1999). *Earth education: A new beginning* (4th ed.), Institute for Earth Education, Greenville, West Virginia. (Original work published 1990).

Vecchi, V. (2010). *Art and creativity in Reggio Emilia: Exploring the role and potential of ateliers in early childhood education*. London: Routledge.

Verhoeven, C. (1972). *The philosophy of wonder*. (M. Foran, Trans.). New York: Macmillan (Original work published 1967).

Vogler, C. (1992). *The writer's journey: Mythic structure for storytellers & screenwriters*. Studio City, CA: Michael Wiese Productions.

Voorhoeve, B. (1996). *Luisteren naar bomen: Sprookjes en verhalen*. Zeist, Netherlands: Carrousel.

Wahl, D. (2005). "Zarte Empirie": Goethean science as a way of knowing. *Janus Head*, 8(1), 58-76.

Wals, A.E.J. (2007). *Social learning towards a sustainable world*. Wageningen, the Netherlands: Wageningen Academic Publishers.

Wals, A.E.J. (2010). *Message in a bottle: Learning our way out of unsustainability*. [Inaugural lecture]. Wageningen University, Netherlands, on May 27. Retrieved from http://www.naturearteducation.org/Message_in_a_bottle.htm

Wals, A.E.J., & Corcoran, P.B. (2012). Re-orienting, re-connecting and re-imagining: Learning-based responses to the challenge of (un)sustainability. In A.E.J. Wals & P.B. Corcoran (Eds.). *Learning for sustainability in times of accelerating change* (pp. 21-32). Wageningen, Netherlands: Wageningen Academic Publishers.

Watson, B. (2005, November 22). *Unweaving the rainbow*. [Blog]. Retrieved from <http://branemrys.blogspot.nl/2005/11/unweaving-rainbow.html>

Weber, M. (1991). *From Max Weber: Essays in sociology*. H.H. Gerth & C. Wright Mills (Eds.), Oxon: Routledge. (Original work published 1922).

Weymouth, A. (2009). Where spirit lies. *Resurgence*, 253. March/April.

Whitaker, A. (2006). Arne Naess and possibilism. *The Trumpeter*, 22(2), 118-120.

White, J. (1994). *Talking on the water: Conversations about nature and creativity*. San Francisco: Sierra Club Books.

White, L. (1967). The historic roots of our ecological crisis. *Science*, 155(3767), 1203-1207.

Whitehead, A.N. (1925). *Science and the modern world*. London: Macmillan.

Williams, R. (2004). *Art theory: An historical introduction*. Hoboken, NJ: Wiley-Blackwell.

Willis, P. (2001). The “things themselves” in phenomenology, *Indo-Pacific Journal of Phenomenology* 1(1). April 2001.

Wilson, F.R. (1998). *The hand: How its use shapes the brain, language, and human culture*. New York: Pantheon Books.

Wilson, S. (2000). *The magical universe*. London: Hambledon & London.

Wolcott, H.F. (2001). *Writing up qualitative research*. London: Sage.

WolfQuest (2012). Retrieved from <http://www.wolfquest.org>

Wong, D. (2007). Beyond control and rationality: Dewey, aesthetics, motivation, and educative experiences. *Teachers College Record*, 109(1), 192-220.

Woodcock, B. (1994). Introduction. In P.B. Shelley. *Selected poetry and prose of Shelley*. Ware, Hertfordshire: Wordsworth Editions.

Woolery, L.-A. (2004). Knowing the language of place through the arts. *New Horizons for Learning*. Seattle WA. Retrieved from <http://www.marthalakecov.org/~building/strategies/arts/woolery.htm>

Woolery, L.-A. (2006). *Art-based perceptual ecology as a way of knowing the language of place* [Dissertation]. Antioch University New England.

Wortham, J. (2011, April 9). Feel like a wallflower? Maybe it's your Facebook wall. *The New York Times*.

Wright, J.K. (1947). Terra incognitae: The place of the imagination in geography. *Annals, Association of American Geographers* 37, 1-15.

Y.S. (2011). *Improvising not the same as breaking the rules*. [Blog]. Retrieved from <http://www.innerbjj.com/2011/07/improvising-not-same-as-breaking-rules.html>

Yin, R.K. (2003). *Case study research: Design and methods*. (2nd ed.). Thousand Oaks, CA: Sage.

Yoon, C.K. (2009). *Naming nature: The clash between instinct and science*. New York: W.W. Norton.

YoungMentality. (2005). Study carried out in the Netherlands by marketing firms Motivation, Young Works and publisher Sanoma Young.

Zaradic, P.A., & Pergams, O.R.W. (2007). Videophilia: Implications for childhood development and conservation. *The Journal of Developmental Processes*, 2(1), 130-144.

Zweers, W. (2000). *Participating with nature: Outline for an ecologization of our world view*. Utrecht, Netherlands: International Books.

