

Crafting Nature, Crafting Self

An ecophilosophy of *friluftsliv*, craftmaking and sustainability

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This article is based on a project in the Regional Research Fund (“Oslofjorden”) that explores the relationship between friluftsliv (outdoor life), craftmaking and sustainability in the context of the friluftsliv program at the University of South-Eastern Norway (USN). The overall question in the project, and this article, is: What do students say about the relationship between nature and self, the process of learning and craftmaking in friluftsliv and how to integrate different forms of sustainability? As educators and researchers in the field of friluftsliv studies, we are also interested in implications and possibilities for teaching friluftsliv and craftmaking in sustainable ways. The project was initiated in collaboration with our students and colleagues, inviting them to critically and constructively investigate and reflect on what it is that prevents and promotes sustainability in the education of friluftsliv and craftmaking. In recent years, researchers have pointed to a paradox between friluftsliv and sustainability, and how this paradox plays out in combination with craftmaking will also be addressed. The article draws on a critical participatory action research approach, which entails that as researchers we participate in the development of knowledge in the project. In addition, we set out to conduct a meta-analysis of the findings, so to get an overall picture of the problem area. We take an ecophilosophical perspective on the topic, with a special emphasis on the relationship between self and nature. We find that students, participating in the project, were concerned about promoting a mutual reinforcing relationship of sustainability between friluftsliv and craftmaking, and that crafting nature is also a way of crafting self. However, it is not possible to generalize from our findings and we ended up with more questions than answers. As such, we hope to have inspired or provoked others to also conduct research on the topic.

Keywords: Ecophilosophy, *friluftsliv*, craftmaking, sustainability, learning through making, self, nature-use, nature protection.

Introduction

The craft-making component of a *friluftsliv* education should require the people of each region to learn, maintain and revive (if necessary) its own unique cultural craft traditions. [M]aking a craft serves as a microcosm for peacefully living in nature; craft-making is about exploring *friluftsliv*. (MacEachren, 2007, p. 184-186)

The above quote is from the Canadian outdoor educator, Zabe MacEachren, in a chapter she wrote, “The role of craftmaking in *friluftsliv*” (in Henderson & Vikander, 2007). She finds that craftmaking in *friluftsliv* (*free-air-life*) is a way to teach students environmental awareness. We use the word “craftmaking” in this article, similar to MacEachren, as “nature-based handcraft”. The word “*friluftsliv*”, in the Nordic countries, is associated with various activities taking place in nature, such as camping, hiking, climbing, biking, boating, but traditionally it was also associated with people making things they need to fare in nature for the purpose of hunting, fishing, foraging, gathering. In traditional societies, these would be necessary means of survival, while in modern societies, such means are standardized and specialized commodities in a growing consumer-culture. Both *friluftsliv* and nature-based handcraft are today mostly regarded as a leisure phenomenon.

The combination of *friluftsliv* and craftmaking was still widespread when *friluftsliv* became an educational goal in the 1960s and the 1970s in Norway. It was not uncommon that *friluftsliv* students also engaged in nature-based handcraft, making things like walking sticks, ice-fishing rod, utensils, birch-bark containers, skis, snow shoes, clothing, canoes and boats. Such craftmaking has always been an integral part of the *friluftsliv* education program at the University of South-Eastern Norway (USN), which started in 1982. But, as its popularity dropped in the mid-1990s, partly due to new activities that required more specialized means, e.g. Randonee skis, river kayaks, mountain bikes, kites, surfboards, clothing, and specialized climbing and camping gear. *Friluftsliv* became one of the fastest growing consumer markets in the 1990s and Norwegians are today at the top of the world on the list of money spent on equipment and travel related to outdoor activities (Gurholt Pedersen & Haukeland, 2019).

This article takes a critical look at the relationship between *friluftsliv*, craftmaking and sustainability. The overall question is: What do students say about the relationship between nature and self, the process of learning and craftmaking in *friluftsliv* and how to integrate different forms of sustainability, and furthermore, what implications do the findings have on how we teach *friluftsliv* and craftmaking in higher education.

An emergent research field

We will here take a closer look at the three fields of inquiry: *friluftsliv*, craftmaking and sustainability. We start with the assumption that there is a potential to create a stronger focus on sustainability between *friluftsliv* and craftmaking. It is a novel idea that both *friluftsliv* and craftmaking is a way to teach environmental awareness, as MacEachran suggests, but we cannot take this for granted and therefore it is an idea in need of scrutiny. Some *friluftsliv* activities, as we shall see, may paradoxically harm nature. To understand this better, we need to know more about what relevant research is taking place in each of the three fields.

First, research in and of *friluftsliv* has grown rapidly over the last couple of decades (e.g. Bischoff, 2015; Gurholt Pedersen, 2014; Gurholt Pedersen & Haukeland, 2019; Mygind et al., 2018; Odden, 2008; Sandell, 2004; Schantz & Silvander, 2004; Sølvi, 2013; Tordsson & Vale, 2013). To view *friluftsliv* as an embodied social practice of learning, knowing and doing, is prevalent in several anthologies on the pedagogy of *friluftsliv* (Bentsen, Andkjær & Ejbye-Ernst, 2009; Hallandvik & Høyem, 2019; Horgen et al., 2016; Tordsson, 2006). The focuses on pedagogy, health, safety, nature-relation and the environment have been part of the field for decades, but in recent years, issues of re-connecting to nature, the use of close-by nature and sustainability have moved in the forefront of *friluftsliv* research, seen at the bi-annual research national conference on *friluftsliv* in 2018, which proceedings can be downloaded from the web page of Norsk Friluftsliv.

Second, research in and of craftmaking is extensive. It is, however, not all that clear to us how researchers in the field make a distinction between “craft” and “craftmaking”. In this article, we use the word “craft” (“*håndverk*”) as a certain skill which we may find in school curriculums under “arts and crafts”, while we use the word “craftmaking” in a broader sense, following the lead of Ingold (2013), as a haptic way that we engage with and correspond to materials and co-form the world we co-inhabit. Sandven (2019), in a recent article in *Techne*, combines interestingly ecosophy and woodwork (“sløyd”) in a school setting. Research into the use of the knife is also an example that is relevant for craftmaking and *friluftsliv* (Gårdvik, 2009; Gulliksen, 2017). There is also research into the art component of the arts and crafts that takes into account both nature and sustainability (MacEachran, 2007). Sørenstuen (2011) claims, “we can discover nature through art, and art through nature” (p. 5). Craft-educators are attentive to how craftmaking is a way of being and embodied knowing through making (Gårdvik 2010). One pioneer of traditional crafts in Norway, Jon Godal (1988, 2006), has done extensive practical research with relevance for *friluftsliv*, e.g. skimaking and boat-building. Others have, like Godal, looked at the

relationship between boat-building and their usage (Wollan, 2006; Planke, 2001). Godal (2006) applies the concept "handborn knowledge" ("handlingsbåren kunnskap") to describe how craftskills are transferred from one generation to another. The Norwegian Crafts Institute (Norsk Håndverksinstitutt) in Lillehammer conducts many research projects on this form of knowledge, especially related to various small crafts and often "endangered" craft relevant to *friluftsliv*, e.g. basket-weaving, leather-work, ski-making.

Third, the research on sustainability has also grown much over the last two decades. Linked to *friluftsliv*, leisure researchers came with a report in 2007 that concluded that *friluftsliv* is the third worst thing one could participate in during leisure time, if one is interested in sustainability (Hille, Aall & Klepp, 2007). This is known in Norway as the "sustainability paradox" in *friluftsliv*, since what many thought to be a nature-friendly activity, may worsen the climate crisis and thereby harm nature (Gurholt Pedersen & Haukeland, 2019). The reason for this is largely consumption of equipment and clothing and travel. The bi-annual national conference, called *Research in Friluftsliv*, had in 2018 sustainability as one of its main themes, where we presented our project (Haukeland & Sæterhaug, 2018, 2019; Eikje, Haukeland, Sæterhaug & Færden, 2018). The project was also presented at the NordFo Research Conference in 2019 in Gothenburg on "Make&Learn", in which there was also a session on sustainable development and craftmaking. Others have also picked up on this link between craft and sustainable development (Hofverberg, Kronlid and Östman, 2018; Hofverberg, 2019), including within the arts and crafts (Lutnæs & Fallingen, 2017; Väänänen et al., 2018). Whether there is a similar "sustainability paradox" in craftmaking is hard to say, but some paradoxical areas may be: cutting down a tree for the sake of relating to it, making more of the things we do not need, and the ecological footprint of products in production, usage and disposal of what we make from natural material, such as wool from sheep, versus what is made from artificial material. It is also an ethical question how we treat other beings. Internationally, we have mentioned the research by MacEachran (2000, 2001, 2005, 2007), which is also influenced by the deep ecology movement that acknowledges nature's intrinsic values. Also, Wattachow (2001) makes a bridge between craftmaking and self-made equipment in "outdoor education", and Fenton (2016) shows how *bushcraft* help people reconnect to nature through what they do. In sum, there is much relevant research, both in the Nordic countries and elsewhere, on the various elements in the relationship between *friluftsliv*, craftmaking and sustainability, but less from the field of *friluftsliv*.

Methodology, data collection and analysis

The research methodology we draw on is *critical participatory action research* (CPAR) (Kemmis, McTaggart & Nixon, 2014). There are many versions of action research (Gjølterud et al., 2017), but CPAR has its root in critical pedagogy and the empowerment of the oppressed. In our context, we find it especially useful in two ways. First, it challenges the dominant hegemony of a spectator view of knowledge, the conduit view of learning (from the head of the teacher to the head of the student) and disinterested research in academia. Second, it sets out to change problematic matters, which in our context is the change from unsustainability to sustainability. We set out to analyze what causes the problems, but also how to skillfully cope with them. An education for sustainability needs to focus more on hands-on practical knowledge and skills in values-oriented learning, so that students and teachers alike are empowered as agents of sustainability.

Lange (2009) combines also PAR (participatory action research) with sustainability in her research, but she argues, in ways we agree, that "sustainability and living systems theory pose significant challenges to existing conceptualizations of PAR and demand new ontological, epistemological, pedagogical and social change premises for use within a process of sustainability education" (Lange, 2009, p. 128). In her view, "transformative pedagogy would require the development of an ecological consciousness – an enlargement of the sense of self where the external is understood as part of oneself" (Lange 2009, p.

130). Inspired by the Norwegian ecophilosopher and founder of the deep ecology movement, Arne Naess, she advocates a transformative education that "nurtures a consciousness shift on the part of individuals who take on ever expanding circles of identification – from individual ego and self-interest towards an expanded sense of self, particularly an ecological self and a social self" (Lange, 2009, p. 132). This presents, she says, a "critical living practice" of PAR that shows how person and context are inseparable, and that "new possibilities for knowing, doing, and being are ever emergent, ever creating new possibilities for sustainability" (Lange, 2009, p. 135). What Lange envisions is what we attempt to do in our research into how crafting nature is also crafting self. MacEachran (2007) can be said to support such a critical approach when she argues,

The socialization to outdoor life that *friluftsliv* entails is represented in the role craft-making plays in education. Many programs that are considered environmental or nature-based education make references to the importance of craft-making. Unfortunately, many of these programs lack a critical examination or detailed explanation as to why craft-making activities are emphasized and in what ways they serve to connect people to the land (MacEachren, 2007, p. 181).

This is, succinctly put, what we set out to explore in the project that his article is based on. The main participants in the project were current and former students in the course, "Craftmaking and Creative Joy in Nature", colleagues and ourselves as researchers. To get at our overall question, we need to draw on a variety of methods within CPAR, since it has no single method. First, we followed the course as a "participant observer", or as we would call it "participant co-inquirer". This included conversations with students in their making process. Second, we followed students in the field conducting a craftmaking task, which ranged from making knitting needles, fishing rod, spoons, wooden knives. Besides participant inquiry, we supplemented with both individual interviews and focus-group interviews. The data gathered was anonymous, written down by pen in the field journal and findings were discussed at several meeting points between ourselves, students and colleagues. The research process was approved by the Norwegian Centre for Research Data (NSD), which ensures ethical standards in research.

As part of the project, four students decided to write their bachelor thesis on the topic (Dalsgaard Jensen, 2017; Riis Overgaard, 2018; Ingemann Berg Neilsen, 2018; Verbelen, 2018). Dalsgaard Jensen (2017) and Riis Overgaard (2018) interviewed fellow students and the teacher. Ingemann Berg Neilsen interviewed former students and craftmakers, and Verbelen (2018) conducted a questionnaire with former students (with a response of 49 out of 104), where the main aim was to find out the role of nature-relation in craftmaking. These studies were used as a source of data in the project, which we will refer to as data in this article. The students did a great job and found out much that deserves to be shared. These studies are based on too small samples to say anything general and statistically significant, but they still bring new knowledge to our inquiry. It is not our aim in the project to make generalizations of our findings. Rather, we wish to share what the involved students have to say.

We are still attentive to "field-confirmations", i.e. confirming what one already things, but by involving students and colleagues in a critical discussion on the findings, we find our interpretations to be "negotiated" as openly as possible. There is also a question of power relation between teacher and student, but the students working on their theses, have had much freedom to pursue their own interest within the field. We have also given opportunities for students to share their reflections anonymously in evaluation processes. To address the validity of our findings, we have sought transparency in both methodology and conceptual framework. Based on the data, we set out to conduct a "meta-analysis", to get at the "larger picture". Our aim with such an analysis is to develop a critical communicative competence that can empower students, colleagues and ourselves, as agents of sustainability in the field that combines *friluftsliv* and craftmaking.

An ecophilosophy of reciprocity

Our CPAR approach is nourished by an ecophilosophy of reciprocity, inspired by Arne Naess (1989) and the social anthropologist, Tim Ingold (2013). In presenting this conceptual framework, we will again revisit the three fields of inquiry, to get a clearer picture of what we are researching.

Friluftsliv (self-in-nature)

The White paper definition of *friluftsliv* is "...stays and physical activities in the free air during leisure time with the aim of a change of environment and nature experience" (KMD, 2016, p. 10). The definition leaves out, according to the Norwegian proponent of *friluftsliv*, Nils Faarlund (2015), the need for, not only change of environment, but environmental change. The White Paper eludes claims that there may be such a link, "friluftsliv can give the individual a relationship to nature, which again can lead to increased willingness to take environmentally sound choices" (KMD, 2016, p. 10). And later, in outlining the relationship between *friluftsliv* and traditional practices, the White Paper says, "The continuation of hand-born knowledge to future generations is of great importance. Acquaintance with the use of plants, old handcraft and traditions can strengthen the interest in nature as a resource and bring more people on trips to learn and to have nature experiences" (KMD, 2016, p. 97). This says not that there *is* a link, as Faarlund argues is a premise for what *friluftsliv* is all about, but that there *can* be a link between friluftsliv, craft and sustainability. It depends on what kind of activities we are speaking of. The sustainability paradox, mentioned above, shows clearly that not all kinds of *friluftsliv* activities are sustainable.

According to Naess in 1989, "...there are extremely powerful forces that attempt to replace *friluftsliv* with mechanized, competitive, and environmentally destructive intrusions into nature" (p. 180). We see nature-based craftmaking in *friluftsliv*, with a focus on sustainability, as a counter-movement to these forces. It is so far a marginal counter-movement, but our projects set out to explore what prevents or promotes its empowerment. One way to do so is to study the juxtaposition of traditional and modern cultural *friluftsliv*. According to Breivik (1978), «*friluftsliv* belongs just as much to the village as to the city. *Friluftsliv* must not become an escape- or recreational life for urban culture but must be an ecologically balanced surplus life for both urban and rural cultures. This *friluftsliv* can use both pure surplus forms (climbing, walking glaciers) and self-subsistence forms (hunting, fishing, farming" (Breivik 1978, p. 14; my translation). We may think of traditional *friluftsliv* as focused on nature's instrumental values and modern *friluftsliv* as its intrinsic values, but this would be to oversimplify the matter. Traditional friluftsliv may also acknowledge nature's intrinsic values, for example while fishing one can enjoy the beauty of the sun glimmering in the water, while modern friluftsliv may use nature as a learning arena, a recreational arena or as a way to know oneself, which is certainly a form of use. Our position is that it is not a matter of juxtaposition, but rather one of integration, so that modern *friluftsliv* may learn from traditional ways of sustainable use of nature, just as traditional *friluftsliv* may learn from a modern focus on nature protection. We advocate an approach to *friluftsliv* and craftmaking that draws on the best of both worlds. Yet, there is no guarantee that combining *friluftsliv* and craftmaking leads to sustainability. Therefore, we need to critically investigate the conditions that frame the relationship.

To do so we need to better understand the relationship between self and nature, craftmaker and material. There is the Cartesian way (after Descartes), dominant in Western culture, which separates the self and nature, craftmaker and material, as between subject and object. And there is the relational way, echoed in the ecophilosophy of Naess, in which the self and nature are intrinsically related as the craftmaker is to the material. Naess speaks of a "smaller" and a "larger" Self" (with capital S) (Haukeland & Naess, 2008, p. 157-160). The smaller self makes us unique, while the larger Self makes us relational. As Lange noted above, Naess speaks sometimes of the larger Self as an "ecological Self" that co-evolves from the relationship between oneself and that which one is intrinsically bonded to through a process of identification. For Naess, the focus is not on the self *and* nature, but rather on the *self-in-nature*. To identify with a tree, he says, is to understand and acknowledge it as a unique life form, similar to how a

craftmaker may speak of the material as its own being. An ecophilosophy of reciprocity animates the world of nature, or as Abram (1996) says so eloquently, perception as an embodied and sensuous dance with the "more-than-human world".

Craftmaking (learning through making)

The noted pioneer in traditional handcraft in Norway, Jon Godal (1988), put emphasis on how we can learn from the past ways of living with nature by developing traditional craft-skills. Knowing how to use nature in sustainable ways, is not to overuse a resource and risk losing it for future generations. To respect and care for nature, and material, would be to develop a personal relationship to it. What is personal, in the sense of self-identity, would mean that you would care for that which you are integral part of as you would care for yourself, since the other and yourself are *intra*-related. If we see nature, or the material, only as a resource or instrument for human purposes, we would be less attentive to its "needs" and thereby miss how to make the co-forming of its qualities to flourish. We would also be less mindful of how we are both threads in the same evolving web of life.

We are inspired by Ingold (2013), who challenges the spectator view of knowledge and proposes a haptic view of knowledge to craftmaking and learning. Ingold understands the dominant paradigm of knowledge as a "hylomorphic" view, from Greek "hylo" (matter) and "morphe" (form), which is when an educator imposes an idea onto the minds of students, or a craftmaker imposes a form inside the head upon outside matter (Ingold 2013, p. 20-21). The idea comes first, then its application. Ingold argues, on the contrary, that "even if the maker has a form in mind, it is not this form that creates the work. It is the engagement with materials. And it is therefore to this engagement that we must attend if we are to understand how things are made" (Ingold 2013, p. 22). The alternative paradigm of knowledge and understanding that Ingold proposes is a "haptic" model of touch, which emphasize the sensuous and embodied process of learning through making as a "correspondence" with the material, as perception and response. Ingold's approach is useful for understanding how nature and self is entangled in a transformative and reciprocal process of crafting. Crafting nature, through natural material, we craft ourselves.

MacEachran (2000) echoes Ingold position, «Learning to look for material and how to harvest material sustainably is often the most significant part of the crafting process which directly engages us with the land.» (2000, p. 194). She elaborates, "this deeper sense of being part of the land gives results, because we have reason to interact with the land that the mere social enjoyment of being outdoors does not provide" (MacEachran, 2007, s.186). Her focus is on "traditional *friluftsliv*", on having an errand when you roam in nature, but she finds that in the utility of a crafted product, there is also a sense of "fulfilment and satisfaction when one learns how to create something important and worthy» (MacEachran, 2000, s.192). It is a view that can easily be combined with the joy and appreciation of nature's intrinsic worth, but to ensure this combination, we need to get into not only what we craft and how, but also why. We need, in short, to be attentive to crafting as a co-forming process between craftmaker and material as between self and nature.

Sustainability! The integral approach

When the Brundtland-commission (UNCED) defined "sustainable development" as "a development that helps people today meet their needs without taking away the possibility for future generations to also meet their needs" (UNCED, 1987, p. 10), the presented three sustainability goals: economic growth, eradicate poverty and healthy environments. It argued that economic growth is necessary first to achieve the other two goals, while others pointed out that economic growth may reproduce inequalities that may, instead, undermine the other two. An integral approach to sustainability was called for (Naess & Haukeland, 1992). When the UN expanded the sustainability goals to 17 in 2015, they were presented as integral to each other. The UN Decade of Education for Sustainable Development (2005-2014) generated many research reports and teaching material on how to reach the sustainability goals (Sinnes,

2015). When people today speak of "sustainability", they often speak of three forms: ecological, social and economic, but a fourth form, cultural sustainability, should be added (Haukeland, 2010; Haukeland & Brandtzæg, 2019). The cultural form of sustainability is especially important in combining *friluftsliv* and craftmaking, since it includes sustaining place-responsive skills, traditions, local knowledge and identities. All forms of sustainability should be integrated, according to the UN, into any educational program, including that of both *friluftsliv* and craftmaking.

Findings

The name of the course in *friluftsliv* and craftmaking at USN is called "Handcraft and Creative Joy in Nature". The aim of the course is now, as it has always been, to give students knowledge and skills that they need to produce various products they can use in *friluftsliv*, but also to learn about tools, natural materials (tree, textile) and craftmaking in an environmental and didactical perspective. The course that combined *friluftsliv* and craftmaking was mandatory from the outset, but over the last decade, it has become an elective. There are over the last years about 60:40 female to male students in the course, which is also the ratio we find in the *friluftsliv* program in general. Examples of products that students have made are: utensils, filtering items, bags in leather, knives, footbags, gaiters, mittens, anoraks, backpacks, skis, canoes and kayaks. The pedagogical aspects of the course has been growing, and in the last few years, also its relevance for sustainability. Students use more time to gather and work with materials in nature, which can easily be integrated into what the *friluftsliv* students try out in a practice area, such as a school. Many former students report on using this combination later in their line of work. The knife is still a key element of the course, as a tool that most *friluftsliv* practitioners (as craftmakers) need to master. Reflections are always made around the campfire together with smaller craft tasks. Part of the exam of the course is a self-chosen project, where they produce a product and write about the process from the making of it to their experiences and reflections on using it.

Student reflections

The students involved in the project are either in the first, second or third year of their bachelor degree in *friluftsliv*. They have varied prior experiences with craftmaking. Since it is an elective, they have either a special interest in it or they take it for the lack of alternatives. Several of the students that belong to the latter group say, in evaluations after the course, that they have enjoyed it much more than they anticipated. Over the last 3 years, the recruitment to the course has doubled. Below we will share some student reflections on the relationship between nature and self, the process of learning and making and how to integrate the different forms of sustainability.

Self-in-nature ("Without craftmaking, we are like tourists in nature")

From the questionnaire, we found that 61% of the students said they had come closer to nature and feel more part of nature through the course, especially when they are to find material and make a product outdoors. One student says,

...in a way, I start to get to a deeper layer, than simply going out and obtain an experience. You get out and become a small part of it all (female student).

From the field notes, we hear from another student, pointing to her newly made wooden spoon, that it was as if the nature experience lasted longer with crafting, since with the spoon she can take the experience with her for as long as it lasts. From the interviews of fellow students on the relationship between nature and self, Ingemann Berg Nielsen (2018) finds that students develop a special relationship to nature through the material. The relationship, according to her respondents, become "closer", "tight" and "more personal" (p. 22). Other students express similar relationships. From the field notes, we find the following:

...I become, yes, deeper into the tree than if you only looked at the tree, in a way, and thereby you get to know the structure, hardness, fibers and direction...how strong it is (female student).

When you collect the material yourself, then you are more conscious of it being a living material...it is wet, moist, but also because you see where it stands... (male student).

The relationship to nature is the most important to me (female student).

It is clear that among many of the students, the relationship to nature is emotional. They can use words like "care" and "respect", but also "frustration" and "anger". A male student put it this way in a conversation,

It is incredible sad to look at a human being that is depressed and break down, since I am a human myself...[but] I also find it incredible sad to look at a part of nature that has been destroyed by other unconscious beings.

Riis Overgaard (2017) claims in her bachelor thesis, "My respondents describe all emotions, which leads to thought of care, simplicity or respect for nature...largely expressed through a wish not to overuse nature" (p. 21). Another female student said in a focus-group interview, "Without craftmaking, we are like tourists in nature". These examples show how some of the students experience craftmaking as a way to connect and engage with nature, and that to engage in craftmaking is a way to know oneself.

Learning and craftmaking ("...to be in what you craft")

Riis Overgaard (2018) summarizes her respondents views, "In relationship to how we understand nature and the material, the respondents speak of a tree as material and they tell different things about the tree, which will make it a good material for their product" (p. 19). She continues, "The students understanding of natural processes and the presuppositions of the material is closely related to what they work with and how" (Riis Overgaard, 2017, p. 20). The students relate to nature, in other words, through the material. One student supports MacEachrans view on the importance of having a purpose, "If I go with a purpose to look for material, I slow down the tempo on the hike and move about over a smaller area and with more attention" (Verbelen, 2018, p. 21). The notion of slowing down and become more attentive is a view that many of the students share. This purposeful way to be in nature ...may shift the focus more on nature's utility, but we do not find, among the students, that this goes on behalf of appreciating nature for its own sake. One female student finds craftmaking to enhance a sense of belonging in nature,

The feeling that I belong here...that I am not only a guest, travel out, take some nice photos and then return home, but that one has a bit knowledge and understanding of how things works, which gives a good legitimization that I have a right to be there.

To get an eye for the craft, is to get an eye for nature's qualities in the material. Paying attention and using all our senses are something *friluftsliv* share with nature-based craftmaking. Ingemann Berg Nielsen (2018) says that all her respondents experience that using all "their senses make them attentive to the fact that the material is living" (p. 20). It is not just a living tree in the forest, it is very much alive as a material too. One female student put it this way in a conversation: "It is a whole new sensation when the tree, which has just been standing there alive, still can be smelled and touched". It is as if a dialogue between the person and the material emerges.

It is all about creative joy and to relate to something by being near it, to work with it. I get a feeling and an understanding of it, and if I misunderstand, then the material will tell me what I need to do. So, it gives me a joy to make something with my hands (female student).

To work with the hands is all about embodied knowledge, skills and learning, as well as an attitude of respect to nature and the material, e.g. how hard you shall let the axe fall or how to move the knife up along the piece of wood. It is a way of learning from within. One student explains,

Even though there are many things to learn from a teacher, so these are simply many things, which I do not understand before I have seen them. Then they give meaning. So, that is how the tree is, that is how it looks

and feels from the outside if it is this or that on the inside. That, I first understand when I have tried it out with my hands and seen it for myself (male student).

It shows the balance between the mental and physical aspects of haptic knowledge, a reciprocity between sensing, intuiting and reflecting in what we understand. To "make sense", or for something to make sense, is to understand that something. To "get a sense of" is to get an understanding of, and "common sense" is a shared understanding. The point being that in learning the mind-body reciprocate. Another part of the process of craftmaking, as a creative process, is what some students describe as a "flow-experience". This is similar to how students describe a perfect ski-run down a slope or a perfect ride with the canoe down a river. These experiences show up in how students describe working with craft. Time and space seem to dissolve into an experience of flow, seen in the following accounts from the interviews for the bachelor theses,

The creativity that allows us to chose ourselves how to shape a product that you yourself want, makes you fully absorbed in what you do – as a flow-feeling, nice to forget where you are and what you are supposed to do afterwards, and simply *to be in what you craft* (female student; our emphasis).

Time is not essential. Instead of trying physically to reach something, like a mountain top before it gets dark, there is no time-demand in craftmaking. If you are depressed, then it also works well. Creativity influences your psyche: you become more at one with yourself, you use your body and your thoughts (female student).

It creates a calm to get something in the hands, to get the mind to cooperate with the fingers. I am surprised that this is not more present in *friluftsliv* (male student)

Craftmaking can, from this, be seen as a creative way of being as doing. You are what you do, which is not separate from the context or relationships that you do things within. An awareness of these contexts need to be reflected upon by the doer, and here the role of the educator becomes especially important.

Sustainability ("...to make a difference")

As educators we seek to develop in our education a space for both doing and reflecting, and we experience that this process continue, individually and in groups, also after class is over. Here are some reflections in doing and doings in reflection on the relationship to sustainability, from the theses:

It is not that difficult to make a small difference and to be in nature in a more sustainable way, and it is not that difficult to make a difference and connect to nature, which I earlier thought was a gigantic step (female student).

I experienced, after the course, that my view on natural material, my relationship to nature and to be a student of *friluftsliv*, changed. The same is with my view on the equipment we use in *friluftsliv* (female student).

To me it is important to be a part of nature and to understand how things in nature hang together, also from a more ecological perspective. One understands alittle, where to harvest material without doing harm...and how I can give back by perhaps think more about the environment in other contexts or to behave well, when you are in nature. To obtain a more natural relationship to nature rather than a distant relationship, and thereby, a much greater wish to care for nature. So, when you see the values in it, then I cannot understand, why so many of the thigns we do, harm nature enormously (female student)

These are clear thoughts on how interacting with nature through craftmaking is also a way to increase one's awareness and care for what is going on in nature and with the material. It is clear that the combination has done something to both what they do and how they reflect. For example, in the questionnaire, 61% of the respodents said the course had changed their mindset and attitude towards the means we use in *friluftsliv*. And 51% of the respondents said they had become more reflective over their own and other's actions in nature.

Many students feel really strong about the sustainability topic. However, we do not know how the relationship between mindset/attitudes and choices/actions play out across contexts. There are reasons to believe that students are sincere when they say they seek a more sustainable lifestyle, but there are

also reasons to believe there is much cognitive dissonance taking place outside the class. There is clearly a distinction between beliefs and actions for many, but there are also examples of students trying to act and live more sustainably, such as this male student,

One does not take too much, and for the same reason, I chose a tree that had fallen down as a material to my kayak ore, since it was already down and would eventually rot...it is, like, a life you take, when you cut down a living tree (male student).

Ingemann Berg Nielsen (2018) says that all her respondents "point out that craftmaking can lead to higher environmental engagement, but that a course, with limited time, is not enough to make any larger behavioral changes". This is an important point, since it would be farfetched to hold that one semester would change lifelong habits of thought and action. One female student speaks to the issue of promoting sustainability as follows,

That, I believe, is something one needs years to deal with. It sounds very well, but I do believe that, in a larger environmental perspective, it takes a much longer period than one subject, to get into the real matters and get an understanding. We have now obtained a glimpse in it, and I feel certain, that it has given me a large kick in the right direction

We have come here to a crucial point: What does the experience in the course lead to? We should not underestimate the effect of a quick awakening of habits and a possible change of ways, but the probability is rather small and what may grow is only the cognitive dissonance. According to Ingemann Berg Nielsen, reflecting on her own work with the bachelor thesis, says that "the use of nature as a 'classroom' seems to create a relationship between the participants and nature. This relationship can lead to a wish to care for nature, both in terms of direct use of nature and more indirectly, e.g. through conscious consumption choices" (p. 39). Furthermore, she says, "When I ask [the fellow students] what elements are important in the craftmaking process to create environmental awareness, all respondents emphasize nature-connection; to get the material from nature, and that the work-process also takes place in nature" (Ingemann Berg Nielsen, 2018, p. 21). One important part of the findings, we believe, is the ability to systematic assess how things are made and where the material come from, as one female student point to from the field notes,

It is a very different experience, when the tree you use have been standing there, alive, and you can attend to it and smell it. If you had gotten it from the store, it would have travelled a long way....

Another female student says that she has become more attentive to how much material of the tree is actually used to bring forth a spoon, and that this has led her to reflect more over the materials she buys and what process they must have gone through (Ingemann Berg Nielsen, 2018, p. 27). Another student sums the course up in a way that is gold to the ear of an educator, "I have gained faith in my self, that I can make a difference...I have some abilities, and they are good enough; so it is just to get at it" (in Ingemann Berg Nielsen, 2018, p.25).

Discussion

Some critical remarks

A critical approach to our findings is important, since there are many possible traps in the material we have from the students. That many reflections are positive to combining *friluftsliv* and craftmaking is likely in a course they have, more or less, chosen to take voluntarily. We need, hence, to be sober about making any general claims from what is said. When 51% say they have changed attitudes towards nature, it is, perhaps, more interesting to undrestand what happened to the 49%. There is both a cognitive and cultural dissonance in the field. The latter speaks of how a group may enculturate dissonance and thereby legitimize and reproduce current inconsequent habits. There is perhaps never a possibility of full consequence, so one needs to look at "second best", but that position may simply continue to strenghten the dissonance. Our findings do provide examples of what these student-participants think and

experience, and we find that even here the results vary much. We have not been able to account for all that is said, and even though we have picked sayings that we think speaks well to the issues, we are thence conducting an interpretive act that may schew the picture for the reader. A way around this would be to take in all that is said, or search out positions that juxtapose. The first is impossible, since it would be too much, while the latter is something we have sought after.

Crafting nature, crafting self

Student reflections suggest that to craft is to transform nature, such as a tree, into something else. When you are in this transformative process, you not only relate to this specific tree, but also to other trees in their environment. And through the craftmaking process, you put some of yourself into the creative process that also transforms you. To better understand this process, we can turn to Naess' concept of the process of identification (Naess, 1989; Haukeland & Naess, 2008). One of the student remarked that he had extended his sense of identification from the human realm to nature. Naess (1989) speaks of the process of identification as a way recognize the life in the other as in yourself, e.g. when you see an animal in pain, you also feel pain. It is a process of reciprocity. You and the other relate in an intrinsic way. Naess argues that we become ourselves as unique beings through our relations. As we craft nature, we then craft ourselves – we co-craft eachother in what is becoming.

Learning by crafting

The student reflections gave important contributions to how both knowing and learning is an embodied and transformative process. We know and learn from within. MacEachran (2007) makes this point, “A craft made from material obtained on a hike and through the process of quietly shaping it, allows the craft to remind us of our connectivity and the serenity of being in nature” (p. 186). It is within this process of reciprocity, between touching and being touched, that we find meaning in what we do. Related to *friluftsliv*, she says:

Some educators refer to hiking as a *friluftsliv* educator's main tool to encourage people to feel comfortable and enjoy nature. I would refine this concept by suggesting that to have a purpose that accompanies the hike allows a person to find greater meaning in why they should continually wander on the land (MacEachran, 2007, p. 185).

The students share this observation, but as we have eluded to earlier, to wander freely without purpose and to wander with a purpose do not need to contradict each other. You can do both on the same trip. You may have the intention of picking mushrooms or berries, but in the midst of so doing, you may simply lay in the field and watch the clouds go by, getting into the appreciation and joy of simply being. Or you may wander freely, while you suddenly see some mushrooms that may be perfect with dinner that evening. MacEachran picks up the sentiment from Abram (1996) when she says,

In craftmaking, the material informs the maker of what is possible; material becomes the teacher. The material and your body co-teach your mind, while all communicate and dance together...the body must dance with the material from the more-than-human world and as in dancing, craftmaking requires a form of bodily communication (2005, p. 27).

Integral sustainability in *friluftsliv* and craftmaking

The combination of *friluftsliv* and craftmaking may ideally integrate all forms of sustainability. Ecologically, it may generate respect for nature's unique qualities, its richness and diversity, and care for its materials. Socially, students and teachers may cooperate well and help each other, based on a sense of belonging to a community of practice. Students are used to working in groups, but we were surprised how important this social learning was in the craftmaking process. It created a “safe” atmosphere, but also helped inspire and commit each other to the tasks involved. Culturally, many got into the stories told from craftmaking traditions, such as the history knives. Students were conscious of revitalizing practical knowledge and skills of the past. Economically, students voiced concern about the consumerism of *friluftsliv*, but whether it makes a dent in their own behavior is hard to say. Some say

they are more attentive to buying used, repairing old, recycling, borrowing things and caring more for what they have, which in itself can amount to substantial financial savings. There is an element of what we can call “rich *friluftsliv* with simple means” (Haukeland, 2018), in what the students express, but we know so little about the extent of the impact the course may have, so that we would need much more in-depth study about their way of life to say something more certain about it. Still, we do feel we are on solid ground when we say that students have become more attentive to what is there of possibilities in nearby nature and thereby in less need to travel far, but that will also vary from where you live.

The other area of sustainability is the integration of *friluftsliv*, on the one side, and craftmaking on the other. We believe that maintaining the practices of craftmaking may provide a new dimension for nature experiences, and that an appreciation of nature’s intrinsic values can enrich craftmaking. We have attempted to visualize this relationship in the following figure:

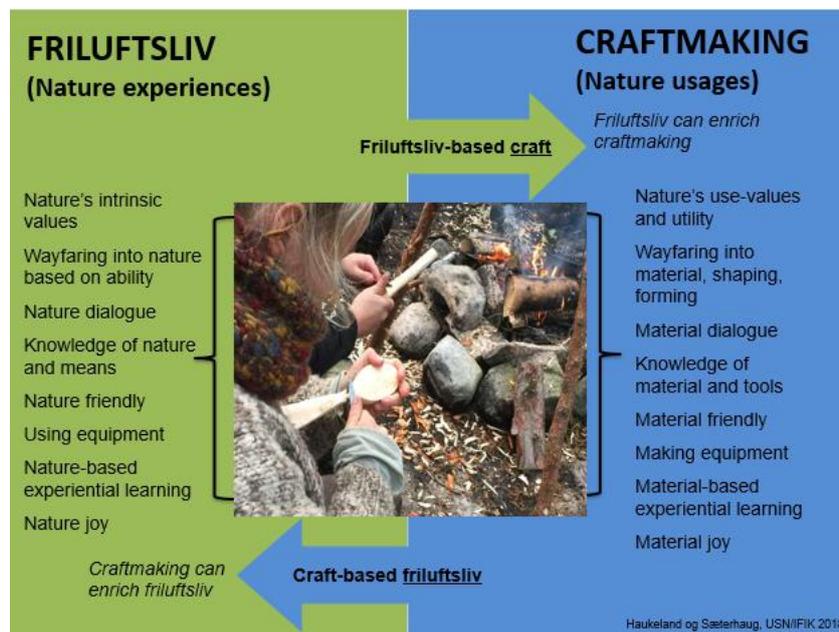


Figure 1. Friluftsliv-based craft, craft-based friluftsliv

The figure shows how there may be an “intraplay” between friluftsliv and craftmaking, and in ways that enrich each other, but it may also show areas where this is not the case. For example, making equipment may lead to using it, but it may not necessarily be nature-friendly, as we have seen. The figure, hence, does open for both. In Norway, the model has been used to depict the relationship between use and protection of natural and cultural heritage (Haukeland & Brandtzæg, 2019). We have in our project found examples of such an “intra-play”, but we have also found examples of the opposite. The role of the educator becomes crucial, but there is also the need for more research to understand better how the different aspects of these two sides play out.

Conclusions

We cannot say that we have fully answered the overall question we set out to explore, but we find that we have become, at least, more aware of the issues involved. First, we do find that the relationship between material and making is exposing the relationship between nature and self, and that, for some, this relationship is experienced intrinsically as a widening of oneself. But we do not fully get a sense of how widespread this experience is, nor whether the combination is sustainable. We need more research, for example, to what it means to “thread lightly” in terms of our ecological footprint, both in nature and in craftmaking. Second, *friluftsliv* and craftmaking, as reflected by what the students say, confronts the

dominant hegemony of spectator knowledge in academia. Yet, we cannot say that the project has fully empower them, or us as educators, to take on this hegemony besides doing what we usually do when we extend our education into nature. But we may have pointed to the possibilities inherent in supplementing this with the craftmaking process to a larger degree, which we see brings an added dimension to the educational quest to promote sustainability. Lastly, we do find examples that craftmaking can provide an attitude of caring for nature, but this is not a prevalent attitude for all. Again we need to do more research. More in-depth interviews could perhaps help in this regard. Also, more research is needed on how the sustainability paradox in *friluftsliv*, and perhaps in craftmaking, is reproduced, resisted to or actively or passively dealt with. All in all, we seem to have ended up with more questions than answers. We are, however, reassured that combining *friluftsliv* and craftmaking has provided new possibilities for incorporating sustainability in our educational program, and wish to see more colleagues, both in craftmaking and in *friluftsliv*, to contribute to furthering the research field.

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