

VALUES OF CRAFTING IN DESIGN EDUCATION

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ABSTRACT

This paper demonstrates the manner in which craft enhances discussion in design education and how ‘experienced knowledge’ from materialised form processes raises perspectives relating to interactions between people and products. The sustainable perspective of the crafting approach to design education is connected to the perception and awareness of materials and forms in ways that also go beyond the making of physical products. By choosing craft as the core subject of this paper, the authors raise questions about: (i) the role of materialisation in design thinking and (ii) the concepts of culture and aesthetics in design. The perspectives of Howard Gardner’s theory of “multiple intelligences” (2011), and ‘material-agency’, from the two last decades of practice-based and practice-led research, are used to frame the discussion in this paper. The use of the concept ‘material-agency’ emphasises the role of craft and the way it describes how materials and materialisation processes affect our thoughts. The research is based on the master’s course, Product Aesthetics and Culture, at IPD, HiOA. Qualitative methods were chosen to document and communicate craft processes as well as discussions with the students. The analyses show how theory and practice are weaved together to enrich the students’ understanding of the manner in which craft in design serves as *practical intellect*. Crafting in design education has great potential in terms of students’ concern towards creating meaningful products for people, products grounded in cultural understanding.

Keywords: Crafting, culture, perception, maker-space, experienced knowledge.

1 INTRODUCTION

In this paper, the role of *craftsmanship* is explored mainly from two perspectives: (i) learning processes in design education and (ii) reflections and interactions between people and products based on exposure to foreign settings and discussions in maker-spaces. The authors argue that crafting experiences contribute to an individual awareness of physical products as well as solutions for social spaces. With the aim of contributing to sustainable discourses from these perspectives, the main research question is:

How can ‘crafting’ as a pedagogical tool enhance awareness and reflections about interactions between people and products?

There seems to be a contradiction between designing more products and contributing to a more sustainable society. However, many researchers have promoted a sustainable perspective as knowledge and awareness of how to produce meaningful products that last longer, conceptualised, for example, as emotional design and cultural sustainability. Today, questions of sustainability are a pressing social concern in most disciplines, not least in design (Keitsch et al., 2016; Berg & Johansen, 2016; Wigum, 2015; Skjerven, 2012; Berg & Gulden, 2012). As part of society, we belong to a human as well as a material culture. For present purposes, *society* is understood as the social constructions arising from interactions between ‘living and non-living things’ (Latour, 2005; Malafouris, 2013). The concept of culture is defined as meaningful actions. *Crafting* constitutes our material culture, e.g. products, buildings, spaces. The concept of ‘material-agency’ underlines the importance of the making of, and skills of producing, meaningful products that people can feel connected to. In recent decades, design education has undergone dramatic change. A wide range of new theoretical perspectives and methods emphasise *learning as socio-cultural participation* in design education. In this new landscape, design students may have less time for (or access to) learning through materialisation processes (Mäkelä & Löytönen, 2015, s. 2). Today, the virtual world dominates our everyday lives,

and visual perception has increasingly overtaken tactile experience. One key challenge for design education is how to combine practice and theory as *fruitful confrontations* that (i) expand *designers' competence in critical discourse by means of linguistic terms* that challenge conventional ideas of design (Skjerven, 2011) while, at the same time, (ii) developing students' professional craftsmanship and identity to enable them to communicate skilfully through visual and materialised articulations. The authors claim that the educational system in Scandinavia today promotes learning through primarily two of the 'multiple intelligences': Linguistic and Logical-Mathematical. However in design education it also is important to problematize design issues through the Visual-spatial-, Bodily-kinaesthetic-, Interpersonal-, Intrapersonal- and sometimes even the Musical intelligences (Gardener 2011). Inspired by the American anthropologist Richard Sennett, meanings created from crafting are explored here from a pedagogical perspective that gives students time and space to *establish habits from making dimensions of skill, commitment and judgement* (Sennett, 2008, s. 9). In particular, this refers to how students make and reflect on the manner in which interacting with objects in unfamiliar ways creates new meaning. According to Sennett, the concept of *craftsmanship* has to do with developing skills and an awareness of how to use techniques informed by a cultural perspective rather than as mindless procedures for making (p. 8). Specifically, we contend here that it is difficult to understand users' needs or to solve design problems relating to physical products without being trained in materialisation processes. The present research is based on the MA course Product Aesthetics and Culture (MAPD 4200) at the Department of Product Design, HiOA, Norway, in 2015 and 2016. During this course, students study how to explore simple products, such as drinking vessels, in the setting of specific cultural contexts and how they physically grip, interact with, and experience these products in ways that increase their meaning. Objectives are discussed based on teachers' and design students' understanding of culture, aesthetics and the role of making (craft and craftsmanship) in design.

2 METHODS

During the last decades important contributions to research has been made within the 'Making disciplines' (Dunin-Woyseth & Michl, 2001). That involves concepts of: 'experienced knowledge', 'confident knowledge', 'embodied knowledge' and 'making knowledge' referring in particular to how we learn by using our hands (Jarvis, 1999; Molander, 1996, 2015; Refsum, 2009; Adamson 2006; Groth, 2017; Mäkelä & Löytönen, 2015; Fredriksen, 2011; Pallasmaa, 2009). Central to the present research is the concept of 'material-agency' (Malafouris, 2013; Nimkulrat, 2009; Bolt, 2007; Heimer, 2016). The authors are artists/designers, and for the purposes of this project, they are researchers as well as practitioners, using their subjective, 'confident knowledge' as a background for their investigations. This qualitative research project employed two principal methods: 1) ethnographic studies of students' approaches to their assignment, their working processes and their findings/results and 2) in-depth interviews with two students (one each from the 2015 and 2016 groups). The ethnographic studies accommodated the authors' own perspectives as professional practitioners and teachers in arts and crafts, encompassing both our embodied and theoretical knowledge (Groth & Mäkelä, 2016; Mäkelä & Löytönen, 2015). The approach involves observations as well as interactions with the students during their working processes (Schön, 2001). The framing of the assignment emphasised visual and materialised documentation of students' processes as well as reflections on the impact of cultural understanding on design, seen from a humanistic perspective. The interviews were conducted to obtain students' retrospective reflections after completing their assignment (Groth & Mäkelä, 2016).

3 RESEARCH

In 2015 and 2016, the chosen context for this research, the Product Aesthetics and Culture (MAPD 4200) course engaged with a Japanese view of aesthetics and culture. The course involves a theoretical as well as a practical assignment. The present research focuses on the latter. Professor Astrid Skjerven has been responsible for this particular course since 2007 and has previously explored fruitful ways of bridging theory and practice in design education (Skjerven, 2011). While her primary position is theoretical, the present research focuses on practice in crafting. The tradition of object culture in Japan is long established and highly valued (Weisberg, Bonsdorff et al., 2016). An important aspect of the Japanese aesthetic tradition is the use of the senses both in crafting and in the interactions between users and objects, such as in the Japanese tea ceremony (Okakura, 2007). The main purpose of introducing Japan to the course was to enable students to experience unfamiliar expressions of culture

and aesthetics, giving them both distance and new perspectives on their own material culture. An important source for this discussion was Yuriko Saito's views on Western and Japanese everyday aesthetics regarding moral, political, existential and environmental questions (Saito, 2007).

In 2015, the theme of the practical assignment was 'The Drinking Vessel', which required students to explore and materialise a form and concept for a drinking vessel according to three parameters:

1. How to hold a drinking vessel
2. Interaction and movement between the drinking vessel and the mouth
3. Contact between the vessel and lips.

The practical assignment had to communicate how theories as well as the students' own reflections about the given theme were to be investigated, both methodically and practically. The objective of the assignment objective was a Final Object—A Drinking vessel, with a set of five models or tests relating to each of the above parameters. In 2015, all the students gathered in the ceramic workshop from the start of the course to work on the practical assignment, using clay as their material. In 2016, an overall change in the course structure for the first year of the MA made it difficult to confine the theory and practical demonstration to the beginning of the course, as in the previous year. The students were also given a wider choice as to where, when and with which material they would work on the practical assignment.



Figure 1. Tea ceremony (Photo: Rognstad, 2015). The image on the right demonstrates the Raku firing process (Photo: Andreassen, 2015)

In 2015, the course included a performance of the Japanese tea ceremony; some of the students took part in the ceremony (Figure 2), while the others served as observers. Before the performance, the tea-master delivered a lecture about the utensils and Raku cups used in the tea ceremony, complementing one of the author's (Andreassen) lectures and demonstrations relating to ceramic drinking objects. In 2016, two Butoh dancers held a workshop and performed for the students, all of whom were observers of the performance, gaining an in-depth perspective on Butoh dance during the workshop. In 2015 and 2016, the students were introduced to the tea ceremony as part of the course syllabus, but the Raku ceramic workshop was held and fired in both years. Ceramic drinking vessels, fired using the Raku process (Figure 2), form an integral part of the tea ceremony. The workshop and Raku firing were intended to serve as a cultural and aesthetic inspiration for the students.

In 2015, the students participated in a workshop on the use of clay to make a simple object by hand building, followed by individual guidance and tutoring in the ceramics workshop. In the authors' experience, the choice of hand building as a process in which the hands are the main tools ensures a fast learning curve. During this work, there were many useful discussions about the cultural influences and aesthetic aspects of the students' work. In the interview with James Duncan Lowely, we asked 'What do you think has promoted reflection and discussion on your work during this course?' He was also asked about the impact of 'geography' on his working process as well as his reflections on the two assignments (theoretical and practical). In general, he described the workshop (especially the ceramic studios) as a collaborative arena where people generally discuss each other's work.

It was different from other courses—being in the same place with the same group of people for several weeks, having your tools and materials around you, discussing your own and other people’s work. It was the only course (on the MA programme) for which we were expected to deliver physical works. Theory is relatively new to most of the students, and you question the content less than in the case of the material. We are used to handling materials; it is visible, and you have more knowledge and consciousness. It is out there in full visibility. It is easy to grasp something you see going on at a co-student’s working desk, to comment and discuss. Theoretical sharing usually has to be organised, while sharing about practical work may happen more spontaneously.

James said that he normally reads and applies theory towards the end of a project.

The course was successful in that regard because we had to start with materials early on, and we developed an understanding—developed a language, both physically and in our heads, a synergy that just happened. You cannot do that entirely in your head. Through that course, I have found a method of working that suits me. I want to work with objects and materials because, more than word, this offers a more understandable way of communicating values.

Helena Larsson (2016) chose to work with the Japanese technique *Kintsugi* or ‘golden repair’. As a philosophy, this approach treats breakage and repair as part of the history of an object rather than as something to disguise. From her practical experience, she discovered that she was more interested in the space of the crack than in the object itself, and experimented with different methods of reworking the cracks. During this process, she found methods for removing the actual object, leaving only a materialised crack. Her experience of working hands-on with a philosophical, aesthetic issue gave her a new perspective on how negative space can be concretely explored through objects as well as conceptually and more abstractly. She found the *Kintsugi* metaphor useful and described a transferable value for handling more complex issues in system design, where the designer needs to *look for the cracks and refine, redefine, make new connections and look at the negative space* (from a personal conversation during tutoring). In the interview with Malin Brekke Medin described that working with the practical assignment had improved her understanding of aesthetics in design. Reading about the meditative part of the tea ceremony and experiencing the Butoh dance affected her working process. As aesthetics is about experiencing with our senses, she was led to work blindfolded as she modelled her clay objects for the practical assignment. She experienced a calmness and rhythm of work that enhanced her focus and strengthened her other senses once the visual sense was removed. She claimed that this may impact her further work with system design in a health context. She exemplified the use of blindfolds when making observations of space and activities in places such as hospital sites in terms of better recognising sounds, smells and other impressions. She compared the Raku process with the working blindfolded, as the results were unknown until they emerged from the sawdust. Malin noted that the experience of the Butoh dance session has broadened her understanding of aesthetics. In particular, it gave her an insight into how our own culture disregards the ugliness and grotesqueness expressed in the Butoh dance as aspects of aesthetic expression. Overall, Malin found that the practical work made greater allowance for mistakes to be made compared to her experiences of the writing process, possibly because it is visible and easy to discuss. Nevertheless, she would have welcomed a greater focus on the opportunity to shift between the methods of ‘theory feeding practice’ and ‘practice feeding theory’.

4 DISCUSSION

This research confirms the value of craftsmanship as a creative thinking tool and the impact that the maker-space has on both practical and theoretical issues beyond the actual assignments during the MAPD 4200 course. Based on the authors’ observations, in 2015, working in the same workshop as well as with the same material (clay) strengthened students’ collaborative experiences. As a group, they managed to initiate more discussion regarding the main subject of the assignment. James underlines the value of crafting as the way in which it enables you to ‘grasp something you see going on at a co-student’s working desk’. For many of the students, clay was unfamiliar as a material, but the experience of ‘material-agency’ from the clay, together with the supportive atmosphere in the student group in the ceramic workshop, gave them confidence in their working process.

In 2016, the framing of the course changed, and the students were offered a wider choice of where, when and with which material to work during the practical assignment. In this group, many of the students chose to perform the practical work at the end of the process. Working together was put aside because of the pressure of the theoretical task. For many of the students, the process of making therefore became a solitary and short process at the end of the project, and the cross-pollination between theory and practice characterising the previous years' experience was lacking.

Crafting as practice, especially working with clay, opens an extraordinary *space* for sharing ideas, not only in technical and aesthetic terms but also in how practice deepens understanding of theories associated with particular issues. When the students approached theory prior to experiences from practice, they found it more difficult to become involved and to discuss their ideas, fearing an inability to give 'right answers'. The students described feeling more comfortable sharing ideas and that making mistakes was more acceptable when working with crafting processes in the *maker space*. The students described that although theory can feed theory independent of practice, a platform characterised by sharing emerges when practice and theory are merged and practice feeds theory.

The students' experiences with Japanese culture were important from many different perspectives. The emphasis on utilising more senses came into play when Malin explored making her tea bowls blindfolded. She deepened her skills, not only from making bowls with her hands, but also when reflecting on how she could use blindfolding in observations in system-oriented design as a methodological strategy. Another example is the concept of cracks (Kintsugi) as a negative space being used in products 'to refine, redefine and make new' and to be transformed into more complex issues in system design.

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