

Craft is ubiquitous

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Craft is ubiquitous, the many forms of crafting, craftsmanship and skilful material considerations exist in multiple contexts and situations. What counts as craft, and what does not, has been discussed (Dormer 1997; Niedderer & Townsend 2014) with the consensus that craft evades definitions and instead thrives as an adhesive between other domains, such as art and design (Niedderer & Townsend 2010). Acts of “crafting” are infiltrated in most aspects of society, from the industrial workplace to the domestic home. As well as being a professional domain, craftsmanship is an attitude, a way of thinking and of being in the world (Korn 2013; Sennett 2009). Craft making further facilitates reflective platforms which can carry and sustain cultural associations that have developed and become personified over time (Kouhia 2012: 33).

In the Nordic countries, Craft, or Slöyd education has always had the twofold aim of educating both physical and cognitive skills through drilling students in material interaction exercises. The system of educational handicrafts developed by Otto Salomon (1849–1907) (Salomon, Nordendahl & Johansson 1907) included aims such as to instil a taste for and an appreciation of work in general, provide training in the habits of order, accuracy, cleanliness and neatness and develop independence and self-reliance (Thorbjörnsson 1994: 4). In this view craftsmanship is an attitude to work that connects to honesty, determination, and even moral and ethical judgements; honesty, because there is no gain in cheating on the material, determination is needed to overcome material resistance, and moral and ethical judgement in knowing what to do and when to do it.

Ideas of craft making as the natural activity of the Homo Faber (Arendt [1958]1998) is revitalized in the writing of Sennett (2009) who points to general craftsmanship as a lost virtue in the workplace. Extended forms of crafting are found in the way anyone handles a complicated human-material interaction skilfully, and with pride in their work. When talking about craft research, the context is often the academic arts and crafts, and less about the vocational craft contexts. Crafting and skilful considerations are inevitable in any artistic or designerly practice of reflecting-while-making, but are also present at the building site, in the laboratory and on the factory floor, in the greenhouse, perhaps even in the office and the body shop of a garage?

The question of where the limits of craft practices and other forms of skilled labouring are drawn is addressed to some degree by Pye (1968) who in his definition of the workmanship of risk and certainty, distinguishes skilled work that includes an intelligent form of navigating risk to rudimentary and predictable labouring. Risatti (2007: 159-160) refers to Pye and exemplifies the difference by comparing a modern electrician or a plumber who use limited material knowledge and manual skills in their labour, to the skilled dexterity and craftsmanship of the plasterer who also knows how to prepare and slake the lime before its application.

In this special issue we have gathered a selection of contributions that seek to extend the normative idea of what practices of crafts include. They stem from the conference presentations in the 1st Biennial International Conference for the Craft Sciences (BICCS), held online during 4–6 May 2021. This conference was initiated by the Craft Laboratory members and invited co-editors of this special issue; Almevik, Westerlund and Groth. The Craft Laboratory in Mariestad city is affiliated with the Department of Conservation,

University of Gothenburg, Sweden, and was established in 2010 in cooperation with heritage craft and trade organizations, to empower craftspeople and craft education.

In the Lab, selected *Master Classes* are provided for established, highly trained craft professionals. *Craft Scholarships* are offered to practitioners interested in taking time out to investigate a problem or question in their practice, or to improve their craft methods or techniques. The site-specific workshop capacity in Mariestad city allows craft researchers to implement research questions in practice and to perform full-scale material and methodological tests in masonry, carpentry and painting workshops, as well as in the timber building yard, greenhouses and gardens. These facilities are also used by the vocational craft education programs in gardening, masonry, timberman and architectural painting crafts.

The BICCS conference therefore reached out to a broad community of craft researchers that are housed in a variety of disciplines and institutions and with large scale craft interests – the common thread being an interest in Craft practices and related research. Through this lens the conference aimed to expose the breadth of topics, source materials, methods, perspectives and results that reside in this field. Through collaboration with the University of Gothenburg’s Centre for Digital Humanities and Media Technology, the Conference additionally aimed to provide novel and supported ways to better elicit the performative and material nature of craft research. The traditional call for research papers was thus amplified with calls for filmed submissions, interactive applications, demonstrations and exhibitions. Research contributions were invited from any discipline or field that includes craft practice and that particularly aimed to discuss the following six themes:

1. Multimodal communication of craft research
2. Craft and society
3. Craft in interdisciplinary research
4. Craft pedagogy for higher education
5. Crafting theory for practice
6. Craft, heritage and conservation

The Contributions

The articles in this special issue, were selected from responses to a call sent to contributors to the BICCS by the journal editors Professor Katherine Townsend and Professor Kristina Neidderer and guest editors. Through this selection we show some of the breath of the craft research arena by including varied fields such as: craft education, interdisciplinary collaborations with neuroscientists, industrial crafts’ role in cultural heritage, gardening crafts and the exchange of craft knowledge between horticultural practitioners, native cultures political activity through craft practice, archaeological reconstruction and boatbuilding crafts and the use of new technology in both research and craft practice and lastly, thoughts on craft theory and how it may be formulated. For an overview of the other contributions to the conference, please see the official website (BICCS, 2021).

Sirpa Kokko writes in her article “*Orientations on studying crafts in higher education*” that crafts in higher education are scattered and typically lack departments of their own, instead being integrated in art, design, technology, education or culture-oriented departments. Kokko reflects on the fact that since craft studies became a part of university curricula, there has been continuous discussion about their role in this context (see also Westerlund, Groth, Almevik, 2022). The purpose of her research is to shed light on the orientations of crafts in HE programmes that include and focus on crafts. Based on her document analysis of the

curricula of one American and four European craft study programmes and her fieldwork observations in the same institutions she found five orientations of craft education, these are: educational crafts; traditional crafts; critical crafts; cultural heritage of crafts; and design-based crafts. In her article she analyses the study programmes educational approaches, the pedagogical methods and their students prospective career paths. She concludes that, the status of crafts as a higher education discipline adds value and visibility to the crafts, strengthening their identities.

While making has either been studied as and phenomena from both outsider and insider perspectives (Niedderer & Townsend 2010), philosopher and craft theoretician Mikkel Tin (2013: 2) asks: 'is there a danger that making, as the object of scientific research, will be reduced to its mechanical aspects, material results, social preconditions, or other contingencies?' Surely it is time to join forces and study crafts from a joint point of view. Camilla Groth, Veikko Jousmäki, Veli-Matti Saarinen and Riitta Hari write in "*Craft sciences meet neurosciences*" about their interdisciplinary collaboration, between a ceramic craft researcher and three neuroscientists working in the field of human brain imaging, claiming that joining of forces can produce results that neither discipline could provide alone. Groth et al. describe the possible future interests in this kind of research, also the different levels of collaborative work between disciplines. They write that the applied methods could help to accumulate general craft-making knowledge and build related theory. A screenshot taken of the ceramicist in action, captured by a thermal imaging camera during the research process, is featured as the Remarkable Image.

Pride in one's own work and craftsmanship as an identity and way of life is evident in several contributions, and most explicitly in Amanda Briggs-Goode's, Tonya Outtram's and Deborah Dean's article "*Lace Legacies: How partnerships enhance understanding of craft and heritage*" that investigates Craft's role in Nottingham, once the centre of a global lace industry employing tens of thousands of people in its manufacture. The slow decline and sudden demise in the early years of the 21st century impacted upon both the sense of identity of the citizens who were involved in its success and those who enjoyed its resonance. Both individual and regional identity were bereft in the process that is all too familiar in many craft-based industries in Europe and elsewhere. In their article they share how through collaborations between cultural, educational, community and business partners, they began to address this sense of loss, to improve the visibility and legacy of Nottingham lace and continue to tell its story. The article includes quotations from current and former employees reflecting upon the values implicit within lace manufacture, then and now, of skill, craft and a pride in work.

Tina Westerlund is a horticultural craftsperson, and in her article "*Knowledge in our hands: analytical tools for craft knowledge communication*" she explores the sharing of craft knowledge between practitioners in her field, that resonates well in any craft community. Westerlund writes how craft knowledge is built from examples of experiential learning, and when individual or group experiences are gathered and compared, new knowledge is created. The aim of the paper is to show how theoretical frameworks can be used as analytical tools to develop strategies that support the communication of craft knowledge. In her search for meaningful documentation methods for plant propagation, Westerlund draws upon object-oriented, practice-oriented and subject-oriented methods based on philosopher Bengt Molander's research, which seeks to enable a concept of 'theory' which does not separate theory and practice from each other (Molander, 2022). Our Cover Image features a still from

one of Westerlund's video recordings of horticultural practice, made to help disseminate practitioner's subjective knowledge.

Pye's and Risatti's definitions of skilful workmanship excluded predetermined and safe tool use that did not invite creative problem solving and risk, such as the use of technological tools. However, through the digitalization and hybridization of craft practices a workmanship of risk has been introduced into processes, which was previously thought to be invariably certain (Niedderer & Townsend 2012: 4). Kathryn Walters has explored Digital tools such as CAD/CAM through experimental design research methods in order to expand the nature of craft practice, offering new means of design and making. The article "*Emergent behaviour as a forming strategy in craft: The workmanship of risk applied to industrial-loom weaving*" presents her self-forming three-dimensional textiles that were first designed in CAD software and then woven on a computer-controlled jacquard power-loom. The concept of emergent behaviour is discussed as a craft strategy when the workmanship of risk is focused on material forming rather than tool, technique or predetermined outcome.

Material tinkering and the possibilities of self-made materials inspired jeweller Sofie Boons to learn the craft of growing her own crystals in sugar, alum and salt. This new interest in making one's own materials for one's craft is changing the material realm of many practitioners and offers new unforeseen potentials for both expression and ethical considerations of sustainability and value. In the article "*Crystal Growing Design Method: An investigation into the growing of crystals for jewellery designs*" Boons presents her practice-led process of finding a workable methodology for her Crystal Growing Design. Through conducting experiments in which she was testing four hypotheses developed around the practice, Boon's investigated the opportunities and challenges presented by such crystal growing processes and discusses the potentials for this in her practice.

Heritage study shows crafts role in material culture and how we can trace back meaningful social and cultural exchange between people through time. Discrepancies and injustice may also be revealed through crafted objects and their conception. Stefanía Castelblanco Pérez's article "*Craft as resistance: a case study of three indigenous craft traditions*" explores the manifestations of social resistance in craft processes, through investigating three indigenous craft traditions: the Iku and Nasa located in Colombia, and the Sami from Sweden. Through interviews with indigenous makers and experts the objective was to understand not only the techniques and materials involved in the processes of creation, but also their motives and sources of inspiration. Castelblanco Pérez found that the craft of these native peoples has served as an effective vehicle for communicating social, cultural, political and ecological resistance in a peaceful way. To contextualize this practice, she cites *arpilleras* textile tapestries made using a patchwork technique, which constituted expressions of resistance against poverty and the repressive regime in the era of Augusto Pinochet in Chile (Bacic 2014).

The use of digital tools is changing practices not only in the crafts but also in research on crafts, and the new tools are already becoming indispensable in documentation of artefacts that are sensitive to various exposures and handling. Fredrik Leijonhufvud is a boatbuilder and researcher who documents and reconstructs Nordic clinker boats. In his article "*A boatbuilder's approach to boat documentation*", he presents a methodological approach for the documentation of craft objects, including a comparison of traditional analogue methods and modern digital photogrammetry. Leijonhufvud claims that it is important to utilize one's own craft knowledge in research on crafted objects as this can contribute to understanding and revitalizing broken craft traditions. However, the author acknowledges that an awareness

of one's own traditions and prejudices is also needed to interpret a boat built in an older tradition.

New digital tools allow not only for the making of crafts or the study of crafts, they also give new opportunities for disseminating craft knowledge to others, both inside and outside of academia. Jonathan Westin and Gunnar Almevik have written the article "*Bringing a building into being: a virtual reality application as a non-traditional research output*". This article presents and discusses a digital reconstruction of a historic building, and the use of a Virtual Reality (VR) application as a standalone. While the technology is there, the authors claim that there is still a need for incorporating VR platforms into the academic system as research outputs in their own right. They further argue for the benefits of virtual reality applications in communicating research on embodied craft skills and sensory-based judgements, as it has a potential to reduce the loss of information in translations between modes, medias, and formats.

The issue of theorizing practice is a subject that will perhaps always haunt the crafts which continue to evade articulation. In Bengt Molander's article "*Ways We are Connected to the World: Craft and/or Science?*" he discusses the understanding of craft as a science and the different types of theoretization that this involves. Molander focuses on the notion of science in order to find meeting points between methodological and epistemological aspects of the sciences and the crafts, highlighting the human aspects of both. In particular, he seeks to throw light on the human attributes of theories, through the main argument that 'theories' may be expressed in and by practices, not only by words.

The Portrait is of the carpenter, heritage craft professional and lecturer Olof Appelgren, active at the University of Gothenburg, Sweden where the BICCS conference was held. Appelgren has a long career specializing in curved wooden window frames and as a teacher who values the skills and the learning that he continues to exchange with his students. The portrait is written based on an interview with Appelgren made by Gunnar Almevik and Tina Westerlund and includes a reference to a video film depicting his craftsmanship.

This special issue includes a Conference Review, of the BICCS Conference that the contributions are collected from. The review is written by one of the visiting craft researchers, Bilge Merve Aktaş. In it she reflects on her experiences and the contents of several contributions, also describing her understanding of their relevance. She further accompanies her reflections with images of her diary notes to explain her points.

Finally, the next Biennial International Conference for the Craft Sciences will take place during 20-22 September 2023 in Mariestad, Sweden. The call for papers will be launched in autumn 2022, please refer to the Craft Laboratory's official website for more information; <https://www.gu.se/hantverkslaboratoriet>.

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