

Jun 25th, 12:00 AM

Editorial: Experiential Knowledge in Collaborative Interdisciplinary Design Research

Nithikul Nimkulrat
Academy of Arts, Estonia

Camilla Groth

Follow this and additional works at: <https://dl.designresearchsociety.org/drs-conference-papers>

Citation

Nimkulrat, N., and Groth, C. (2018) Editorial: Experiential Knowledge in Collaborative Interdisciplinary Design Research, in Storni, C., Leahy, K., McMahon, M., Lloyd, P. and Bohemia, E. (eds.), *Design as a catalyst for change - DRS International Conference 2018*, 25-28 June, Limerick, Ireland. <https://doi.org/10.21606/drs.2018.012>

This Miscellaneous is brought to you for free and open access by the Conference Proceedings at DRS Digital Library. It has been accepted for inclusion in DRS Biennial Conference Series by an authorized administrator of DRS Digital Library. For more information, please contact DL@designresearchsociety.org.

Editorial: Experiential Knowledge in Collaborative Interdisciplinary Design Research

NIMKULRAT Nithikul^{a*} and GROTH Camilla^b

^a Academy of Arts, Estonia

^b University College of Southeast Norway

* Corresponding author e-mail: nithikul.nimkulrat@artun.ee

doi: 10.21606/drs.2018.012

1 Introduction: Collaboration and experiential knowledge

Design practice has transformed from one based on the production of artefacts to one that engages expertise and knowledge from multiple disciplines. Collaboration between stakeholders has become indispensable, and research has played a crucial role in exploring the changing territorial context of designing and making (Nimkulrat & Matthews, 2017; Bowen et al., 2016). This is particularly evident in the fields of New Materials, Smart Textiles and Human-Computer-Interaction (HCI), where research tends to be conducted in teams comprising different disciplinary experts who may work across academic, commercial and public sectors, and may include designers alongside, for example, scientists, technologists, artists, business strategists and policy makers (e.g. Bhömer et al., 2012). Various partners are in dialogue with one another, developing, consolidating and enhancing knowledge while generating new opportunities for interdisciplinary knowledge exchange.

Experiential knowledge, as knowledge gained by experience, signifies ways of knowing and understanding things and events through direct engagement with people and environments (Niedderer, 2007). The DRS Special Interest Group on Experiential Knowledge (EKSIG) since its establishment in 2007 has focused on experiential knowledge, thinking and knowing at the core of design practice. It attempts to illuminate how a design process conducted in a research context begins and ends in the domain of experience, which is in turn changed by design.

At the *DRS 2018: Design as Catalyst*, the EKSIG track aims to examine collaboration within design research teams that comprise members with diverse disciplinary expertise. This is to understand: 1) how individual experiential knowledge, or knowledge gained by practice, is shared; 2) how collective experiential knowledge is accumulated and communicated in and through collaboration; and 3) how it is embodied in the outputs and may be traced back to the origin of the practice. The track also aims to illuminate the act of making as the action of change in which matter and materials are transformed through collaboration, interaction or negotiation between the collaborative team and their material environment. Collaborative making and knowledge creation occur in multiple forms, on many levels and in different contexts and, through the act of making, meaning is made, communicated and shared (Ingold, 2013). This collaborative learning is a process of exchange where existing knowledge and experience of a certain topic is reviewed, added or transformed. The track explores how learning is transferred and articulated within multidisciplinary teams. Starting with an



understanding of making and collaborative learning, it discusses how we can create a greater awareness of our responsibilities as designers, researchers, consumers, teachers and members of society.

2 EKSIG track: Selected papers

In response to the EKSIG track call, international researchers and practitioners, whose work is centered on the experiential knowledge of collaborative work in interdisciplinary projects, submitted their papers that describe and discuss cases studies regarding collaboration in design and design research practices. We received 19 paper submissions from 12 countries, including Australia, Canada, China, Denmark, Finland, India, Norway, the Netherlands, Sweden, Turkey, UK and USA. After the double-blind peer review by the panel of 34 international reviewers, nine papers were selected for presentation at the DRS 2018.

The selected papers exemplify interdisciplinary collaboration or the sharing of expertise through various worked examples. Many of the selected papers touch upon the sharing of expertise between stakeholders in different contexts. The sharing and combining of expertise are generally reflected on in positive wordings, especially highlighting the widening of perspectives and the added insights in all participating domains. However, a number of challenges are emphasized, for example, the communication of experiential knowledge and the utilization of the added value of the collaboration in a meaningful way.

The first paper, 'Transdisciplinary PhDs in the making disciplines' by Anne Solberg, discusses doctoral research in art and design. Solberg highlights the benefits of multi- and interdisciplinary projects in research in that they encourage the sharing of the research process and findings to a larger audience. Nevertheless, she finds that support from each specific discipline is important in such collaborative processes in order to maintain expertise and in-depth knowledge on the subject. The next paper, 'The future of heuristic fossils' by Simon T. Downs and Claire A. Lerpiniere, presents a critical view on the use or idea of design methods/design thinking, as these leave several contexts of design uncovered. For example, the tacit areas of 'crafts' practice, which require different kind of iterations and are not typically reflected in a design thinking manner, do not readily fit within the model of 'Discover > Define > Develop > Deliver' mainly developed for industrial design domains. Yubo Kou and Colin Gray discuss the different aspects of communication of design related knowledge in their paper entitled 'Distinctions between the communication of experiential and academic design knowledge: A linguistic analysis'. As communication between stakeholders often happens between peers online, it is interesting to see how experiential knowledge communicated virtually differs from that communicated in design practice and in academic contexts. Kou and Gray present a mixed-method analysis, comparing ways in which experiential design knowledge is communicated in two online practitioner-oriented venues and two leading design research journals. Unsurprisingly, they found that the articulation of experiential academic knowledge differs in many ways in these two contexts, and in their analysis they let us know how these contribute to the construction of design knowledge.

The next three contributions all engage in the study of designer's collaboration with craftsmen, highlighting different aspects in these engagements. The paper 'One over, one under: A dialogue between design and craft' by Can Altay and Gizem Öz looks into the practice of basket weaving in Turkey. The student project described in the paper aimed to intervene in traditional process of basket weaving by utilizing methods of digital manufacturing and, as a result, 'clashing the craftspeople's traditional methods of making and the new technologies that the designer is proficient in'. Intentions of sharing knowledge through making together and learning from the inside worked both ways as the designer learned craft skills and the craftsmen were introduced to 3D manufacturing methods. Similarly, design and craft practices are shared in Michael Nitsche's and Clement Zheng's paper 'Combining practices in craft and design'. Based on a case study describing an interaction designer and a ceramic craftsperson consolidating their expertise in the creation of an

interactive lamp, the paper discusses models of collaboration on a theoretical level. Nitsche and Zheng offers a collaboration model that builds on distinct expertise, evolves through a design-based brief, and is realized through a shared dialectic object. In the following paper 'Co-creation in professional craft practice' by Camilla Groth and Arild Berg, designers process of outsourcing the making of their designs to craftspersons are problematized. Issues of authorship and trust, together with the role of experiential knowledge and the communication of design restrictions, are vented. A tradition that is as long as design history is about to change due to the development of notions of co-creation and cultures of interdisciplinary collaboration.

Sucharita Beniwal describes a communal design practice that is shared between members of the community, perhaps unpronounced but certainly global, in her paper 'Embodied knowledge in a community adaptive practice'. The described case study takes us to a market place in India where load-bearers design and make their own tools for carrying heavy loads on their backs. Beniwal argues for the collective body of experiential knowing that is a form of open-authorship in which any user-maker can try new iterations. 'Designers emotions in the design process' by Monica Biagioli, Silvia Grimaldi and Hena Ali is a newly found initiative for investigating designers' emotions, especially as part of their decision-making processes. The authors aim to start a focused discussion network across geographies and cultures, the function of which is to foreground the experiential and emotional domain of designers' practice. As the paper describes a future endeavour, the intended outputs will be: an index of emotional and experiential aspects; a cross-referencing of those with cross-cultural elements; and an index of qualitative methods examined within the framework of emotion, experience, and culture. The last contribution to the EKSIG track, 'Understanding the evaluation of new products through a dual-process perspective' by Anders Haug, is likewise looking in to human aspects of decision-making in design, namely the evaluation of new products. The gap between what the designer designs and what consumers like needs to be narrower, whereas the understanding of how consumers evaluate new products needs to improve. He studies the problem through interviews of 12 designers of consumer products and identifies 24 distinct types of pitfalls for new product designs.

The selected nine papers build a rich collection of case studies that potentially contribute to a more systematic approach for studying and integrating experiential knowledge into design practice and research. The papers focus on peer-level collaboration, illuminating its usefulness for the partners involved, and highlight the relationships built within the collaboration, as well as the approaches used and the new knowledge gained and transferred within the team.

3 References

- Bhömer, M., Tomico, O., Kleinsmann, M., Kuusk, K. & Wensveen, S. (2012). Designing Smart Textile Services Through Value Networks, Team Mental Models and Shared Ownership. In Proceedings of the Third Service Design and Service Innovation Conference (pp. 53–63). Espoo: Laurea University of Applied Sciences.
- Bowen, S., Durrant, A., Nissen, B., Bowers, J. & Wright, P. (2016). The Value of Designers' Creative Practice within Complex Collaborations. *Design Studies*, 46, 174–198. DOI: 10.1016/j.destud.2016.06.001.
- Ingold, T. (2013). *Making: Anthropology, Archaeology, Art and Architecture*. London: Routledge.
- Niedderer, K. (2007). Mapping the Meaning of Knowledge in Design Research. *Design Research Quarterly* 2(2): 1 & 5–13.
- Nimkulrat, N. & Matthews, J. (2017). Ways of Being Strands: Cross-Disciplinary Collaboration Using Craft and Mathematics. *Design Issues*, 33(4): 59–72. DOI: 10.1162/DESI_a_00461