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Embodiment and Experiential Knowledge

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Editorial: Embodiment and experiential knowledge

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1. Introduction

The Experiential Knowledge SIG track at the DRS2022 emphasizes the process of making as an act of accumulating experiential knowledge and examines possible modes of communicating such knowledge. We invited submissions that open up the processes of various human-material, human-object, and human-environment interaction in design practice. The EKSIG track thus provides a forum for a debate on design and making practice in research contexts and on such practice as a process of material-based and artefact-mediated thinking. The questions specifically addressed in the track include:

- How do processes of human-material, human-object or human-environment interaction play a role in design practice and research?
- How can experiential knowledge of materials be utilized in the process of designing in virtual environments?
- How may experiential knowledge be shared and discussed between research collaborators in transdisciplinary projects?
- What can we learn from indigenous cultures, their design and making, and the ways they pass on knowledge?
- What role does material interaction and reflection have in research for sustainable transitions?
- How do we best disseminate material-based research through design and related artefacts and results?
- What role does the artifacts have in design and craft research dissemination?
- How can practitioner-researchers carry, transfer, and communicate knowledge and expertise they have embodied through professional practice?



- What role do demonstrations and mimicking have in the transfer of material based experiential knowledge?

Not only do the selected papers for inclusion in the track reflect on the theme outlined above, they also show strong connection to the general focus of the DRS Special Interest Group on Experiential Knowledge (EKSIG) regarding the understanding of ‘knowledge’ and ‘contribution to knowledge’ in design research, especially in the areas where making and designing forms part of the research process. In addition to the Experiential Knowledge SIG track at the biennial DRS conferences, EKSIG has its own biennial conference series and the next conference will take place in 2023 in Milan, Italy. For information about EKSIG, see <https://eksig.org>

2. Experiential Knowledge SIG track: Selected papers

The papers selected for the track are concerned with various areas of design research. In their paper ‘From Wine Tasting to Materials Sensorial Perception: A Framework for Materials Experience’, Niki Boukouvala and Spyros Bofylatos elaborate on the established ‘materials experience’ framework (Karana, Pedgley, & Rognoli, 2015) by proposing a framework that transfers principles/concepts and lexicon/narratives from wine tasting, which involves sensorially rich experience. By doing so, the paper demonstrates the track theme regarding how embodied knowledge and expertise can be transferred and communicated. The work is especially directed towards sensorial or poetic characterization of new kinds of materials that are ‘grown’ or which exhibit ‘livingness’, in contrast to conventional materials that are inert or once-living. The overall aim is to find ways in which these new kinds of materials can be more accurately and engagingly described – a need that has emerged in relation to the acceptance of new materials in the design field.

‘The Unfolding of Textileness in Animated Textiles: An Exploration of Woven Textile-Forms’ by Alice Buso, Holly McQuillan, Kaspar Jansen, and Elvin Karana demonstrates the way in which material-based research can be best disseminated through artefacts and results. The paper points out the complexity and richness of textile structures that have been shadowed by the often impressive response to computational, biological, or smart materials in textile-based interactive systems. The paper argues for textiles not being just substrates, by illuminating ways in which novel interactions can be developed based on textiles’ inherent material qualities and structures (i.e. ‘textileness’; cf. Nimkulrat, 2009), resulting in complex woven forms that can change over time. By leaning more heavily on textileness and embracing the tangible familiarity of textiles, the designing of wearable interactions can eliminate waste from production and end of life – a problem of computational textile systems. With this, the paper also addresses the track theme regarding the roles of material interaction and reflection in research for sustainable transitions.

The topic of how experiential knowledge may be shared and discussed between research collaborators in transdisciplinary project is exemplified in the paper ‘Intertwining Material

Science and Textile Thinking: Aspects of Contrast and Collaboration’ by Emmi Pouta, Riia Vidgren, Jaana Vapaavuori, and Mithila Mohan. The paper summarizes the findings of an interdisciplinary research project aiming to develop soft robots that has brought together researchers from different disciplines including applied physics, materials sciences, design, e-textiles, textiles, and craft. Using ethnographic methods, the researchers also examine the collaborative aspects of the research process to understand the satisfactions and frustrations of the research team members. The paper offers some recommendations for establishing and running interdisciplinary projects within the e-textiles space where a group of eight textile experts bring together scientific argumentation (Berland, 2011) and practice-based research (Candy & Edmonds, 2018) to realize, facilitate, and support material development processes. From a series of semi-structured interviews, the authors identify three key areas for consideration: how different types of thinking are woven together; contrasting and conflicting ways of thinking; and best practices for knowledge sharing.

Nesli Hazal Akbulut’s paper entitled ‘Design Placebos for the Impossibility of Empathy in Videotelephony’ describes a research project that explores the relationship between body and hand movements and empathy in the context of videotelephony. The recent pandemic has pointed to not only the need for social contact but also the lack of multimodal and physical experiences when using virtual communication tools. As body language is largely hidden in videotelephony, over time the lack of this bodily communication can lead to ‘hollow’ interactions between loved ones and disable people from fully empathizing with each other. The use of cultural probes (Gaver, Dunne, & Pacenti, 1999) to generate awareness of empathic dimensions in communication through videotelephony technologies helped the participants to narrate their emotions through a set of artefacts.

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Dr Nithikul Nimkulrat is the convenor of the DRS Special Interest Group on Experiential Knowledge (EKSIG). Nithikul intertwines research with textile practice, focusing on experiential knowledge in craft and material processes in the context of design research. She is the main editor of *Crafting Textiles in the Digital Age* (Bloomsbury, 2016).

Dr Camilla Groth is the co-convenor of the DRS Special Interest Group on Experiential Knowledge (EKSIG). Camilla is a practitioner - researcher in ceramics and her research interests lie in experiential knowledge in creative practices, she also leads the Embodied Making and Learning (EMAL) research group.