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EDITORIAL

Experience, Materiality and Articulation in Art/ Design and Research Practices

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### STUDIES IN MATERIAL THINKING

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# Introduction

Over the past two decades, a continuous dialogue and fruitful convergence has been taking place in academia between art and design related practices and the practice of research. While the practice of research aims at the generation of new knowledge, art and design practices predominantly aim at the creation of new artefacts. However, this does not mean that there is no knowledge involved in the making of artefacts. Rather, knowledge and understanding of one's own creative practice are generated whilst the artefact is being formed. Such knowledge can be called 'experiential knowledge' or knowledge that is derived from experience and concerns 'how things appear' (Williams 2001, p. 189). How artefacts appear in the practices of artists/designers that are integrated into the conduct of academic research is the focus of this special volume 'Experience Materiality Articulation.' Direct experience of artists/designers performing research in academia is key in the discussion within this special volume. The volume takes a critical look at the interactive and dynamic relationship between experience and articulation from the perspective of practicing artist-researchers who deal with materiality in their practice.

Art and design practices tend to rely on the tacit understanding that the artist/designer has acquired through extensive experience of working with materials and processes. Such understanding or knowledge, according to Michael Polanyi (1967), is largely personal and cannot be fully communicated. The tacit dimension of experiential knowledge can be seen as a problematic issue of research through art and design (Frayling, 1993), practice-based research (Durling, Friedman & Gutherson, 2002), or practice-led research (Coumans, 2003) from a conventional understanding of scholarly research that necessitates explicit justification and communicable knowledge contribution. In this editorial, these terms will be used interchangeably to signify research that is carried out using the researcher's own practice as a method for inquiry. Attempts to articulate the designer's or artist's process of making that is utilized as a research method have been made among artist- and designer-researchers by adopting Donald Schön's (1983) concept "reflective practitioner" as an approach for observing and reflecting on their art and design practices. Articulating experience in the conduct of such research is further discussed and exemplified through research case studies in this special volume.

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# Materiality of Artefacts in Art and Design Practices

Art and design has been recognized as a domain in which practical and bodily experience provides an essential foundation. The world appears for us through our bodily senses and through our physical experiences of the material world. Materiality, as Blaine Brownell (2014, p. 51) points out,

not only influences the physical attributes of objects and environments, but also shapes experience. In design, each material decision is charged with meaning, and materials convey particular social, historical, and technological information. Sophisticated designers recognize that this embedded information can be used to elicit particular responses from a viewer, based on his or her prior set of experiences.

Accordingly, design thinking is mediated by use of visual and material tools and artefacts. Materiality plays a crucial role in art and design related practices: during designing and making, the designers are sketching out various kinds of visual or material ideas and experimenting with concrete materials. This creative work is attached to the physicality, since forming the object requires an engagement with various material resources. However, the role of material exploration and experimentation has not received much attention in the research context. How exactly this materiality plays a vital role in art and design processes has remained largely unquestioned until recently when the research through art and design approach emerged in academia. The nature of art and design practices lies in the exploration with materials, whether physical or digital. Artefacts, as tangible outcomes of practice, can be in the form of design objects, artworks, installations, exhibitions, performances, musical compositions, and creative software systems.

Because the researcher's art and design practice is utilized as a method for investigation, material exploration becomes an activity within the research process, which the researcher observes and reflects upon while making. Materiality of the artefact emerging in the material exploration not only affects the appearance and meaning of the artefact, but also shapes the experience of the maker during and after the exploration. The next section will examine how such experience can embed knowledge that, once properly captured, can be articulated in the research context.

# Experience, Experiential Knowledge, and Articulation of Knowledge

Research *through* art and design practices is a form of research enquiry that is carried out through the researcher's specialist practice in order to generate new knowledge or understanding about that particular practice from within it. The integration of creative practice in research connects the direct experience of the researcher with the creative process. One of the researcher's roles in this type of research is to create or make the artefact in relation to the research question or experimental objective that has been set up for the work.

The creation production of the artefact, specifically planned and created in accordance with the research question and/or research objectives, can lead the research process and create the researcher's awareness of his/her own creative process and temporal experience (Nimkulrat, 2012). However, in order to treat experience as the basis of knowledge, 'experience must itself be understood to involve propositional content: the sort of content expressed by complete sentences' (Williams, 2001, p. 97). This problematization of experience as the foundation of knowledge reveals the importance of articulation that is not just mere articulation but linguistic expression of propositional content.

In the context of academic research, the experience of the researcher in art and design practices therefore needs to be explicated. An essential characteristic of research is that it should be disseminated, original, and contextualized and the new knowledge or understanding must be in a form that can be shared (Biggs & Büchler, 2008). What the researcher does during the making and how they carry out that particular making become the researcher's experience that cannot be kept as 'personal knowledge' only to the researcher him/herself any longer. To explicate the experience within the creative process and the experiential knowledge generated, it is important for the researcher to explore ways in which his/her experience and knowledge can be communicated. Communicating research findings through written texts is a conventional means for dissemination. However, it may not be sufficient in most cases of artistic and design research in the creative disciplines. As Michael Biggs (2004, p. 11) points out, 'the transition from practice to theory cannot always be made [due to] a limitation of language.' The explication of knowledge generated from art and design practices can therefore be successful if other means than language are used. In research through art and design, when artefacts are made, these artefacts together with a critical exegesis can be an effective means for knowledge communication (Biggs, 2002, p. 24). Similarly, Linda Candy and Ernest Edmonds (2011, p. 136) assert that the outcomes from this kind of research in art and design tend to 'include both artefact and text that illuminates the context and trajectory of the research, and ... frame our perceptions of the artefact.'

In order to include artefacts in the articulation of research processes and outcomes, documentation of the creative process (i.e. how artefacts appear and evolve in the practice) is crucial. Since art and design practices are typically highly visual, the practitioner naturally tends to adopt visual means for documentation, depending on the nature of the practice. For example, they may include sketching, photographing, sound and video-recording; methods that are not new or limited to research in art and design. These methods are frequently utilized for field research in anthropology and sociology (see e.g. Pink, 2006). Documentation connects art and design practices with the research context, making the researcher's personal artistic experience accessible and discussable (de Freitas, 2002, 2007; Nimkulrat, 2007). Documentation reveals the process of making artefacts as well as the artistic researcher's experience of making in a form that can be used as research data for analysis. Documented visual data can then be present alongside textual explanation to articulate experiential knowledge.

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# Contributions to the Special Volume

This special volume is the post-conference publication of *The Art of Research V*, an initiative of the EMPIRICA Research Group at Aalto University School of Arts, Design and Architecture (<a href="http://designresearch.aalto.fi/events/aor2014/">http://designresearch.aalto.fi/events/aor2014/</a>) in collaboration with *The Material Thinking Research Platform*, School of Art and Design, Auckland University of Technology.

Selected authors were invited to submit reworked manuscripts for a second round of peer review after the conference, and the revised submissions were subjected to further development in collaboration with the editorial team (Nancy de Freitas, Nithikul Nimkulrat, Sofia Pantouvaki, and Pirita Seitamaa-Hakkarainen). After the peer review process, seven papers written by practicing artistic and design researchers were selected for publication in the special volume. The authors contributing to this special issue come from a broad spectrum of creative disciplines whose practices involve the practitioner's bodily experience with a particular material or medium.

The special volume starts with Astrid Heimer's paper titled 'The Aesthetics of Form Knowledge: Embodied Knowledge Through Materialization', which articulates her bodily experience of forming clay and demonstrates how embodied knowledge of form is learned through the senses. Heimer utilizes five phenomenological concepts: *animated organism, zero-point, Leib, body-scheme* and *kinaesthetic* together with her reflections of material (clay) agency to form a theoretical framework that provides access to subjective, embodied experiences and eventually develops new form knowledge—an aesthetic embodied theory of form. Mary Jane Hackett also examines the materiality of form and material agency in her paper titled 'Finding Form in the Dynamics of a Quench'. In Hackett's case, the material is hot steel and the material agency is temporal transformative energy. The paper reveals how Hackett captured such energy in an aesthetically pleasing form that would disclose her experience with the material by using videos and photographs of a quench, a blacksmithing process of cooling and hardening steel.

Yeseung Lee's paper titled 'Seaming, Writing, and Making Strange: Between Material and Text' makes explicit the uncertainty and ambiguity of artistic research practice through a process of translating her experience of making seamless woven garments into a written text. In this process, Lee recognizes an 'empathetic' relationship developing between the ongoing artefact, documented material and fragmentary texts, which are subsequently presented together as the research outcome. This form of articulation emphasizes that in artistic research, rich ambiguity between material and text remains, even when the researcher has arrived at a point of settled knowledge. Articulating the practice of design research in forms of texts and visuals is also evident in Wim Goossens, Arnaud Hendrickx, and Nel Janssens's paper titled 'A Case of Poetic Measuring: Isopleth'. This paper investigates the potential quality of poetic measuring as an embodied act within the context of architectural research. The process of constructing *Isopleth* (a site-specific flat concrete sculpture in a natural environment) was used as an 'intrinsic case study.' The case sheds light on personal knowledge gained from embodied experience in architectural practice. During the construction of Isopleth, the authors articulated a different kind of measuring namely 'poetic measuring' that can be seen as an intuitive way of knowing—combining memories and perceptions with embodied experiences.

'Making With Others: Working with Textile Craft Groups as a Means of Research' by Emma Shercliff and Amy Twigger Holroyd investigates the collective experience of making textiles. Through Shercliff's research-led participatory textile making activities examined as the case study, the paper demonstrates how 'making with others' can be considered a research approach that can be adapted according to the variables presented by particular research questions. In this case, the dialogue of participants in the craft groups' activities contributes to the gathering of rich data for research analysis. Kristi Kuusk, Stephan Wensveen, and Oscar Tomico also work with 'others' in their research practice. In this case, they are craft experts. Their paper, 'Craft Qualities Translated from Traditional Crafts to Smart Textile Services', investigates a process of designing sustainable smart textile services that was built upon a dialogue between the materiality of smart textiles, the designer-researcher (Kuusk), and the community of craft experts. By utilizing traditional crafts as a source of inspiration in the design process and as a reference to analyze new smart textile designs with craft experts, the investigation resulted in a smart textile proposal that suggests Augmented Reality as an added feature and a set of design guidelines as craft qualities of the textile material.

The special volume is closed with 'The Knowing Body in Material Exploration' by Camilla Groth and Maarit Mäkelä which explores the role of the body in the process of knowledge production in the field of art, craft, and design. The paper examines two cases of Master design students' material exploration processes, looking into their manipulation of material and how knowledge is constructed through their sensory experiences. The cases reveal that previous bodily experience with materials guides the student toward their choice of materials before actual manipulations have begun. That experiential knowledge formation in physical material exploration is an important consideration in the education of design students.

# Final Remarks

The resulting collection of papers in this volume illustrates a variety of approaches that are currently developing internationally. Together, they make a valuable contribution to the discourse on material thinking through shared understanding of the ontological, epistemological, and methodological issues of artistic and design research. This volume of research papers is concerned with unique ways in which artists and designers realize their objectives through their various methods, tools, and skills.

The co-editorial team for this volume hopes that you will find fresh perspectives in the work of these artistic and design researchers which you can apply in your own fields of research and to your specific artistic projects. We invite you to share this range of contemporary thinking and reflect on how our evolving understanding of these different fields is shaping the future of research.

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Nithikul Nimkulrat is Professor of Textile Design and Head of the Textile Design Department at Estonian Academy of Arts in Tallinn, Estonia. She earned a Doctor of Arts from Aalto University in Finland in 2009. Her research interest is rooted in her textile practice, reaching across experiential knowledge in art and design, especially the role of creative practice in research and that of materials in creative processes. Her creative artefacts have received awards and been exhibited internationally, while her research has been included in international academic journals and publications. She is co-editor of the book *Reflections and connections: On the relationship between creative production and academic research* (2009) and convener of the Design Research Society Special Interest Group on Experiential Knowledge (EKSIG).

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Sofia Pantouvaki is a scenographer and Professor of Costume Design at Aalto University, Finland. Her background includes over 75 designs for theatre, film, opera and dance productions in Europe as well as numerous curatorial and exhibition design projects. She is co-author of History of Dress: The Western World and Greece (2010); editor, Yannis Metsis: Athens Experimental Ballet (2011); co-editor, Presence and Absence: The Performing Body (2014), and co-editor, Studies in Costume and Performance (Intellect, 2016). She is Project Leader of Performance: Visual Aspects of Performance Practice and Vice-Head for Research, OISTAT Costume Design Group; Costume Curator for World Stage Design 2013, and Associate Curator, Costume in Action (WSD 2013). At Aalto University, Sofia founded Costume in Focus, the first research group on performance costume, and leads a 1.2M€ Academy of Finland project on Costume Methodologies (Principal Investigator, 2014-2018). Sofia has taught, lectured and published internationally. Her recent research focuses on insights and processes in performance costume, fashion and costume curation, the potential of new materials and embodied technologies in costume practice, and clothing in the concentration camps of the Second World War.

### Nancy de Freitas

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