



## Editorial

### Making, Materiality and Knowledge

This volume of FORMakademisk is a special issue which features articles based on presentations made at Making - an International Conference on Materiality and Knowledge, Notodden on September 24-27, 2012 (Making, 2012). This FORMakademisk publication is accompanied by special issues from two other scientific journals, the New Zealand-based Studies in Material Thinking (Freitas & Lutnæs, 2013) and the Nordic journal *Techne A Series*, published by NordFo (Johansson & Porko-Hudd, 2013).

The main topic of this issue is making. Making is here defined as the process of creating something, an intentional activity in which an individual or a group of individuals actively engage in developing and changing something, such as a material, so that it becomes something else. The term was first introduced and used in an academic setting by the Nordic network for cooperation in research education in the development of the Millennium Program (Dunin-Woyseth, 2010). The term was then used as a common denominator for the activities which practitioners engage in within the fields of art, design and architecture or, collectively, the ADA fields. The goal of introducing making as a collective term was to emphasise the communalities among these professions to determine a common ground and thus develop making as a discipline of its own (Dunin-Woyseth & Michl, 2001; Dunin-Woyseth & Nielsen, 2004).

In this special issue, the term is used in a broad context with the intent to introduce a process of making which an individual or a group can undertake, but not only within the aesthetic ADA fields. Education or the process of teaching or learning is also seen as something which is made and which involves other intentional processes.

Today, developing the knowledge of the making professions and making education has gained broad international interest. This interest manifests itself through research projects, research methodological and philosophical discussions, conferences and journals within and across several different fields of study. Since the introduction of the term and its development as a particular field of instruction and research, research has rapidly evolved as research on, research in and research through processes of making (Frayling, 1993; Gulliksen, 2009; Sevaldson, 2010).

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### Making and the sense it makes

#### Abstract

*Making is ubiquitous, and it is as ancient as culture. In fact, making is the practical dimension of culture. It transforms matter, and it articulates meaning. Making has a cognitive dimension; it makes sense. But this sense is not ordinary discursive knowledge – making yields another kind of knowledge, often referred to as ‘tacit’ because it seems to go without saying. Now, if it is tacit how can we speak about it, and what is its role in making?*

*During the last decades, we have witnessed, perhaps also contributed to, the appearance of making on the academic arena. It has been met with a great deal of scepticism on the side of the institutions – yet studies such as architecture, design and arts, generally acknowledged as ‘making disciplines’, have proved to be researchable, and the interest they arouse keeps growing. The present series of articles based on contributions to the Making conference at Notodden, Norway, in September 2012, is one among several indications that making is increasingly recognised as ‘an emergent field of study’.*

*But what exactly does it mean for a human activity to be recognised as a ‘field of study’? This wording may refer to at least three quite different epistemological situations that I will discuss briefly: 1) Making seen as a study, or inquiry, in its own right, independently of scientific research, as a source of non-scientific cognition; 2) making as the object of study within academic research, as the object of scientific cognition, and 3) making as an integrated part of academic research, as a source of scientific cognition redefined.*

### Invited Articles



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### Explorative Materiality and Knowledge

#### The Role of Creative Exploration and Artefacts in Design Research

#### Abstract

*Juxtaposing the nature of design and the foundations of research in the traditional science and humanities disciplines puts their differences into sharp relief. The comparison highlights the key characteristics of design – its creative and experiential nature – which any design research must take into account, as well as the theoretical foundations of research. The aim of this article is to*

develop an understanding of the ontological, epistemological and methodological issues of design research, and to offer a framework that can embrace equally the notions of creativity and experiential knowledge, and of academic rigour.

Furthermore, the potential roles of the design process and artefact within research are examined within this theoretical framework, which suggests that design processes and artefacts can – if appropriately framed – play an important part in the research process, facilitating an approach commensurate with the aims of design enquiry. A case study of the Niedderer's own work serves to illustrate the balance and integration of theory and (creative) practice within the research process, and how this integration can enable a multi-layered contribution to the theoretical and practical advancement of the field.

**Keywords:** design, research, practice, knowledge, creative exploration, artefact



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## Knowledge in the Making On Production and Communication of Knowledge in the Material Practices of Architecture

### Abstract

This article discusses some conceptual frameworks and notions used in, or with the potential to further develop, theories and understandings regarding the specific processes and forms of knowledge in creative practices of architecture, design and art. More articulate conceptual frameworks are not only of importance for strengthening disciplines and practices, but can also make valid contributions in wider societal contexts in relation to contemporary challenges in built environments. With the point of departure in the notions “material practice” by Stan Allen and “making disciplines” by Halina Dunin-Woyseth, theoretical frameworks and approaches by, for example, Andrew Pickering, Nigel Cross, Albená Yaneva, and Gilles Deleuze & Felix Guattari are discussed. The contemporary world has brought challenging societal developments and complex transformations of built environments, but new tools have also enabled other forms of design experiments, including non-verbal languages and various model worlds. The article argues that we must constantly study the contemporary situation, but also reflect upon our means of designing and production, as well as our forms of working and collaboration. New relationships between theory and practice, between research and practical designing, between academia, architectural practice and different actors in society, must be articulated and established through conscious strategies.

**Keywords:** making disciplines, architectural knowledge, design knowledge



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## Making sense

### What can we learn from experts of tactile knowledge?

#### Abstract

This article describes an embodied way of making sense through making with the hands. We examine the potential of tactile experience in the making process and analyse what tactile experiences mean. The study takes place in the context of an era marked by audio-visual dominance. The article presents a case study that observed and interviewed deafblind makers while they worked with clay. The findings reveal that modelling in clay resembles the visualisation process of sketching. As such, it may contribute to thinking through the hands. Language is not a self-evident communication tool for transferring tactile skills. Based on our case study, we propose the use of tactile communication in the process of transferring tactile knowledge through making with another person's hands.

**Keywords:** tactility, embodied knowing, making, clay, deafblind

#### More Articles

Nithikul Nimkulrat:

#### Situating Creative Artifacts in Art and Design Research

Terence E. Rosenberg:

#### Intermingled Bodies

#### Distributed Agency in an Expanded Appreciation of Making

Lisa Meaney:

#### Towards Posthumanist Design: With-Water

Kirstine Riis:

#### A systems theory perspective on the relationship between practice and research in the making disciplines

Karel Deckers:

#### The Unheimliche Approach in the Making of Interiors

Jessica Schoffelen, Selina Schepers, Liesbeth Huybrechts & Laura Braspenning:

#### Making design representations as catalysts for reflective making in a collaborative design research process.