

Situated Design Methods

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The Book

Today, design extends into areas far beyond the traditional design professions. Design takes place in domains as different as health, culture, education, business, transportation, etc. With this expansive development, design methods become multiple and diverse; various domains (re)produce their own ways of designing and ways of approaching design through different domain specific design methods. However, most books about design methods come out of traditional disciplinary design fields representing iconic practices from singular fields. As an alternative, this book takes an interdisciplinary point of departure. By doing so, the book contributes to the understanding of design methods as a spreading and heterogeneous phenomenon.

To conceptualize the multiplicity of design methods we employ the notion of situated design. Situated design has roots in Participatory Design (Greenbaum and Kyng, 1991; Simonsen and Robertson, 2012) and highlights that design is always carried out from an embedded position. Famously, Haraway makes the argument for situated knowledge (1988), and this argument has since been developed in relation to design (e.g. Suchman 2002; Bjögvinsson, Ehn, Hillgren 2012: 101; Büscher et al 2001). Haraway argues for situated knowledges and against the possibility of universal knowledge or what she calls ‘playing the God trick’, pretending to see from an abstract, invisible ‘nowhere’ – as an eye hovering indefinitely above. Inspired by Haraway, Suchman opposes the stance of design from nowhere (2002: 140), and suggests considering design as located practices; a repositioning she terms ‘located accountability’ (ibid: 142).

Following from this idea of seeing design as located, design researchers Bjögvinsson, Ehn, and Hillgren (2012: 102) point out that “a fundamental challenge for designers and the design community is to move from designing ‘things’ (objects) to designing Things (socio-material assemblies)”. This book contributes to this endeavor. It deals with the processes, interactions, infrastructures, and assemblies that constitute design activities and that are central in the making of durable socio-material assemblies. Phrased in a slightly different manner: it deals with all the ‘thinging’ that goes into the making of ‘things’ (see also Binder et al 2011).

Each chapter in this volume presents and considers a situated design method. To undertake the task of emphasizing the broad scope of design methods, the book contains cases from highly diverse areas: information technology, service and experience, art productions, communication, health, work life, landscape science, regional planning and development, urban studies, sustained environmental studies, energy, and more. In so doing, the contributions in various ways highlight the situatedness of design. The strength of the contributions is that they employ interdisciplinary vocabularies comprising the technical, human, and social sciences in their articulation of the processes and practices in which design is embedded. They provide a rich and multifaceted understanding of the different ways in which design is much more and much else than the work of craft-based designers. This way, the book draws attention to the design work that is black-boxed when design is singularly conceived as the master plan of the architect or the brilliance of a star designer. It highlights how design is a relational and distributed accomplishment. Design is situated – and this entails a demand for situated design methods.

Aim and Objective

We aim at making a book that can form a basic reading within all interdisciplinary design programs at advanced bachelor and master university levels. The objective is to have experienced design researchers inform students about how to apply situated design methods in their design projects. To obtain this goal, the book outlines ways in which design theory, design research and design practices may inform each other. Thus, the book illustrates how research and design are intertwined.

Following the typology of design-research perspectives from Cross (1995, 2006, 2007), the book puts an emphasis on *research through design*. That is, rather than solely presenting research-based design or research on how design works, the book focuses on design-based research; processes where research and design become fused. Accordingly, the chapters in the book provide examples of how design practices spur research and vice versa. By doing so, the book suggests that design research and design are not separate activities but interrelated practices. In making this claim, the book subscribes to a view on design research as a form of 'mode 2' knowledge (Nowotny 2004, see also Simonsen et al 2010).

The book views research as performative. This means that research is shifted from a position of providing perspectives on a reality that forms itself regardless of research, into a position of making reality while researching it. Research not only describes what it studies, it also makes, creates, enacts, and designs. Inquiry forms part of the enactment of reality; research is performative (Law & Urry 2004: 390, see also Mol 2002, Law 2004, 2007). This shift from epistemology (building informed perspectives on a world which is out there as a separate entity) to ontology (contributing to, shaping and building the world) makes a way for design as a central research activity. Research no longer looks at the world; it also crafts, fabricates and creates the realities of inquiry. Research designs reality.

All chapters in the book are co-authored by scholars from Roskilde University who are affiliated with design in their teaching, research, and work as designers, as well as associated to the university research initiative Designing Human Technologies. Roskilde University is known as a pioneering university dedicated to interdisciplinary programs based on problem-based and exemplary project work (Olesen and Jensen, 1999; Mallow, 2001; Olsen and Pedersen 2005; Andreasen and Nielsen 2013; Nielsen and Andreasen, forthcoming). In problem-based design projects we often see a two-part structure: a traditional academic analysis of a problem and a design solution to this issue. Whereas the traditional analysis is easily explained in terms that fit academic conventions (regarding research methods, philosophy of science, and theoretical approach), the second part is not as easy to account for: How did you come up with your ideas for the design? Which techniques did you use in working with these ideas? Why did you choose a specific design over other options? What is the relation between the analysis, the identified problems and needs, and the design solution? How is it possible to justify the design in an academic way? Questions as these are often difficult to answer. This book provides students across academic fields with a core text to reflect on the methods they apply in their design projects.

All chapters illustrate and reflect on specific design methods as they are used and experienced empirically. The chapters represent methods from a variety of areas. Special attention is paid to the discussion of how methodological knowledge may be transferred to future design projects, including student projects. The book thus outlines a new suggestion for thinking about problem-based project work as work that does not only analyze problems but also formulates academically anchored suggestions for design.

Background

In 2010 we published the book *Design Research: Synergies from Interdisciplinary Perspectives* (Routledge), which described a new interdisciplinary research area with a social science orientation

at its heart. The book investigated the process of designing with the overall intention to understand the design process better. It clarified common aspects – in terms of features and approaches – that characterize all strands of research disciplines addressing design, and undertook an in-depth exploration of the social processes involved in doing design, as well as analyses of the contexts for design use. The book concluded by eliciting ‘synergies from interdisciplinary perspectives’ and outlined a general design process depicted as a series of iterations (Figure 1).

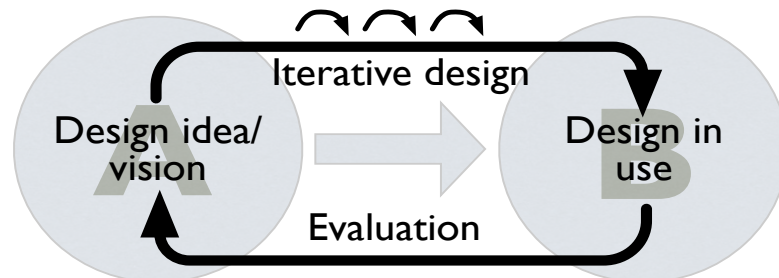


Figure 1: The design process depicted as a series of iterations. © Jesper Simonsen 2010 (Figure 14.2 from Simonsen et al., 2010, p. 205).

As indicated in Figure 1, we emphasize *processes* and define the human activity of ‘designing’ by focusing on the non-routine and creative aspects of producing, facilitating, encouraging, advancing, and causing a change process that transforms one situation (A) into another (B) (ibid, p. 202):

- Designing involves the intention of problem solution.
- A tangible outcome is realized and can be identified as the result of a design process.
- The outcome of a deliberate design process might not correspond to the intended outcome.

With our new book proposal *Situated Design Methods* we want to continue our interdisciplinary endeavor and explore design methods. We will write this book with a participatory bottom-up approach similar to the one we used in making the previous book: By mutually informing, sharing, and discussing the different methods that are applied in different areas. This way, examples from existing traditions will inform and inspire each other and provide an opportunity to create an overview and to reflect on methodological experiences.

Structure of the Book

The diversity of current design methods entails that the book must cover a broad range of subject areas. The chapters thus demonstrate different methods and traditions. Some chapters emphasize action research oriented approaches, others take a sociotechnical approach, yet others descriptively approach empirical fields. To help the reader orient and navigate through the chapters of the book, it is structured in two ways: First, it is divided into four distinct, but related, sections. Second, the introductions to the four sections as well as to all chapters have a shared structure, which consists of outlining their answer to the four questions: What, Why, Where, and How.

The book is divided into four sections:

1. *Methods for Projects*: Methods for defining the scope of a design project and organizing the activities in a design project. (six chapters)
2. *Methods for Aesthetic Experiences*: Methods dedicated to designing aesthetic experiences based on real-world examples. (six chapters)
3. *Methods for Collaborative Processes*: Methods for organizing temporary design activities using various techniques, representations, and visualizations. (six chapters)

4. *Methods for Sustainability*: Methods for sustainable production, technological development, and consumption. (four chapters)

Each section and chapter is introduced by outlining its contribution in terms of:

- *What*: What kind of method is presented and what are its constituent elements? What empirical case is used for illustrating the method?
- *Why*: Why is the method relevant and important for design and what does it offer? Why do we need the outcome/design resulting from the use of the method?
- *Where*: The application area of the method. In which domains, situations, and contexts can you use the method?
- *How*: Which foci, central guidelines, tools, parts, or processes does the method comprise? How does it address and approach situatedness?

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