Towards a Unified Theory of Design?

**Keywords:** design theory; design research; methodology; emergence

1. Catalyst Information

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2. Conversation Description

This conversation originates from a behavioural researcher’s genuine expression of surprise of not finding a dominant theory of design or anything close to it. There is an ongoing debate on how design research is (or should be?) different from related sciences. E.g. the recently established Journal of Design Science aims to “facilitate communication across diverse fields and serve as a bridge [between] scholars from a diversity of disciplines.” This shows the felt urgency to bring together knowledge from multiple disciplines. However, a unified theory has not (yet) emerged. Can we indeed unify multidisciplinary knowledge into one theory? Should we? Löwgren and Höök (2012) propose “intermediate levels of knowledge” (e.g. annotated portfolios). Will this help us to move “towards a new science of design” (Dorst 2008)? Is there perhaps a “possibility for accumulative theoretical advancements … using tools of theoretical analysis and discourse” (Stolterman and Wiberg, 2010, p. 99)? A naïve ‘scientification’ seems unfit for design research, even triggering strong defensive responses. Even so, what can be a fruitful role of conventional scientific methods in design research?

We invite the audience join our catalysts, both physically and virtually (via a running digital commentary projection) to discuss with us the following:

- Is there a unified or at least dominant theory of design?
- How would such a theory contribute to design research (if at all)?
- Is theory always “of what is”, can there by theory of ‘what can/should be”?
- What would be the unit of analysis (designer? artefact? process? ...)?
- What are promising directions for (future) research on a unified design theory?
- If designers typically use ‘scientific theory’ from other disciplines: how can it generate any of that stuff itself?
- Is there a meaningful role for (conventional) scientific method in design research?

4. Set-up of your session

Our conversation will start with a researcher’s (Jörg Henseler, background in behavioural research) genuine expression of surprise of not finding a dominant theory of design or anything close to it. The conversation, moderated by Jelle van Dijk, will continue with an exploration of perspectives. This will depart with brief prepared-statements of the catalysts, after which a more open conversation will take place. The purpose is to collect a series of perspectives and frame their differences, similarities and ambitions in a constructive manner.

During the conversation, the facilitator will pose a series of questions that will help this elaboration. The overview of perspectives will be presented on the background [powerpoint/keynote presented on a screen behind the catalysts] and elaborated real-time [the presentation will be adjusted according to the conversation insights], facilitated by Geke Ludden. The audience will be involved to nuance the conversation insights both directly and via real-time digital contributions using a suitable social media platform.

5. Type of space and equipment required

Our idea of the set-up is a central space where catalysts engage in a conversation, with audience in a half circle around it, inviting active participation. Our conversation will be accompanied by a realtime, moderated annotation of emerging insights and issues, projected visually on the wall (such that all present can see its contents). The evolving presentation includes a series of pre-defined topics and statements that are prepared by the catalysts and moderator to initially direct the conversation. The annotation facilitator will also integrate audience’s live online comments (via social media) to derive themes that will be fused back into the ongoing conversation. This means we need sufficient wifi bandwidth. We will bring our own laptop for the digital content to be displayed.

6. Dissemination strategy

Our conversation will be documented on the spot as the conversation insights will be published during the conversation in a dynamic keynote with the realtime documented annotations as a starting point. Besides arriving at an overview of statements, perspectives
and their nuances, the evolving document will also reveal the rationale. The dissemination report will thus consist of the conversation insights, annotated with footage recorded during the conversation. The resulting document will be published via the online repository of the University of Twente, and it will receive a DOI. We intend to collect further feedback and comments from scholars interacting with the document, and aim at compiling the gathered insights into a journal article.

7. References


About the Catalysts:

**Jörg Henseler** holds the chair of Product-Market Relations (Department of Design, University of Twente). His research interests encompass the interface of design and marketing, structural equation modeling, and in general the construction and testing of theories in marketing and design research.

**Jelle van Dijk** is assistant professor in the Human-Centred Design group (Department of Design, University of Twente). His research is on embodied cognition theories, interactive empowering artifacts, human practices and design-based forms of inquiry.

**Caroline Hummels** is full professor Design Theory of Intelligent Systems at the Department of Industrial Design at the Eindhoven University of Technology. Her current activities concentrate on designing for personal, social and societal transformation, with a special focus on health and wellbeing.

**Mikael Wiberg** is full professor of Informatics at Umeå University. His research is concerned with the entangled ways through which digital materials sets or reconfigures the scene for social, cultural and architectural practices.

**Ann Light** is Professor of Design and Creative Technology and leads the Creative Technology Group at the University of Sussex. She specialises in design for social change and is co-author of “Designing Connected Products: UX for the Consumer Internet of Things” (2015).

**Geke Ludden** is an assistant professor in the Interaction Design group (Department of Design, University of Twente). She holds a PhD in (multisensory) design and product experience. Her current interests lie in design for behaviour change and empowerment.