The Role of Theory in Design:
Reflections on *Examining Practical, Everyday Theory Use in Design Research*

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It is an honor to be asked to provide commentary on this article, *Examining Practical, Everyday Theory Use in Design Research*, as it is a unique opportunity to comment on work that seeks to investigate something so fundamental to design scholarship—the use of theory.

Design has had a somewhat complicated relationship with theory. Historically design has had a relationship to craft and a focus on doing (and in certain cases, experimentation). As the study of design has moved into academia, and into what Friedman (2003) has called "reasoned inquiry" there has been a move towards developing a theory (or theories) of design. The value of theory in making a field systematic cannot be overstated. Thus as the field of design seeks to become better structured, it is important that there is emphasis on how design theory is articulated and actually utilized in the process of design research.

This article engages in an attempt to analyze and understand the possible uses of and approaches to theory in design research. In this, it takes an important step into understanding the theoretical underpinnings of design as practice and scholarship. As the authors point out, others (Friedman, 2003; Love, 2000; Weick, 1989, 1995) have also ventured into important meta-level considerations of theory, to develop and expand our understanding of scholarly and practitioner work in design. The focus in this article enters into a broadly-applicable, yet underrepresented area of theory-examination, in looking across common themes that characterize how scholars *actually use* theory in design. In academia, theory often operates as a given or absolute, an unquestioned abstraction that we recognize as the guidepost for our work, but that is often left unexplored in how it manifests in the everyday work of scholars. Thus the authors do an important service to the field in engaging in this discussion. It is clearly one of foundational importance if scholarly design work is to develop a certain "meta-cognition," about how we work, think, and develop or share knowledge.

At the same time, in any such endeavor, there are issues, gaps, and unresolved tensions within the work that should be noted and engaged. I point to some of these in understanding where they lie within this particular line of work, but also as broader critical considerations for the field, as it continues to strengthen its position as an academic discipline.

One core issue that arises here is the need for more specificity in use of terms and general terminology. This is most notable being the lack of a strong working definition being given for what the authors mean by theory. They state up front that, "in this article our aim is not to

demarcate or define theory. Instead, our aim is to investigate how researchers present their use of theory in written texts." Yet, this lack of a definition speaks to a broader issue in scholarship, of the need for clear statement of how core concepts of are defined on the authors' terms. This problem of clarity around the object of study complicates things when they explain their analysis of the articles—it is not as clear as it could be what they mean in saying that a certain paper is theory-driven or not. For instance, the authors often use the word "frameworks" as being similar to "theory." Which may certainly be the case, but since it is never clarified as to how these relate or differ, our understanding remains murky. A similar issue occurs when the authors speak of attempting to develop "models" of how theory plays out in the articles they analyze. But without a clear initial description of the term, it begs the question of how models are different from theories and frameworks? Implicitly we could assume the authors see distinctions in these terms—but this requires more definitive treatment in the text. This point being that some discussion of how these core terms relate could provide further clarity and consistency. Again this issue (of care with usage of core terminology) is a broader issue of scholarship in design and other fields.

There is also a more general issue overhanging the paper, having to do with the fact that for work focused on theory, it is somewhat a-theoretical in nature itself. The authors take on empirical examination of how theory is used in design research, but there does not appear to be a strong theoretical approach framing their own work. In this sense, it would be wonderful to see more discussion of and references to other work or thinking on theory, from areas such as the philosophy of science, social science or others. Including these points would serve to enrich the ideas, provide context, and situate the article within a broader literature and discourse around the philosophy of research.

Finally, there are some concerns with the methodology, and how it is conveyed. A clear and justified methodology provides a rhetorical argument, to convince the reader of due diligence in methods as well as the resulting discussion or findings. Composing a methods section requires a recognition that the readers do not instinctively know the "what" and "whys" of the researchers' methodological choices, but need explanation, rationale and justification, in order to validate conclusions and stances. The article in question raises a few questions in this area as well.

For instance, the authors note that they engaged in a round of "unmotivated looking" at the texts. But without a methodological rationale or theoretical justification for "unmotivated looking," the reader might ask if this is a viable or previously justified technique in qualitative or grounded theory work? This even begs the question of whether "unmotivated looking" is even possible!

Similar questions might be asked about aspects of the coding and methods of analysis. One such instance occurs where "no theory" is given as a coding category, when not one example emerged in the study data. Such a categorization choice, particularly in coding processes specifically noted

as emergent and using grounded theory, appears somewhat ad-hoc and unsupported by either data or formal justification.

That is not to say that the authors have not done their work with due diligence, but rather that in places where one can identify gaps or questions, it signals the need for more full and thorough treatment. Anfara, Brown, & Mangione (2002) point to the necessity of thorough details and complete justifications in methods, as the cornerstone of the defensibility of qualitative work. This allows a study's methods to be a strong rhetorical argument supporting what has been done. In broader terms, this suggests that design scholarship benefits by casting a careful eye to issues of methodological rigor, and how it is communicated as an argument that advances the work.

In conclusion, my aim in this commentary has been to speak to the value and potential in the work in this article, but also to use certain points to consider in a broader discussion around these issues. I would like to sincerely thank the authors of this work, along with the editors of this journal, for the opportunity to comment and engage in this discourse. As design research continues to grow as a scholarly field, such engagement with theory in meaning and use is of immense value, and it is a pleasure to be a part of that conversation.

References

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