
Book Review

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Analyzing Design Review Conversations
by: Robin S. Adams and Junaid A. Siddiqui (Eds.)
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Design studies are a fairly mature research field, concerning itself (as the name implies) with the processes and foundational concepts of design for more than 50 years. One entity providing important contributions to the field of design studies since its 1991 inception is the Design Thinking Research Symposium or DTRS for short. The symposium has been held ten times over the years and one of its main characteristics is the creation of a common dataset to which design researchers of various disciplinary origins are invited to apply analysis methods of their choice. Perhaps the most famous instance is the DTRS 2 symposium held in Delft in 1994, where the focus was on the use of protocol analysis as a research tool for analysing individual and team activity in design processes (see Cross et al., 1996).

The book at hand documents the DTRS 10 Symposium at Purdue University in 2014. The topic of the symposium, as the title suggests, was the study of design review conversations. Design reviews in general comprise a multitude of situations in design education contexts, ranging from the desk crits, where teachers gave feedback and posed questions to individual students or teams of students at the work table, to formalised final presentations with grading teachers or external jurors. Moreover, the concept of design reviews in general also applies to professional design activities such as structured criticism and assessment at specified milestones in contemporary design methods. This book, however, is exclusively focused on design education as witnessed by the contents of the common dataset: a collection of video recordings and transcripts covering design review sessions in six different design courses: choreography, entrepreneurship, industrial design (undergraduate and graduate), mechanical engineering and multidisciplinary community service. All of the courses except one of the industrial design courses were on undergraduate level. The multidisciplinary group of researchers participating in the symposium were invited to choose data as well as analysis methods to reach initial results, which were then processed collaboratively in a workshop format to increase the degree of cohesion and multidisciplinary synergy in the resulting body of knowledge.

Analysing design reviews

Design reviews in educational contexts have been studied to some extent within the design studies field, with some notable examples being Schön's (1987) influential conceptualisation of the master-apprentice relation as a reflective practicum, Goldschmidt's (2002) analysis of the centrality of the crit in design education, and more recently, the detailed studies by Murphy et al. (2012) on how reasoning is embodied and performed spatially in architectural critique. However, to the best of my knowledge, there is no comprehensive multidisciplinary source approaching the topic in a concerted fashion. Or rather, there was no such source. The book at hand clearly fits the description, at least on a table-of-contents level. It contains 19 substantial chapters reporting studies by different researchers and groups of researchers where methods from a variety of disciplines are brought to bear on selections of the common dataset. The core matter of the book is organised into five loose themes: design inquiry, design discourse, design interactions, design being and design coaching.

As could be expected with such a wide variety of research interests and methodological approaches, it is virtually impossible to say something meaningful about the book as a whole. My particular interests as a design teacher are heavily influenced by Donald Schön; I am convinced of the value of craft and practical knowing, and I am always eager to improve my didactic abilities. Based on this personal filter, I have chosen three chapters from three different themes to give a sample of the nature of the research and insights found in this book.

Normative concerns, avoided

Chapter 13 in the book is written by Colin Gray and Craig Howard. Its full title is 'Normative concerns, avoided. Instructional barriers in designing for social change' and it appears within the theme of design discourse.

Gray and Howard are interested in the ethics of design, and specifically in how ethical choices or what they call normative concerns manifest themselves throughout the design process. They perform longitudinal analysis of four industrial design cases from initial gestation to final design presentations, using interpretive methods drawing on a Habermasian foundation of critical qualitative inquiry.

A very interesting finding from this analysis is that normative concerns enter the design processes in the studied cases only if there is a phase of user-centred research to initiate the design work, and the normative concerns turn out having a hard time staying alive throughout the design process. An example might be the graduate student Julian whose work on a broader notion of laundry started with the identification of ergonomic and financial barriers to access for elderly users. Still, towards the end of the design process, Julian had refocused his efforts on new conceptualisations of laundry for privileged businesspeople. Gray and Howard demonstrate convincingly in their study how Julian and his professor collaborate to re-narrate the project to accommodate the changed direction (which seems to reflect more of Julian's heartfelt interests as a prospective designer). Other cases add further evidence to the emerging image of industrial design education as foregrounding formal, material and client-related considerations at the expense of normative concerns and the ethically-informed character of the designer in training.

Becoming a designer

Chapter 18 by Janet McDonnell, illustrating the theme of design being, is entitled 'Becoming a designer: some contributions of design reviews'.

McDonnell's interest, which is not unrelated to that of Gray and Howard (above), lies in how novice designers develop their competence as practitioners and how they develop their understanding of what it means to become a designer. The chapter draws on close readings of review meetings between one industrial design instructor and five undergraduate students engaged in designing occasional-use quirky office seating.

The main insight in McDonnell's chapter concerns how the work accomplished by an instructor and a student in a 1:1 design crit makes it possible for the student to gradually acquire expertise. She illustrates how the instructor assumes conversational roles including the prescriptions of goals and design thinking while avoiding telling the students what to think, providing exemplary demonstrations of expertise and authority, drawing in relevant precedents, recommending courses of action to generate persuasive arguments to clients. The key distinction in McDonnell's analysis is between how the instructor deals with what to do (instructing, demonstrating) and what to think (coaching, facilitating, opening up for further development). In essence, the chapter provides rich and empirically well-founded elaborations of what instructor articulation and intervention might, or perhaps even should, look like in a reflective-practicum learning process.

Making visible the how and what

The final sample is chapter 22: 'Making visible the 'how' and 'what' of design teaching', authored by Robin Adams, Tiago Forin, Mel Chua and David Radcliffe. The chapter appears as part of the design coaching theme in the book.

Adams et al. find their point of departure in the concept of pedagogical content knowledge, which they characterise as 'a framework that makes visible the craft knowledge that guides teaching actions within a subject' including knowledge of students' preconceptions and motivational factors as well as content-specific teaching strategies and more. They elaborate this for design to include two main frameworks on the 'how' of teaching design – cognitive apprenticeship and teaching as improvisation – and two frameworks characterising the 'what' or the content of teaching design – design judgement and procedural knowledge on task execution and process management. Drawing on these frameworks, they report the results of an iterative qualitative analysis covering data from three different design disciplines (choreography, industrial design and mechanical engineering).

The outcome of the analysis is summarised into four recurring patterns, arguably illustrating elements of pedagogical content knowledge in design. The first concerns the use of scaffolding to help students articulate and evaluate their own reasoning. The second pattern involves taking control of a review conversation to drive it in a direction where learning insights are to be expected, and the third revolves around temporarily breaking the flow of a conversation to create a 'teaching moment'. The fourth and final recurring pattern involves suggesting rather than telling in order to let students figure things out for themselves.

The frameworks introduced by Adams et al., together with the empirically grounded patterns, serve as a playbook of sorts for design instructors – not in the naïve sense of a how-to manual but rather as a resource for didactic learning and development.

Some general concluding remarks

It is rather trivial to observe that design students are not designers. Academic studies of design students should, in general, be framed as studies of design learning rather than design practice. In the research field of design studies as a whole, there are some regrettable examples of where this point has been ignored or glossed over. Most chapters in the book at hand make an admirable job of focusing on design learning or pedagogical/didactical aspects of design, as they should. However, there is the occasional chapter which may be accused of speaking about design and design practice rather than design learning, in spite of the nature of the available data.

This leads to a slightly more general remark: academic collections are often rather mixed in terms of approaches, scopes and results. This is an inherent feature of the format and its upside is that virtually any reader can find something of interest. On the other hand, it means that there will always be parts of a collection that are less relevant to an individual reader. The collection by Adams and Siddiqui is no exception in this regard. The reader is advised to switch on their discerning eye – but then again, is not this always good advice for the academic reader?

References

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