The Theoretical Treasure of Cross-disciplinary Research in Design: Reflections on Reading “Theories in Design Research”

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In the rapidly developing era of emerging technologies, design is no longer just about aesthetics or functionality. *Theories in Design Research* provides us with tools and frameworks for in-depth understanding and evaluation of design, ensuring that we can make truly valuable design decisions while pursuing innovation. This academic work *Theories in Design Research* (Figure 1) coauthored by scholars including Wu Wenzhi, Zhao Bin, and Hu Xiaoyu and freshly published by China Textile Publishing House in September 2023, selects from over 300 cutting-edge theories and practical methods and elaborates on 103 of them that can be applied in design research. The book is ordered by the phonetic sound of the first Chinese character in the name of each theory. The scholars develop these theories and carefully list the history and the scope of application for each entry, as well as their sources and the sources of relevant terms.

*Theories in Design Research* provides us with a brand new systematic reference for theoretical research that will help us maintain competitiveness in this rapidly changing environment. *Theories in Design Research* provides a very comprehensive toolbox for design researchers, covering material from ancient and traditional eras to modern times, from Europe, America, Japan and China, and from qualitative analysis theory to quantitative theory and from participatory design theory to user experience testing. The book includes information on the theoretical origins, the progress of research in practical cases, and developments from prototypes to the service experience. With coverage of modern techniques including computer-aided design, artificial-intelligence-generated design, sustainable development, and social impact assessment, the text enables us to conduct more comprehensive and in-depth design research, helping us respond to the severe disruptions introduced by the artificial intelligence era to the design community and capture opportunities for interdisciplinary development. Whether facing climate change, social inequality, or emerging technologies, *Theories in Design Research* provides us with a solid foundation and promotes the evolution of design research tools and methodologies.
The importance of *Theories in Design Research* is unquestionable in the interdisciplinary construction of design evolution and design studies. The background of the idea for this book is derived from the continuous development and innovation in the field of design in recent years, with various new design concepts and methods emerging one after another. Therefore, it is particularly important to systematically organize and explore the interdisciplinary construction of design research.

Design is boundless, creating everything. Design is closely related to human daily life, and it is ubiquitous. From mobile phones to urban infrastructure and from advertising to daily necessities, design subtly influences people’s decision-making and behavior. *Theories in Design Research* provides a mechanism, a means, and a method to help us understand the deep meaning of design across borders and explore its impact on society, economy, and culture. Design is a cross-disciplinary practice that not only involves aesthetics and functionality but is also closely related to human psychology, culture, society, and technology. The coverage of these 103 methods reflects the authors’ deep understanding of design research. *Theories in Design Research* provides a needed, comprehensive resource addressing knowledge scarcity in the design community and highlights the necessity of interdisciplinary research.

Design is also based on multidimensionality. In human history, design, like other emerging disciplines, emerged from the intersection of engineering and art. Design psychology emerged from the intersection of design and psychology. Design consumer psychology emerged from the intersection of design, consumer marketing, and psychology. Traditional design thinking may overly focus on the appearance or functionality of products. However, in *Theories in Design Research*, more attention is given to how to deploy design as a true solution to real-world problems. This requires a deep interdisciplinary understanding of multiple dimensions, such as human psychology, social interaction, cultural differences, science and technology, and the commercial economy.

In the book *Theories in Design Research*, the 103 interdisciplinary research theories are an important highlight, showcasing the rich foundation for research in the field and the depth
and breadth of research on design. These 103 theories enlist design to assist with researching diversity, covering dozens of research theories such as literary criticism, commercial consumption, emerging technologies, experiential services, craftsmanship, simple rules, communication and publicity, aesthetic psychology, spatial planning, neurosensory studies, social narratives, and innovative creativity. This diversity allows designers and researchers to choose the most suitable research method based on specific design issues and backgrounds. These 103 design methods not only contribute to the designer’s own research and innovation but also promote cooperation with experts in other fields. For example, when designers are researching a problem related to psychology or sociology, they can use these theories to engage in deep cooperation and communication with experts in the relevant fields, which undoubtedly provides valuable resources for the interdisciplinary construction of the research field of design. These theories not only enhance the depth and breadth of design research but also promote innovation and development in the field of design. This book is an indispensable and valuable resource on the bookshelf of every designer, researcher and also those who feel confused in design research.

*Theories in Design Research* not only provides us with tools and frameworks for interdisciplinary understanding and evaluation of design but also, more importantly, reminds us that design is not only a creative process but also an influential practice requiring responsibility. Through in-depth research and the application of *Theories in Design Research*, we can ensure that while pursuing innovation, we also make positive contributions to society and the environment.

This book is a highly valuable work and is a must-read for design researchers, designers, and anyone interested in design. It provides us with a comprehensive perspective on design research and in-depth coverage of its theoretical basis, helping us better understand the essence and research process of design. The logic of the presentation in this book is clear, and the analytical approach is rigorous. The authors first define the basic concepts of design research and then elaborate on the methods and theories of design research from different perspectives. The book not only cites a large number of domestic and foreign research achievements and cases but also combines the author’s own practical experience, making it more persuasive and practical.

During the process of reading this book, I could not help but fall into deep contemplation. As early as ten years ago in 2013, I hosted the International Symposium on Interdisciplinary Collaborative Innovation in Design at the China Academy of Fine Arts, inviting renowned experts and scholars from both domestic and international sources such as Wu Zhiqiang, Xu Jiang, Pietrode, and Dietbach to attend. I also edited and published over 50 collections of 200000-character papers, beginning the exploration of interdisciplinary collaborative research in design. Now, *Theories in Design Research* provides us with a new perspective to re-examine the development and future of the design field, making me more aware of the importance and value of interdisciplinary research in design and making me look forward to future development and innovation in the design field. At the same time, I also deeply feel that design research should not only have a tool or method but also a new way of thinking and values. It requires us to approach complex social problems from a design perspective. 
perspective, using innovative thinking and diverse means to seek solutions. In addition, design research also requires us to always pay attention to the needs and experiences of users, placing them at the core of the design. This is precisely the issue that we need to carefully consider when carrying out any design work.

Of course, no book is perfect, and *Theories in Design Research* is no exception. Although I think this book has done a good job in elaborating on *Theories in Design Research*, there are still some areas that can be improved appropriately. For example, the arrangement of the directory does not necessarily need to be arranged according to the English phonetic order of Chinese characters rendered in Pinyin but can be arranged according to theoretical categories, which is easier for readers to classify and understand. For some more complex design research methods, some of the content may be profound and specialized, requiring a certain professional background and relevant knowledge to assist in comprehension. The authors can provide more details and examples for readers to better understand and apply these concepts. In addition, the authors can also delve deeper into the ethical issues and social impacts of certain design studies.

In short, *Theories in Design Research* is a highly valuable academic monograph to read and collect, as well as a tool book full of wisdom and enlightenment. Its advantage lies in not only providing us with basic theories and methods for design research but also enabling us to better understand the application of these theories and methods through vivid cases and practical experience. In addition, the language of this book is easy to understand and suitable for readers of different levels to read and learn from.

Due to the above value, I recommend this work to readers interested in interdisciplinary design research. The work will provide readers with rich and effective design research theories for reference and learning, and I believe there will be unexpected gains. Undoubtedly, the book will provide valuable references for those committed to promoting the development of the design field and promote the in-depth development of design research in China.