Research Methods for Architecture (review)

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Renewed interest in integrating research into design is apparent when we look at books published on the topic in recent years. The go-to textbook for more than a decade, Linda Groat and David Wang’s *Architectural Research Methods* was revised and expanded in a recent second edition (2013), reflecting such interest. The most important area of update is on the relationship between design and research. In particular, it explores research by design, that is, generating new knowledge using design as a method, as do a number of other publications. Among them are *Design Innovation for the Built Environment: Research by Design and the Renovation of Practice* (2012), edited by Michael U. Hensel, and *Design Research in Architecture: An Overview* (2013), edited by Murray Fraser. The former is a collection of pieces written by architects, designers, and thinkers from the United States, the United Kingdom, Australia, Japan, and Europe. It offers an emerging understanding that design and research have a shared purpose that is projective in nature and presents research by design as a way for design practice to engage in the production of new knowledge. The latter brings together writings by researchers, practitioner, and educators, many of whom are associated with the Bartlett School of Architecture at the University College London. It serves also as an...
overview of a book series of the same title, which showcases a variety of projects that take design as a form of inquiry. To those who are accustomed to regarding design as an activity whose end product is a discrete object, it is a revelation to consider the widening possibilities of what design may accomplish. In the background of these publications are an increasing number of professionals who are involved in research as a part of their practice, either within a professional office or in collaboration with academic or research institutions. As the Bartlett and other schools such as the Harvard Graduate School of Design launch new academic degrees in design research, other schools are adopting design research into curriculum, in studios and in lecture/seminar courses, including my own institution. There even is a pedagogical debate between proponents of design theses and those of research studios, as David Salomon has outlined in his “Experimental Cultures: On the ‘End’ of the Design Thesis and the Rise of the Research Studio” in the Journal of Architectural Education.

To the timely topic of architectural research, Ray Lucas has recently authored Research Methods for Architecture. This review discusses the book across three main attributes: its organization, depth of explanation, and use of case studies. Lucas is a Senior Lecturer and the Head of Architecture at the University of Manchester, where he teaches courses in graphic anthropology and world urbanism as well as studios. Lucas offers this book as a “handbook for research in architecture,” whose aim is to “assist the reader in producing research that is distinctly architectural in nature” (7–8). Lucas expects his book to be “primarily focused on the student experience of research,” observing that many students struggle with the research part of their courses (21, back cover). I share and expect many others to share Lucas's observation, and I suspect the struggle to be rooted in the perceived contradictory natures of design and research, which, articulated by David Leatherbarrow, are their objects (creation of something totally new vs. discovery of what already exists); their procedures (mysterious whim of a creative genius vs. methodical process worked out beforehand); and their time frames (future vs. present). The overarching question of the book is, Lucas states, “What is research in architecture?” Lucas further defines and justifies the book’s focus: “While technical and technological research is both crucial and valid, the purpose of this book is to examine the research methods appropriate to architectural humanities” (7). This focus reflects Lucas’s own work: his prior publications are in architectural phenomenology and anthropology, and on the topics of film, drawing as notation, and so on. The book is made up of two parts. The first part, consisting of seven chapters, lays out process, from defining the research project to writing it up; the second covers in eight chapters a diverse range of research topics, including material culture, the politics of space, and ethnographic research, and varied methods, from interview to mapping. Here, some readers may find it a discrepancy to include social science or visualization in architectural
humanities; however, Lucas's purpose is clear: to develop “the role of architecture as a discipline with an interest in the theory of spatial production, the social role of space, and the historical context within which we live” (7). Compared with Hensel's and Fraser's, Lucas's organization makes it easily adoptable as a textbook for a course in architectural research.

A number of features are intended to make the book's textual content more accessible to the reader, which is especially effective in the event it is adopted as a textbook for an undergraduate course. A full-page photograph introduces each chapter. For example, the exterior metal skin of the New Museum in Manhattan by Studio SANAA opens the chapter on material culture, and the layers of ramps seen from above at Norman Forster's Berlin Reichstag leads the chapter on the politics of space. These introductory photographs are taken by the author, as are smaller illustrations throughout the book. Also helpful to the reader is the use of sidebars, encased in gray-shaded boxes and inserted within the main text. These sidebars vary in their content, however, and are most effective when used either to explain and define terms or to demonstrate academic style. If there had been more sidebars throughout the book, the glossary at the end could have been eliminated. Endnotes are sufficient for the most part, and the bibliography should be helpful to readers interested in further readings on a topic. Since the chapter topics are fairly discrete, greater usefulness could be achieved by organizing the notes and the bibliography by chapter. These organizational tactics matter greatly when the goal is to facilitate the learning of the less trained reader.

The author's style of writing is on target for the intended audience with its uncomplicated grammar and easily accessible language. When it comes to the content, however, further elaboration in several areas is desirable, including deeper discussion of a particular concept or the addition of concrete examples. To do this, the author may have referenced past scholarship on research, such as Wayne Booth et al.'s *Craft of Research.* For example, in chapter 1, “Defining Your Research Question,” possible ways to find such a question are listed: a question is given by an assignment; a gap in the literature prompts a question; or one takes issue with the existing scholarship. Curiously, this list misses the most common circumstance in which architects and other designers find their question, that is, by identifying a problem in the real world. This would have easily been amended with the intellectual framework of conceptual problem à pure (basic) research versus practical problems à applied research. In chapter 4, “Cross-Disciplinary Working,” different modes of collaboration between architecture and other disciplines are explained by “architecture and ...,” “architecture of ...,” “architecture with ...,” and “architectural ...” (66–67). The classification makes good sense and the nomenclature appears smart; however, a concrete example for each of these collaborations, even in a brief
summary, would have greatly improved understanding and made the material more accessible.

In the book’s second half, each of the chapters is divided into two segments. The first segment provides a general discussion on a topic, and the second segment is a case study, which is a research project conducted in the past by the author and, in some cases, his collaborators. Each project seems intriguing and interesting in itself; however, as an apt representation of the topic the chapter title purports to cover, the degree of its relevance varies. For example, chapter 11 is titled “The Politics of Space,” in which the “Cultures of Legibility” project is a case study, which was conducted by a collaboration between the University of Edinburgh and the National University of Indonesia. Interviews and mapping techniques were used to document how people understood and navigated in the city. Only a page and a half of textual explanation does not allow the reader to understand how this particular project relates to the general topic of “the politics of space.” Furthermore, without an explicitly stated research question, it is difficult for the reader to understand the significance of maps and photographs provided. Herein is the liability of the author’s decision to draw cases exclusively from his own research projects. On the one hand, there obviously are merits, including access to the materials accumulated from the process and insights gained through his own experience. The advantage is enormous, especially when instructors who use the book as a textbook are familiar with Lucas’s work. On the other, however, it creates serious limitations: the projects discussed are rather small in number and comparatively narrow in scope, considering the two titles mentioned earlier, both of which feature curated assemblies of researchers and projects from a larger canvassing process.

It would be a mistake to take this book as a comprehensive survey of the types of research being conducted in today’s academy and profession. It is not the author’s intention, either, as he states, “What is research in architecture? The answer is not singular, of course, but as multifaceted as the discipline of architecture itself” (7). With some limitations discussed above, Lucas has provided students of architecture, mainly university students but also practicing architects interested in incorporating research into their work, a handbook for research in architectural humanities. At the same time, he has also given those who teach design research a glimpse at possible threads to widen the scope and methods of research in architecture.

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Notes


3. Harvard University’s Graduate School of Design (GSD) and John A. Paulson School of Engineering and Applied Sciences (SEAS) collaboratively initiated a Master in Design Engineering (MDE) degree, beginning in fall 2016. The two-year program is intended to hone skills and endow knowledge to solve multiscale, complex, open-ended problems. The Bartlett School has launched a new four-year undergraduate program that combines Engineering and Architectural Design, starting in fall 2017.

