Introduction

Julia Williams Robinson and Andrzej Piotrowski

The disciplinary character of architecture is one of the most important, though underexplored, issues that architects face today. Disciplinarity—the way that architecture defines, creates, disseminates, and applies the knowledge within its domain of influence—is increasingly central to the discussions about the present and future direction of the field. However, we rarely focus on how our seeing, thinking, and understanding of architecture or on how the social construction of our field can obstruct or advance our ability to create a built world viable and valuable for the next century.

Following a line of thought developed by Ellen Messer-Davidow, David Shumway, and David Sylvan (e.g., 1993a, 1993b) and others in which knowledge is seen as “historically and socially contingent,” and disciplines as “historically discontinuous” knowledge formations in constant change (Shumway and Messer-Davidow 1991, 218), the essays collected here, many of them presented at the conference “Knowledges: Production, Distribution, Revision,” address this disciplinary question. They suggest that what propels architecture—such as procedures for design, education, research, publication, career advancement—is what has usually been considered to be peripheral to the field. This collection shifts the emphasis to what we believe is the center of the problem—the epistemological and political dimensions of architectural knowledge.

The chapters of this book show that the practices of knowledge production and dissemination do not play a minor supportive role in the
discipline. Rather, through application of hidden assumptions in supposedly value-free practices (decisions on such things as what knowledges to pursue, publish, and teach, how to do scholarly research, whether to apply knowledges in design, standards for admitting and advancing students and future practitioners), these practices significantly affect the discipline's direction.

Consequently, the chapters of this book revolve around a set of difficult questions: Is there something uniquely architectural in the way architects know and design buildings? What determines the understanding of value in a building? To what extent is the knowledge of architecture strictly an outcome of particular methods, their epistemological assumptions, and institutional mechanisms that facilitate knowledge production? Are the objectives and methods of knowing architecture similar or different when academia and professional practice are considered? Should they be different or similar? Could these questions even be addressed from perspectives that have dominated architectural knowledge thus far?

At the chapters of the book will elaborate, architectural knowledge is diverse and complex, drawing from a range of fields that influence how a building or environment is imagined, designed, described, constructed, and sold and how it performs, once built. Architectural knowledge is deeply embedded in the network of political relationships. Until quite recently in the United States, with the exception of a small number of institutions, academia primarily disseminated professional knowledge to future practitioners. Professional practice and the building site were the dominant locus of the development of architectural knowledge, the site where architectural knowledge was applied and passed on through apprenticeship. Now the sites of development have expanded to include research centers with well-defined and targeted agendas (located in governmental agencies and business corporations), and many academic institutions, especially those in universities. The discussion of disciplinarity has arisen within academia, perhaps because the presence of other, better-defined fields and the increase of cross-disciplinary work beg the definition of architecture as a discipline. That does not mean that the subject of disciplinarity in architecture is primarily an academic topic, but simply that academia is the place where this discussion has begun.

The discussion of architecture as a discipline is approached through a number of themes. Perhaps most central is the issue of authority. Where does authority lie within the field? Who is given the power of authority, whose interest does it serve, and how does the present structure sustain it? Who is denied authority and how? What are the criteria for determining authority, and what are the social structures and mechanisms that maintain it? Arising in many contexts, from the problems of globalism, to the challenges of the increasingly diverse membership of the profession, to the tensions between profession and academia, to how the subfields are arrayed relative to each other, we find a diverse set of responses. The chapters of this book address authority or domination of certain models or attitudes that frame the discipline of architecture. The points they make sometimes reinforce observations in other chapters and occasionally contradict each other.

One of the most important aspects is the existing configuration of the field of architecture and how the knowledge production relates to this configuration—what subjects are central to the field, how it ought to be configured, and how it should be structured. As issues are a variety of structures and practices. One area of discussion is the relation of architecture to other fields. Some argue for maintaining clear and strong distinctions, and others support permeable boundaries, suggesting that increased interdisciplinarity will affect present ways of doing things. Another discussion addresses the relations between the discipline and the subfields. Here again there is no consensus. Authors suggest different subfields and give them different names. In relation to describing the nature of the disciplinary boundaries, authors also propose different definitions of the field. Several authors raise the issue of validating knowledge. Several characterize the present method as based on Western historical precedence and question, variously, whether it can adequately serve non-Western contexts, both genders, all classes, all races and ethnicities, as well as current political realities. All authors address whether the values and ideas that founded the field are still appropriate for today.

The form and content of education is yet another important theme of the discipline of architecture. Because architectural education is unique within the academy, for those who are not familiar with the field, it may be useful to provide information about it. The primary focus of architectural education has been the development of professional com-
pentence to construct the buildings that serve society. The architectural curriculum is structured around this content, with architectural design as the core activity. Keith Hopkins (1993) identifies as the locus of higher education the classroom, the seminar, and the laboratory. For the professional education of architects, we must add the design studio, where students are supposed to integrate the divergent knowledges taught in other classes by applying them to particular design projects. The studio resembles the laboratory setting in that students learn by actually doing but differs in that the style of instruction is predominately critical. Although the tradition of the studio is felt to be central to professional education and its methods are highly valued for its hands-on, interactive approach to learning, its use of critical pedagogy is currently under severe scrutiny (Anthony 1997). On the other hand, in recent years, the need for specialization and more research has led to a professionalized education for which the studio may no longer be central, which creates a potentially expanding identity for architectural education beyond the professional orbit.

A third general disciplinary topic related to authority is the legitimacy of different voices within the field in relation to the social responsibility of the architect. Many of the authors see the present social context as challenging existing ideas of authority. The profession of architecture, formerly bastion of upper-middle-class white males of European descent, has a growing number of people from different classes, genders, nationalities, and ethnic backgrounds. The concepts, methods, and professional practices developed by the original group are often irrelevant and even destructive to the interests and values of the new members.

The fourth area of focus is the relation between academia and the profession. The roles of each can no longer be taken for granted, as academia is increasingly the source of new technology and expertise, and the profession, where ideas are implemented, is not only what the need for new knowledge is identified but also a place where new knowledge is being developed. A new balance of power between the two areas is being negotiated. Following opinions that currently shape this issue, the authors present different perspectives. Some envision academia and the profession as both within the larger discipline; others define academia as the locus of the discipline and argue for its independence from the profession; still others argue that academia and the practicing profession are separate but that each exerts a form of leadership for the other.

Thomas Fisher begins the book with a discussion of the contemporary discipline of architecture as historically growing from two different traditions, scholarly and professional. He says that although in the Western tradition both the academic and architectural professions originated in the Middle Ages, the integrated professional education, as we now think of it, did not exist in most institutions of higher learning until the nineteenth century. Thus the sense of disciplinary authority has been, and still is, a negotiated one. It reflects the uneasy but necessary reconciliation of these two kinds of expertise and modes of operation.

In contrast, Michael Starnon associates the discipline of architecture with the most current cultural phenomenon of commodification of life and, as such, finds it susceptible to intellectual fashions, which legitimize current ways of understanding a building. His concern is that architecture develops a critical apparatus that goes beyond fashion and transcends commercial approaches to architectural knowledge. He argues that the authority of "intuitive creativity" should be replaced with discipline, critical, and precise mode of understanding offered by history or theory.

From a similar point of view, Andrej Piotrowski argues that to understand how the knowledges of buildings are constituted today, one must study the common practices of knowledge and representing. Within such a theoretical framework, he studies three particular practices, exploring how each foregrounds certain attributes of a building, defines the relationship between who knows and what is known, and who ensures the truthfulness of such a knowledge.

Julia Williams Robinson contends that fundamental assumptions deriving from earlier conceptions of architecture as a practice need to change to reflect the new knowledges and changing social orientations that now inform design. Seeking to reinforce the synthetic orientation of the field, to link the different subdisciplines, and to strengthen the identity of the field, she proposes a paradigm of architecture as cultural artifact that incorporates and extends beyond the accepted conception of architecture as art.

David Leatherbarrow, on the other hand, argues that the authority and identity of the discipline of architecture reside in subjects and skills
that are particular to architecture—representation, architectural reflection, and building technology. He also believes that for professional responsibility and intellectual clarity, it is important to maintain the differences between architecture and related fields such as engineering, painting, and planning.

David J. T. Vanderburgh and W. Russell Ellis critically review the production of architectural knowledge. They address a particular subfield of the discipline that they call "social and cultural factors." They analyze some of the ideas and events that have marked changes in the understanding of social and cultural aspects of architecture over the last three decades, examining particular texts in the context of the changing intellectual environment.

In a study of another subfield, Kay Bea Jones focuses on the practice of traveling to learn about architecture, which, although common among architects and architecture students, seems underexplored as a mode of knowing. Her special concern is with "travel pedagogy," by which she means "experientially centered studies dependent on some cultural, geographic, and paradigmatic shift that radically alters sense perception and challenges visual and spatial cognition" of architecture.

Donald Watson's essay also approaches the knowledge of architecture from a particular subdisciplinary focus. He presents environmental sustainability as one of the most important issues and traces how the function of the knowledge of environment evolved. After examining the structural relation between architecture and the knowledge necessary to create ecological environments, he advocates a number of disciplinary and curricular changes required for environmentally responsible design.

Sharon Egeruma Sutton follows Donald Watson's emphasis on environmental issues but reveals a different side of these phenomena. Here is the first of three chapters that focus on ethical and political aspects of the discipline of architecture. She describes how practices such as professional privilege and land ownership perpetuate existing patterns of domination and not only lead to degradation of biological environments but also create oppressive architectural environments. Sutton argues for radical change in the myth and practice of professional privilege and for a new concept of the architect—a facilitator of social processes.

A. G. Krishna Menon, like Sutton, argues against asymmetries of power behind architectural professional practice and intellectual leadership. Menon's perspective, however, is that of a non-Western architect who practices and thus faces challenges of a global market, and that of an educator who has participated in founding a school in India to develop postcolonial models of architectural education.

The last of the three chapters, one written by Linda N. Goor and Sherry Ahrentzen, addresses the politics of gender in architectural education. The authors summarize their research on the status of women in architecture, noting that although women are currently marginalized, typically their work is influenced by fields outside architecture. The authors therefore see the present emphasis on interdisciplinary in academia as presenting leadership opportunities for women in architecture and propose specific ways in which the perspectives of faculty women might transform architecture into a more truly interdisciplinary endeavor.

The next sequence of three interrelated chapters examines the issue of the relationship between academia and the profession. For example, Carol Burns advocates for more connection between academia and practice, proposing a number of possible alignments. Following Burns's argument for the alignment between the two, Garth Rockcastle demonstrates how a similar integration helped his professional practice. Using a case study of a project his company designed in Las Vegas, he discusses how critical insights and reflective modes of thought reveal political and ideological complexities of architectural commissions. In this way, his observations practically substantiate the strategy Carol Burns proposes.

Finally, Stanford Anderson identifies the value in maintaining differences between academia and the profession. He argues for an interdependence of the two areas based on a precise understanding of their complementary functions and perspectives.

In the discussion of disciplinarity that follows, we do not present a definitive text, a cohesive and highly structured framework within which the chapters play clearly defined roles to communicate a singular message. The issue of architectural disciplinarity is too complex and too politically charged to afford a conclusive treatment. Instead, this book presents a multiplicity of critical intersections that demonstrate
how knowledges and the systems that produce and reproduce, revise, and disseminate them can no longer be taken for granted. We expect that this book is just the beginning of a timely discussion.

Notes
1. The conference was organized by Ellen Moser-Davidow and David R. Shainwaw, under the sponsorship of the University of Minnesota and the Group for Research into the Institutionalization and Professionalization of Knowledge-Production (GRIP), and held in April 1994 at the University of Minnesota.
2. The use of "knowledge" in the singular stands for the collectivity of the diverse architectural knowledges and is not intended to suggest the existence of a single integrated "knowledge" in architecture.

Revisiting the Discipline of Architecture

Thomas Fisher

The professions in North America are under attack. Surveys reveal widespread public distrust of professions such as law and politics, and the bottom-line management of professions such as medicine and architecture has become equally pervasive, with the rise of entities such as health maintenance organizations and disciplines such as construction management. What has caused this public and private-sector reaction to professionalism, and how has this affected the disciplines in these fields?

All of the professions have begun to search for answers, and at least in architecture, this has produced a flood of articles, conferences, and books calling for sweeping reform of architectural education and the architectural profession. Some believe that the architectural schools must change to serve the shifting needs of practitioners, others think that the architectural profession has relinquished its educational responsibilities and thus weakened the field, and still others claim that both have become marginalized and need to rethink their mission in order to become more relevant (Cresbin 1995; Kroloff 1996; Fisher 1994, 2000).

In all of this discussion, we need to keep two points in mind. First, the situation we face is not new. The profession of architecture, like the other major professions, has come under attack before, for reasons similar to those generating the current crisis of confidence, and we cannot address the latter without understanding its history. Second, unlike in previous eras, academia has come under as much scrutiny as the
# Contents

Acknowledgments vii
Introduction ix

1. Revisiting the Discipline of Architecture
   Thomas Fisher 1

2. Disciplining Knowledge: Architecture between Cube and Frame
   Michael Stanton 10

3. On the Practices of Representing and Knowing Architecture
   Andrzej Piotrowski 40

4. The Form and Structure of Architectural Knowledge:
   From Practice to Discipline
   Julia Williams Robinson 61

5. Architecture Is Its Own Discipline
   David Leatherbarrow 83

   David J. T. Vanderburgh and W. Russell Ellis 103

7. Unpacking the Suitcase: Travel as Process and Paradigm in Constructing Architectural Knowledge
   Kay Bea Jones 127

8. Environment and Architecture
   Donald Watson 158

9. Reinventing Professional Privilege as Inclusivity:
   A Proposal for an Enriched Mission of Architecture
   Sharon Egretta Sutton 173

10. Thinking “Indian” Architecture
    A. G. Krishna Menon 208

11. Interdisciplinary Visions of Architectural Education:
    The Perspectives of Faculty Women
    Linda N. Groat and Sherry Ahrentzen 235

    Carol Burns 260

13. Reduction and Transformation of Architecture in Las Vegas
    Garth Rockcastle 272

14. The Profession and Discipline of Architecture:
    Practice and Education
    Stanford Anderson 292

Works Cited 307
Contributors 331
Index 337