

The Anatomy of the Architectural Book

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**The Anatomy
of the Architectural Book**

Canadian Centre for Architecture
Lars Müller Publishers

PROLOGUE

- 9 Cross-Sections through an Endless Library

PART ONE

- 25 **Colorful Crossroads**
From Paper to the Crystal Palace
- 61 **Modern Clumsiness**
Building *Befreites Wohnen* and Sigfried Giedion's Loom

PART TWO

- 109 **Texture**
Reading with Hands
- 161 **Surface**
Even Pages Talk to Odd Pages
- 237 **Rhythm**
Dynamics of Content
- 277 **Structure**
Architectural Frameworks
- 337 **Scale**
Objects without Size

EPILOGUE

- 385 Hugo's Prophecy

Shifts in technology launch us into unexplored territories, causing a visceral sensation which cannot help but induce both fascination and loss. Though disorienting, these are often the best moments to reflect on what was left behind, and what continues, but differently. This volume by André Tavares arrives at such a juncture, between print and digital media; the one has yet to find a way to coexist with the other.

Architectural books are special objects, or rather projects, as we discover following Tavares's careful dissection of the bibliographic *corpus* produced during another such moment in the middle of the nineteenth century. Authors and architects' experiments with photography and chromolithography revolutionized the presentation and interpretation of both ancient and contemporary architecture, from the buildings of Egypt and Greece to the Crystal Palace. These striking compositions of text and image—their colors, texture, rhythm and structure—shaped the reading experience and, in doing so, communicated certain ideas about architecture.

Why do we do books? As Phyllis Lambert has observed, books are references to return to, a type of long-term work to which the Canadian Centre for Architecture is committed. But this particular book, with its meticulously selected images, is also *A Sentimental Journey* through the CCA's collection, where Tavares has conducted the better part of his research, spending some months sifting through the library's many shelves and quietly flipping through 500 years of architecture-related publications.

We have to thank him, not only for dissecting in the following pages part of a collection whose goal is to serve research and the production of knowledge, but also for his provocative insights into the very production of some of the means by which this knowledge is disseminated.

Mirko Zardini, Director, Canadian Centre for Architecture

Prologue

Cross-Sections through
an Endless Library

In the summer of 1995, bookshops throughout Europe and North America displayed Rem Koolhaas and Bruce Mau's hefty volume *S,M,L,XL*.¹ The book repeated the claim made by Le Corbusier (1887–1965) in 1923 for his *Vers une architecture*:² “This book is implacable. It is unlike any other.”³ But why would these architects pride themselves on making a book that goes beyond the norms of book production? Isn't their job to design unique buildings?

Some architectural books are unconventional because they are made by architects who are personally engaged in the process regardless of the fact that they are largely unfamiliar with how books are made. An architect's strategy of reasoning is shaped by architectural practice and the constant need to compromise between contradictory wills and technological constraints. Hence, when an architect sets out to make a book, despite his or her possible ignorance of the publishing industry, he or she knows how to find out what is needed and is not afraid to break with the protocols of publishers or editors. The results are often surprising.

Another possible factor that makes an architect's book different from an average book is that architects who make books often think of them as spatially equivalent to buildings. In buildings as in books, architects set up sequences and logical paths that generate meaning for those using them and thus both formats offer similar strategies by which to physically grasp spatial experiences, from page to page as from room to room. El Lissitzky (1890–1941) offered an explanation for this ambivalence between architectural and book knowledge when he signed Vladimir Mayakovsky's

1 Rem Koolhaas, Bruce Mau, and Jennifer Sigler, eds., *Small, Medium, Large, Extra-Large: Office for Metropolitan Architecture* (Rotterdam: O10 Publishers, 1995); Rem Koolhaas, “Shared Dilemmas,” in *Bruce Mau: The Architecture of the Book. Books in Reverse Chronological Order 2013–1986* (Eindhoven: Lecturis, 2013), 10–12.

2 Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (1994; repr., Cambridge, MA: The MIT

Press, 1998), 119; Jean-Louis Cohen, introduction to *Toward an Architecture*, by Le Corbusier, trans. John Goodman (Los Angeles: The Getty Research Institute, 2007), 1–78.

3 “Ce livre est implacable. Il ne ressemble à aucun autre.” *Vient de paraître*, publicity brochure for *Vers une architecture*. Original document FLC B2 (15), reproduced in Cohen, introduction to *Toward an Architecture*, 2 (see n.2).

(1893–1930) *Dlia golosa*⁴ as *konstruktor knigi*, book constructor.⁵ The book is meant to be read out loud, the pages an instrument to project the author's intended meaning into the reader's space. This spatial action recalls the fact that, before Gutenberg's movable type, the advent of silent reading prompted an earlier technical revolution in writing: the invention of punctuation, which became an essential tool in the production of meaning.⁶ Lissitzky blurred the spatial limits of architecture, painting, and sculpture with his *Prouns*, and *Dlia golosa* did the same for poetry, recreating Mayakovsky's oral delivery by placing words within visually intense pages. The volume's physical qualities were not intended to guide the eyes or hands but were conceived directly for the voice. The poem, when read aloud, became a shared social experience.

The books by Le Corbusier and Koolhaas were conceived for large print runs, unlike the typical "artist book."⁷ Their uniqueness rests on the means used to disseminate their messages. And unlike many architectural books, they were not monographs that present the authors' designs as models for other architects, but polemics aimed at the core of architectural debate. They were not to be read in drafting studios and classrooms but in cafés, in the corridors of architectural schools, on the streets, and eventually in libraries. Their authors appealed to the resources of bookmaking to draw readers into the arguments, producing an engagement difficult to achieve through the written word alone.⁸ The successful use of visual effects to enhance both text and image makes them unique, surprising the reader while still conveying a comprehensible narrative. The point of each of these books comes

- 4 Vladimir Mayakovsky, *Dlia golosa* (Berlin: Lütze & Vogt, 1923), published as vol. 1 of the three-volume set *For the Voice* (London: The British Library, 2000), which also includes an English translation of *Dlia golosa* by Peter France (vol. 2) and Patricia Railing, ed., *Voices of Revolution: Collected Essays* (vol. 3). See also Mayakovsky and El Lissitzky, *Per la voce* (Milan: Ignazio Maria Gallino, 2002).
- 5 Irena Murray, "Affirming the New: Art and Architecture in Soviet Avant-Garde Publications, 1918–1932," in *Architectural Drawings of the Russian Avant-Garde, Soviet Avant-Garde Publications, 1917–1935* (Montreal: Canadian Centre for Architecture, 1991), 6–19.

- 6 Malcolm Parkes, "Lire, écrire, interpréter le texte: Pratiques monastiques dans le haut Moyen Âge," in Guglielmo Cavallo and Roger Chartier, eds., *Histoire de la lecture dans le monde occidental* (Paris: Seuil, 2001), 115–30. Originally published as *Storia della lettura nel mondo occidentale* (Rome: Laterza, 1995).
- 7 For a survey of the "artist book" form, see Anne Moeglin-Delcroix, *Esthétique du livre d'artiste 1960–1980: Une introduction à l'art contemporain*, rev. ed. (1997;

Marseille: Le Mot et le reste, 2012). See also Paulo Pires do Vale, ed., *Infinite Tasks: When Art and Book Unbind Each Other* (Lisbon: Fundação Calouste Gulbenkian, 2012).

- 8 One architectural book that successfully engages the reader with words is Aldo Rossi, *A Scientific Autobiography*, trans. Lawrence Venuti (Cambridge: The MIT Press, 1981).

across physically, without even reading the words, as they are really architectural arguments that have gone undercover as books.

A book is more than just the object itself. As Robert Darnton explained,⁹ we must consider it within the circle that links the many players involved in its existence, from printers to readers, from paper suppliers to booksellers. In the case of architectural books, architecture itself becomes a major player; and thus the books by Le Corbusier and Koolhaas are as unique as their buildings. There is no need for eccentric bookish statements in the presence of the Villa Savoye or Villa D'Alva. In the wider history of architecture, studies of architectural books have naturally focused on their content, rather than on their editorial strategies. And in the wider history of books, books of architectural theory like *Vers une architecture* and *S,M,L,XL* have been overlooked because they are part of a niche category that is highly specific and technically demanding.¹⁰ But my purpose here is neither to evaluate their tactics nor to analyze the content of their books. I am concerned with how they were able to produce them. Recalling Lissitzky's self-identification, this book is about the special ways in which architects have engaged with the techniques of bookmaking to become book constructors.

⁹ Robert Darnton, "What is the history of books?" (1982), in *The Case for Books: Past, Present, and Future* (New York: PublicAffairs, 2009), 175–206.

¹⁰ Architectural books are seldom treated as a separate genre and, compared to the photo-book, have received little attention. See Martin Parr and Gerry Badger, *The Photobook: A History*, 2 vols. (London: Phaidon, 2004–6); Horacio Ponsard, *Fotografía pública: Fotografía en Print 1919–1939* (Madrid: Aldeasa,

Museo Nacional Centro de Arte Reina Sofía, 1999). See also Michelle Debat, ed., *La Photographie et le livre: Analyse de leurs rapports multiformes, nature de la photographie, statut du livre* (Paris: Trans Photographie Press, 2003).

Industrial crossovers

Architectural bookmaking has been exposed to disciplinary debates, just as building construction has been exposed to the charms of book culture. By examining the transverse relationship involved in this double exposure and dissecting the anatomy of architectural books, I argue that, despite their being independent, the forms generated by building and bookmaking are interconnected and affect books just as much as they affect buildings. Examining the crossovers between book culture and building culture makes visible the axes along which architectural knowledge circulates through books into buildings and back, from the celebration of specific architectural practices to the production of unique books, using pages and print to convey architectural ideas.

My aim is to demonstrate how architectural books attempt to materialize knowledge specific to the field. To do so, I focus on the processes of making books, rather than on architectural or book history, and explore the limits of one hypothesis: that the book forms produced by architects derive from a reasoning that is more architectural than editorial. It is not a one-way relationship: books and their forms—and not only their textual and iconographic content—have informed original architectural ideas.¹¹ Even though bookmaking and architecture have little professional parallels, the material qualities of books—their weight, size, texture, etc.—are close enough to architecture to make a parallel between the two material cultures possible.

11 Recent approaches to design history have stressed the forms in which content is delivered. Sara De Bondt and Fraser Muggeridge, eds., *The Form of the Book* (2009; repr., London: Occasional Papers, 2010); Kevin G. Barnhurst and John Nerone, *The Form of News: A History* (New York: The Guilford Press, 2001); *Architecture & typographie: Quelques approches historiques* (Paris: Éditions B42, 2011).

How to grasp such an elusive hypothesis? Setting the focus on architecture presents a daunting labyrinth of material—even the smallest library is unforgiving to the individual. However, book by book, day by day, I encountered more and more examples confirming my hunch: that architectural books draw on a common conceptual foundation, whether printed in the twentieth century or the fifteenth. Although books from different centuries vary significantly in their material qualities, my physical interaction with them suggested that there was also some historical continuity. In all of them, architectural ideas seemed to be communicated solely through their physical qualities, irrespective of the buildings the books were attempting to embody or the books' different sizes, the roughness or delicacy of some papers, the dark ink of engravings or the ethereal quality of aquatints. Such a *corpus* of historical sources was intriguing. One seldom sees it as a whole, and often when a panoramic selection of books is made for a publication or an exhibition, the criteria depend more on the significance of their authors' built achievements than on their allegiance to a hypothetical thread of architectural bookmaking.¹² For this reason, keeping the concept of *corpus* in mind, I aimed to produce a synthetic portrait of architectural books at the moment of their industrialization, opening up perspectives on their antecedents and their possible interest to a postindustrial readership at a time when digital technologies offer interesting alternatives to traditional physical architectural publications.

Book history is a history of specialization and the progressive separation of the author from the final embodiment of the work.¹³ It

12 Carroll L. V. Meeks, "Books and Buildings, 1449–1949," *Journal of the Society of Architectural Historians* 8, nos. 1–2 (January–June 1949): 55–67. See also Joseph Rykwert, "The Roots of Architectural Bibliophilia," *Design Book Review* 28 (Spring 1990): 9–13; Alan Powers, "The Architectural Book: Image and Accident," in Kester Rattenbury, *This Is the Architecture: Media Constructions* (London: Routledge, 2002), 157–73.

13 Francis Klingender notes that the printing industry provides a "very early example" of the division of labor, in which the production of woodcuts involves two specialized crafts in the production of a single reproducible object. A draftsman first draws a design on the woodblock, which is then taken by an engraver to be carved. One can establish a parallel between this process and architecture since the division of labor

engendered by printing was contemporary with the Renaissance emergence of architecture as an autonomous discipline. Francis D. Klingender, *Art and the Industrial Revolution* (1947; rev. ed. 1968; repr., Frogmore, UK: Paladin, 1975), 57–71.

maps the social relations produced throughout this process of specialization, from authors to readers via publishers and paper and ink suppliers, and from readers to authors via booksellers, promotional strategies, and even censors.¹⁴ Since architectural production also takes place in this complex social context, with the final results being a synthesis of the ambitions of the many people involved, it seems a worthwhile scholarly gamble to consider book production and architectural production within parallel lines of reasoning.

The Industrial Revolution introduced new techniques for manufacturing paper and steel printing machines that made large-scale print runs possible, another step in the progressive division of labor in the printing industry. Beginning in the 1830s, new genres of books emerged in every field of the book trade in response to the changing habits of readers and consumers. Increasingly complex distribution networks and the need to manage a constant production flow led to a sharper separation between printer and editor,¹⁵ a shift that took the author even further away from the presses. The separation increased with the introduction of the editor as an important intermediary between author and printer, at which point the book trade started to become a serious commercial endeavor. Although architectural books were somewhat marginal to these dynamics, because their ambitions did not usually aim at a mass audience, their physical qualities and the cultural context of architectural production were not unaffected. And, as industrial production was changing the form of architectural books, architecture itself was also being transformed by industry.¹⁶

14 Since Robert Darnton and Roger Chartier encouraged the formation of a disciplinary field concerned with book history, authors like Adrian Johns and Leah Price have reconsidered the significance of printing in bringing technology and culture together, placing less emphasis on the impact of media technologies than do works by authors such as Marshall McLuhan and Elizabeth Eisenstein. See David Finkelstein and Alistair McCleery, eds., *The Book History Reader* (2002; repr., London: Routledge, 2006); Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Toronto: University of Toronto Press, 1962); Elizabeth L. Eisenstein, *The Printing Revolution in Early Modern Europe* (Cambridge: Cambridge

University Press, 1993); Adrian Johns, *The Nature of the Book: Print and Knowledge in the Making* (Chicago: University of Chicago Press, 1998); Leah Price, *How to Do Things with Books in Victorian Britain* (Princeton: Princeton University Press, 2012). For a critical review of the field of book history, see Leah Price, "The Tangible Page," *London Review of Books*, October 31, 2002, 36–39.

15 Christine Haynes, *Lost Illusions: The Politics of Publishing in*

Nineteenth-Century France (Cambridge, MA: Harvard University Press, 2010). See also John Feather, *A History of British Publishing* (1988; repr., London: Routledge, 1996).

16 Charles B. Wood III, "Asher Benjamin, Andrew Jackson Downing: Two Divergent Forms of Bookmaking," in *American Architects and Their Books to 1848*, ed. Kenneth Hafertepe and James F. O'Gorman (Amherst: University of Massachusetts Press, 2001), 181–98.

If the nineteenth century established a new framework for publishing, a further step that distinguished the architectural book took place in the early twentieth century. At the time, architects were striving to develop an aesthetic language that could translate the qualities of the new industrial era into design, an effort enshrined in the mythology of the modern movement. Myth or not, modern architects acted within a field where communication was instrumental to achieving their goals.¹⁷ Production and reproduction were two sides of the same coin, and print was the medium of communication, both within the profession and with a wider audience. The industrial aesthetic became as intrinsic an aspect of the design of architectural books as it was for buildings.

These two moments, separated by almost a century, confront us with the rise of the industrialized book (and the editor) and the configuration of the book as a unique visual device (with the designer taking part in a complex chain of decision making). Hence, they suggested possible reference points for my argument: from a seemingly endless list of architectural books and within a long historical timeline, these two precise points in time mark instances where significant developments in publishing were synchronized with significant developments in architecture.

¹⁷ **Jose Ockman** and **Beatriz Colomina**, eds., *Architectureproduction* (New York: Princeton Architectural Press, 1988).

Endless libraries

The library of this book is a European one.¹⁸ The main geographic axis along which the books discussed were produced runs between Paris and London (with frequent connections to Germany, Russia, and America), and working with specific locations helped to relate linked cultural fields and dissimilar architectural environments. Whatever the location, the main question remains the same: What is an architectural book? One answer comes from Hyungmin Pai, whose work on the nineteenth century identified a "representative sample of genres constituting the discursive field of architecture" composed of "history texts, treatises, encyclopedias and dictionaries, journals, sketchbooks, builder's guides, construction handbooks, specifications, and catalogues."¹⁹ To this, he adds two major genres, the portfolio and the architectural journal, each a fundamental tool for the education, professional practice, and promotion of architects.

A consideration of journals and magazines was instrumental in establishing the boundaries of the architectural book field for the purposes of this study. Although books and magazines share production techniques and are often intimately connected in content,²⁰ their formats have different purposes.²¹ Magazines are often produced collectively, are released at set intervals of time, and are served by logistical networks that separate them from authored books with their illusion of permanence. Despite the similarities and the usual transfers between the two media, they belong to different fields. Still, one can find traces of architectural book production in magazines.

18 Most of the research was done at the Canadian Centre for Architecture, Montreal; the Royal Institute of British Architects and the National Art Library, London; the Collection Jacques Doucet at the Institut National d'Histoire d'Art, Paris; and the Institut für Geschichte und Theorie der Architektur (gta), Zurich.

19 Hyungmin Pai, *The Portfolio and the Diagram: Architecture, Discourse, and Modernity in America* (Cambridge, MA: The MIT Press, 2002), 22.

20 Le Corbusier and Amédée Ozenfant's (1886–1966) art magazine *L'Esprit nouveau* was a testing ground for the architect's first series of books: *Vers une architecture*, *L'Art décoratif d'aujourd'hui*, and *Urbanisme*. See Colomina, *Privacy and Publicity* (see n. 2), and also "Page against page" (pp. 161–173 below).

21 Marc Saboya, *Presse et architecture au XIXe siècle: César Daly et la revue générale de l'architecture et des travaux publics* (Paris: Picard, 1991); Hélène

Lipstadt, "The Building and the Book in César Daly's 'Revue Générale de l'Architecture,'" in Ockman and Colomina, *Architectureproduction*, 25–55 (see n. 17).

A simple example: by browsing through book reviews in magazines, one can reconstruct the publishing history of a given year to discover, for instance, that in 1925 one of the most acclaimed books—virtually unknown today—was *Swedish Architecture of the Twentieth Century*²² by Hakon Ahlberg (1891–1984) and Francis Yerbury (1885–1970). From their position outside the field of architectural books, magazines attest to the functions of such a *corpus*, documenting the critical reception of books and their effects on architectural practice.

Book genres, from the theoretical treatise to the monograph or portfolio, evolved according to their functions and changes in practices of printing and distribution. Following these mutations is fundamental to charting the field of architectural books, as is mapping the relevance of these genres to libraries developed for personal, professional, or public use. However, my focus is not so broad. I consider instead how books have been used, in the hands of the author, as a support and form for architectural ideas—as attempts to materialize a specific knowledge—rather than how they have been used as vehicles by which to disseminate content, in the hands of the readers. Although the main purpose is not to discuss exquisite books,²³ the selection of examples tends toward books that are out of the ordinary, made in such a way that the form engages the uniqueness of the architect's ideas.

The years 1851 and 1925, chosen early on as anchors for the research, cannot be considered benchmarks or threshold moments after which one can trace an aftereffect. If I may borrow a term from wine production, they are akin to possible vintages. The climate of

²² Hakon Ahlberg and Francis Rowland Yerbury, *Swedish Architecture of the Twentieth Century* (London: Ernest Behn, 1925). The book was published in English by Ernest Behn in London and Charles Scribner's Sons in New York, and in German by Ernst Wasmuth in Berlin. See *AA Journal*, April 1, 1925; *The Builder*, March 20, 1925, and June 11, 1925; *Journal of the American Institute of Architects* 14, no. 5 (May 1926).

²³ Mathieu Lommen, ed., *The Book of Books: 500 Years of Graphic Innovation* (London: Thames & Hudson, 2012).

1851, marked by the opening of London's Crystal Palace, an architectural achievement often considered "a perfect vantage point" or "the mid-nineteenth century touchstone,"²⁴ produced such disparate books as John Ruskin's *The Stones of Venice*, Jacques Ignace Hittorff's *L'Architecture polychrome chez les Grecs*, and Julio Rae's *Philadelphia Pictorial Directory & Panoramic Advertiser*. These samples were enough to justify a survey of architectural books published in 1851, which resulted in one hundred bibliographic references for that year alone in a single library.²⁵ Overall, apart from a few little-known *opera prima* and several rare and exquisite publications that have been largely forgotten, the overview revealed a dull crop of homogeneous books. In selecting the early-twentieth-century counterpart for 1851, an exhibition again led the way: the Exposition Internationale des Arts Décoratifs held in Paris in 1925 condensed the debate on the image of industrial production sparked by the London exhibition. Among that year's books were Le Corbusier's *L'Art décoratif d'aujourd'hui*, Hendrik Wijdeveld's (1885–1987) *The Life-Work of the American Architect Frank Lloyd Wright*, and the first volumes of the *Bauhausbücher* series, edited by Walter Gropius and László Moholy-Nagy, including *Internationale Architektur* and *Malerei, Photographie, Film*. A quick survey of a few architectural journals from 1925 uncovered references to over four hundred architectural books published that year.²⁶ Why not choose different years? What about 1923, with El Lissitzky's *Dlia golosa* and Le Corbusier's *Vers une architecture*? It soon turned out that 1851 and 1925 were no more than arbitrary references that framed a wider exploration.

24 Louise Purbrick, ed., *The Great Exhibition of 1851: New Interdisciplinary Essays* (2001; repr., Manchester: Manchester University Press, 2013), 1. The quotes are from Asa Briggs and Nikolaus Pevsner.

25 Most of these books were British, since the exercise was conducted at the Royal Institute of British Architects.

26 Since *The Builder* and *The Architectural Record* were the most consistent in listing publications, most of these four hundred books are in English.

The history of architectural books is not unknown: a great deal of bibliographical information has already been published, from reference books and catalogues of libraries and collections to comprehensive works based on national surveys.²⁷ Furthermore, triggered by the English translation of Mario Carpo's seminal essay *Architecture in the Age of Printing*,²⁸ Catherine de Smet's research on Le Corbusier,²⁹ and Richard Wittman's inquiries on the relationship between printing and the public sphere,³⁰ many case studies have applied methods from book history in order to extend the scope of architectural history.³¹ However, the focus on the material history of books has somehow left unexplored the complex relationship between books and buildings.³²

My plan to concentrate on 1851 and 1925—and not the period between them—collapsed in the library when faced with a wealth of other books, including those suggested by secondary sources. The purpose thus shifted away from examining the historical framework of specific books to concentrate on the circulation of knowledge within the book world. Architectural books are like imaginary buildings that meet on a reading table, where fifteenth-century pages might resonate with a twentieth-century layout. Such a physical proximity permits strategic insights across time that dissolve chronology and allow one to consider all architectural books as an intertwined *corpus*. Navigating their relationships strengthened the possibility of verifying my hypothesis: that the forms of architects' books result from a reasoning that is specifically architectural.

Catalogue of the British Architectural Library Early Imprints Collection, 5 vols. (London: Bowker-Saur, 1994–2003); Elisabetta Bresciani, ed., *Modern: Architekturbücher aus der Sammlung Marzona. Architecture books from the Marzona collection* (Vienna, Schlebrügge, 2003); Jean-Philippe Garric, ed., *Bibliothèques d'atelier: Édition et enseignement de l'architecture, Paris 1785–1871* (Paris: Institut National d'Histoire de l'Art, 2011).

- 28 Mario Carpo, *Architecture in the Age of Printing: Orality, Writing, Typography, and Printed Images in the History of Architectural Theory*, trans. Sarah Benson (Cambridge, MA: The MIT Press, 2001). Originally published as *L'architettura dell'età della stampa* (Milan: Jaca Book, 1998).
- 29 Catherine de Smet, *Le Corbusier: Architect of Books*, trans. Deke Dusinberre (Baden: Lars Müller, 2005) and de Smet, *Vers une architecture du livre. Le Corbusier: Édition et mise en pages 1912–1965* (Baden: Lars Müller, 2007). See also *Le Corbusier et le livre: Editions originales des livres de Le Corbusier* (Barcelona: Col·legi d'Arquitectes de Catalunya, 2005).
- 30 Richard Wittman, *Architecture, Print Culture, and the Public Sphere in Eighteenth-Century France* (London: Routledge, 2007).
- 31 Several anthologies of essays provide a wealth of relevant sources: Pierre de la Ruffinière du Prey, ed., *Architects, Books & Libraries* (Kingston, ON: Agnes Etherington Art Centre, Queen's University, 1995); Vaughan Hart and Peter Hicks, eds., *Paper Palaces: The Rise of the Renaissance Architectural Treatise* (New Haven: Yale University Press, 1998); Hafertepe and O'Gorman, *American Architects and Their Books to 1848* (see n. 16); Jean-Michel Leniaud and Béatrice Bouvier, *Le Livre d'architecture: XVe–XXe siècle. Édition, représentations et bibliothèques* (Paris: École des Chartes, 2002); Kenneth Hafertepe and James F. O'Gorman, eds., *American Architects and Their Books, 1840–1915* (Amherst: University of Massachusetts Press, 2007);

27 Adolf K. Placzek, ed., *Avery's Choice: Five Centuries of Great Architectural Books – One Hundred Years of an Architectural Library, 1890–1990* (New York: G. K. Hall, 1997); The Mark J. Millard Architectural Collection, 4 vols. (Washington, DC: National Gallery of Art; New York: George Braziller, 1993–2000); Lawrence Hall Fowler and Elizabeth Baer, eds., *The Fowler Architectural Collection of the Johns Hopkins University* (Baltimore, Douglass House Foundation, 1961);

Giovanni Maria Fara and Daniela Tovo, eds., *La raccolta palladiana Guglielmo Cappelletti del Centro Internazionale di Studi di Architettura Andrea Palladio di Vicenza* (Vicenza, IT: Centro Internazionale di Studi di Architettura Andrea Palladio, 2001); Eileen Harris and Nicholas Savage, eds., *British Architectural Books and Writers, 1556–1785* (Cambridge: Cambridge University Press, 1990); Royal Institute of British Architects, *Early Printed Books, 1478–1840*:

The anatomical hypothesis

This book is organized in two parts. Part one comprises two essays focusing respectively on one building and one book. The building is the Crystal Palace. If, at its construction in Hyde Park in 1851, the building absorbed from books the effects of experiments with chromolithography and debates about the polychromy of Greek architecture—the book traveling toward the building—at the moment of its reconstruction at Sydenham in 1854, photography returned the building back to the book realm. The book is Sigfried Giedion's *Befreites Wohnen* of 1929, in which the architectural historian drew upon the arguments of modern housing to turn the book itself into a powerful object. These two case studies assert how buildings can embody printing knowledge and books can embody architectural knowledge.

Part two departs from the chronological cross-sections of 1851 and 1925 to take an anatomical approach to the dissection of the *corpus*. The tools are five concepts—texture, surface, rhythm, structure, and scale—that help to analyze the material qualities of books in order to assess their crossovers with architectural knowledge. This approach attempts to elude the temptations to identify technological determinants—for example, that a precise printing technology propelled a certain architectural praxis³³—and to fall into direct metaphor: reading a building as a book. Although metaphors can result in arguments that are as beautiful as they are meaningful, and are often used to conceive books, the purpose of this research

Jean-Philippe Garric, Valérie Nègre, and Alice Thomine-Berrada, eds., *La Construction savante: Les Avatars de la littérature technique* (Paris: Picard, 2008); Jean-Philippe Garric, Estelle Thibault, and Emilie d'Orgeix, eds., *Le Livre et l'architecte* (Wavre, BE: Mardaga, 2011); Pierre Chabard and Marilena Kourniati, eds., *Raisons d'écrire: Livres d'architectes 1945–1999* (Paris: Éditions de la Villette, 2013).

³² There has also been a growing interest in architectural periodicals, but studies so far have tended to focus on the relationship between the public realm and

the content of publications, using the history of architectural theory as a basis for examining their performative nature. The Program in Media and Modernity at Princeton University, led by Beatriz Colomina, has been particularly prolific in this regard, producing the exhibition and subsequent publication *Clip, Stamp, Fold*. Beatriz Colomina and Craig Buckley, eds., *Clip, Stamp, Fold: The Radical Architecture of Little Magazines, 196x–197x* (Barcelona: Actar, 2010).

³³ In the preface to the French translation of his book, Carpo acknowledges, in light of more recent literature on book history, that the causal relationship may not have been as direct as he first implied. Mario Carpo, *Architecture in the Age of Printing* (see n. 28), translated by Ginette Morel as *L'Architecture à l'âge de l'imprimerie: Culture orale, culture écrite, livre et reproduction mécanique de l'image dans l'histoire des théories architecturales* (Paris: La Villette, 2008).

was not to analyze discursive practices. In fact, a focus on metaphor can obscure one's view of how an architect might struggle to embody their ideas in book form. Dissection cuts through the metaphorical layers of discourse to get at the mechanics of architectural books and architectural reasoning.

Books and buildings are quite obviously different in purpose and form, but they are also similar in many ways. Both are manifestoes of a specific knowledge that use the materials available to construct meaning within the folds of social behaviors that justify their forms and uses. To explore these connections, with the intent of better understanding the relationship between our physical experience of buildings and our physical experience of architectural books—especially how they are configured to deliver architecture to the reader—is the premise of this book.