

# Draw In Order to See

## A Cognitive History of Architectural Design

**ORO**  
EDITIONS

*Draw In Order to See* is the first book to survey the history of architectural design using the latest research in cognitive science and embodied cognition

### Key Sales Information

- This book combines the research methods of the historian with a summary of key neuroscientific discoveries that are likely to influence those approaches in the future.
- The book is comprehensive as a historical narrative, and contains many of the current references to the history of design and representation.
- In short, the book presents a clear view of current research in two related fields that have not heretofore been compared. It outlines a strategy for future research.
- *Draw in Order to See* contains 150 illustrations throughout.

### Description

Beginning with a primer on visual perception, cognitive science, design thinking, and modes of conception used by groups of architects in their practices, Mark Alan Hewitt surveys a 12,000-year period for specific information about the cognitive schemata used by Homo sapiens to make their buildings and habitats. The resulting history divides these modes of thinking into three large cognitive arcs: crafting, depicting, and assembling, within specific temporal frames. His analysis borrows from Merlin Donald's thesis about mimetic and symbolic cognition as critical to the emergence of the modern mind, and further employs theories of enactment and embodiment to clarify their relationship to architecture.

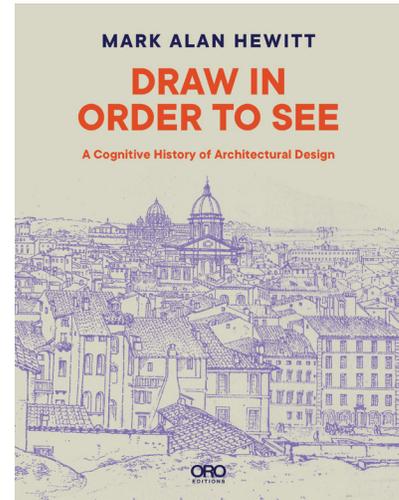
Individual chapters treat the emergence of depiction during the Renaissance, the education of architects in the modern era, Baroque illusionism and scenography, the breakdown of artisanal literacy during the Enlightenment, and modern experiments with models, montage, and illusions of movement. The author concludes with a critique of contemporary design and education, and promotes design with embodiment as a tonic for a profession in crisis, facing the challenges of climate change, energy shortages, inequality, and housing a population of over seven billion in the coming decades.

This groundbreaking and valuable study presents a clear view of current research in two related fields that have not heretofore been compared, and outlines a strategy for future research. An extensive bibliography offers readers an up-to-date reference to both the science and the architectural history behind the text.

### Author

#### Mark Alan Hewitt

Mark Alan Hewitt, FAIA is an architect, historian, and preservationist working in the New York area. He taught architecture at Rice University, Columbia University, and the New Jersey Institute of Technology, before serving for eighteen years as an adjunct faculty member in the Art History Department at Rutgers University. He is the author of six books and numerous articles on American architecture, representation, architectural practice, and building conservation. His renowned work as a biographer of modern architects became a springboard for this provocative book.



### ISBN

978-1-943532-83-4

### Trim

7" x 9" Portrait

### Extent

300pp

### Binding

Softbound

### Provisional Publication

Spring 2020

### Cost

\$34.95

**For orders, inquiries, and all additional information please contact us:**

#### ORO EDITIONS

31 Commercial Blvd. Suite F  
Novato CA 94949  
USA

P: 415.883.3300

F: 415.883.3309

[info@oroeditions.com](mailto:info@oroeditions.com)

[www.oroeditions.com](http://www.oroeditions.com)

#### PDFs and Hard copies are available:

For review copy requests, please contact  
Brooke Biro at [Brooke@oroeditions.com](mailto:Brooke@oroeditions.com)

ISBN: 978-1-943532-83-4



All Information is in advance of publication date and may be subject to change

## Advanced praise for Mark Alan Hewitt's *Draw In Order to See*

Mark Hewitt's brilliant new book is essential reading for anyone interested in how human beings think and make decisions. It is of particular relevance to those who are involved in architectural education, architectural theory or architectural design. It updates such classic handbooks as *Towards a New Architecture* and *The Architecture of Humanism*.

—Allan Greenberg, architect, Driehaus Prize recipient, author of *The Architecture of Democracy*

Mark Allan Hewitt's book *Draw in Order to See* is a remarkable study in the history, processes and practices of architectural thinking, design and representation, and their cultural, embodied and neurological groundings. It is a persuasive argument for the benefits of the bodily and manual practices of sketching, drawing and making physical models. The writer's argument is balanced, convincing and enjoyable, and the book is superbly illustrated. Every architecture teacher and student should read the author's twelve recommendations and draw the evident conclusions. Having practiced and taught architecture over half a century, I fully support these proposals to re-orient architectural thinking and education.

—Juhani Pallasmaa, architect, HonSAFA, HonFAIA, IntFRIBA, Professor Emeritus, Aalto University, author of *The Eyes of the Skin: Architecture and the Senses*

This book is a tour de force that weaves together insights from design history, philosophy, psychology, and even neuroscience, to tell a compelling story about the interplay between representation and practice (with mind, eye, and hand) in art and architecture. Few people have the grounding in practice and breadth of knowledge to carry out such an ambitious project. The prose is smooth and entertaining, and the drawings and images are not only delightful, but an education onto themselves. It should be required reading for architects and other designers who wish to understand the past and future of their discipline.

—Vinod Goel, Professor of Cognitive Neuroscience, York University, author of *Sketches of Thought*

Mark Hewitt's *Draw in Order to See* is designed to help us See in Order to Understand, as its profuse and illuminating illustrations enrich a text that links eye, brain and hand to the action-perception cycle. He then guides us from the art of drawing to the drawing of art and on to scenography and architecture, with drawing guiding the design of spaces for our embodied and emotional experience.

—Michael Arbib, Professor Emeritus of Computer Science and Neuroscience, University of Southern California, author of *How the Brain Got Language*

Mark Hewitt's book presents architectural design throughout history as no less than a form of human cognition. Drawing on the most recent discoveries in neuroscience, he documents the role of memory and the importance of hand drawing to the mental process of design.

—Stuart Cohen, FAIA, Professor Emeritus of Architecture, University of Illinois, Chicago Circle

When Carlo Scarpa (1906-1978) explained, "I draw in order to see," he was restating in the 1960s what artists and architects believed since the sixteenth century – that disegno is a process of "drawing out" that which is unseen, making the not-yet-visible, visible. Hewitt's book is no less a drawing out of the rich history and meaning of the architect's task, and how the mimesis of drawing is different in kind from the mimicry of digital renderings.

—George Dodds, Alvin and Sally Beaman Professor of Architecture, University of Tennessee, author of *Building Desire: On the Barcelona Pavilion*

