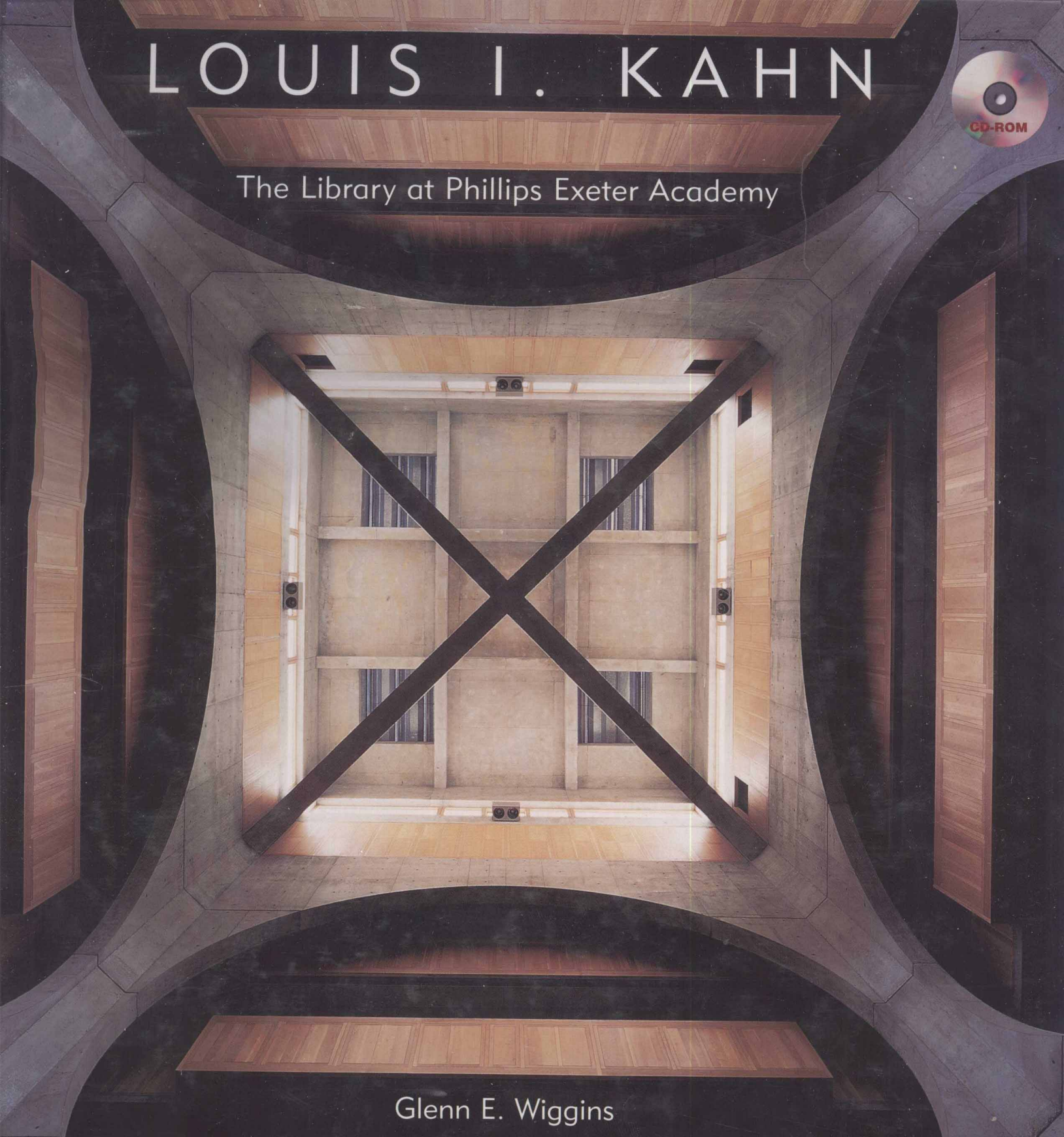
LOUIS I. KAHN

The Library at Phillips Exeter Academy



Glenn E. Wiggins

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The Library at Phillips Exeter Academy

by Glenn E. Wiggins

VNR Van Nostrand Reinhold

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Cover design:
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Printed in Hong Kong

Van Nostrand Reinhold staff:

Executive Editor:
Roberto de Alba

Production Editor:
Carla M. Nessler

Production Manager:
Mary McCartney

Text Design & Composition:
Paul Aljian

Electronic Projects Manager:
Geraldine Albert

For more information, contact:

Van Nostrand Reinhold
115 Fifth Avenue
New York, NY 10003

Chapman & Hall GmbH
Pappelallee 3
69469 Weinheim
Germany

Chapman & Hall
2-6 Boundary Row
London
SE1 8HN
United Kingdom

International Thomson Publishing Asia
221 Henderson Road #05-10
Henderson Building
Singapore 0315

Thomas Nelson Australia
102 Dodds Street
South Melbourne, 3205
Victoria, Australia

International Thomson Publishing Japan
Hirakawacho Kyowa Building, 3F
2-2-1 Hirakawacho
Chiyoda-ku, 102 Tokyo
Japan

Nelson Canada
1120 Birchmount Road
Scarborough, Ontario
Canada M1K 5G4

International Thomson Editores
Seneca 53
Col. Polanco
11560 Mexico D.F. Mexico

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1 2 3 4 5 6 7 8 9 10 CP-HK 02 01 00 99 98 97

Library of Congress Cataloging-in-Publication Data

Wiggins, Glenn E.
Louis I. Kahn : the library at Phillips Exeter Academy / Glenn E. Wiggins.
p. cm.
Includes bibliographical references
ISBN 0-442-02531-9
1. Phillips Exeter Academy. Library — Buildings. 2. Academic libraries — New Hampshire — Exeter. 3. Library architecture — New Hampshire — Exeter. 4. Exeter (N.H.) — Buildings, structures, etc. 5. Kahn, Louis I., 1901-1974 — Criticism and interpretation.
I. Title
Z733.P57W4 1997
727'.82'09742—dc21 97-6038
CIP

www.vnr.com
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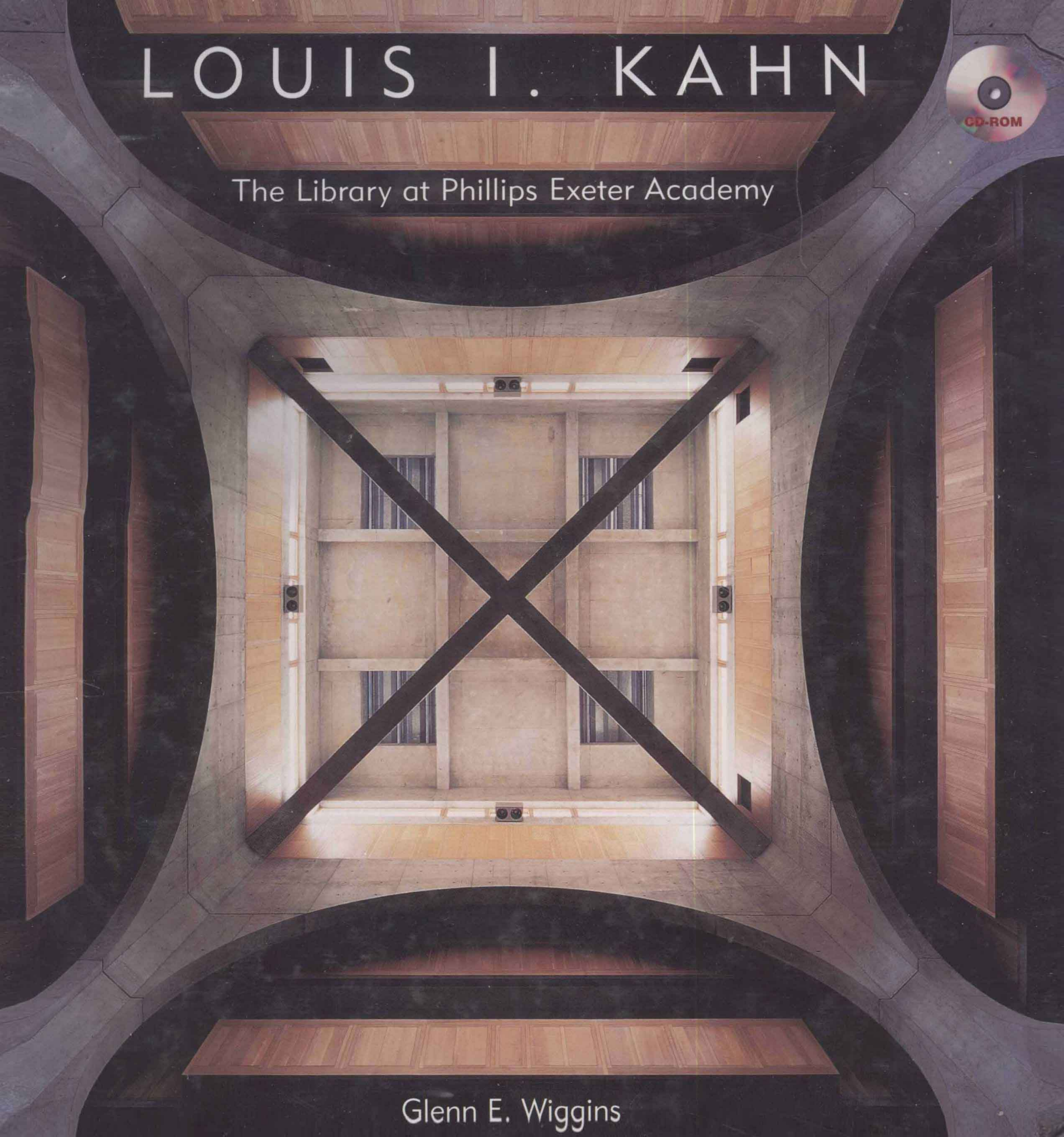
LOUIS I. KAHN

CD-ROM

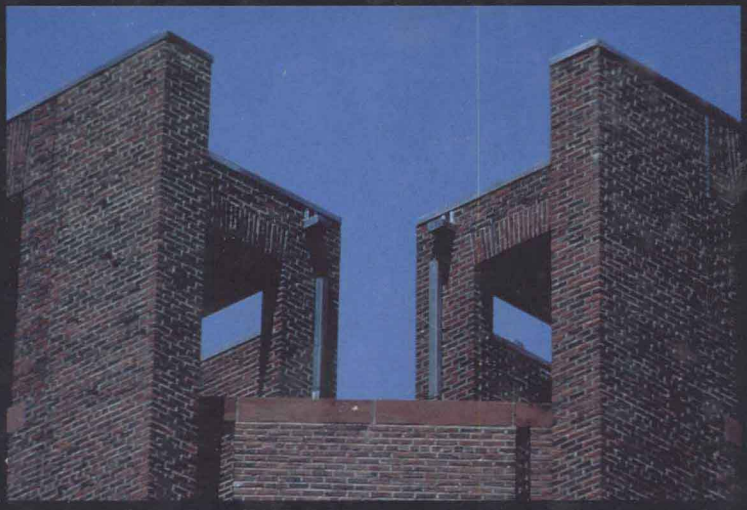
The Library at Phillips Exeter Academy



Glenn E. Wiggins

"The Library at Phillips Exeter Academy in Exeter, NH, has won the Twenty-Five Year award from the American Institute of Architects. The award is bestowed annually on an American work of architecture that has proved its merit over a life of at least a quarter of a century. . . . The Exeter Library, which opened in 1971, was designed by Louis I. Kahn (1901-74). Kahn . . . accomplished something no one else had quite figured out how to do. He made modern buildings that achieved the timeless, monumental presence of the great works of the past. . . . Kahn respected books. 'Nobody ever paid the price of a book; they pay only for the printing,' he once said. Exeter is his attempt to embody, in brick and teak and marble and concrete, the essence of a particular kind of institution: the house of books, the library."

—Robert Campbell,
The Boston Globe, January 11, 1997



This groundbreaking CD-ROM will bring you as close to the Library at Philips Exeter Academy as you can get without actually visiting it. The disc includes:

- **video clips of the library's exterior and interior**
- **animated plans and sections**
- **hundreds of exterior and interior color photographs**
- **audio explanations by the author**
- **archival audio recordings of Kahn's lectures**
- **illustrated descriptions of five other projects by Kahn**

System Requirements:

Macintosh®: 68040 or Power PC processor; Apple® System 7.0 or higher; 5MB of free RAM (8MB recommended); 8-bit video display (16- or 24-bit recommended); 14-inch color monitor; 2X CD-ROM drive.

Windows®: 80486 or Pentium-compatible processor; Windows® 3.1 or higher; 4MB of free RAM (
ommended); 640 x 480 color monitor; 2X CD-ROM drive; MPC-compatible sound card; speaker

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Foreword and Credits

Many people believe that architecture is the essentially deterministic conjunction of program, legalistic issues, and technique. Users of this CD-ROM may come to question such a belief. A thoughtful exploration of the experiential and analytical sections of the CD will reveal Louis Kahn to have had a strong ideological and aesthetic commitment to a particular way of designing. In the Library at Phillips Exeter Academy we see a design that responds to far more than basic utilitarian concerns, regulations dealing with planning, zoning, and building codes, and methods and materials of construction. While all of these are important, what stands out is the way in which Kahn's particular commitment to design informs these and other issues.

There are many risks in using CD-ROM for this study. Foremost among them is the danger of emphasizing form over content. While good form is important, it is in no way a substitute for content. Therefore, it is important to note that this CD is first and foremost a study of Kahn's particular design ideas as they are embodied in the Library. In studying Kahn we may discover ideas that help us to understand not only Kahn and his work but also our own work.

Why CD-ROM instead of Text?

I enjoy architecture and find it infinitely interesting. I enjoy studying architects, their design ideas, and, whenever possible, visiting their actual buildings. Like most people, however, it is impossible for me to visit every building I would like to see and study. In these instances it is natural to resort to books and articles, studying text, photographs, and drawings. This process has many strengths, not the least of which is the portability of the material, but it also has limitations.

Variety of Images

- Generally not enough images are available to provide a complete description of the building.
- Images may be taken not to explain a building but rather to make it look good.
- Images are not arranged to provide a feeling for what it might be like to actually visit the building.
- Often the position from which an image was taken is unclear.
- Images typically focus solely on the building under consideration. Thus the building is treated in isolation, without regard for the environment surrounding it.

Availability of Formats

- The traditional text and photographic format precludes the video, sound files, and animation sequences that provide richer description of the building, its architect, and the design ideas.

Clarity of Relationships

- I often find myself struggling to relate a piece of text to a photograph and the photograph to a plan.

To avoid problems such as these, I selected CD-ROM over traditional print for this study. The format provides a fresh and appropriate way to study architecture, approximating as nearly as possible the actual experience of visiting the building. Advantages include:

Variety of Images

- Images are arranged *experientially,* their sequence following what visitors to the site might encounter as they walk around and through the building.
- A large number of images have been included to provide the fullest possible visual description.
- The position from which each image was taken is clearly indicated.
- Both the architecture and the landscaping around the building are completely shown. The thoughtful architectural study does not treat the building as a jewel box, without regard for its surrounding environment.

Range of Media

- To provide the richest possible visible description of the Library, still images are complemented by a large number of video clips. These provide information about the building that no number of still photographs can provide.
- Sound files are included to enrich the study process. Notable among these are excerpts of Kahn speaking about his design process and the Library. Also of note is the clock sound heard every time the CD is started. This sound was recorded from a large grandfather clock that sits adjacent to the Library's main entrance and central hall. It is a subtle but distinctive feature of the Library.
- Animation files have been included to more fully describe Kahn's design ideas for the building. They facilitate a quick understanding of often difficult and complex issues.
- Because the CD employs so many media, there is no one right way to use it; rather, users can move through the material in any manner they choose. However, users who elect to go through the program one frame at a time will see that the images have been arranged experientially, approximating what it might be like to approach and pass through the Library.

In addition to the features already discussed, the CD includes an extensive Analysis section that helps users explore Kahn's particular commitment to design and the way it influenced the built form.

A Note about Photography

It has been suggested, perhaps cynically, that a mediocre design can be enhanced by good, if deceptive photography. Certainly architects, owners, and photographers work to capture images of a building that project a particular, desired quality. The danger is that the images may become such art objects that the building itself is misrepresented, if not lost.

No deception is necessary when photographing the Library — the quality of the architecture speaks for itself. My goal is to provide photographs that fully reveal the nature of the building as well as provide insights into its design. Parenthetically, it is worth mentioning that I have included photographs of the building exterior taken under a variety of natural lighting conditions. I find that the character of the exterior varies according to the quality of the sunlight striking it. For example, on a clear, dry summer evening the building's elevations have a rich orange glow. In contrast, on hazy, humid mornings they seem much

cooler, almost bluish. While using the CD you will notice this range of lighting conditions and how it adds another level of complexity to the design. Figures 1, 2, 10, 20, 22, 28, and 32 courtesy of Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historic and Museum Commission. Figures 3, 26, 27, 29, 30, 31, 33, 34, 35, 36 courtesy of Grant Mudford Photographer.

Thanks

There are many people to thank for their kind assistance during the development of this CD. Foremost are the librarians and staff of the Library at Phillips Exeter Academy. I am grateful for their openness and cooperation during my many visits to the Library. Thanks to the Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historical and Museum Commission, and again to the Library at Phillips Exeter Academy for the use of the sound recording of Kahn. Jacquelyn Thomas of Phillips Exeter was particularly helpful with the recording.

Many thanks to Mark Gunderson for his photographs of the Kimbell Museum and Professor Stephen Diamond for his photographs of the Salk Institute. Thanks also to the Yale University Art Gallery and the Yale Center for British Art for allowing me to photograph the interiors of their buildings. Black-and-white photographs of Louis Kahn are all from the Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historical and Museum Commission. Thanks to Vicky MacDonald of Shambhala Publications, Inc., for her assistance with my research.

Professor Mike Feller, who has been an unending source of advice and assistance throughout this project, deserves special praise. The final result would certainly be less without his input, and I am most grateful. Thanks also to the Davis Center for Advanced Computer Graphics and Interactive Learning and to the Wentworth Institute of Technology for the use of hardware and software laboratories.

I am also indebted to Roberto de Alba and Van Nostrand Reinhold. Roberto has been a great source of encouragement, helping me maintain my enthusiasm throughout the project.

Thanks to Donald Schön and Leo Marx at MIT, who, while not involved with this particular project, are a continuing source of inspiration.

Finally, thanks to Rae Jean Wiggins, who contributed her usual thoughtful comments on the printed part of the project, as well as valuable advice concerning issues of media.

—Glenn E. Wiggins
Boston, 1997

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A Brief Overview of the Library at Phillips Exeter Academy

When he began his design for the Library at Phillips Exeter Academy, Louis Kahn first asked himself what a library should be. His goal, at least in part, was to discover the essential meaning of "library" and to let this meaning guide his design process. Unlike an architect who might begin with studies of the building's more practical requirements — its program — or who might visit and study exemplary libraries for input and inspiration, Kahn began as if no other library had ever been built, as if *this* problem were completely new. He wanted to know how this institution "library" related to men and women.

Kahn answered his question by saying, "I see a library as a place where the librarian can lay out the books, open especially to selected pages to seduce the readers. There should be a place with great tables on which the librarian can put the books, and the readers should be able to take the books and go to the light."[1] In many ways this seemingly simple statement describes the Library's entire design. It also indicates a design in which a user's movement — his or her procession through and around the building — is of particular significance. Given the importance of procession to the overall design of the Library, an overview of the building is best accomplished by tracing the steps a user might take moving to and through the building.

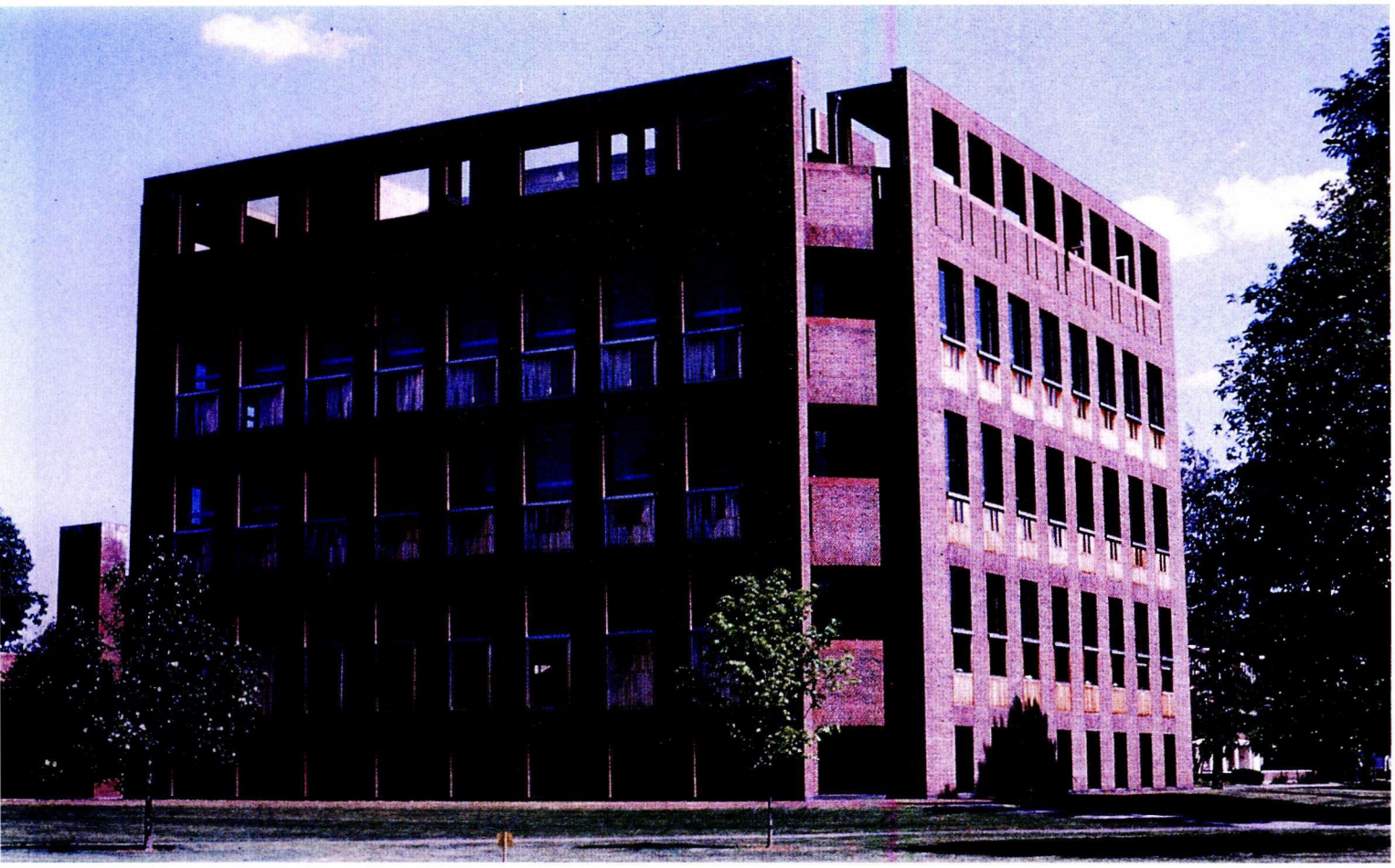


FIGURE 4. *Looking Northeast to Library.*

When approaching the Library from a distance (Reference Figure 4), a user may notice that it is one of several adjacent traditional masonry structures. Certainly Kahn was influenced by the existing buildings on the campus. He said, "Brick was the most friendly material in this environment. I didn't want the library to be shockingly different in any way. I never lost my love of the old buildings."[2] The Academy Building (Reference Figure 5), which is directly north of the library, is typical of the surrounding masonry structures.

From a distance, a user may be tempted to conclude that all of the Library's elevations are the same. Closer inspection, however, reveals a great deal of subtle variation

both between different elevations and within individual elevations. For example, consider the wide variety of window types occurring on the east elevation (Reference Figure 6). These windows were designed in response to the specific qualities of the light they admit into the building as well as to the differing needs in the interior behind them.

Passing near the façade a user also notes a variation in the width of the masonry piers between the windows (Reference Figure 7). Kahn felt that it was important to be "true" to the nature of a material. For example, brick should be treated as a load-bearing material, not as a mere veneer on a skeletal structure. He argued further that the force of gravity and the weight of the masonry should be evident in the construction. Thus, as the Library's brick piers rise and the load they must carry decreases, they

FIGURE 5. *Academy Building—South Elevation.*

FIGURE 6. *East Elevation.*

FIGURE 7. *Looking up Pier.*

become progressively narrower. Similarly, arches above windows become shallower and windows wider.

Surrounding the Library on all sides is an arcade (Reference Figure 8). It has been commented upon by numerous sources that the design of this arcade tends to conceal the main entrance into the building. Kahn, however, felt this continuous arcade to be an essential feature for the institution. He said, "From all sides [of the campus] there is an entrance. If you are scurrying in a rain to get to the building, you can come in at any

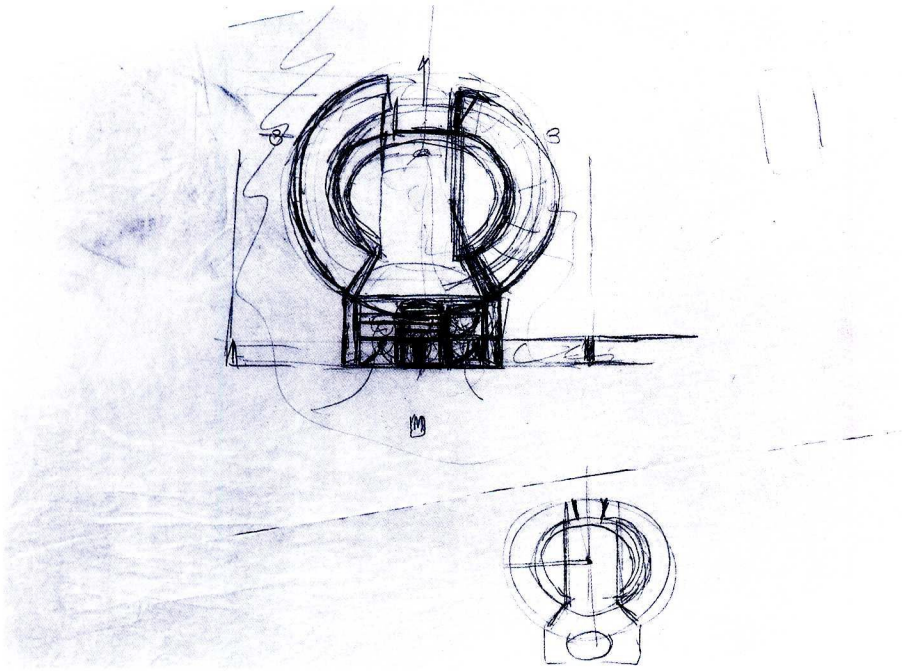


FIGURE 10. *Schematic Sketch. Entrance stairs plan. Graphite on yellow trace.*

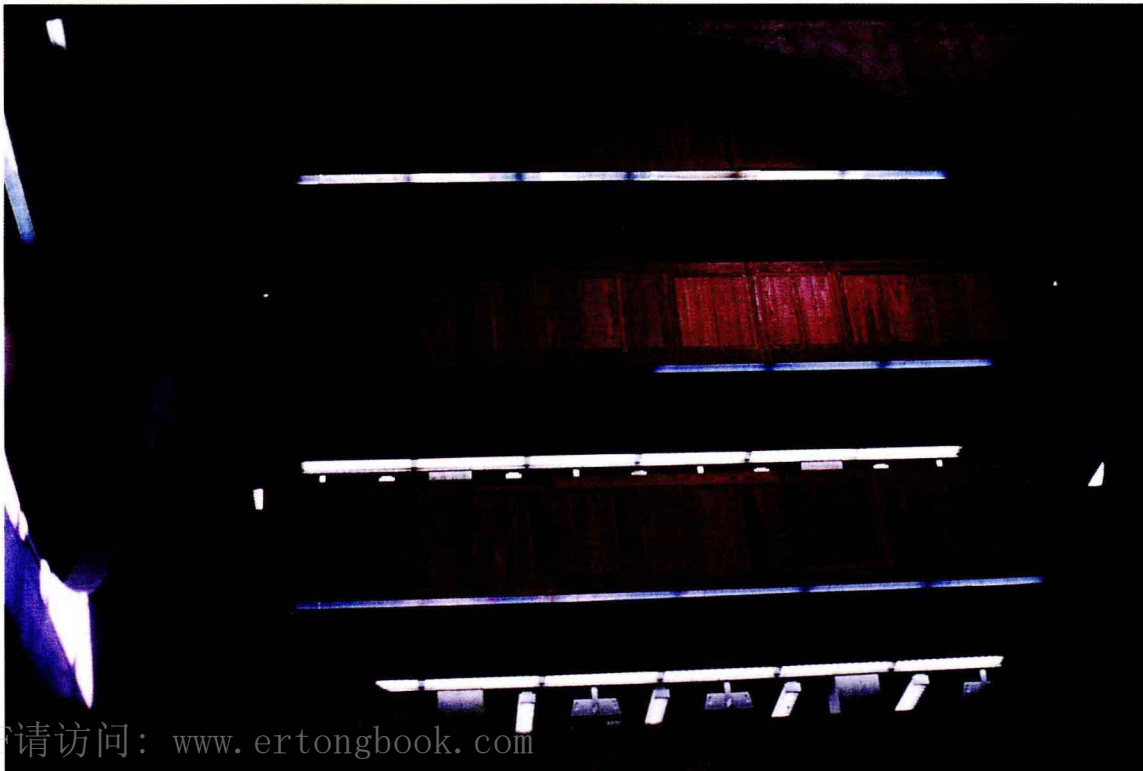
point and find your entrance. It's a continuous campus-style entrance."[3] In addition to providing shelter, the arcade does inevitably lead users to the main entrance, which is located on the north elevation (Reference Figure 9). Moreover, the arcade provides a sense of transition from the building's exterior to its interior.

It is upon entering the building that users can begin to understand the way in which Kahn's form statement concerning what a library "wants to be" so fundamentally shaped the building's design. Passing from exterior to interior users encounter a grand circular stair (Reference Figure 11). Moving up this stair they enter a central hall surrounded on all sides by large circular openings; this is where the "invitation to books" occurs. This invitation occurs in several different ways. First, the librarians actually place selected books on tables and in cases. Also, carts filled with books — a function of the normal life of the Library — are evident (Reference Figure 12). At a more essential level, however, the design of the building itself participates in the seduction of the user. Moving up the stair and standing in the hall, users can look through the large circular openings and into the main book stacks of the library (Reference Figure 13). This provides an invitation to leave the central hall and enter the stacks.

FIGURE 11. *Entry Stair.*

FIGURE 12. *Circulation Desk in Central Hall.*

FIGURE 13. *Looking up Stair into Central Hall.*



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