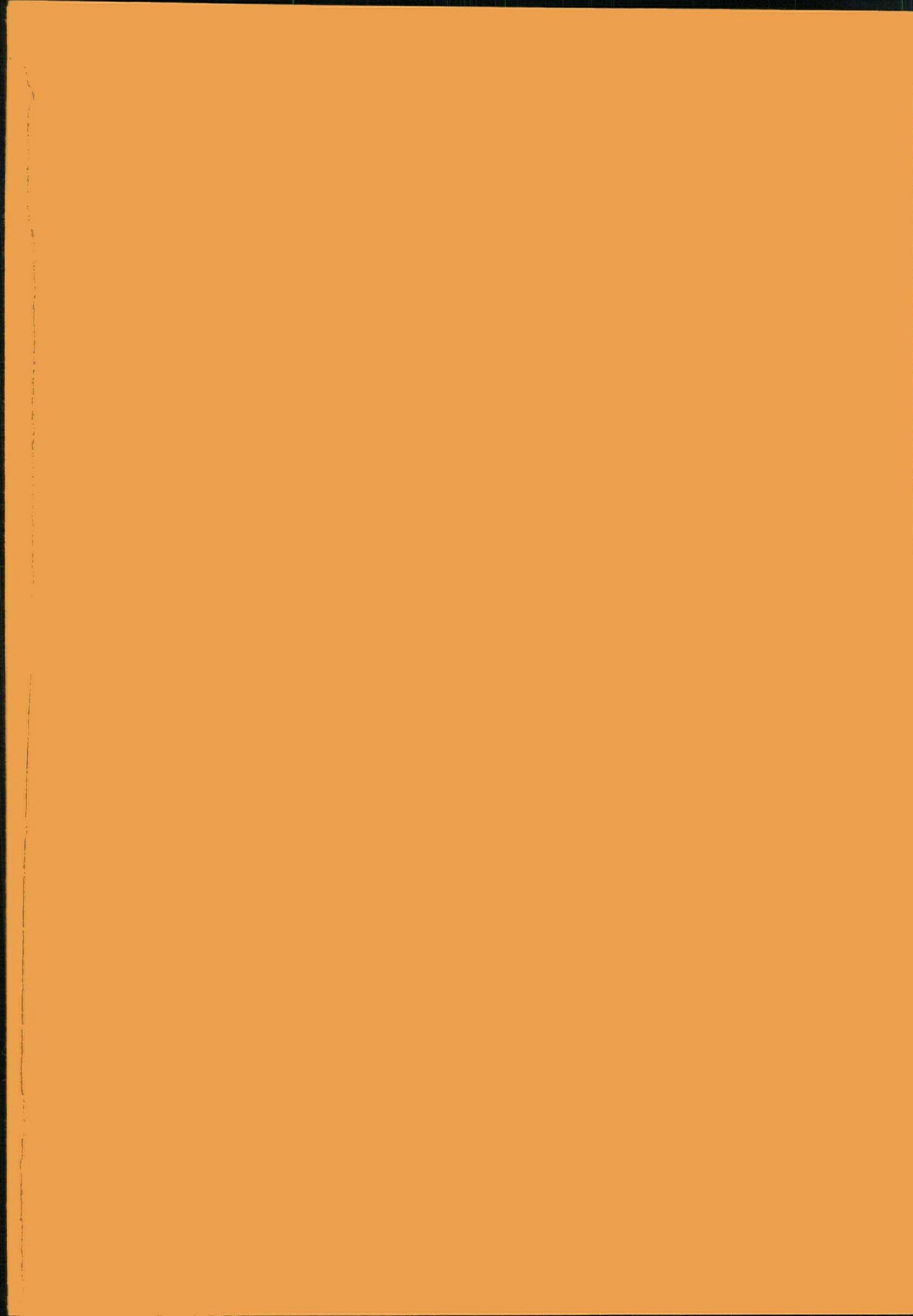


Perspecta 22: The Journal of the Yale School of Architecture *Paradigms of Architecture*



HOUSTON
10 JAN 87

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RIZZOLI
NEW YORK

Perspecta: The Yale Architectural Journal
is published in the United States of America
by Rizzoli International Publications, Inc.,
597 Fifth Avenue, New York, NY 10017

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The Yale Architectural Journal, Inc.,
and Rizzoli International Publications, Inc.
ISBN: 0-8478-5421-3
LC: 56-28005
ISSN: 0079-0958

Send editorial correspondence to:
Perspecta: The Yale Architectural Journal
The Yale School of Architecture
180 York Street
New Haven, Connecticut 06520

Send orders and business correspondence to:
Subscription Department
Rizzoli International Publications
597 Fifth Avenue
New York, NY 10017

Printed and bound in Japan

Perspecta 22 was designed during 1985 in
New Haven, Connecticut. The typeface
used throughout is Times Roman and was
set by G & S Typesetters, Inc. of Austin,
Texas. *Perspecta 22* was printed in an
edition of 3,000 copies.

Co-Editors *John Perkins, Paul Rosenblatt, Jennifer Sage*

Graphic Designer *William Anton*

Copy Editor *Ruth Hein*

Board of Trustees of Perspecta, Inc.
*Harold Roth, President; Cesar Pelli, Dean;
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Thanks to the following for their help and advice: *Robert Livesey, Michael Roemer, Sandra Cloud, Dolores Gall*

With thanks to: *Ross Cann, Garrett Finney, Bill Grego, Robert Kupiec, Beverly Lett, Sharon Matthews, Tim Mohr, Erin Reilly, Chris Ryan, Kim Shkapich, the Eiflers and Cousin Alice, and Seamus*

Special thanks to *Peter Coombe* and to the following people for their help in preparing the drawings of Unity Temple: *George Ranalli, Corvin Alstot, Susan Baggs, Rasa Bauza, Kristin Hawkins, Mark Hesselgrave, Lucy Irwin, Peter MacKieth, Randall Ott, Mark Rylander, Steven Wright, Unity Temple, The Unity Temple Foundation, The Frank Lloyd Wright Home and Studio, Sturr Young Associates, Ltd.*

The Editors wish to thank the following for their generous gifts which made the printing of this issue possible: *Agrest & Gandelsonas, Thomas Beeby, CRS Surrine, Ulrich Franzen, Frank Gehry, Mitchell Giurgola, Bruce Graham, Gwathmey Siegel and Associates, Margaret Helfand, Philip Johnson, Kohn Pedersen Fox, Richard Meier, IM Pei and Partners, Cesar Pelli and Associates, James Stewart Polshek, James Volney Richter, Arthur Rosenblatt, Skidmore Owings and Merrill-New York, Robert AM Stern, Venturi, Rauch and Scott-Brown.*

10

The Villa as Paradigm

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32

Multiple Essences

Kent Bloomer

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38

A Note on Photography and Its Influence on Architecture

Kenneth Frampton

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42

Diagrams

Douglas Graf

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72

The Space In-Between

John Hejduk

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94

Drawing a Conclusion

Jeffrey Kipnis

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100

Defining Paradigm

Cesar Pelli

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102

Excerpts From a Conversation

Paul Rudolph

Paul Rudolph, Chairman of the Department of Architecture at Yale University from 1958 to 1965, is a practicing architect in New York City.

108

Unity Temple and the A&A

Vincent Scully

Vincent Scully, Sterling Professor of the History of Art at Yale University, teaches and writes on both ancient and modern architecture.

112

**Mies van der Rohe:
A Moral Modernist Model**
Stanley Tigerman

Stanley Tigerman is principal of the architectural firm of Tigerman, Fugman, McCurry in Chicago and is professor of architecture at the University of Illinois at Chicago where he directs the post-professional graduate program. He has taught at Harvard and Yale universities as well as many others and is a fellow at the American Academy in Rome. He is author of *Late Entries to the Chicago Tribune Tower Competition*, *Versus*, and a new book, *BAB-ILU*, to be published in 1986.

136

**Architectural Cryptograms: Style and
Type in Romantic Historiography**
Anthony Vidler

Anthony Vidler is Professor of Architecture and Director of the Program in European Cultural Studies at Princeton University. His monograph on Claude-Nicolas Ledoux will be published by Electa, Milan, in the fall of 1985. This essay is part of a more comprehensive study of late-eighteenth-century theory, *The Writing on the Walls*, Princeton Architectural Press, fall of 1985. Professor Vidler is at present writing a book on the architecture of French Romanticism as a John Simon Guggenheim Fellow in Paris.

142

**Drawings and Photographs of
Unity Temple**
The Editors

The Editors, John Perkins, Paul Rosenblatt and Jennifer Sage graduated from the Yale School of Architecture in May, 1984.

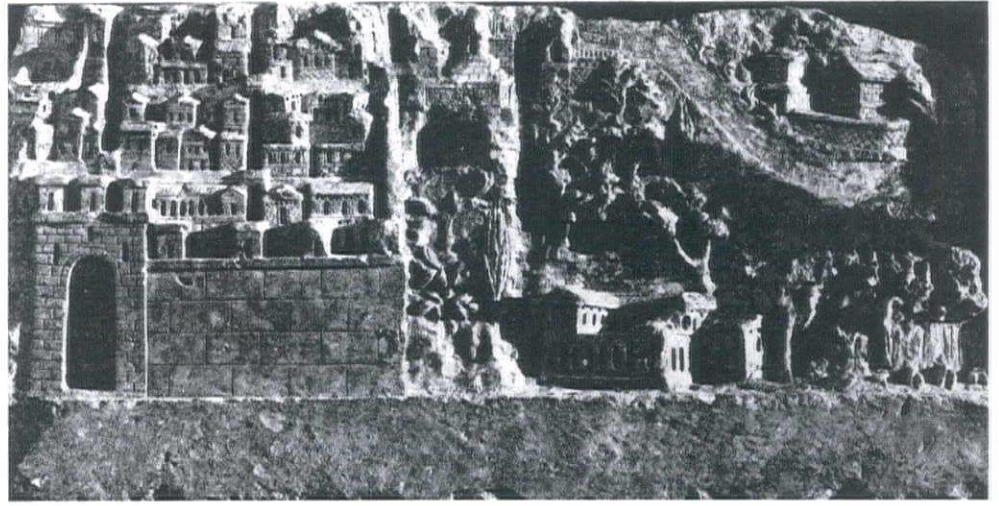
We began work on this issue with the intention of collecting responses to the idea of the paradigm in architecture—whether and how a model is chosen and how it is transformed in the design process. According to Thomas Kuhn, who has written extensively on the subject of paradigms and scientific thought, a paradigm is a “universally recognized solution,” a “consensus.”¹ By this definition, an architectural paradigm may be any building, idea, or theory that is universally understood to offer a solution to the problem of finding an approach to making architecture in which the conceptual and the physical are compatible.

To us, there is no consensus today; rather, there are so many minority opinions as to produce chaotic variety rather than direction. We propose a more limited and personal understanding of paradigm. To us, a paradigm is something—a building, an image, a text, an individual—with both general qualities that transcend its age and specific traits that place it in time.

Any existing building, idea, or image an architect fixes upon can therefore become the guiding paradigm. (While this paradigm may be an ideal, it does not have to be.) In the process of designing, the architect necessarily transforms his model in terms of the real considerations of program, site, and structure. The outcome is the transcendence of the paradigm. The new architecture that grows out of the process is meaningfully placed into the continuum of architectural history, into a pre-existing system of references. The new work, in turn, will have general qualities that transcend the age and specific traits that anchor it to its time.

We sought the opinions of a diverse group of scholars and practitioners on the subject of paradigm. Their responses revealed a pattern—in Kuhn's term, a "consensus," a paradigm of paradigms. Some of our contributors addressed the function of an individual as a paradigm. Others discussed the effect of a specific building, type of building, or image. Finally, some dealt with the relationship between ideas and the physical world. All these articles, either in describing an existing paradigm or in formulating a new one, center on the paradigm as an idea that simultaneously expresses the inspiration for making and the thing that is made, the mold and that which is cast.

1
Roman relief showing town
and suburban villa,
Avezzano, Italy



1

Introduction

A villa is a building in the country – or at least outside the city – designed for its owner's enjoyment and relaxation. Though a villa may also serve as the center of an agricultural enterprise, the pleasure factor is what essentially distinguishes this kind of residence from the farmhouse. Similarly, a villa estate differs from the farm.¹ The farmhouse tends to be simple in structure and to perpetuate formal solutions that do not require the intervention of a designer. The villa, typically the product of an architect's imagination, asserts its modernity.

Since it was first fixed by the patricians of ancient Rome, the basic program of the villa has remained unchanged for more than two thousand years. The villa is therefore unique as a paradigm; other architectural types – the palace, the place of worship, the factory – have changed in form and purpose as the role of the ruler, the character of the liturgy, the nature of manufacture have changed, frequently and often radically. The villa has remained substantially the same because it fulfills a need that never alters. Because it is not material but psychological and ideological, this need is not subject to the influences of evolving societies and

technologies. The villa accommodates a fantasy impervious to reality.

The villa cannot be understood apart from the city; it exists not to fulfill autonomous functions but as the antithesis to urban values and accommodations, and its economic situation is that of a satellite (fig. 1). The villa may be built and supported with monetary surpluses generated by urban commerce and industry; or, when it is sustained by agriculture, the villa may be justified by urban centers' need for the surplus it will produce. Consequently the fate of the villa has been intimately tied to that of the city; villa culture has thrived in periods of metropolitan growth (as was true in ancient Rome, eighteenth- and nineteenth-century Britain, and the twentieth century throughout the West) and has declined with urban decline – indeed, to the point of extinction as urban life withered from the fifth to the eleventh century in the West. But this generalization is invalid for two moments in Western history: the apogee of the republican city-state in classical Greece and the communes of central Europe and Italy in the period 1000–1300. Perhaps in these moments of communal idealism those whom the political institutions most benefited felt no need to escape the city; or it may be that life in the country was still too rugged and unsafe for anyone not raised to endure its rigors.

As satellites, villas have not always been near the cities on which they depended. Some colonial agricultural centers – such as those in Gaul, Britain, and Africa in Roman times and in the southern United States in pre-Revolutionary times – were established in areas almost devoid of urban development and became in themselves industrial and cultural centers, importing the values of urban culture. They often grew to be large in scale, and their dependence on the institution of slavery was due in part to their isolation.

I shall exclude from what follows examples designed for rulers. While only persons of wealth, and usually of prestige and power, have been able to afford a villa (at least until the nineteenth century), the idea of a country dwelling is a bourgeois concept, responding to the perceived needs of the city dweller. The villas of kings and princes, built and supported by public wealth, are essentially hybrids, rooted in bourgeois ideology but, by virtue of often unlimited economic means and the symbolic and representational requirements of supreme power, demanding a scale and an elegance in some degree antithetical to the concept. The villa of the Emperor Hadrian at Tivoli is the paradigm of this hybrid form.

The Ideology of the Villa

- 12 Today, as in the past, the farmer and the peasant, whether poor and oppressed or rich and independent, do not as a rule regard country life as an idyllic state; they accept it as a necessary and, more often than not, somewhat antipathetic condition. In the folklore of all ages the country dweller longs – though possibly with some misgivings – for the stimulation and comforts of city life. The city dweller, on the other hand, has typically idealized country life and has sought to acquire a property from which it might be enjoyed if he could afford it. This impulse is generated by psychological rather than utilitarian needs; it is quintessentially ideological.²

I use “ideology” not in the current colloquial sense, to designate a strongly held conviction, but rather as referring to a concept or myth so firmly rooted in the unconscious that it is held as an incontrovertible truth. Marxists interpret ideology in this sense as the means by which the dominant class reinforces and justifies the social and economic structure and its privileged position within it while obscuring its motivation from itself and others. In these terms the villa is a paradigm, not only of architecture, but of ideology; it is a myth or fantasy through which, over the course of millennia, persons whose position of privilege is rooted in urban commerce and industry

have been able to expropriate rural land often requiring the care of a laboring class or of slaves for the realization of the myth.

Because literature is a primary form expressing myths, the ideology of the villa in every epoch is richly reinforced by poetry and prose. Indeed, literary works have not merely reflected the villa culture of their time; they have promoted villa concepts developed in later times.

Major revivals of the villa from that of the fifteenth century in Italy to Le Corbusier have been explicitly justified by reference to the Roman writers of the late Republic and early Empire – Cato, Varro, Virgil, Horace, Pliny the Younger, Vitruvius, and others. Each villa revival has been accompanied by a revival of villa literature: in the fifteenth century that of Poliziano and Bembo; in eighteenth-century England that of Shaftesbury, James Thomson, Pope, and ultimately the early novel (the writings of Jane Austen seem obsessed with the property and status problems of urban-oriented country life); in nineteenth-century America, that of the Transcendentalists, Henry James, and Edith Wharton.

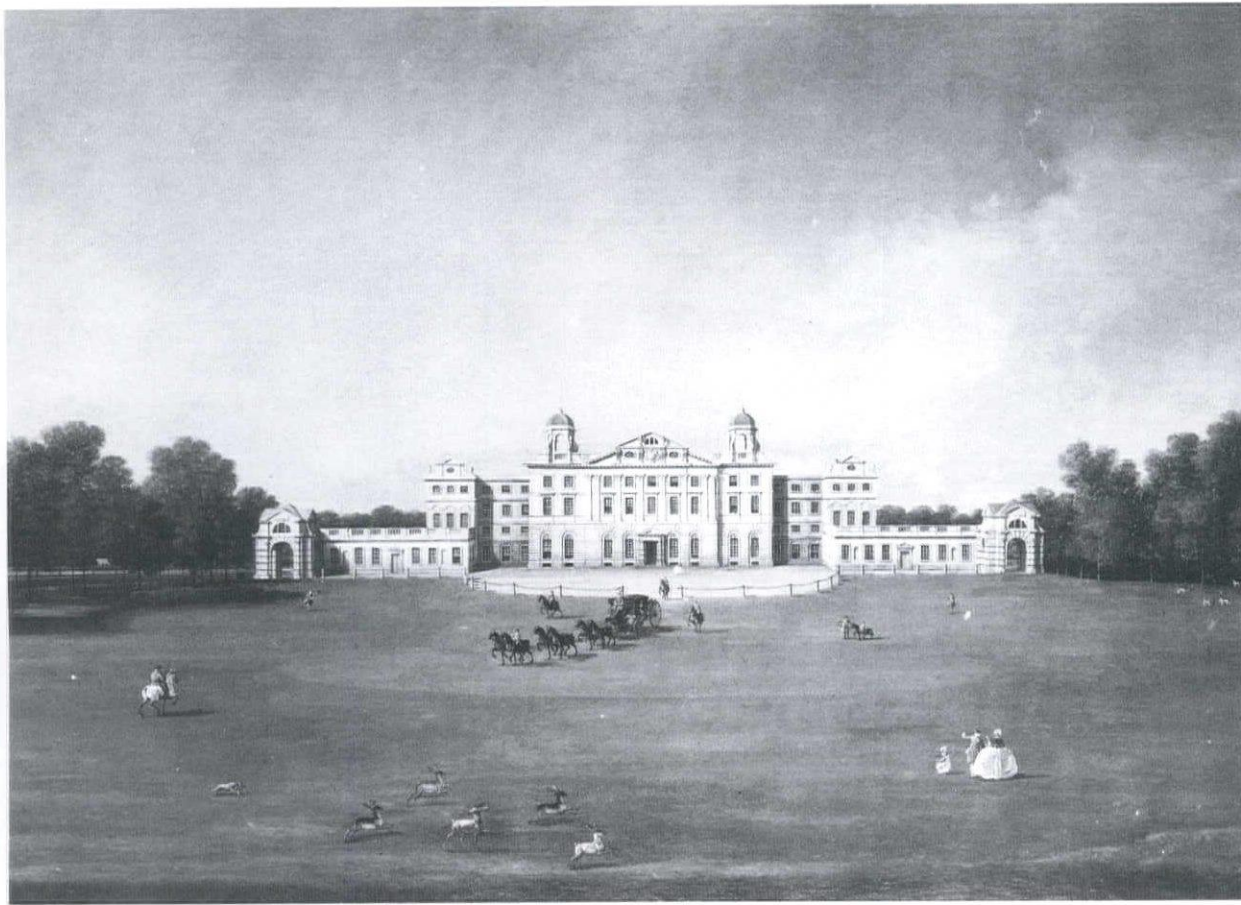


These and other prolific periods in villa history were also marked by a literature devoted to the design and improvement of villas and their gardens – an equally rich source for the interpretation of the myth. The rather muddled prescriptions of ancient authors stimulated a particular inventiveness in treatise writers of the Renaissance (Palladio immediately comes to mind). The publication in England of books on the villa from the early eighteenth to the mid-nineteenth century was literally an industry in itself, and there were those for whom it was a primary vocation. In America, from the time of *The Horticulturalist* in the 1830s to *Sunset Magazine*, *House and Garden*, and *House Beautiful* in the mid- and later twentieth century, instruction in the nurture of the suburban villa has attracted a large public.

Painting also bolsters the ideology. In Pompeiian and other Campanian villas the walls were often decorated with ideal garden and villa scenes; it is chiefly from this source that we know of the appearance of the seaside pleasure residences of the type called *villa marittima*. Tapestries and wall paintings in late-medieval country castles depicted the delights of country life, anticipating the scenes of social gatherings, music parties, and outings on the walls of

2
Fresco of a pleasure villa
from Villa Barbaro, Masèr,
Italy, by Paolo Veronese

3
“Badminton” by Antonio
Canaletto



3

Palladian villas (fig. 2). Eighteenth-century England pioneered in a new genre of painting, the portrait of the country house; its popularity was stimulated by the visit of the distinguished Venetian topographical painter Canaletto (fig. 3). Turner got his start as a specialist in this genre which, though it admittedly gave prominence to the great country houses of the landed aristocracy, must have promoted bourgeois idealization of country life.

Seventeenth-century classical landscape painting, particularly that of Claude Lorrain, rose to prominence in the following century and fostered the aesthetic of the picturesque and the informal English garden; at the end of the century the first Romantic villa designers actually took the imaginary buildings of the Roman Campagna in Lorrain paintings as architectural models. The more modest ambitions of the mid-nineteenth century suburban villa are reflected in early Impressionist paintings, especially those of Monet.

The content of villa ideology is rooted in the contrast of country and city, the virtues and delights of the one being presented as the antitheses of the vices and excesses of the other. The expression is fully articulated in the literature of Republican Rome, where it evolves from an early protovilla stage in the agricultural treatises of Cato and Varro into the typical mature form of Pliny the Younger's two letters describing to a friend the pleasures of two of his numerous luxurious estates — one on the Tuscan seashore and one at Laurentium outside Rome. The early stage, related to stoicism in its ascetic and moral tone, advises the urban man of affairs to acquire a modest farmhouse on a small country property and to cultivate it himself with little or no help; the labor itself is seen as purifying him of the contamination of the city. A similar pattern of evolution is repeated in the later provincial villa culture of Imperial Rome, with its transition from the simple and almost unadorned country residences of the fifteenth century in the Veneto to the elegance of Palladian villas. The same metamorphosis is traceable in Thomas Jefferson's concept of his farm at Monticello from the modest structure of the 1770s (itself surely influenced by the early Roman writers) to the lavish estate of the early nineteenth century (fig. 4).



In describing the sumptuous Tuscan villa, Pliny set the tone for later writers; the letter concludes with an encomium that clearly delineates the rural-urban antithesis.

For besides the attractions which I have mentioned, the greatest is the relaxation and carefree luxury of the place—there is no need for a toga, the neighbors do not come to call, it is always quiet and peaceful—advantages as great as the healthful situation and limpid air. I always feel energetic and fit for anything at my Tuscan villa, both mentally and physically. I exercise my mind by study, my body by hunting. My household, too, flourishes better here than elsewhere: I have never lost a retainer [slave?], none of those I brought up with me.³

About 1600 years later Palladio describes the same benefits from the architect's perspective.

But the villa mansion is of no less utility and comfort [than the city house], since the rest of the time [the gentleman] passes there overseeing his possessions and in improving their potential with industry and with the skill of agriculture. There also, by means of the exercise that one can get in the villa on foot or horseback, the body may more actively be made to preserve its health and robustness, and there the spirit tired of the turmoil of the city may be greatly re-

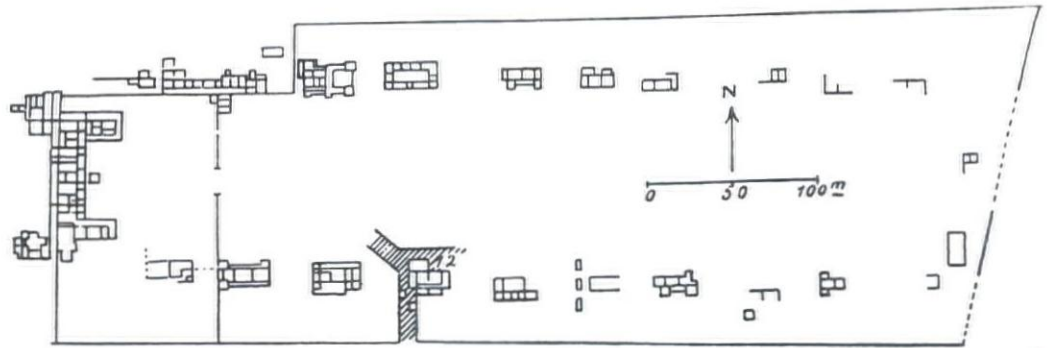
stored and consoled and may peacefully attend to the pursuit of letters and of contemplation. For this reason, the ancient sages used often to retire to such places, where they might be visited by their virtuous friends and relatives and where there were houses, gardens, fountains and similar relaxing places . . . so that they could easily pursue that blessed life so far as it may be achieved here below.⁴

And Le Corbusier, writing to a client in the 1920s, stresses the importance of the landscape setting:

The inhabitants come here because this rustic landscape goes well with country life. They survey their whole domain from the height of their jardin suspendu or from the four aspects of their fenêtres en longueur. Their domestic life is inserted into a Vergilian dream.⁵

The same repertory of the benefits of villa life echoes down the centuries: the practical advantages of farming, the healthfulness provided by the air and exercise—particularly hunting—relaxation in reading, conversation with virtuous friends and contemplation, and delightful views of the landscape.

Social and Economic Aspects



Le Corbusier's reference to his client's "domain" reminds us that the villa is by nature the possession of the privileged and powerful class in society, though at certain times in history, as in the mid-nineteenth century, the privilege has filtered down to those of modest financial means. The social structure of most of the villas we are considering involves the proprietor and his guests on one stratum, servants on another, and in the case of agricultural establishments, farm laborers (often supervised by bailiffs) on still a third. Whether free or enslaved, all of the latter were dependent on the proprietor and his estate for their subsistence during most of the historical span we are considering, and they could not break the serf-master bond without great risk. The owner, however, had no reciprocal obligation toward his retainers. In this respect the villa differs fundamentally from the feudal castle, where the relation between the lord and his retainers was contractual and reciprocal; they provided goods and services—including military service—and he provided protection against common enemies. Long after the feudal system had been forced into the background by a money economy and by urban capitalism, the landed nobility resisted abandoning country castles in favor of villas; this class had no reason to develop a villa ideology until it became economically dependent on the city.

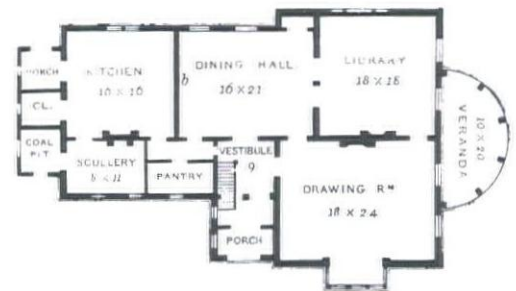
In those areas of the postmedieval western world in which the feudal system was most firmly established, therefore, a villa culture was slow to develop. The situation is clearly delineated in France, where the format of country life for the privileged classes derived from the feudal château. The social character of the château did not change substantially as the monarchy gained in power, drawing the aristocracy into a dependent position at the court, where the competition for preferment made rustic retirement a risky option. Furthermore, the prestige of the aristocracy in France was such that, well into the nineteenth century, bourgeois proprietors modeled their country residences on the aristocrat's château. Viollet-le-Duc's designs for country residences are called "châteaux" while Cesar Daly's, for a lower social stratum, are called "villas."

Economically the villa falls into one of two categories: the self-sustaining agricultural estate that yields not only produce for its own use but a surplus for sale to urban or regional markets sufficient to sustain the proprietor's desired mode of life; and the villa described by Leone Battista Alberti as "per semplice diletto," conceived purely as a retreat and dependent for its construction and maintenance on surplus capital normally earned in urban centers. The ideological opposition of country and city values is thus in part a response to the dependence of the villa style of country life

on the economic resources of the city.

The villa frequently appears in a colonial context, where a powerful empire controls distant territories from whose produce it gains sufficient profit to offset the expense and burden of providing defense and communications. Colonial villas tend to differ in type and scale from those in the homeland; being isolated, they must function as social and administrative units in themselves, often serving as substitutes for towns. Their proprietors are, typically, economically dependent on the production of their estates. The grander villas on the periphery of the Roman Empire—in Gaul, Pannonia, Africa, and the like—mostly built between the second and the fifth centuries, were more complex establishments than those on the Italian peninsula; some, like the villa Anthée near Naumur in Belgium (fig. 5), were small villages in themselves, containing community baths. The American colonies of the southern Atlantic seaboard were virtually without any nearby towns, so that the estates had to accommodate all the communal functions; many included dependent settlements, like their Roman ancestors. The dwellings and workshops of slaves and freedmen have survived too selectively to permit a credible reconstruction of these settlements.





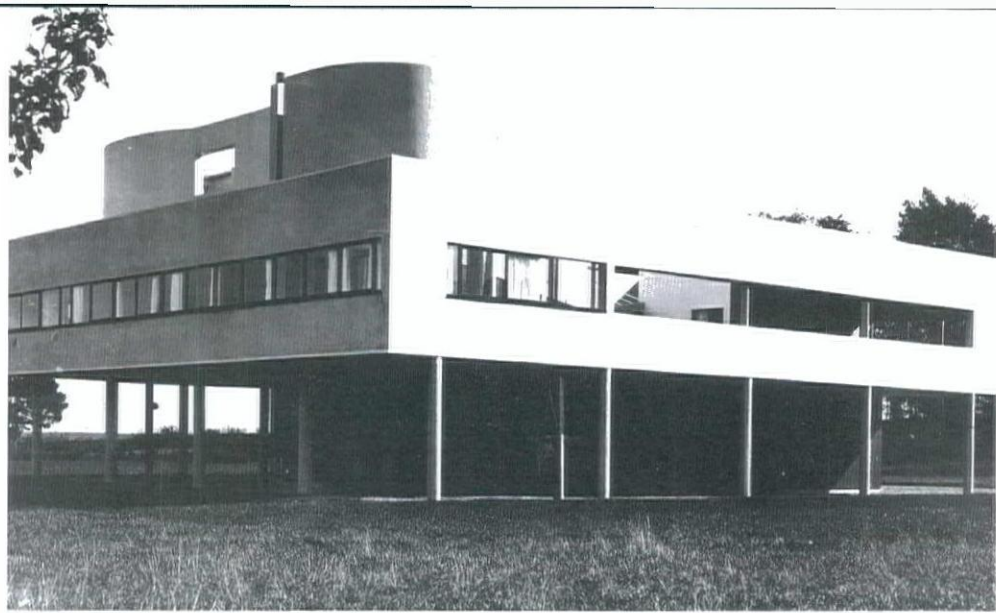
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In the course of time colonial villas in rural territories often spawned towns, reversing the normal dependence of the villa on the city. The far-flung Imperial villa-settlements of Rome and the American plantation centers had originally been sited in places suitable for communication, transport, and in the case of the Roman examples, defense; as urbanization increased, these considerations encouraged the growth of towns, as we are reminded in the etymological linking of "villa," "village," and the French "ville." These were not the great metropolitan centers that grew up as administrative headquarters, but more modest market towns. In the southern United States the domestic architecture of these towns retained some of the openness and rural flavor of the villa-plantation residence.

Southern plantation mansions themselves were not designed to express autonomy from the mother country; on the contrary, their owners, eager to affirm their close ties to Britain, had their carpenters build from plans in books recently published in London; this intention explains the Palladian porch added to the facade of Drayton Hall near Charleston (fig. 6), which was to have had symmetrically placed outbuildings connected to the central block by Palladian quadrants. The fact that these settlers had to subdue the wilderness of a new land at great physical and financial risk cemented their

attachment to the country life and architectural tastes of the British squire. The absence of a comparable villa development in the northern Atlantic colonies is initially attributable to the different social and political orientation of the colonists, the majority of whom, refugees from church and class domination at home, had not attained positions of privilege and status on which to reflect with nostalgia. They had, furthermore, chosen an area more adapted to family farming on small freehold properties, and they had established a society in which there were no slaves, peasants, or serfs to support a gentleman farmer or to maintain a pleasure villa. The contrast between the northern colonial farmer and the southern plantation owner was even greater than that between Cato and Pliny the Younger; Cato, a statesman, farmed for ideological and philosophical reasons, while his American counterpart tilled the land to survive, with a certain Catonian (and Protestant) pride in successful crops and in the sweat they represented but without those mythic trappings that find expression in the literature, art, and architectural symbolism of a proper ideology. Eventually the polarity in both the Roman and the American social and ethical attitudes became seeds of civil war.

The most radical mutation in the history of the villa occurred in the early nineteenth century, when the villa ideology became democratized and accessible to the growing body of lower-middle-class city dwellers.⁶ The causes were complex: the rapid growth of central cities at the expense of the countryside; industrialization; rail and trolley transportation; the effects of eighteenth-century egalitarian social philosophy; Romanticism; and others. The development was anticipated in British villa literature of the later eighteenth and early nineteenth centuries (most effectively by John Claudius Loudon in Great Britain and by Alexander Jackson Davis and Andrew Jackson Downing in the United States), which first provided model plans for small and inexpensive country houses; the texts accompanying these plans promoted the elements of the traditional mythology suited to proprietors below the rank of gentleman (fig. 7). Once the villa had been presented as a commodity, it was a short step to its manufacture by entrepreneurs for the open market, and another short step to its mass production on the periphery of great cities and ultimately of smaller ones. The garden-city movement of the later nineteenth century appropriated as much as possible of villa ideology into its blurred vision of urban and rural values. Ultimately the term "villa" came to be applied to any detached or semidetached residence in city, suburb, or country with



Style and Form

18 a little more open space around it than could be found in dwellings in the densely populated streets of the urban core. This development, however, did not affect the evolution of the villa in its traditional sense, except perhaps in helping to disparage the use of the word “villa” to designate the type. Nineteenth-century country houses in the villa tradition—such as those of Scott, Richardson, Viollet-le-Duc, and Voysey—were not called villas, and in the present century Le Corbusier was exceptional in reviving the designation.

The distinction between the farmhouse and the villa is not simply one of purpose and of program; it is rooted in different cultures and in different rates of evolution. Just as agricultural practices change more slowly than those of industry and commerce, so the farmhouse changes more slowly than the villa. French historians of the *Annales* school have called this phenomenon of gradualism the *longue durée* and have opened new historical potentialities in studying its processes.⁷ Farmhouses in many parts of Europe today retain forms that have remained unchanged for millennia—though they are rapidly being replaced by contractors’ villas and will soon be threatened with total extinction. The debased economic and social position of the peasant (as well as the *contadino* and the sharecropper) have, until recent times, kept him from altering his agricultural methods or the physical setting in which he lives and works; but even on the rare occasions when he became wealthy and worldly, his sense of propriety and pride of class led him to retain traditional forms.

The villa is quite the opposite; it seldom displays an effort on the part of the proprietor or the architect to conform to past custom; with rare exceptions it strains to be the paradigm of the architectural avant-garde. The rule is illustrated by the celebrated milestones of modernist architecture:

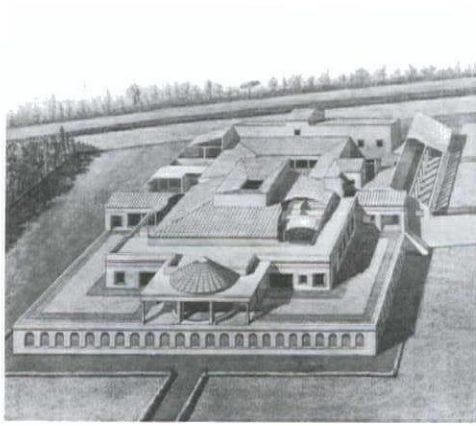
the Ames Gatehouse, the Coonley House, the Villa Savoye at Poissy (fig. 8), the suburban retreats of the New York Five (fig. 9), and Venturi. Granted, Renaissance architects sought to revive antique villas, and British eighteenth-century villa architects were fanatic Palladians; but in both cases the revival was a progressive statement that explicitly rejected a prevailing style. There is hardly a moment in the history of architecture when villas were less innovative than other architectural types. Though urban residences have sometimes kept abreast of villas, generally they follow a more conservative tradition, even in instances where urban and rural residences were designed for the same patron. The different housing styles are consistent with the proprietors’ usual fashions of dress in the city as opposed to the country.

The villa is less fixed in form than most other architectural types because the requirements of leisure lack clear definition. But two contrasting models were firmly established in Roman times: the condensed-cubic and the open-extended. The former was better suited to such crowded suburbs as Pompeii, where the line between the city house and villa was—as in the residences of Le Corbusier or Peter Eisenman (figs. 8, 9)—not firmly drawn and to the initial

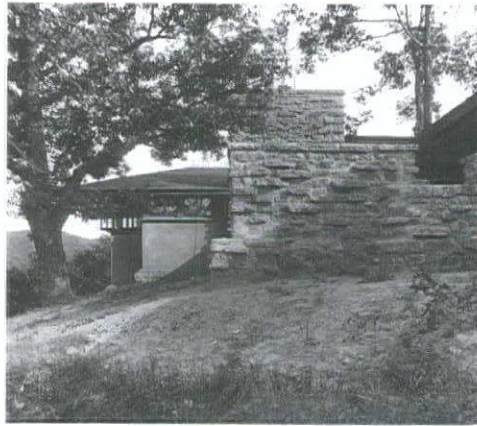
8
Villa Savoye, Poissy,
France, 1929–1930,
Le Corbusier

9
House II (Falk House),
Hardwick, Vermont, 1969,
Peter Eisenman





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13

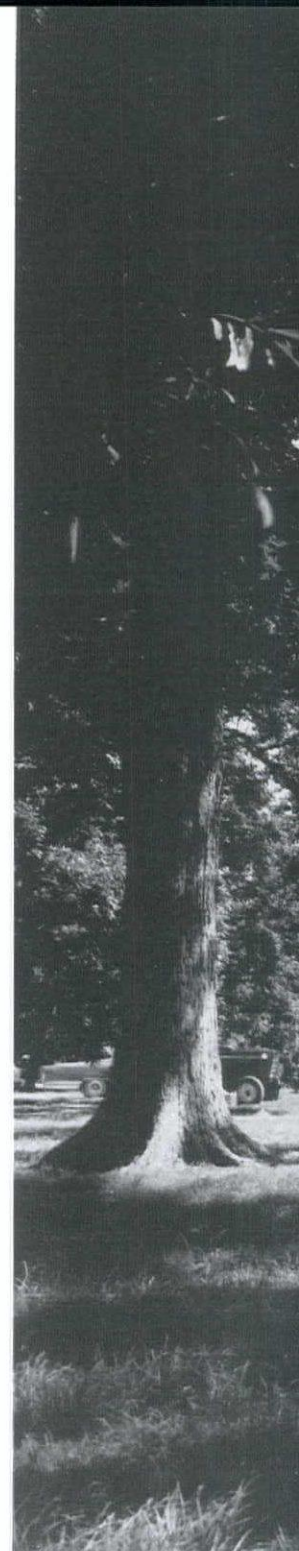


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20 settlements on the periphery of the Empire, where considerations of defense demanded consolidation. The compacted Pompeiian form, as in the Villa dei Misteri, just outside the city walls (fig. 10), is due also to the fact that the villa had not yet gained its independence from urban models by the first century B.C.; the vagueness of the contemporary writer Vitruvius in describing villas (his main point is that the order of rooms at the entrance differs from that of the city houses) confirms this suspicion. When the condensed villa faced a farmyard or a view, it tended to acquire a loggia along its facade, in Roman examples typically framed between two projecting blocks or towers. This type reappears in the small early Renaissance villa, like the Belvedere of Innocent VIII at the Vatican, or the Farnesina in Rome (fig. 11). Tropical forest conditions produced a variant of the cubic type in the plantation houses of seventeenth-century Brazil and in the eighteenth-century Caribbean, a unique veranda-surrounded block that seems not to have been exported from Europe; it found its way into the plantation-house design of the early-nineteenth-century Mississippi valley, as at Home Place in Louisiana (fig. 12).⁸

The open villa is more congenial to the ideological engagement with nature. It expands informally in extended asymmetrical blocks and porticoes, and in the varied profiles of changing levels; it often grows organically as the wealthy proprietor is tempted to continuously extend the initial structure by adding rooms, courts, and porticoes. Pliny must have done as much, and Jefferson (who in the course of forty years never ceased to alter the shape of Monticello), as did Frank Lloyd Wright at the Taliesins (fig. 13).

To fulfill its ideological mission, the villa must interact in some way with nature, and the two major types I have defined are roughly coordinated with two types of interaction. The compact-cubic villa is often a foil to nature, standing off from it in polar opposition; the open-extended type is integrative, imitating nature in the irregularity of its layout and profile, embracing the ground, assuming natural colors and textures. A paradigm of the first is Lorenzo de' Medici's villa at Poggio a Caiano, outside Florence (fig. 14). Inscribed within a cube, it is faced with white stucco to emphasize its total polarity to the irrationality of trees and rolling hills; to underscore this message, it is raised on a high podium to assure that the contact of the residents with nature would be not intimate but removed and in perspective.⁹



10
Villa dei Misteri, Pompeii,
Italy, first century B.C.

11
Villa Farnesina, Rome,
1509, sixteenth-century
view

12
Home Place Plantation,
Louisiana, 1801

13
Taliesin East, Spring
Green, Wisconsin, begun
1911, Frank Lloyd Wright



14



15

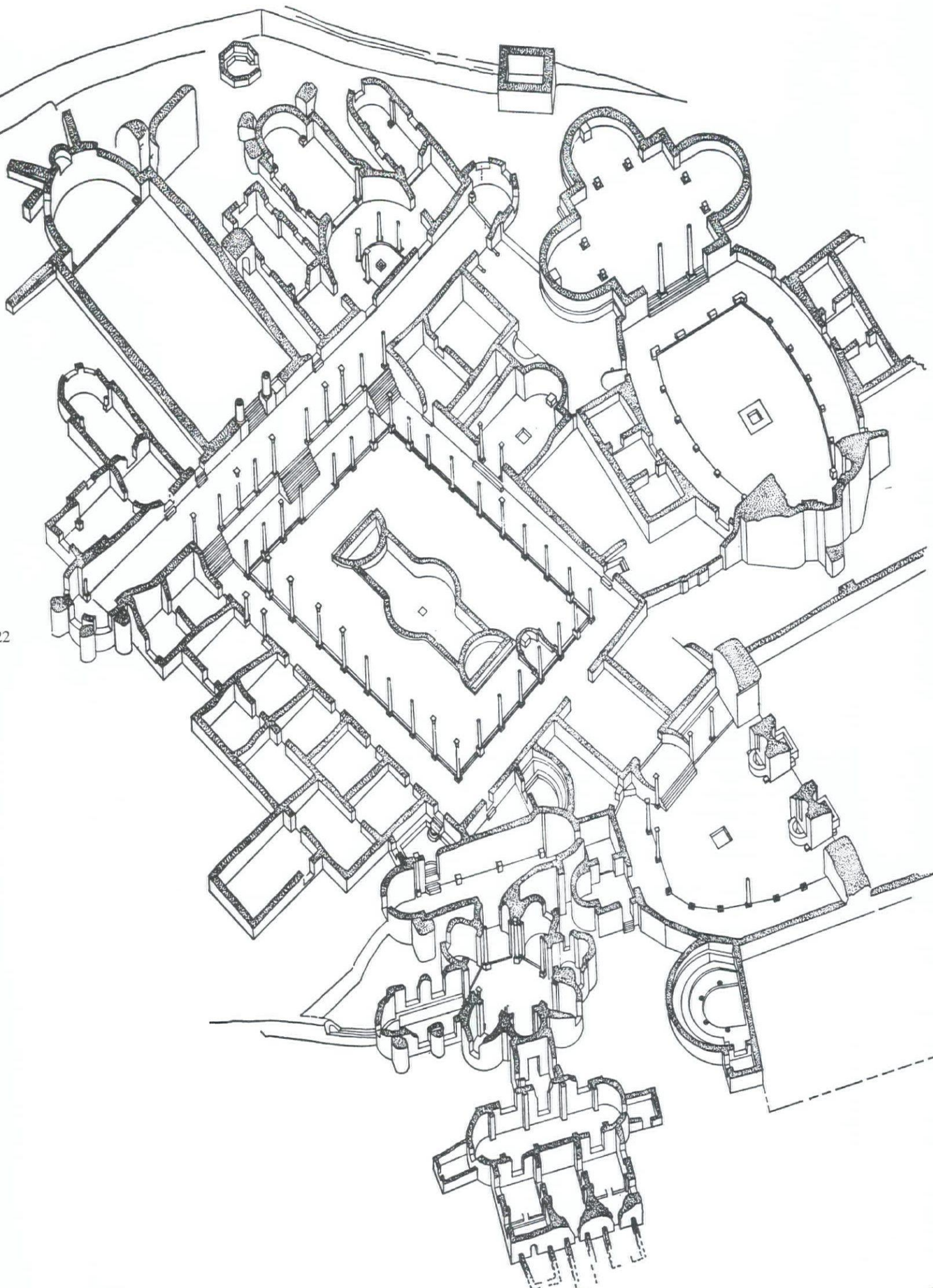
12

14
Villa of Lorenzo
de' Medici, Poggio a
Caiano, Italy, 1489

15
Villa Godi, Lonedo, Italy,
1537-1542

The white-stuccoed podium-villa became a major twentieth-century paradigm, notably in the Villa Savoye at Poissy (fig. 8) and in the Tugendhat House in Brno. Palladio also followed this tradition in the design of his first villa, that of the Godi family in Lonedo (fig. 15), which is also sharply geometrical in form, avoiding even window frames or moldings; there is no podium, but the entrance stairway leads to the upper floor (later Palladian works are more engaged with nature – even the entirely cubic Villa Rotunda in Vicenza, which is designed to reflect the varied views and which seems to crown the hill on which it is placed). The effort to respond to nature by antithesis explains the apparent paradox of melding the sharply geometrical and classical Palladian style in early eighteenth-century Britain (at Lord Burlington's villa at Chiswick, for example) with the invention of the informal English garden in reaction against the imposition of geometric order on plant life.

22



The View

In reflecting on the ways in which villas respond to the landscape, one must remember to look not only *at* them, but out *from* them. The choice of prospect is almost as subject to myth and the rule of taste as is the choice of design – I say “almost” because villa builders are limited in the choice of land formation and flora by the nature of the particular territory in which they intend to settle and by the property available to them. The environs of Tivoli, west of Rome, offer paradigmatic examples of three genres of villa siting. Hadrian’s vast villa extends over a low-lying escarpment at the base of the hills that rise out of the wooded Campagna, just barely above the level of the plain; it is a nestling villa in the lap of the hills, with views just over the treetops. The villa of Quintilius Varus and the Renaissance Villa of the Este family are perched high on the slopes – not on the very peaks, but high enough to gain a vast panorama of the countryside and distant mountains. A view toward the former from the terrace of the latter (fig. 19) shows both to be commanding, extroverted villas (the famed gardens of Villa d’Este, incidentally, are barely

visible from the villa itself: they drop away sharply, and attention is drawn only to the distant panorama). By contrast, Horace’s “Sabine Farm” is back within the mountains on an extraordinary site suited to a poet (fig. 20): a saddle, only large enough to hold a small cubic structure, deeply embedded between two sharply rising hills, with a valley on one side of the cross-axis and conical peaks on the other, atop one of which a village seems almost to cling (the surviving one is believed to occupy the site of its Roman predecessor). Surely the architecture of each of these four structures is designed around what can be seen from them as much as around what is done in them.

The villa view that in one sense most fully illustrates the urban roots of the villa myth is the one that looks back on the city from a high and distant promontory outside its walls; such villas once dotted the slopes of Mount Vesuvius when Pompeii flourished, and Cosimo de’ Medici built one of the earliest Renaissance villas on a man-made terrace above Fiesole, so that in his leisure hours he could enjoy visual command of the city he controlled politically.

The impact of the prospect on the conception of the villa was intensified in eighteenth-century England when the vogue for the informal garden was extended to embrace the entire agricultural landscape. The effect was achieved by removing walls, hedges, and fences so that the lawn and planted trees would merge imperceptibly into pasture and bosc. The innovation was due not merely to a change of taste, as its promoters made it out to be, but also to a radical change in agricultural economy and society resulting from the Acts of Enclosure, which wiped out the ancient common pastures and peasant tillage, as well as many villages on the great estates, and concentrated development of the entire landscape in the hands of the landowners. Extended fields with cattle and haystacks could now become embellishments of a pastoral elegy.

Pliny's descriptions of extended, even sprawling structures offer a model of the more collaborative response to the landscape, but the appearance of these villas is difficult to reconstruct from his letters; the villa at Piazza Armerina in Sicily, unearthed in recent times, provides a better opportunity to visualize this exceptionally large and lavish "organic" type (fig. 16).

Designers of Renaissance villas were too fixed on the polarity of nature and culture to devise schemes in which the barriers between the two were blurred; what interaction did occur was, rather, between the architecture and the garden, which remained firmly in the artist's control. The formal garden of the Renaissance was frequently complemented by a *barco*, or hunting park, where the wildness of nature could be accepted; the nature-art dialectic was transferred to the contrast of wild and tamed greenery and water. An early engraving of the Villa Lante in Bagnaia shows a small "wild" area in the lower right corner (fig. 17). In nonagricultural Renaissance villas, such as those of the Papal court in Rome, the artifices of the formal garden took precedence even over the architecture; the Villa d'Este in Tivoli concedes all emphasis to the garden (fig. 18), while the building itself is exceptionally inexpressive and bland. The architecture of the Villa Lante in Bagnaia is overwhelmed by its gar-

den design; for the first time the central axis of the composition is occupied by landscaping elements – water courses, fountains, and stairways – while the shy, cubic residential casinos are pushed to either side.

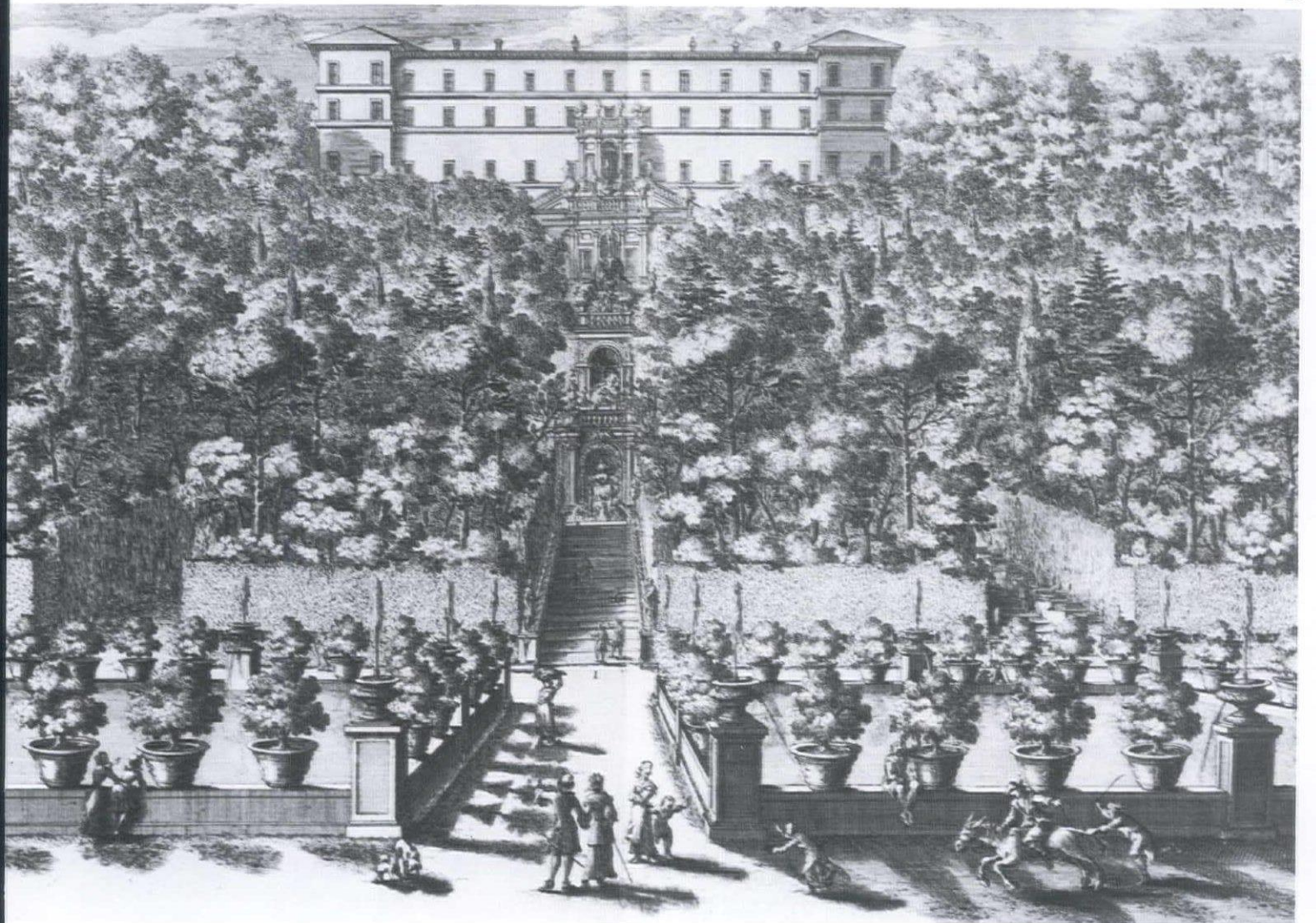
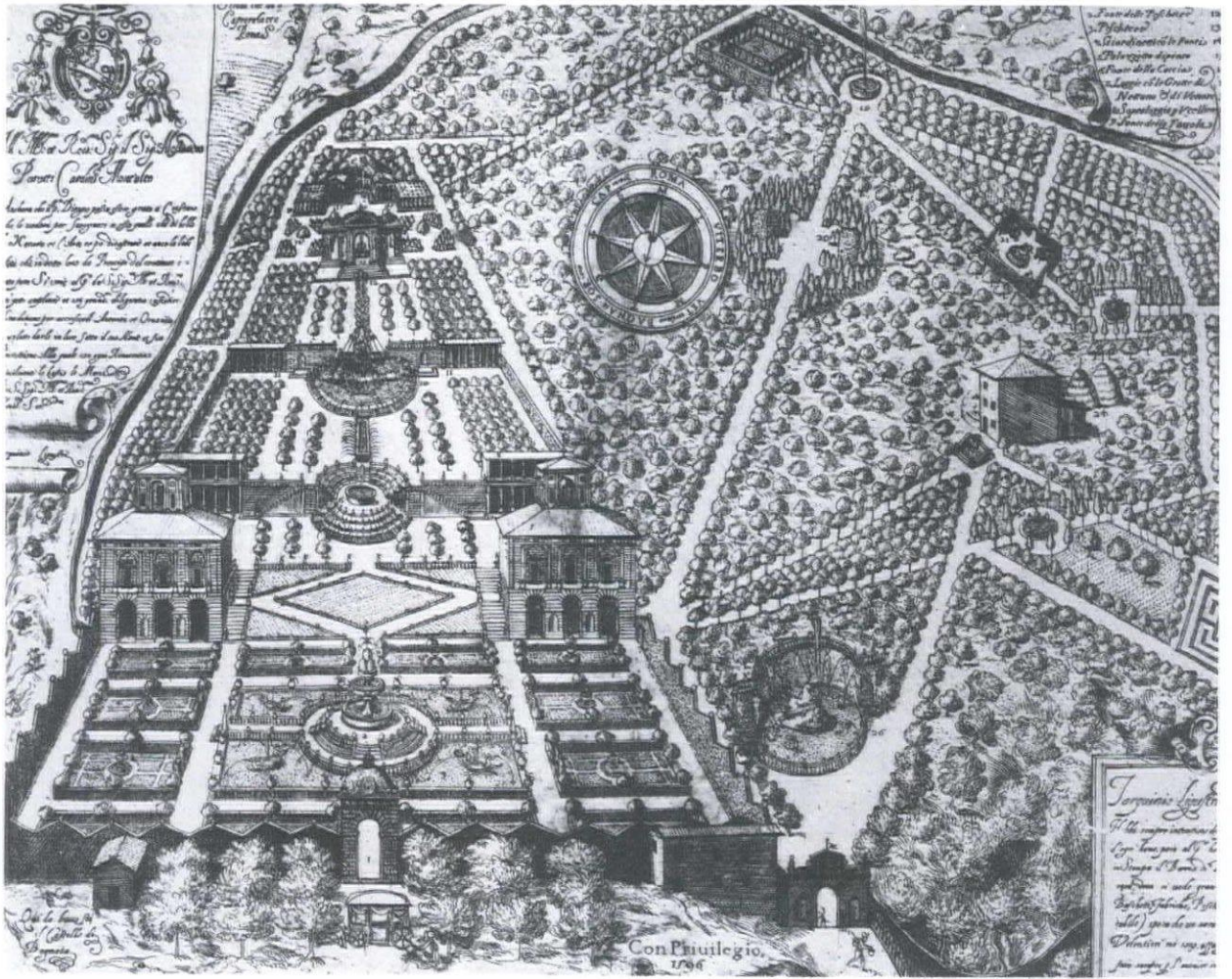
Renaissance designers would have been disappointed and disoriented had they discovered that Roman villas were not classical. Most of the ancient models (none of which was known prior to the discovery of Pompeii) lacked the axial symmetry, rational integration, and proportion that supported their conception of the heritage of antiquity. Whether Roman villas, like many in later times, expressed their communion with nature by a richness of color and of texture is hard to tell even today, because of the condition of the remains. In any event, Renaissance architects from Giuliano da Sangallo through Bramante, Raphael, and Palladio did give the villa a classical form by imposing a rule of order, number, and symmetry that fixed the type until the moment of naturalist disruption in the eighteenth century (Sebastiano Serlio, in his manuscript for a book on villas and palaces, even classicized the peasant's hut). This achievement greatly narrowed the distance between the two Roman types by pulling the extending arms and wings of the open villa in symmetrical order about a central block, as in the porticoed villas of Palladio.

The triumph of nature over architectural form was ultimately achieved in the eighteenth century, when the fashion of the picturesque emerged. The desire to make the real environment look like pictures was stimulated by the landscape paintings of Poussin, Claude Lorrain, Ruysdael, and others, in which the architecture, while frequently geometric in its forms, was designed to be seen as part of the landscape and to respond to it in mood. Authors of books on architecture and landscape design – such as Richard Payne Knight, Uvedale Price, and their heir Humphrey Repton – urged clients to build villas that borrowed from the landscape something of its irregularity, its contrasts of light, and its shadows and textures. The asymmetries of Gothic proved sympathetic to this aim, and the "Italian Villa" style (fig. 7) abruptly emerged, not from any actual models in Italy, but from the canvases of the French and British painters who had worked there (Schinkel's Charlottenhof gardener's villa was one exception; its motives were authentically Italian). From this point on, a picturesque, nature-integrating spirit dominates the naturalist lineage of villa architecture – from the publicists Papworth, Loudon, and Downing through Philip Webb's Red House, Shaw and Richardson, Lutyens, Aalto, Wright, the Greens, and Maybeck to Moore.

16
Imperial villa, Piazza
Armerina, Rome, third
century

17
Villa Lante, Bagnaia,
Italy, 1568

18
Villa d'Este, Tivoli, Italy,
1565 (etching by Venturini)

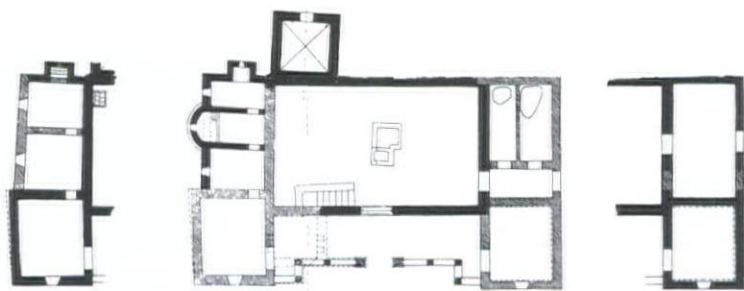




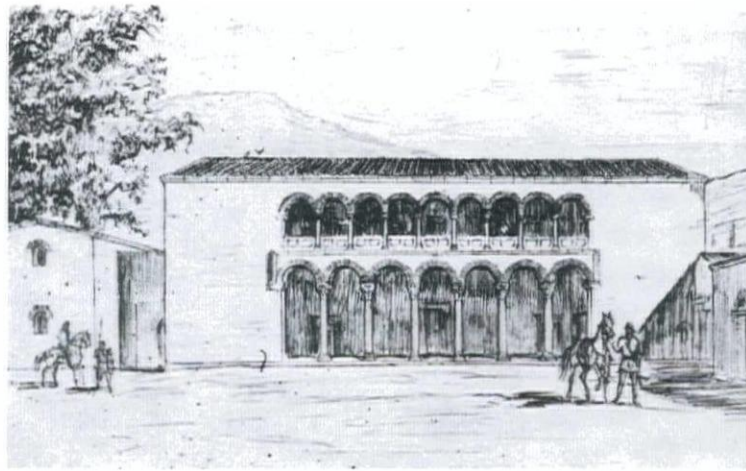
19
View from Villa d'Este,
Tivoli, Italy, 1565

20
Horace's Sabine Farm,
Tivoli, Italy, first century





21



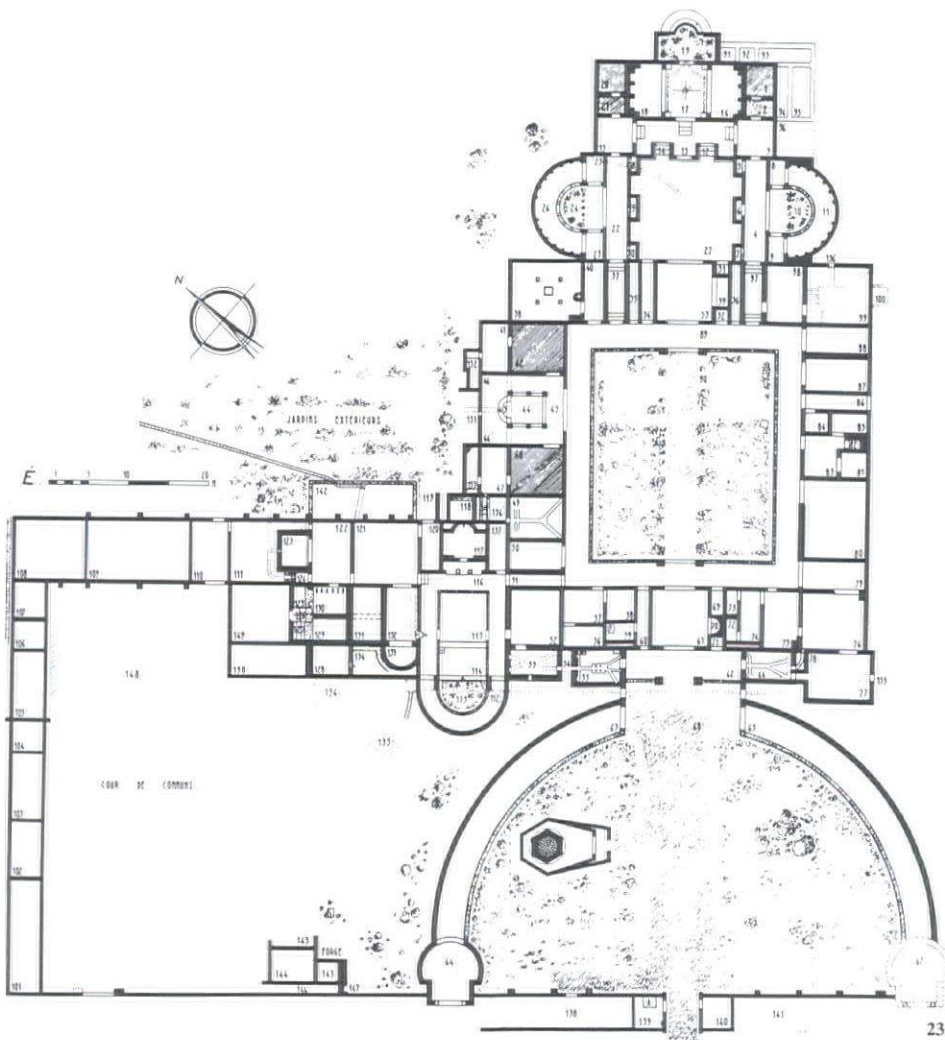
22

Survival or Revival?

26

Renaissance villa architects, intent as they were on reviving the ancient villas, did not know of any models on which to base their designs and were forced to depend entirely on the meager literary sources.¹⁰ Of these, Vitruvius was almost no help, and Pliny's descriptions, though ample, were useful only for projects of great lavishness, such as Raphael's design for Villa Madama in Rome (about which he wrote a letter filled with Plinian phrases). In spite of this lack, archaeological evidence continues to mount of Roman villas that anticipated Renaissance and later types. Since a *revival* of these ancient forms cannot have occurred, they must somehow or other have *survived* over the intervening centuries through links that have now almost entirely vanished. The persistence of the compact-cubic type may not be especially significant, since within the rationalist orientation of Mediterranean culture it is one self-evident architectural solution to the problem of designing a free-standing structure. The U-shaped villa, with projecting blocks framing a central loggia, however, is specific enough in form to arouse curiosity about how it traveled from the late Roman empire to the fifteenth century and beyond. Whatever the answer, it is more likely to be in the realm of folkways than of architectural style. In a characteristic Roman provincial example, at Mayen in German Gaul (fig. 21), the loggia with extended wings was added in the fourth

century to an earlier block. The type was preserved in a sixth-century villa of Theodoric in Galeata (fig. 22), not far from Ravenna, and emerges again in the typical Venetian-Byzantine palace, from which it passes back into a type of early Renaissance villa that achieves a refined form in Baldassare Peruzzi's Villa Farnesina in Rome (fig. 11). Another villa (fig. 23), only recently excavated at Montmaurin in the French part of Gaul, anticipated the entranceway flanked with two quadrants of a circle in a style reinvented by Palladio for such projects as the Villa Badoer at Fratta Polésine (fig. 24) and passing from there into innumerable houses and villas in Europe and America.

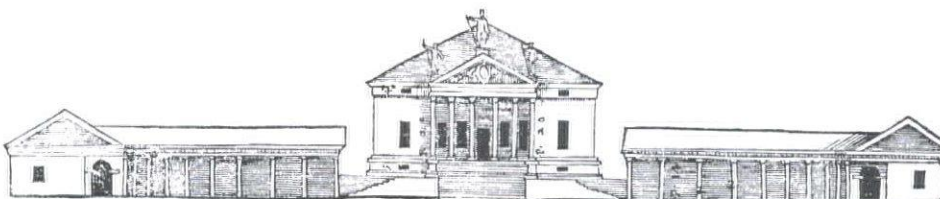
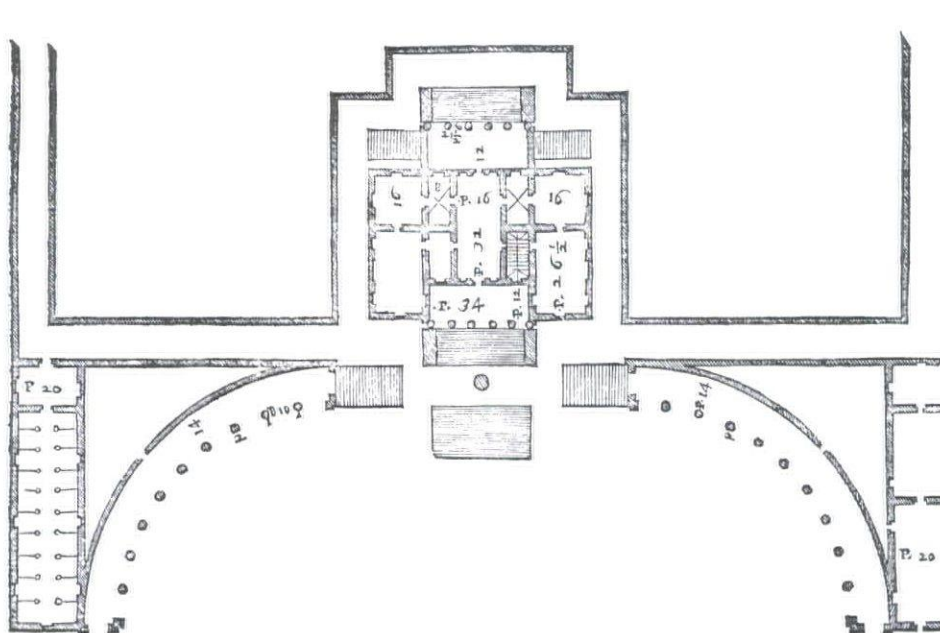


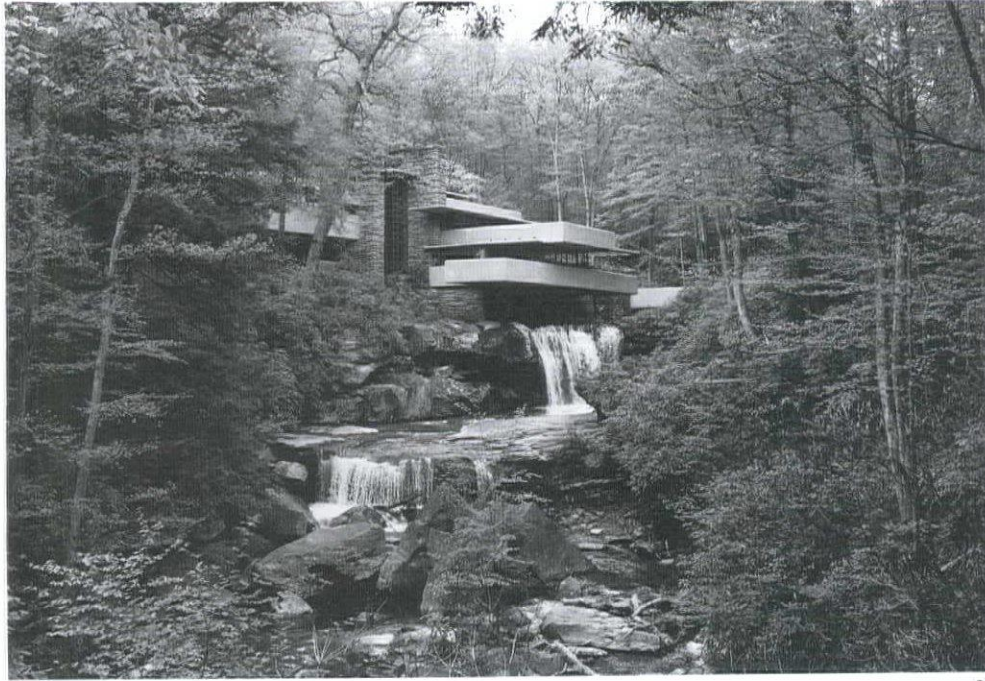
21
Gallo-Roman villa, Mayen,
Rhineland, first to fourth
centuries

22
Villa of Theodoric,
reconstruction, Galeata
near Ravenna, Italy, sixth
century

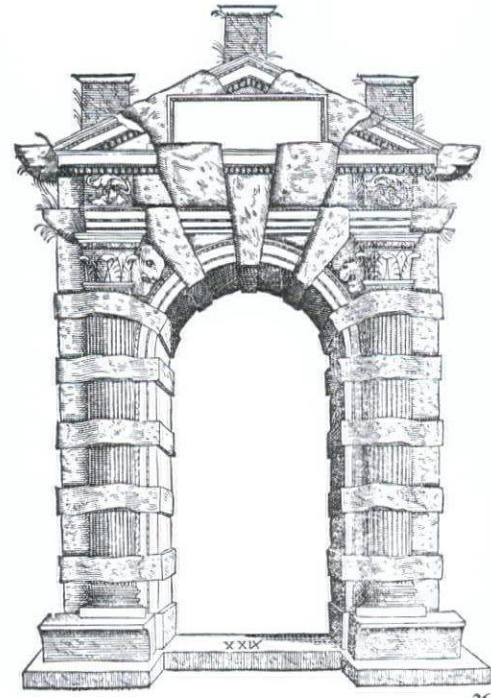
23
Gallo-Roman villa,
Montmaurin, France,
fourth century

24
Villa Badoer, Fratta
Polésine, Italy, after 1556,
Andrea Palladio





25



26

28



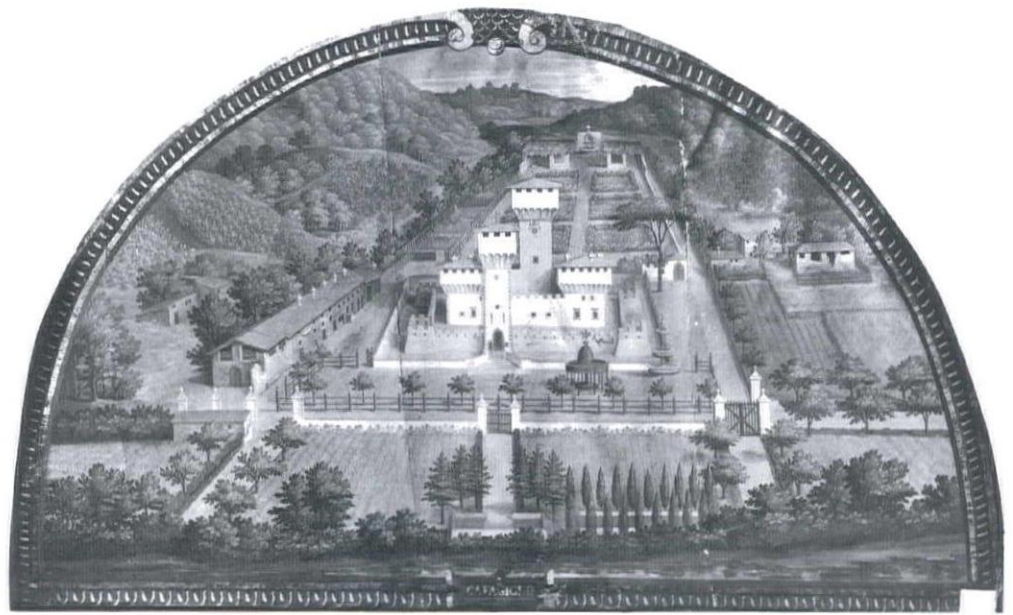
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25
 "Falling Water"
 (Kaufmann house), Bear
 Run, Pennsylvania, 1936,
 Frank Lloyd Wright

26
 Rustic gate, 1584,
 Sebastiano Serlio

27
 Ames Gate Lodge, North
 Easton, Massachusetts,
 1881, H H Richardson

28
 Villa Medici, Cafaggiolo,
 Italy, ca1450



28

The Villa as Sign

The villa inevitably expresses the mythology that causes it to be built: the attraction to nature, whether stated in engagement or in cool distance; the dialectic nature and culture or artifice; the prerogatives of privilege and power; and national, regional or class pride. The signifiers range from the siting and form of the building(s) as a whole to individual details and characteristics. Since signs and symbols convey meaning only to those who know what they signify, they are usually chosen from past architectural usage or, as occasionally happens, are imported from other types of construction, like the ship railings of Le Corbusier.

Intimate engagement with nature is signified by a site and design that permit the villa to nestle and to extend out into its surroundings, by asymmetrical and open design, colors reflecting the setting, and natural and varied textures. Distancing from the setting, on the other hand, is signified by an overall compact, cubic form (often with a podium or similar device to elevate the living quarters from the earth), studied proportions, and emphasis on plane surfaces of white or of a light color that disguise the

nature of the materials. Ambiguity toward these two poles can also be expressed, as occurs in Frank Lloyd Wright's Kaufmann house at Bear Run (fig. 25), which poses a dialogue between the nature-affirming effects of fieldstone hearth, chimneys, and floors laid in irregular slabs linking the interior and exterior, and the contrasting coolness of the carefully formed white concrete balconies. The comparable combination of wood and stucco of Aalto's Villa Mairea serves the same purpose.

The dialectic nature and artifice is expressed in the paradoxical imitation of natural forms in man-made elements. Rustication, adopted from a small number of Roman buildings of the first century, was a Renaissance device that aimed to give building blocks the appearance of "living" stone as distinct from ashlar masonry of finely finished surfaces. While late medieval and early Renaissance rustication implied a military and public function, the symbolization evolved in the sixteenth century to conform with the rustic implications of the term, and rustic gates, walls, and portals, often with the rusticity created in terracotta, were increasingly used for villas. Sebastiano Serlio, taking up the idea from Giulio Romano, made much of combining rustic and smooth treatments as a way of dramatizing the antithesis of the natural and the artificial (fig. 26). The fountain-grotto of

villa gardens was a companion motif, in which such irregular natural phenomena as stalactites were reproduced in a variety of plastic materials to which natural objects—such as shells and fossils—were added. H H Richardson used rustication of a vigorous new kind, not intending particularly to refer to the Renaissance; this is most vividly evident in the Ames Gate Lodge at North Easton (fig. 27) and the Payne house in Waltham. He was also one of the many proponents of shingles as a nature-invoking surface.

The expression of power and class aspiration is evident in the first villas of the Renaissance, which took over the vocabulary of the medieval feudal castle—towers, irregular blocks, battlements, and crenellations. One such is the Medici villa at Cafaggiolo (fig. 28). Even a villa as modern as Lorenzo de' Medici's Poggio a Caiano (fig. 14) has a walled enceinte with four corner towers. The equally avant-garde early-sixteenth-century Villa Giustinian at Roncade, near Venice, was given a moat and drawbridge. Castles returned to favor in the eighteenth century in the work of Vanbrugh and the early Scottish designs of Robert Adam.

29

30 While the adoption of Georgian architectural symbols in southern plantation houses affirmed the link of the colonists with their homeland, Jefferson's taste for pre-Imperial Roman and Palladian references was intended to express republican as against aristocratic ideals. In nineteenth-century Newport the villas of the excessively rich again assumed aristocratic, even regal pretensions.

Regionalism informs the symbolism of the Florentine villas of the Medici dukedom in the sixteenth century; of the British villas of Scott, Voysey, and Lutyens; and more recently of the California school.

Palladio was extraordinarily prolific in devising and combining villa messages. While his geometric and axial forms and white surfaces express a sophisticated contrast to the organic world, the composition often reaches out into the surroundings. Though his domes and temple-front facades are urbane and calculated to imply the patrons' exalted social status by bringing the aura of classical learning and religious tradition to the villa, he could join them to common

barnyard elements. At the villas Barbaro at Maser, Emo at Fanzolo (fig. 29), and elsewhere, he adapted the loggias flanking the temple-front from *barchesse*, traditional agricultural sheds of the Venetian mainland designed to store farm machinery and implements, produce, and cattle. Their role in the Palladian villas was probably not fully utilitarian; the patrons would not have supported the odors and the noise. *Barchesse* do not appear at the Villa Rotonda near Vicenza because it is a suburban villa with no farm functions; here Palladio placed the temple-front on all four faces of a domed cube to underscore the focal position of the hilltop site in relation to the surrounding views.

Signification has become problematic in contemporary villa design because of the absence of clear purpose and confidence in privilege on the part of the exceptionally wealthy individuals who can afford to build them. This circumstance leaves the designer free to devise an expression that will best serve the maker's image as an artist and best define a position in the dialectic of modernism versus antimodernism. The semantic function of the return of elements of the vocabulary of antiquity in this dialectic is less to evoke the classical tradition and its historical implication than to underscore the antimodernist position.

Conclusion

The paradigm of the villa poses a cultural paradox. If the farmhouse resists change because agriculture and farm culture evolve slowly, we should expect the villa to remain even more convention-bound. It is supremely conservative socially, being a luxury commodity available only to persons of privilege and power, and the ideology that sustains the type has stayed unchanged over millennia. Yet the mythical nature of villa ideology liberates the type from concrete restraints of utility and productivity and makes it ideally suited to the creative aspirations of patron and architect. This creativity, however, is essentially limited to the sphere of taste. In this respect the design of villas parallels that of fashions in apparel, which has been similarly motivated by an unchanging mythology since surplus wealth first offered its temptations.



29
Villa Emo, Fanzolo, Italy,
1564, Andrea Palladio

1
Traceries from Caen,
Bayeux, Rouen, Beauvais;
drawing by J Ruskin from
*The Seven Lamps of
Architecture*

2
Pierced ornaments from
Lisieux, Bayeux, Verona
and Padua; drawing by J
Ruskin from *The Seven
Lamps of Architecture*

3
Color and form in a
drawing of the Ducal
Palace, Venice, by J Ruskin

4
Wayside herbage (capital
from the Oxford Science
Museum, Oxford,
England); capital by the
O'Shea Brothers, Benjamin
Woodward, architect

John Ruskin's mid-nineteenth-century theory of architecture addresses a major late-twentieth-century problem: how to provide a building with the cultural content of the region and people in which it stands. Are there ways – short of resorting to historical types – to incorporate specific memorial, narrative, technologic, and geographic themes while observing a visual coherence and a reasonable measure of modern convention? This is the major question Ruskin addressed in his *Seven Lamps of Architecture*. Each “Lamp” dealt with a different criterion by which to achieve the desired historicity which, in Ruskin's view, conferred “beauty” on a building.

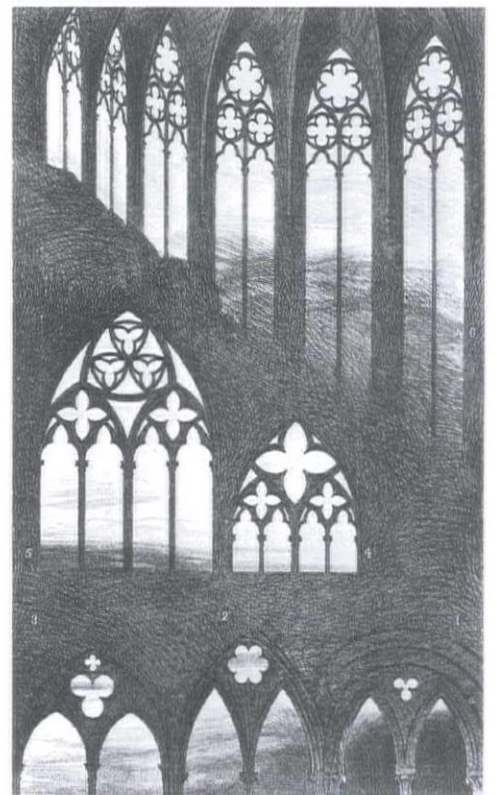
Although a quick reading of Ruskin suggests that his imagery was rooted in a neomedieval setting, a more careful study reveals that he sought basic principles of design that could belong to the age of industrialized architecture. His architectural writings were contemporary with the Great Exposition of 1851, an event dramatically illustrating the gap in design and modern culture that appeared to be unleashing unnatural forces on a vulnerable landscape.

Ruskin believed that the visual content of architecture should inform culture, refine sensibilities, and forever be impressed with the virtues of Sacrifice, Truth, Power, Beauty, Life, Memory, and Obedience. He was unwilling to abdicate those values to the exigencies of mechanization. Detecting in geometric forms an alliance with mechanization, he assigned to them the status of servant, not master, to the visible properties of architecture. Thus, though Ruskin's image of architectural form may be characterized as being more like a tapestry than a set of geometric shapes, it is nevertheless a tapestry that is vividly three-dimensional and formal in manner.

Ruskin's thesis recognizes that a building is a very complex organism indeed. He savored that complexity, seeing a world of opportunity in the richest medium of all the arts – a medium too rich to become specialized and a medium sufficiently rich to signify all the content illuminated by the “seven lamps.” By identifying the many parts, places, and processes of building that could be treated differently, he proposed a grammar for multiple representation, and he specified moments – in the form of buildings – which have the greatest potential of bearing multiple representations simultaneously. Ned Kaufman described those as moments in which “essences are blended”;¹ while this description is brilliant, it must be noted that Ruskin was determined to prevent essentially different meanings from becoming individually illegible or homogenized in such a merger. He did not promote any one of the lamps to the rank of supreme authority over another.

It is also noteworthy that John Ruskin was a dedicated and fine draftsman and watercolorist, as well as a scholar. It is evident in his pictures that he understood the mechanics of a finely balanced figure-ground in which two or more shapes could exchange visual dominance (fig. 1). I believe that Ruskin's life as an artist informed his thought more than is generally allowed; to comprehend his vision, we must (to use modern parlance) use both sides of the brain equally.

The following paragraphs summarize four of Ruskin's approaches to impressing form “with multiple meanings.”



1

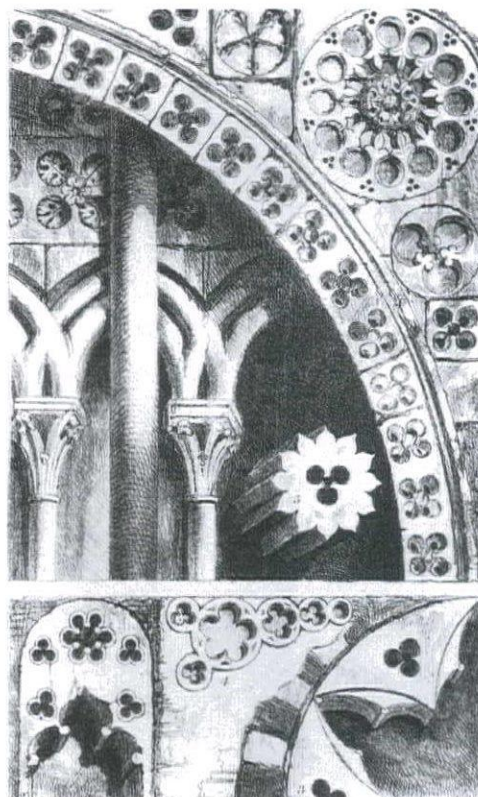
On Shadow and Form

After size and weight, the power of architecture may be said to depend on the quantity (whether measured in space or intensity) of its shadows; and it seems to me that the reality of its works . . . should express a kind of human sympathy, by a measure of darkness as great as there is in human life.²

For Ruskin, shadow opposing the visible, was a property of mystery and sublimity rather than of beauty. While he required that the beautiful be accessible and familiar, like a leaf, he held the sublime to reflect properties less manageable in life, controlled instead by the awesome power of distant light and time. His identification of shadow as a sign of power provides the designer with a visual element that may be employed on any scale; a small building with a powerful meaning could therefore be explicit even in the company of buildings and landscapes whose power is achieved by size.

Ruskin was not concerned with the inevitability of shadow or its accidental manifestation. Rather, he wanted it to be independent, figural, and purposeful to architecture — “the composition of the whole depends on the proportioning and shaping of the darks” — and he identifies the “penetrative ornament” as the boldest and most independent of powerful architectural characters (fig. 2).³ These ornaments belong to the “second kind of mass; that which is flat and of shadow only.”

Graphically the penetrative ornament may be treated as a figure in the flat ground of a wall; but it is also a mass of “starless



2

shade” and an emblem insofar as it is a rosette or a star. Once again we have a combination or “blending” of essences; the flatness of the wall (as building), the mass of the shadow (as power), and the outline of the rosette (as an earthly botanic figure, such as the emblematic Tudor rose). The proportioning and shaping of shadow ultimately represents the cultural and narrative content of the particular building.

On Color and Form

I hold this then for the first great principle of architectural color. Let it be visibly independent of form. Never paint a column with vertical lines, but always cross it⁴ . . . however the colors may be arranged on lines parallel with the main structure.⁵

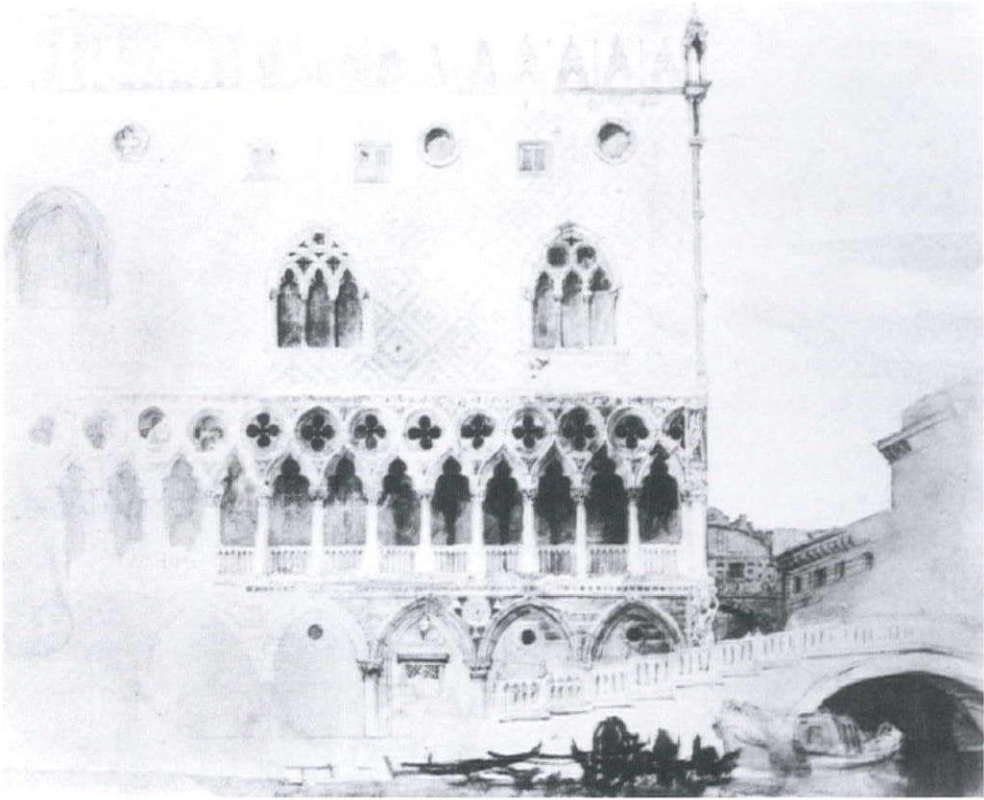
Ruskin saw color as having a beauty and natural essence all its own. To paint vertical lines on a column would be a tautology, as well as subjecting the shape of the color to the form of the figure upon which it is applied. However, by painting the lines horizontally, the colors could establish their own formal existence.

It may seem inconsistent for Ruskin to have encouraged painting a column at all, for the practice seems to violate principles presented in his “Lamp of Truth,” where he labels as architectural deceits the disguising of natural materials or modes of support. But that discrepancy is explained by his recognition of paint as a material in its own right, “so long as the painting is confessed.” Furthermore, the structural truth of the column is not disguised when it is painted across, because the practice does not really obscure its shape as a column (fig. 3). Ruskin explains that color in nature is rarely consistent with the shape of a beautiful object.

[N]otice how nature does it in a variegated flower; not one leaf red and another white, but a point of red and zone of white . . . [and] a bird's head is sometimes of one color and its shoulders another . . . the stripes of a zebra.⁶

Yet there are places where he prohibits polychrome painting, particularly on sculptural forms or pierced surfaces where both the colors and the form would suffer from their combination on the surface, "because even when color is employed (in forms that benefit from shadow) it cannot follow the moving shade."⁷

Ruskin believed that sculptural forms are best rendered in natural materials, whereas sharply outlined and strong color patterns benefit from entirely flat surfaces, "where the certainty of the flat surface is thus secured." This injunction suggests that the flatness found in a wall may be proclaimed by geometric color patterns, even while the color patterns, as pattern, would be least opposed by shape. Kaufman elaborates on this condition by examining stenciled flower patterns on a flat surface in which the outline and color of a particular flower is distilled to its flat botanical essence to conform to the flat essence of the wall. Kaufman argues that to rusticate the wall would be to tautologically reiterate the fact of its being a vertical stack of stone blocks, whereas the inclusion of the stencils promotes a blending of the two essences of flower and wall each.



On Fact and Form

The second form of error is when men of design despise facts. All noble design must deal with facts to a certain extent, for there is no food for it but in nature. . . . The Greek designers delighted in the facts of human form, and became great in consequences⁸

Today the human form no longer represents a particular culture because it is accepted as a universal cultural property, transportable to any place, from the surface of the moon to the bottom of the sea. A particular human settlement, however, always occupies a particular place and is always invaded by a particular family of plants.

But to the Gothic workman the living foliage became a subject of intense affection, and he struggled to render all its characters with as much accuracy as was compatible with the laws of his design and the nature of his material, not infrequently tempted in his enthusiasm to transgress the one and disguise the other.⁹

Ruskin chose the leaf as the universal emblem of earthly life, and he placed it in his discourse on the "Lamp of Beauty" because of its frequent and familiar occurrence in nature. But beyond that attribute Ruskin saw in certain leaves the facts of particular places. Architecture, to his mind, should represent this "living foliage" and "wayside herbage" surrounding a building. Leaves were to be located in places that



may befit and express their origin. . . . Thus the Corinthian capital is beautiful, because it expands under the abacus just as nature would have expanded it . . . and the flamboyant leaf mouldings are beautiful because they run up the hollows. . . . They are no mere cast of natural leaves, they are counted, orderly, and architectural . . . naturally, and therefore beautifully placed.¹⁰

Ruskin's most universal leaves are to be found in a horizontal arcade of pointed arches, "directly borrowed from the trefoiled grass of the field,"¹¹ while he would place his most factual leaves in newly designed capitals. Perhaps his ultimate inspiration was to locate the hammered leaves representing native trees within the hollow webbing above the structural supports of the Oxford Science Museum (fig. 4). In that skylit attic of an enclosed garden their silhouettes become figures against the sky, composing at a distance the figure of the leaf upon a ground of light.

On Life and Form

I believe the right question to ask, respecting all ornament, is simply this: Was it done with enjoyment — was the carver happy while he was about it?¹²

Ruskin's famous statement in which he brings happiness into the evaluation forecast both the arts-and-crafts movement and the modern concept of expressionism. But how does an essence of expressionism establish itself in the ecology of Ruskin's architectural essences?

In the first paragraph of "The Lamp of Life" section Ruskin assigns shape characteristics to the material formed by the happy hand.

[T]hings . . . are noble or ignoble in proportion to the fullness of the life which either they themselves enjoy, or of whose action they bear the evidence, as sea sands are made beautiful by their bearing the seal of the motion of the waters.¹³

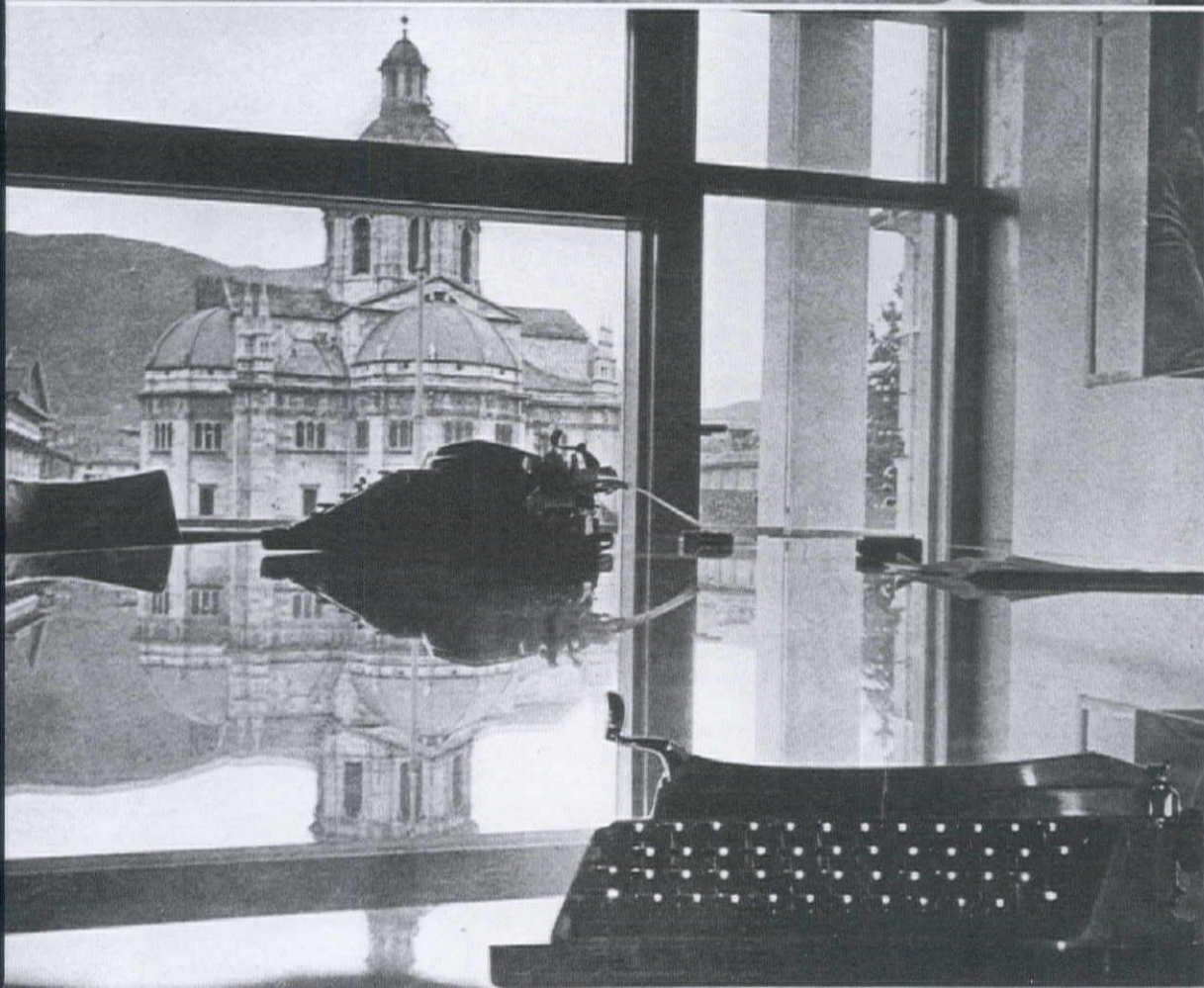
He is saying quite precisely that during the process of formation by the hand shapes adopt certain organic rhythms and that those rhythms are visible. It is significant that Ruskin also believes that those rhythms should be associated with specific facts, such as foliage to represent the local flora. When a carver fabricates the figures of wayside herbage in newly designed capitals, he creates a double essence, wherein the actual rhythms of life from the carver and the botanical figure of life are brought together in the same instance.

It is worth noting that few occasions allow for expressionism in *The Seven Lamps of Architecture*. Most of the principles governing color, shadow, material, plan, and proportion are quite authoritarian, and the seventh lamp calls for obedience to them. Ruskin would probably have been appalled by an entire work of architecture's attempting to be a single object of the architect's self-expression. Such an effort would represent "the little revolution of his own life only," and as such would exaggerate one of the properties in "The Lamp of Life" at the expense of the others. He would object as well to a building that represents only one or two of the lamps, for in the plan of nature, such a limitation would be disproportionate.

These few examples demonstrate the nature of Ruskin's effort. His paradigm of architectural form is taken from the beautiful and sublime forces of terrestrial nature, with all of nature's splendid variety of species coexisting in a highly complex and ordered scheme. In order to make that scheme visible, he proposed strategies as diverse as the scheme itself and resisted adopting classical or rational systems which might reduce, obscure, or homogenize fundamentally different species. His strategies included the optical coincidence of figure and ground, the visual segregation of color and shape, the operational coincidence of extrinsic "fact" with structural form, and the accidents of expressionism. Because he fully realized that so complex a scheme could result in compositional overload and great expense, he suggested that the overall plan-form of a building be as economical as possible. This call for economy was to conserve attention for the aggregate species of form (illuminated by the lamps), which might otherwise become subsidiary to the plan. Indeed, if the aggregate were to be diminished, the potential of the architecture to specifically represent the seven lamps would dwindle to the same degree. That consequence would defeat Ruskin's ethical proposal that architecture function to improve social health precisely by identifying, edifying, and commemorating the specific and natural properties of the culture and of the landscape in which it is built.

This whole page, including the caption, is typical of the presentation of the Casa del Fascio in Quadrante. Among the more obvious metaphorical, and isomorphic operations in this page is the shift between "reality" and symbolic detail as the eye passes from the upper to the lower photograph. The ideological and metaphorical complexity of the lower image is so rich as almost to defy analysis.

Among the more immediate messages one can readily identify: (1) the stress on the horizon as a metaphysical datum that is also the line separating image and reflection—reality and illusion; (2) the ironic parallelism between the cathedral and the typewriter, which are both seen as the origin of the word and of power; (3) the typewriter (the writing machine) is seen as a piece of architecture in itself, having a relationship to the cathedral exactly parallel to that which obtains between the Casa del Fascio and the cathedral. This image is comparable to another photograph of the Casa del Fascio dating from the same period in which a solitary car occupies the piazza between the respective centers of spiritual and secular power.



...io del Federale. Armonia di architettura, d'arredamento, di oggetti (Macchine da scrivere Olivetti.)

The idea that constructional details may have poetic implications and that they may compensate for the inevitable misinformation that, by definition, arises from the extensive use of partial photographic images regardless of their size are both concepts that have been largely ignored by the editors of architectural journals over the past two decades.

At the end of my book *Modern Architecture: A Critical History*,¹ I remarked on the negative impact high-speed film has had on the representation of architecture by photography. Of course I am as aware as the next person that different instruments and methods can be employed to different ends and that there is no such thing as an objective record in the positivistic sense. Indeed, even if such a record were possible, its cultural and critical value would be virtually nil. By raising the issue of photography and the means of reproduction, I am simply alluding to the evident difference between grainy, high-speed, hand-held photography and the potential capacities of a Hasselblad

or, more traditionally, the large format of a plate camera. Twenty years ago I was one of the first editors to publish pictures of Stirling and Gowan's Leicester Engineering Building.² Most of the photographs we used on that occasion were taken by Richard Einzig with a plate camera. The difference between Einzig's images and a number of high-speed alternative shots we had in hand was very marked. As opposed to the dramatic darks and lights of the latter, the specific textures of metal, glass, and brick were almost palpable (tactile) in Einzig's almost shadowless pictures. Printed large on the old letterpress Whitefriars Press was still using at the time, Einzig's photographs approached the level of resolution that used to be achieved in steel engravings.

The famous aphoristic line, "Ceci tuera cela" from Victor Hugo's book on Notre Dame,³ has come home to roost in more ways than one, and while one may boldly claim that architecture is not yet dead, the triumph of the printing press, and of photography, has often had negative conse-

quences for the so-called mistress art. Even if we set aside the sociocultural ramifications of Abraham Moles' observation that "the monuments of Europe are being worn out by Kodaks,"⁴ we would do well to reflect on the way architecture has been influenced by the most recent advances in photo reproduction and by changing editorial attitudes responding to the imperatives of the mass media and the values they imply.

Arthur Drexler's *Transformations* exhibition, staged at the Museum of Modern Art in 1976, may serve as an example. On that occasion some five hundred photographic images were shown to the general public for its edification. These images were deployed by the curator at the rate of one shot per building. In each case the public was furnished with a "picturesque," supposedly representative, view of the building. No plans or other forms of documentation were available. Moreover, the spectacular — not to say psychedelic — effects that could be obtained through the deployment of all-glass neoprene-gasketed curtain walls, which

have since become a normative technique, were represented by large, back-lit colored photographs displayed in a special cavelike enclosure at the center of the exhibition. Needless to say, these sunset-illuminated transparencies cradled within the darkness of a Platonic cave were paid for by a glass manufacturer. The curator claimed that the show was a tremendous success with the public, and no doubt it was. I wrote in *Skyline*⁵ that the net effect was to reduce all the buildings shown to the status of passing images seen from a car traveling at sixty miles an hour. Certainly a great deal of environment is perceived under such conditions, but these are not the circumstances under which architecture can be experienced. And here we have the strange general tendency of our times: the trend to stress information at the expense of experience.

This tendency finds direct reflection in the way in which buildings are published today and the unfortunate current habit of architectural magazines to compete with each other by publishing not only the same build-

ings, in a similar cursory way, but even the very same photographic images. It is difficult to recall the last time that an architectural editor had the courage to devote an entire issue to a particular significant building and hence to document it in its entirety.

The last occasion I can recall personally is the documentation of the Royal Festival Hall in *The Architectural Review* in 1951. Such building monographs were altogether more common in the 1920s and 1930s, above all in the Dutch and Italian magazines. A classic example of this period is the special issue of the magazine *Quadrante*, dedicated to the Casa del Fascio. In this case not only is the building exhaustingly documented, but a very precise complementary relationship is also established among the drawings, the photographer, the text, and the layout. This last is more than a method for positioning the images on the page; it plays a metaphorical and ideological role itself. It is a graphics of commitment and of value rather than a value-free graphics of aesthetic detachment.

The reductive aspect of analysis – etymologically, the “loosening” of a building into its constituent pieces and relationships – inevitably creates, among its products, an element of loss. The act of analysis incorporates the activity of losing as a result of the transformation it performs on a building, removing it from the firm position of artifact to the more uncertain territory of artifice. As the object of analysis, the building is reduced to information, information is reduced to invention, and invention to interpretation. The process wrests the building from the tangible world of the specific, complete but unclear, and deposits it as fragments, clear but incomplete, in the intangible world of the general, a world in which *genera* become central. The process of analysis involves a review of the fragments in a search of opportunities for

recognition, a “re-cognition” that acknowledges familiarity and abandons the specific as a mere vehicle for manifesting the meaning in the general.

Thus the reader of buildings has an immediate need for a reference to the recurring and familiar, the *genera* that stand behind the artifact but are central to architecture. The characteristics of these *genera* may be discovered through questions concerning their situation inside history, their discrete limitations in number or their perceptual or cognitive natures, their timelessness or generation in endless profusion, their range of operation, and their relationships to each other, among others. In effect, all these questions deal with issues of type, and some resolution would presumably result in a generally available operant typology. While we wait for the heralded but somewhat tardy appearance of such a typology, some benefit may be gained by reviewing potential difficulties of using type as an interpretive strategy.

Among the difficulties posed by type – a concept that has replaced the anxiety of originality with the anxiety of origin – is the decision concerning the criteria that must be present to allow the recognition of a legitimate type form, against which the similar, the almost, and the barely recognizable will always be in varying stages of revolt. The “proper” manifestation of type develops the notion of an orthodoxy that is in essence inimical to architectural manipulation and to the specificity of a building as opposed to “building.” Such an orthodoxy stands mute in instances of hybridization, where typologies of form must give way to typologies of operation. Additionally, its proposal for certainty of recognition stands in opposition to the “strong reader’s” revisionism and reinterpretation.

It is clearly impossible to fully “know” a building. We can only understand it as a simultaneously manifested group of diverse abstractions, a reduction, a series of fragments, the boundaries and properties of which have a tendency to drift and expand, causing any enumeration of constituent parts to beg for constant revision under the scrutiny of the eye, the testimony of the object, the analysis of active cognition, the reflection of subjective discovery, or to whatever one might subscribe as the source of the need for interpretation. At the same time it seems even more difficult to understand, let alone fully “know,” the fundamental nature of the abstraction “architecture” – if, in fact, it has one – since physically it can only be manifested by specific, discontinuous objects. The necessity of searching for the general in specific instances is a condition created by the unyielding presence of the object and the

perception of it. The goal of ordering (bringing “specificity” to the general) is conditional to the existence of the subject and cognition.

The difficulty of resolution seems to spur us on to ever greater artifice, wandering between the extremes of primacy for the specific, which may be characterized as “romanticism,” and primacy for the general or, with equal license, “classicism.” Within these extremes interpretive strategies for formal analysis range from those that use typologies of elemental components for the former to those that use typologies of configurational organization for the latter. For the process of analysis, it would be useful to have available an “interpreter,” a device that could simultaneously negotiate between a series of opposing propositions, between typologies that identify the organization and those that identify the components, between the specific qualities of the building and the general qualities of architecture, between processes of cognition and processes of perception, and between the dynamism of operation and the stasis of configuration. This is the role of the diagram.

The diagram as intermediary loosens rather than loses, developing its attributes from both aspects of opposing dualisms and thus presenting rather than representing, explaining rather than embodying. The proposal of the diagram is tentative and temporary. It makes more apparent the processes of type referencing that propose strength, certainty, and origin and that establish the “lateness” of the activity of reading buildings, at the same time providing for the endless reinspection of the specific attributes of a building. Such ongoing examination exposes weakness, uncertainty, and originality and establishes the revisionary character of interpretation. The diagram, then, can be a simultaneous discussion both of the thing itself and of what it manifests. This feature

establishes the possibility of a dialogue not only between object and type, but also between types and between typologies.

Diagramming can investigate the relationship between fundamental elements and fundamental forms. If point, line, plane, and volume can be seen as a "micro-typology" of components, center and perimeter may be an equivalently primitive typology of figure. Since all objects can be diagrammed as "points" (for example, Beijing in relation to the Great Wall), even such a simple system tends to collapse into the singular identity of two "Ur-types" — point and center. Alternately, the system may be seen to spawn the immediate subsets of center components and perimeter components, point and volume forming the first group and line and plane the second (fig. 1).

The diagram can also investigate the link between the original elements of a hybridized form. The collision of "column-wall," for example, spawns a series of diagrammatic syntheses, ranging from a "wall" of columns, in which a group of columns manifests a plane, to an interrupted plane, the fragments of which suggest columns. A building may indicate both, as do the facades of the Temple of Athena Nike and especially the vestibule perimeter of the Laurentian Library, where a continuous change of state from column to wall and back is evident (figs. 2, 3, 4). The Temple facade facing the city both reinterprets and signs for the Propylaeum by

offering the juxtaposition of closure and access. The vestibule of the Library offers either the access of a *cortile* or the protection of an exterior wall. Like a partially frozen lake, its surface shifting back and forth from solid to liquid, the activity of the packed columns oscillates with the passive unity of the planar wall surfaces. Instead of suggesting the easy transformation from one element to another, a "column-wall" can present its components in a more confrontational setting. For example, "entry" may be seen as a two-component synthesis of barrier and procession. *Barrier*, as a wall separating space *A* from space *B*, can accommodate *entry* as a specific exception to a general condition. *Procession*, as a plane separating route *A* from area *B*, can accommodate *entry* as one more event in an episodic chain — as a link rather than a break. Two columns could be a possible representation, establishing simultaneously a transitional plane into which they are incorporated to delineate difference and a

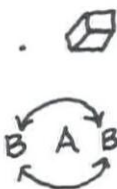
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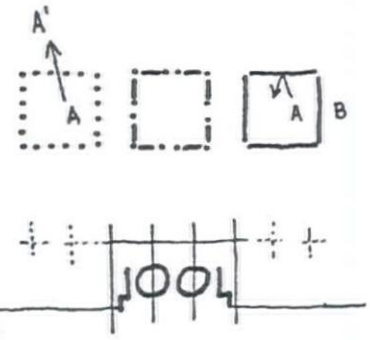
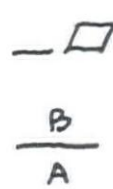
FIGURE



CENTER



PERIMETER



2
Temple of Athena Nike,
Athens, 427–424 B.C.,
Kallikrates



4
Laurentian Library,
Florence, 1526, vestibule,
Michelangelo

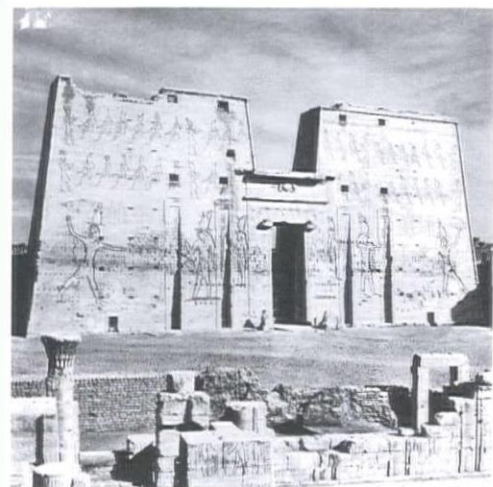
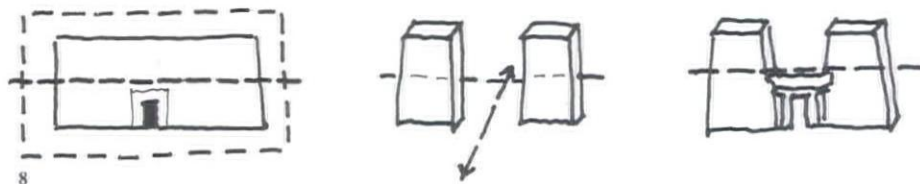
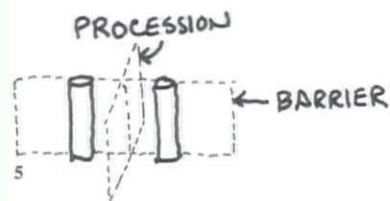
processional plane which they flank, to mark the continuity of the path (fig. 5). Examples of this diagram range from aggressive juxtaposition to accommodative integration. The former is in evidence at the propylaea of Egyptian temple compounds (fig. 6) — compound in this instance being a doubly appropriate term, since diagrammatically barrier and procession are juxtaposed in the manner of a split screen. Integrative accommodation is the strategy pursued on the entry facade of the Vanna Venturi house (fig. 7). In both cases the doorway is in opposition to the idea of barrier, created by the plane as fact on the lower half of the facades, but is in easy agreement with the idea of procession, supported by the double pylons that also

establish the plane as fiction. Both buildings also evidence maximum "grommeting" above the portal; this device reinforces the special character of the center and, more important, provides for the simultaneity of two readings. The first is as one wall, with a void at the bottom edge of the facade, isolated as a ground-related exceptional figure in an otherwise continuous plane. The second is as twin pylons, a duality promising easy passage by defining center as absence rather than object; this absence is not antagonistic to the pylons' integrity; it is, on the contrary, its result. The voided spaces above and below the lintel are thus both the same and worlds apart, that above being a nothing and that below being a something (fig. 8).

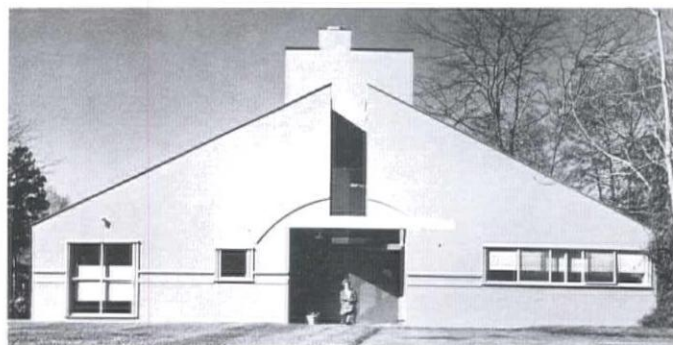
and axial, while the Venturi house is object-centered and centripetal. One establishes a precinct that is object-vacated, while the other provides a precinct that is object-inhabited.

The recurring themes of presence-absence, barrier-passage, and opposites-equals suggest the usefulness of a diagrammatic model that displays its categorizing process and its elements simultaneously, a sort of display rack for elements, a primitive hut for diagrams. A combination of the "microtypologies" of composition and configuration reveals that the basic components form spaces that fall between the two extremes of precinct space, in which the boundaries are certain, and vicinity space, in which the center is certain. Essentially the palazzo-villa argument, this combination differentiates between object as

To an extent, then, these facades share a diagrammatic structure, and the same could be said of the plan form. But the diagram that clearly differentiates them shows the opposing nature of the space enclosed by the perimeter walls. Edfu is void-centered



6 Temple of Horus, Edfu, Egypt



7 Vanna Venturi House, Chestnut Hill, Pennsylvania, 1962, Robert Venturi

perimeter and object as center. One would establish the certainty of containment but lack the quarry; the other, stressing the certainty of occupation, would generate a zone of influence with sure center but indeterminate edge, creating on each hand an anxiety of absence that would be mutually addressed by the opposing subset. These two figures may therefore be seen separately as opposing configurations; and yet, when they are combined, they appear as a unified whole composed of two mutually referencing pieces that assist in the generation of each other (fig. 9).

These figures can also be seen as the relationship between unity and closure. A parallel system of opposing figures, intersection versus module, can be generated by the operations of division and multiplication (fig. 10). Both are necessarily composed of multiple elements, again graspable as inverses of each other; but they also form special subsets of the first system.

Module can be considered a more complex form of *perimeter*, since it is composed of figures that void *center* and are adamant about *precinct*; *intersection* may be seen as a restatement of *center*, since it similarly establishes *vicinity*. The figures can also be diagrammed as manipulated versions of center-perimeter, although, depending on the operation, either of this pair may be assigned the maternal role. Thus, intersection can be viewed as perimeter collapsed or center extended, while module would be generated by the multiplication of center or division of perimeter, in each case the operations themselves being paired in opposition: multiplication-division and extension-collapse (fig. 11).

In some way, then, each of these figures calls for the generation of the other three. Modules create axes, which result in intersection; intersection gives rise to center; center provides vicinity, which promotes perimeter, which in turn creates module (fig. 12). The last link results in two arguments. Although consistency of perimeter (circle) argues for center, inconsistency of perimeter creates "microprecincts" in terms of enclosure and "microcenters" in terms of figure. If the continuity of a perimeter is strained by sufficient aberration, the line is fragmented to a degree and a new figure emerges. This may be the *corner*, which possesses the characteristics of dispersed centers; alternately, the new figure may be found within the enclosure, the module, with some of the characteristics of a fragmented precinct (fig. 13). The point at which perimeter becomes module is a persistent moment in architecture, not merely in its manifestation as corner, but more clearly in the generation and fusion of new centers and new precincts. Emphasis on the former is exemplified by the Château de Chambord (figs. 14, 15) and on the latter by the amazing public buildings on Freudenstadt's central square (fig. 16).

46



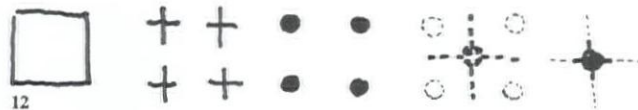
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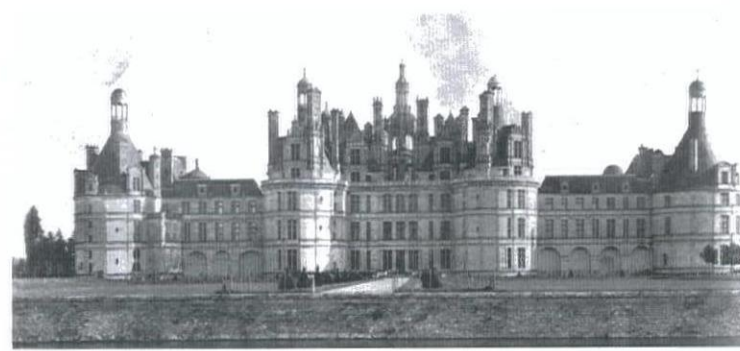
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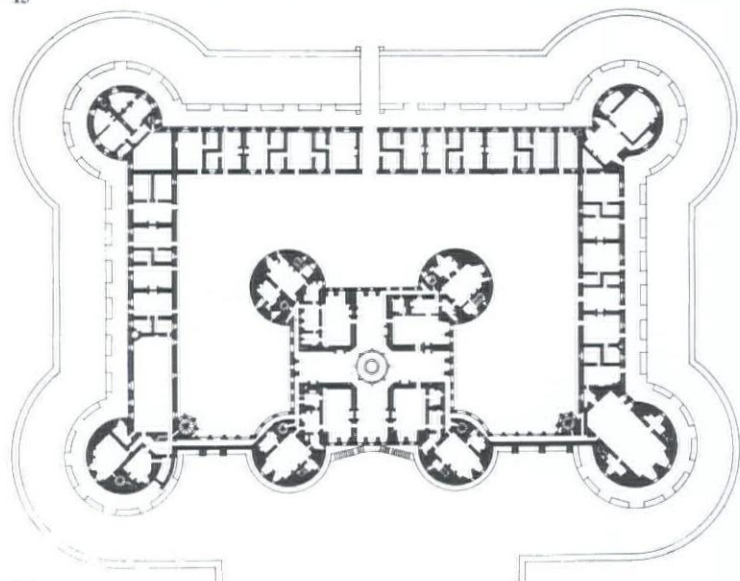
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13



15



14
Château de Chambord,
begun 1519, plan

15
Château de Chambord,
begun 1519, exterior

An example of the phenomenon of progressive configurational generation can be found at San Carlo alle Quattro Fontane (fig. 17). In its cloister the corners begin to exact the characteristics of module. The plan of the church itself continues the sequence according to the earlier argument: perimeter to module to intersection to center (fig. 18). While the modules emerge from the perimeter of the cloister, they are of receding importance in the sanctuary, where the cross-axis of intersection is emergent and the center ever imminent. Thus, the series may be seen as a paradigmatic generator of the church itself, a space in which perimeter and module dance to the tune of axes and center (a theme suitably enthroned in the coffering of the dome), and conversely in the cloister, forming an exploded, episodic version of these relationships.

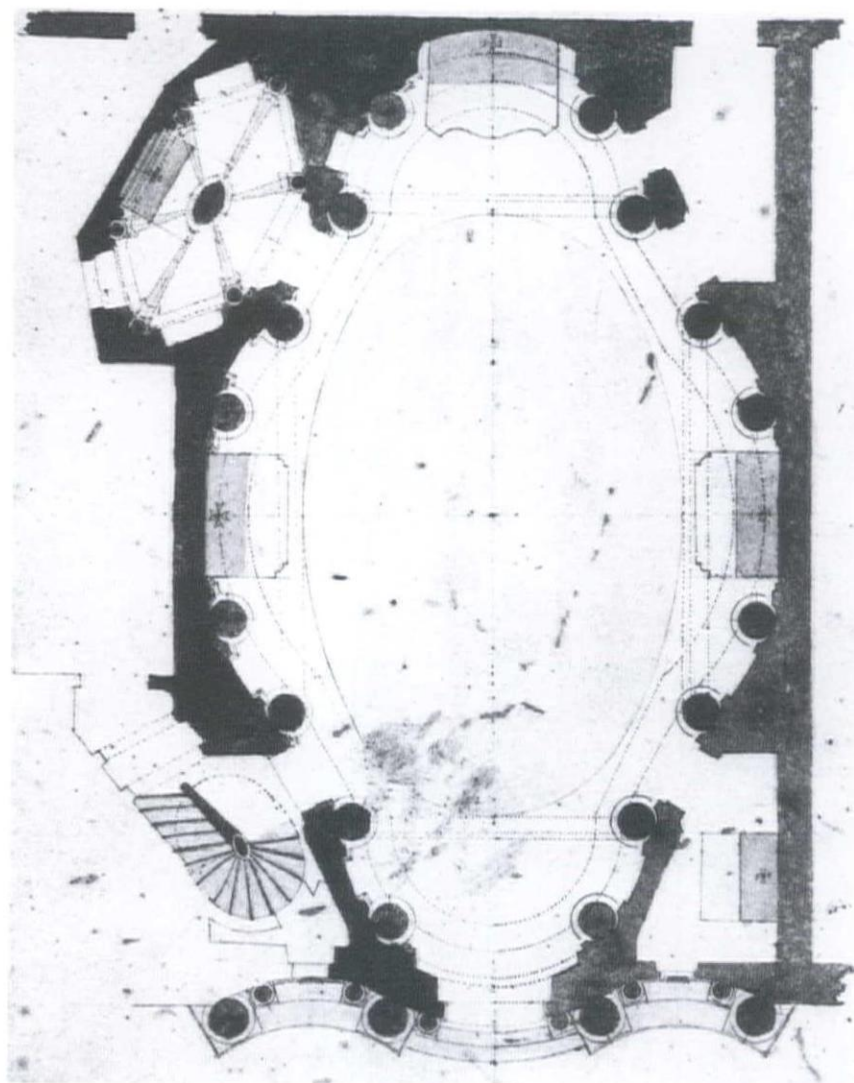
These four organizational diagrams, each of which, although having specific characteristics, contains the suggestion of the other three, contribute their distinguished yet interrelated parts to a unified whole. It is interesting that in combination these figures form a familiar pattern in Western culture with clear cosmological overtures, the paradise garden. One is tempted to read San Carlo, therefore, as a dissected version of paradise, a diagram connecting figure and component.



16
Stadtkirche, Freudenstadt
Square, 1601-1609,
exterior from northwest,
Heinrich Schickhardt

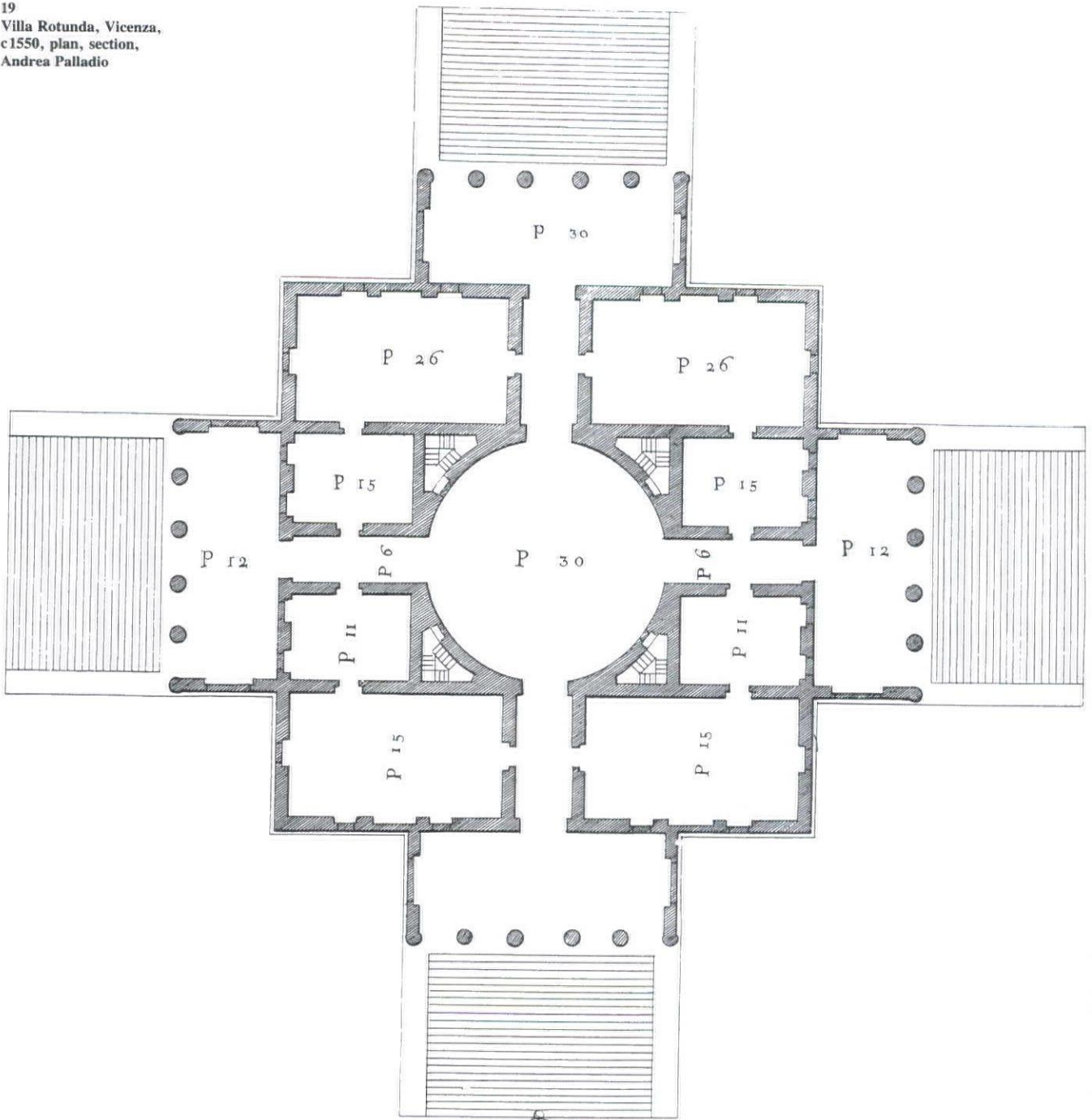


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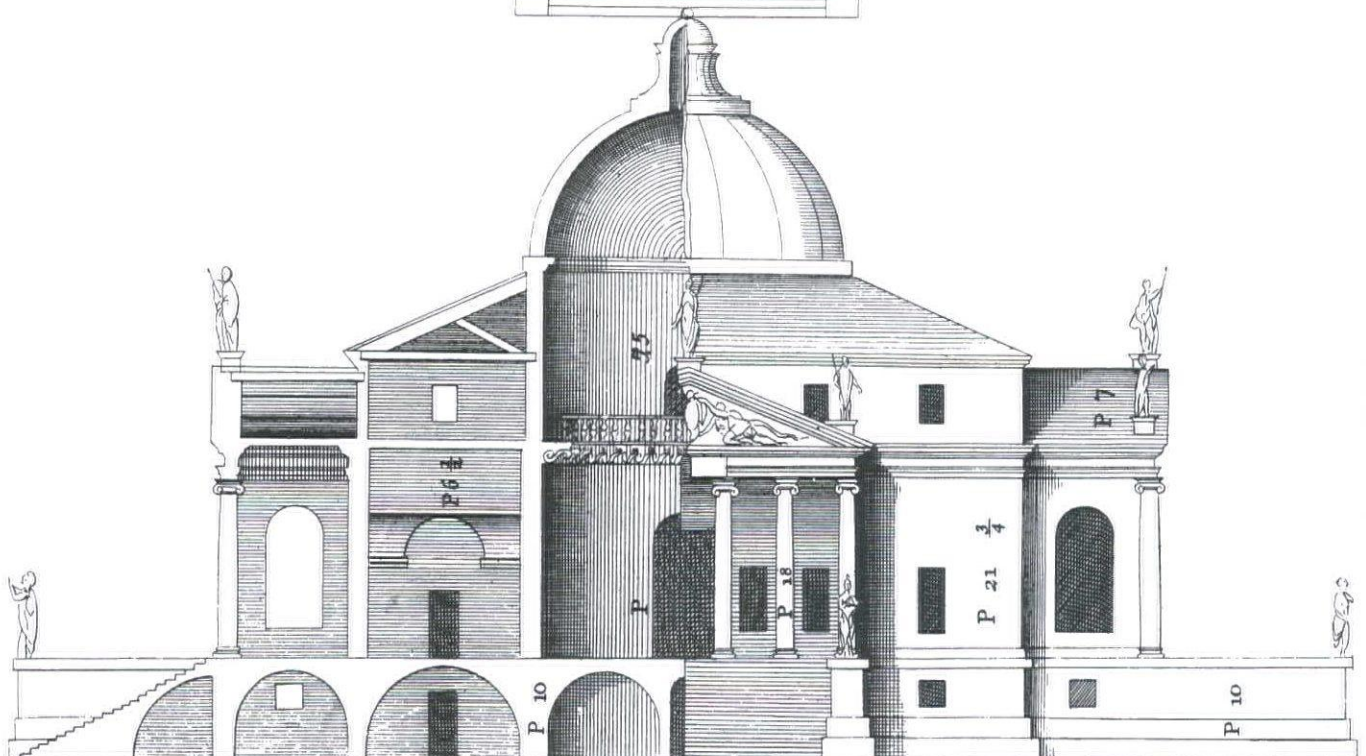


17
San Carlo alle Quattro
Fontane, Rome,
1638-1641, plan, Francesco
Borromini

19
Villa Rotunda, Vicenza,
c1550, plan, section,
Andrea Palladio



48



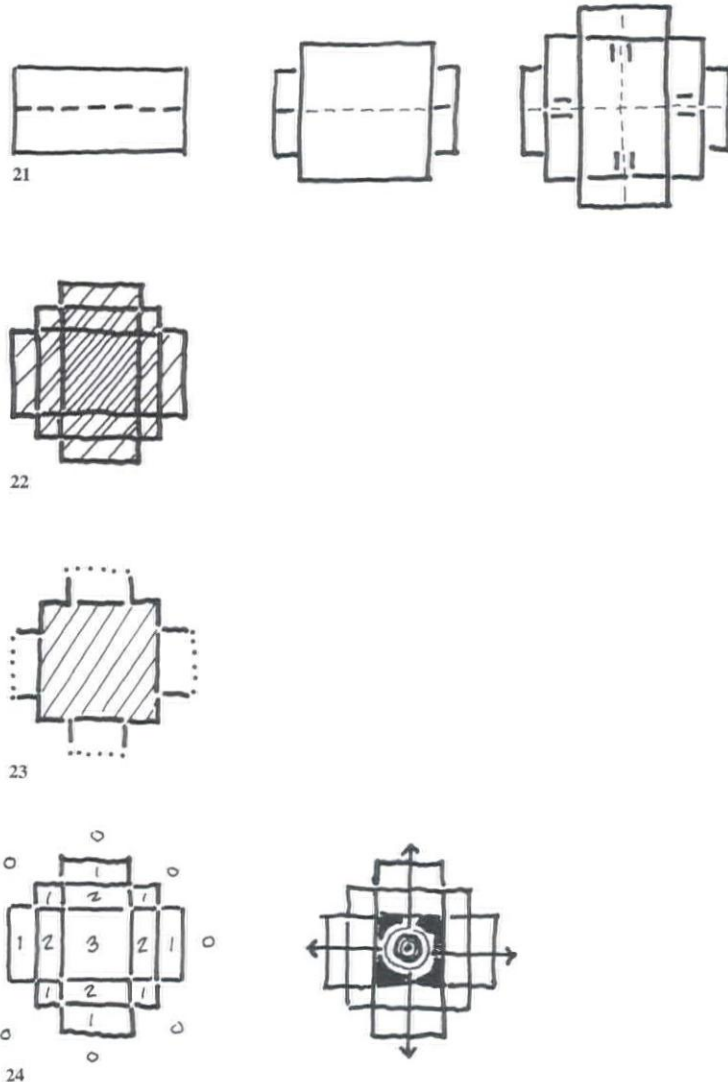
f these four figures constitute an unavoidable, though primitive, typological universe, their analytical value requires them to be "found" in some combination virtually everywhere in ways that, when diagrammed, seem interpretively valuable. For buildings such as the Villa Rotunda, the diagrammatic application of these figures in a search for meaning may seem an exercise in reaffirming convention. Since diagrams promote endless reinspection, however, the possibilities remain of finding cracks within the categories of similarity and type through which even buildings such as Rotunda produce endless reinterpretation and invention.

In all the progeny spawned by Villa Rotunda one set of elements is usually absent; the wing walls with incorporated arches that flank the porticoes seem to be found superfluous or inappropriate and are edited out (figs. 19, 20). Their presence, however, provides opportunity for revisionist diagramming. These aggressive elements make several claims. One is kinship with the colonnade, underscored by record proximity, a sort of intensified Athena Nike. Another is an ambiguous identification with the perimeter wall of the main block; it both is and is not a continuation of the perimeter wrapper. Given the possibility that it is not, a third claim can be made, for an exposed segment of a wall slicing through the facade of the square block — in fact, part of a completely independent building all but submerged within the larger square volume. Thus, Villa Rotunda can be read as the juxtaposition of three buildings, two rectangular temple forms and one square Renaissance block, superimposed on one another. This device is not uncommon to the interpretation of Palladio's ecclesiastical architecture (fig. 21). Corollary arguments

can indicate a "history" of imposition, based on the interior plan and the notion that earlier figures are obscured by later ones (fig. 22). This may be a "history" of attrification, based on the notion that the perimeter of the square is the ultimate determinant of pure volume, suggesting that the porticoes represent a disintegration of the perimeter walls of the two rectangles (fig. 23). Alternately, it may be a "history" of centralization, a Mannerist attack on the consistency of Renaissance space. Positioning equal density for the volumes of the three enclosures results in the doubling and tripling of densities in the overlaps culminating in the explosive generation of the central volume (fig. 24). Its "belated" appearance offers both the stasis of the paradise garden and the instability of revision, arguing for center as the generator rather than the result.



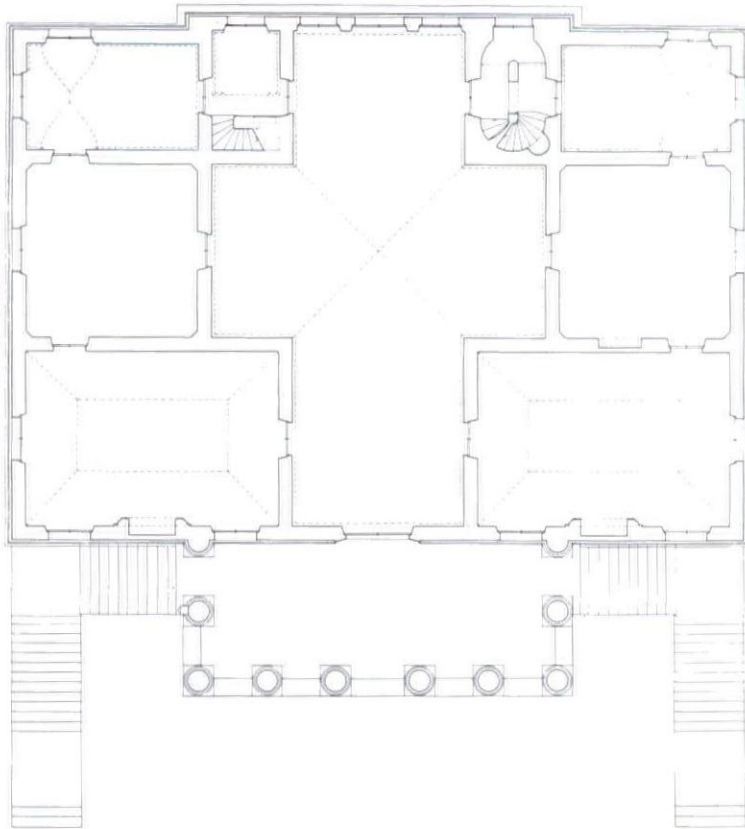
20
Villa Rotunda, Vicenza,
c1550, exterior, Andrea
Palladio



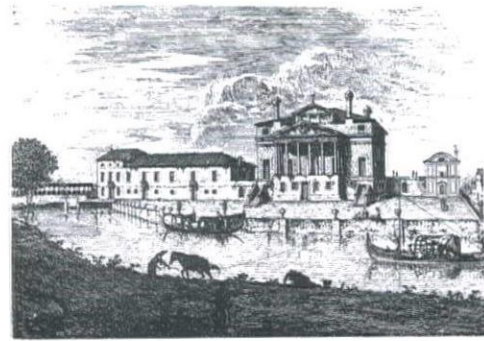
If Villa Rotunda offers revision by addition, Foscari provides it by removal. Again the building can be seen as a superimposition of figures with a resultant center. The front portico seems to slice effortlessly through the villa block, and the main salon is configured by their intersection (figs. 25, 26). The rear facade, however, has been sliced off, as a conquistador would cut off an Aztec's nose, leaving a facade as scar tissue, seeking an uneasy integration with both perimeter volumes, and providing an opportunity for exit by the center space, always in competition with the perimeter for the role of supreme object (fig. 27). It also creates an excellent opportunity for the introduction of thermal windows, which underscore the unusual quality of this membrane and perhaps reflect the former volumetric connection across the wall as well as bearing an

uncanny resemblance to nasal passages. Thus, a reinvention of Foscari is provided by a diagram that reinterprets the elements and assigns them the roles of generator and or resultant, creating a history, a cataclysm and a revision, which move the building away from the paradise garden as "Ur-type" as well as propelling it toward the type, locked in a world neither specific nor general.

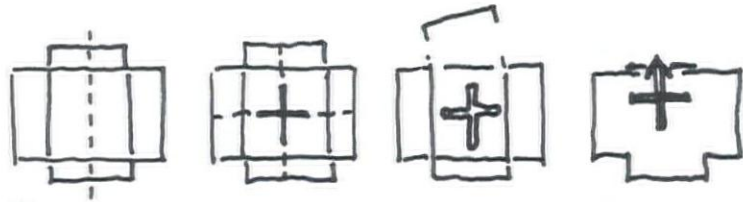
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25
Villa Foscari, Malcontenta,
1559-1560, plan, Andrea
Palladio



26
Villa Foscari, Malcontenta,
1559-1560, river front,
Andrea Palladio

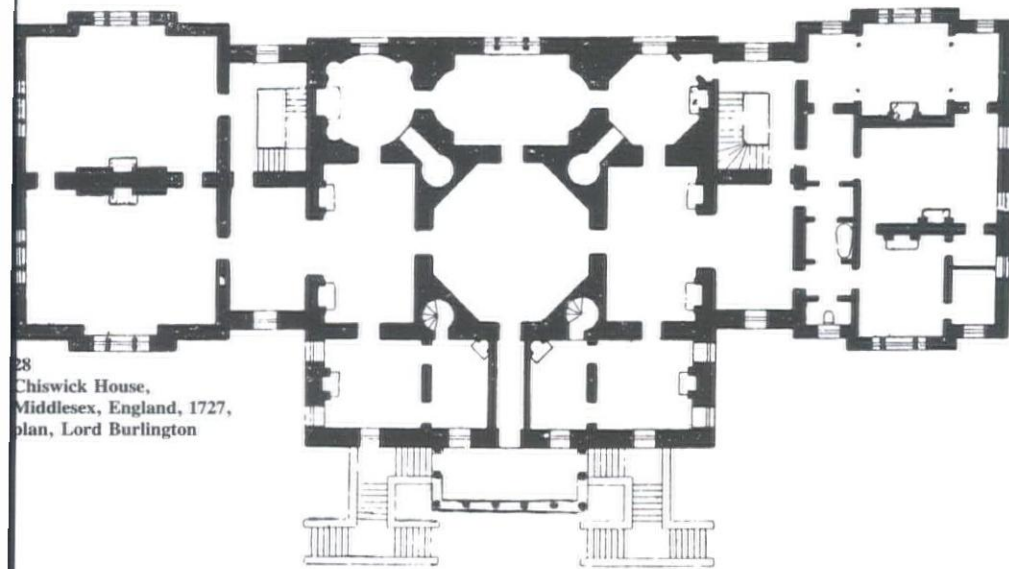


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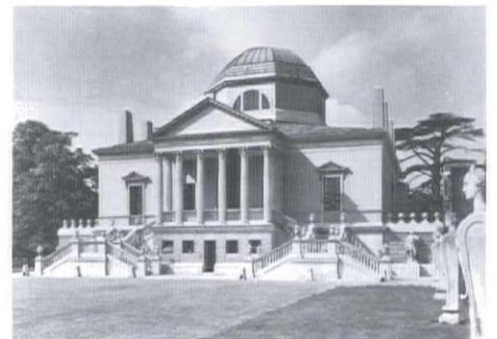
In Rotunda and Foscari, an element was selected from which to spring the diagrams — the wing walls and the garden facade respectively. In the case of Chiswick, the amazing porch may be used as a point of departure (figs. 28, 29). The T-shaped porch plan extends the perimeter facade to the central space of the building and dramatically replaces the experience of the entry portal with a gaping absence, a sort of Egyptian temple front layered in plan. The linear disposition of rooms along the perimeter, the de-emphasis of center along the garden facade, together with the peculiar entrance, seem to argue that this centralized building is really a bent bar, a simple linear element caught in the process of becoming perimetrical, creating a new center that is, ambiguously, both integral and exterior to it. If the rotunda is seen as a resultant void, the temple front becomes a bridge between the two ends of the bar;

if the rotunda is a generating center, the temple front becomes its expression on the exterior, a manifestation of its ability to communicate directly with the landscape, independent of the perimeter (fig. 30).

Thus, in both Villa Rotunda and Chiswick, the center can be rediagrammed as not original to the scheme but a development of it, an evolutionary addition en route to the stasis of "completion." The actual attainment of this state would, of course, result in the complete loss of individuation for the building, which would become subsumed in the generality of the type form.



28
Chiswick House,
Middlesex, England, 1727,
plan, Lord Burlington



29
Chiswick House,
Middlesex, England, 1727,
exterior, Lord Burlington

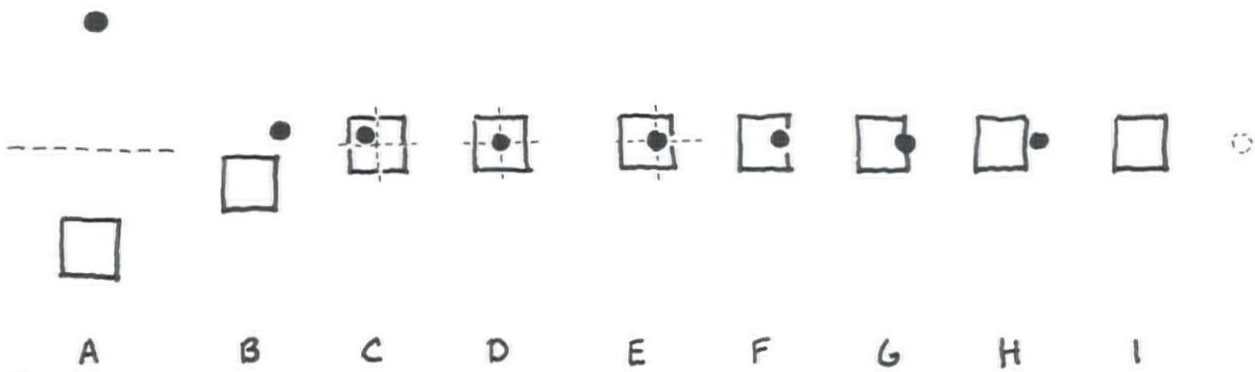


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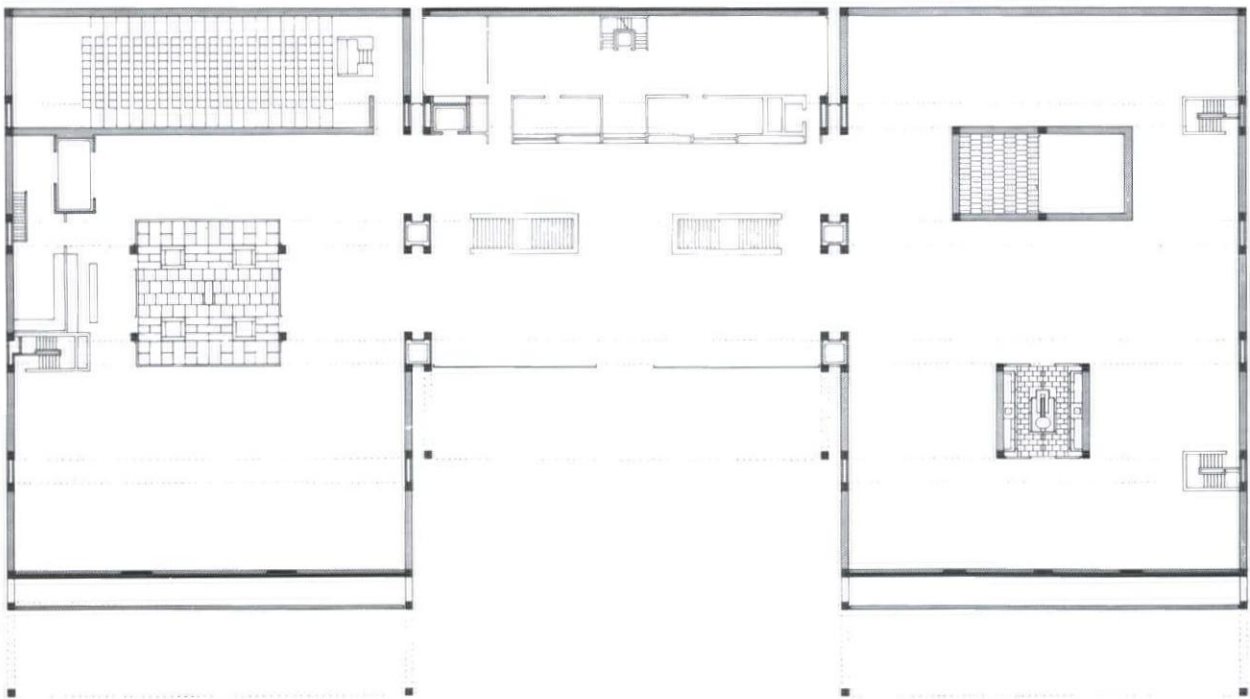
Inspired by the comparative differences between those two buildings, a cycle of type forms may be diagrammed in which center and perimeter are seen as the dominant opposing configurations and which develops the themes of juxtaposition, capture, subjugation, integration, domination, escape, independence, and absence (fig. 31).

Although there are probably an infinite number of such cycles, for whatever themes and figures, the importance is that any one of them can establish a kinship of interpretations of a single building as well as a diverse set of buildings. This kinship is evidenced not only among those buildings that show a configurational similarity, but also among radically divergent buildings, which can share a single diagram or sequential adjacency. Thus, Crown Hall (fig. 31i) is related to the Domus Aurea (fig. 31f), which in at least one instance shares a diagrammatic identity with Villa Foscari (fig. 31e), both of which just fall short of Vaux le Vicomte (fig. 31g).

52



31



32
Kimball Art Museum, Fort Worth, Texas, 1966-1972, plan, Louis I Kahn

It would be ludicrous to argue that any building responds to a single diagram, since diagrams articulate arguments for certain characteristics of a building and ignore others, and these same characteristics can support additional arguments and additional diagrams. The notion that a building can support but a single diagram is unsupported by even functional or programmatic considerations and ignores the endlessly inventive capacities of reading and reinterpreting. Thus it is difficult to imagine a building that does not suggest multiple diagrams, regardless of its apparent simplicity. A building such as the Kimball Art Museum (fig. 32), for instance, may be regarded as an assemblage of module, (fig. 33a) a perimeter containing object, or (fig. 33b) a grid with column clusters demarking the intersection (fig. 33c). It is the simultaneous existence of at least these which provides the building

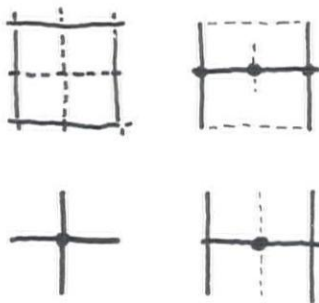
with its richness of meaning. The garden courts may be seen as voids in scheme 1 and solids in scheme 2. In scheme 3 the courts seem superfluous. In reading or experiencing the building, these conflicting perceptions cause constant conceptual shifting, perhaps insuring that the viewer will grapple with the building's fundamental precepts, and perhaps stressing the structure that underlies architecture in general, the latter including the search for classes of figures, of elements, and of operations and their diagrammatic relationships.

Just as buildings are open to multiple configural interpretation, within a single diagram the elements can have a shifting series of roles and emphasis. At Chiswick, for example, the diagram proposes multiple opportunities for the role of center. Three of these are (1) the central room on the garden facade (which, as the center of the bar, can claim originality); (2) the rotunda; and (3) the portico, which so aggressively centralizes the entry facade. The combined effect of these is to stretch "center" along one axis, transforming the subtle axial

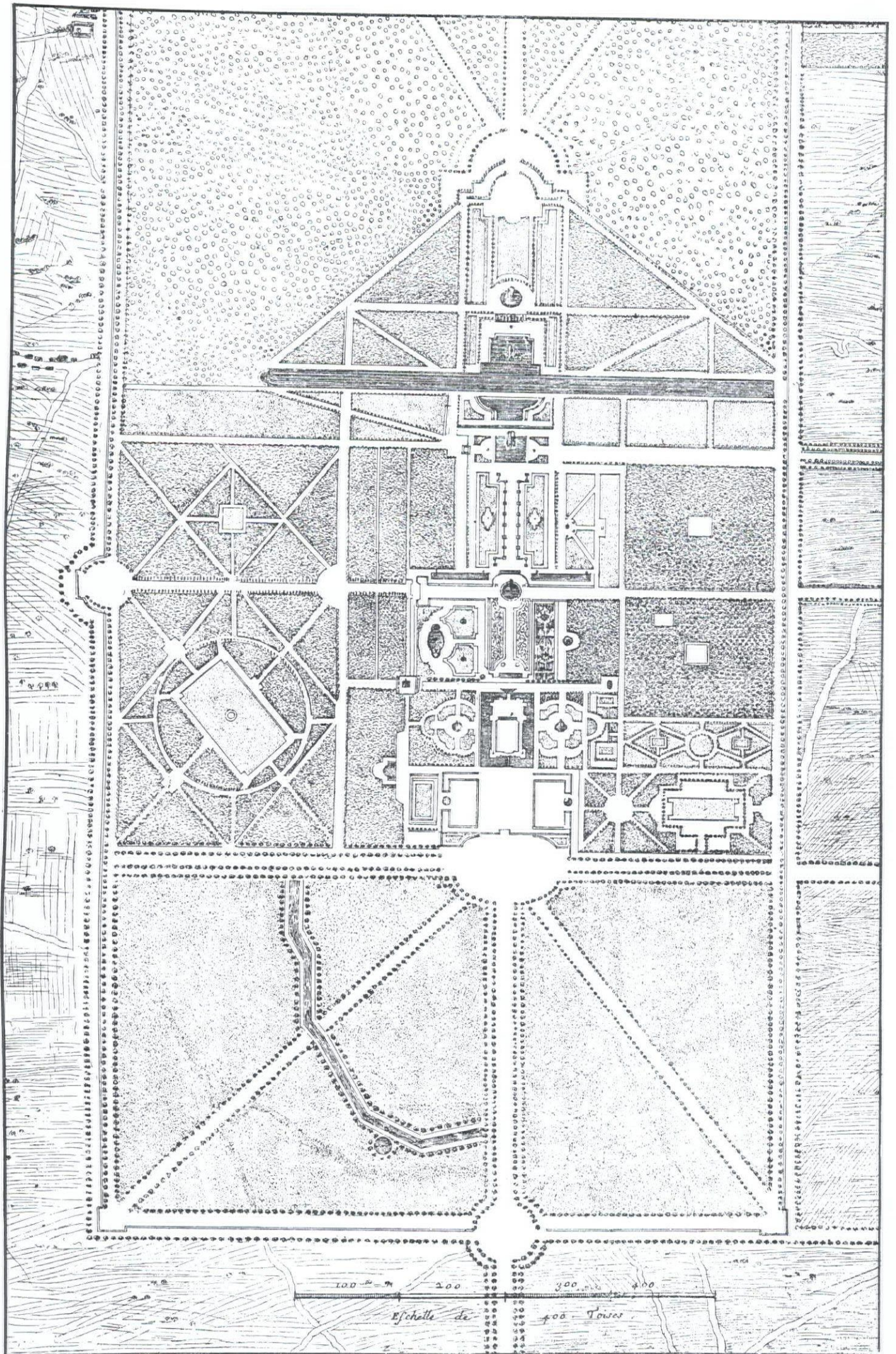
dominance at Villa Rotunda into the relative eclipse of the transverse axis at Chiswick. The result is similar to the partial collapse of a simple perimeter or the partial expansion of a simple intersection, a position intermediate to complete focus on the one hand and complete dispersal of focus on the other (fig. 34). It would be a useful device to begin the dispersal of a precinct organization into the larger landscape, while avoiding the singular center, which greatly reduces the possibilities of defining, much less ordering, the near ground.



33



34

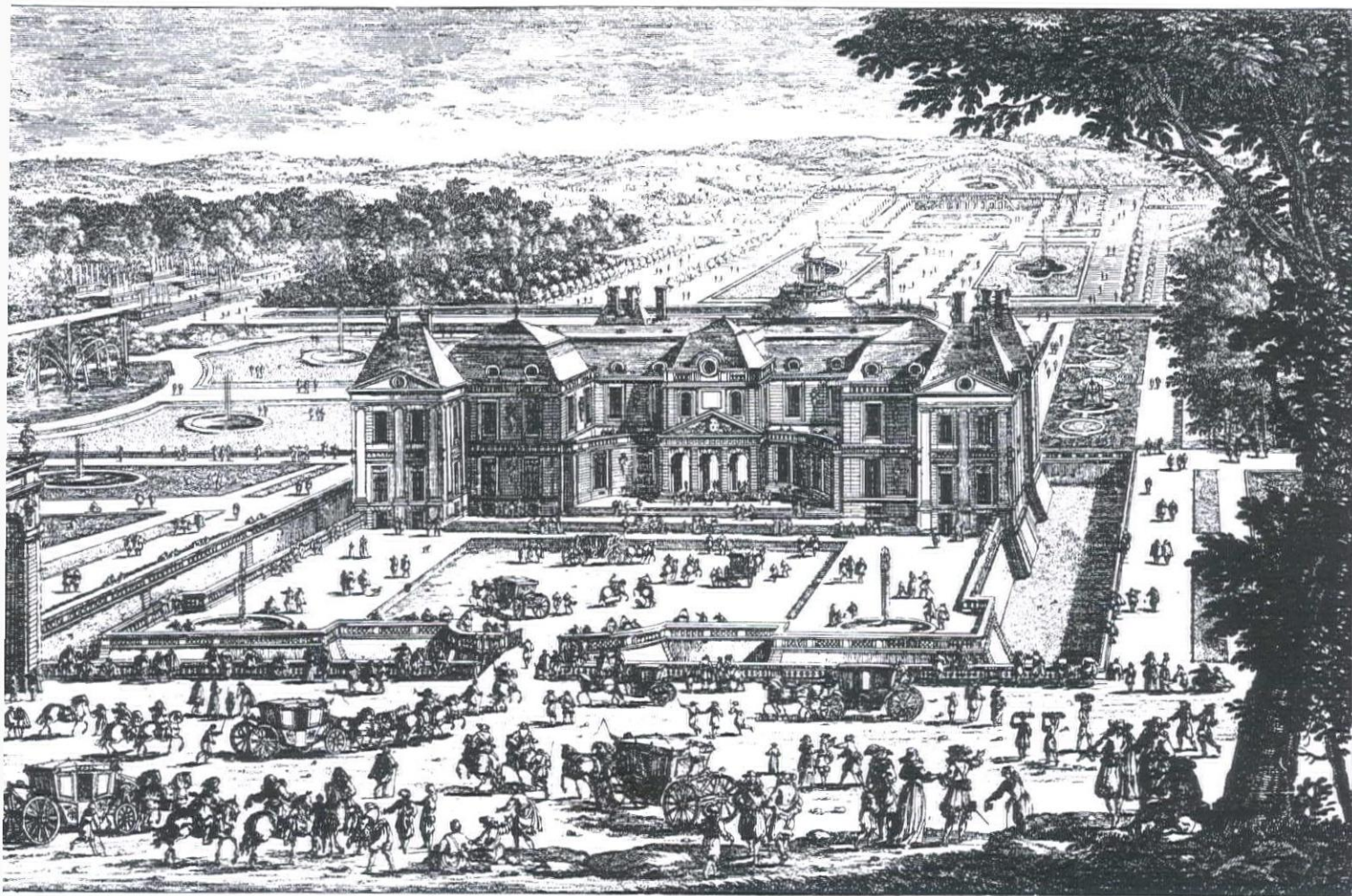


Such is essentially the diagram for Vaux-le-Vicomte, which explodes the enclosed garden along an axis and into the landscape (figs. 35, 36). The perimeters remain fixed along two sides; the north is defined by the road and the axis of the service buildings, and the south by the river's edge. Other elements are located only with respect to these two edges and the central axis which mediates between them. The encapsulated nature of the court of honor from which the chateau seems to withdraw, the similarity in dimension between the forecourt and the moated island, the curious wing walls that bind the moat to the forecourt, the organization of the gardens, and the organization of the chateau itself, all support the following diagrammatic proposal. It suggests that when an initial perimetrical building

is juxtaposed to the river, it responds by decomposing in an effort to accommodate and reconfigure to the demands and complexities of a larger landscape. The juxtaposition creates a new dominant axis along which the original figure deforms, providing center for a larger landscape while leaving the old precinct as a datum, a vestige of a condition before this "history" began to evolve (figs. 37, 38).

Vaux-le-Vicomte, Vaux-le-Vicomte, France, 1656-1660, site plan, Louis Le Vau

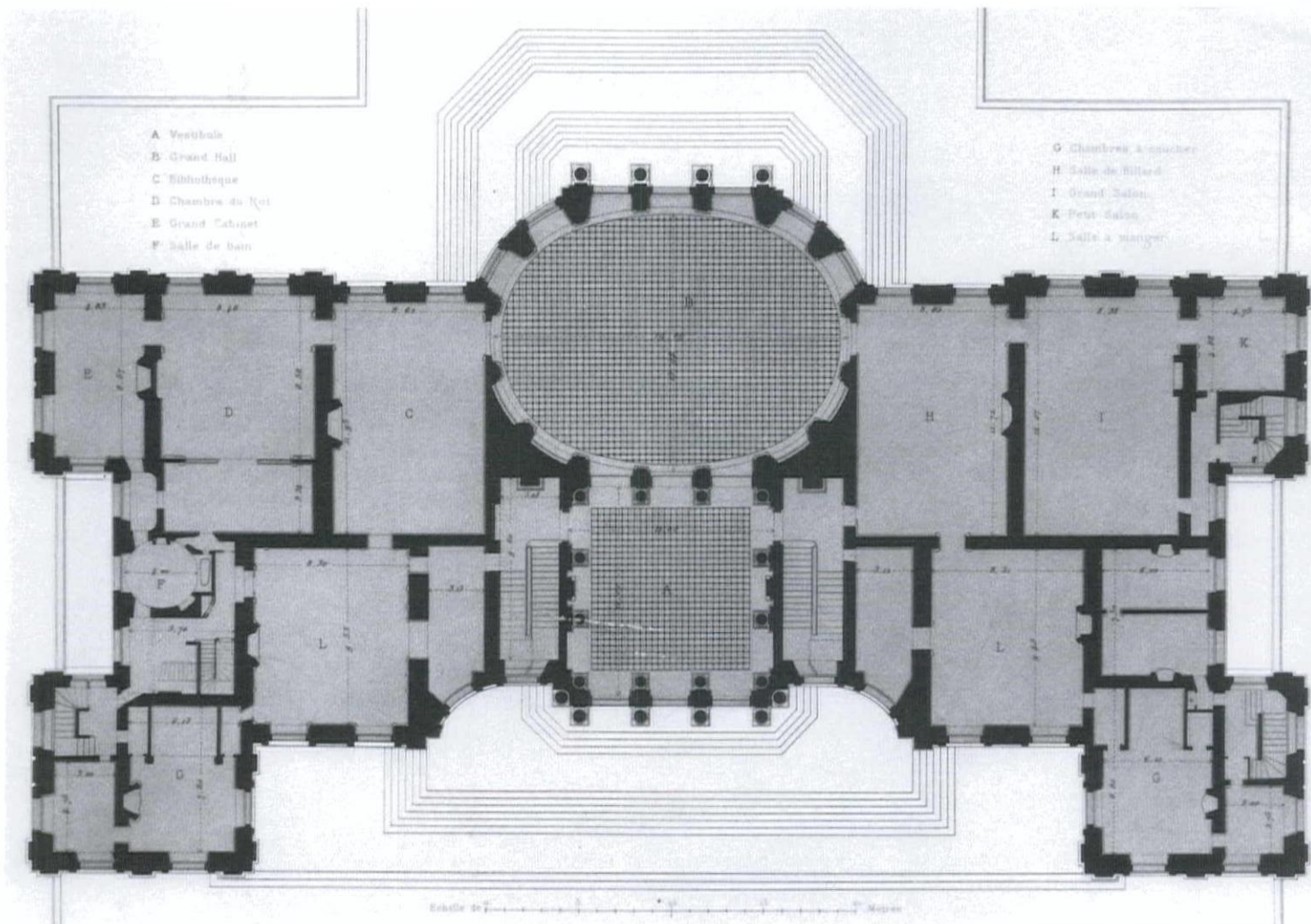
Vaux-le-Vicomte, Vaux-le-Vicomte, France, 1656-1660, exterior, Louis Le Vau



Thus the positioning of the river against the château can be interpreted as introducing time into the diagram, especially given the river's organization as it passes through the garden. Not only does it establish a direction by its flow — a was, now, and will be; it is also born and suffers death at the two edges of the garden. Birth is signaled by the circular collection basin to the east, around which there is a gentle ford; death is shown by the dramatic contrast of the cascade, at which point the river simply slides off the edge of the earth onto the rocks and into the dark Hades of the forest below. As the château moves toward this new element of time, its figure is deformed, marking its passage from the ideal to the real, the timeless to the timely, and the static to the

dynamic. Like a diagram, it is caught between a world in which things happen and world in which things are, a world of making and a world of origins. The garden itse is composed by a series of proposals for a new center (fig. 39); since these move across the landscape with the viewer, they always establish the notion of centrality as the domain of the present and just as quickly demolish it as folly by the provision of a new perspective and its attendant revision.

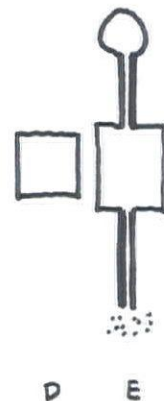
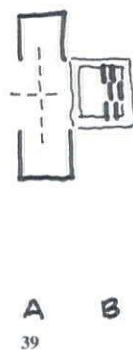
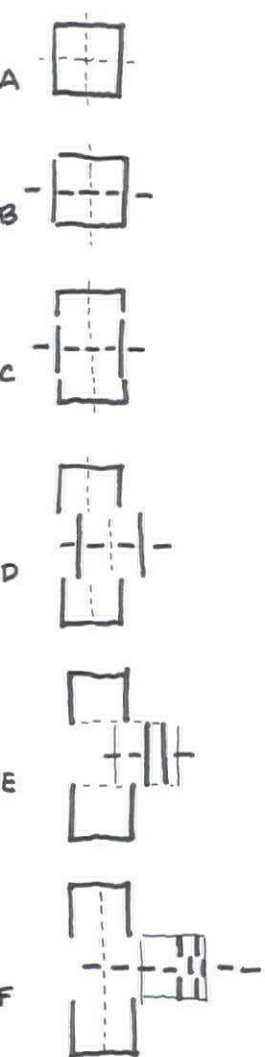
37
 Vaux-le-Vicomte, Vaux-le-
 Vicomte, France, 1656–
 1660, plan, Louis Le Vau



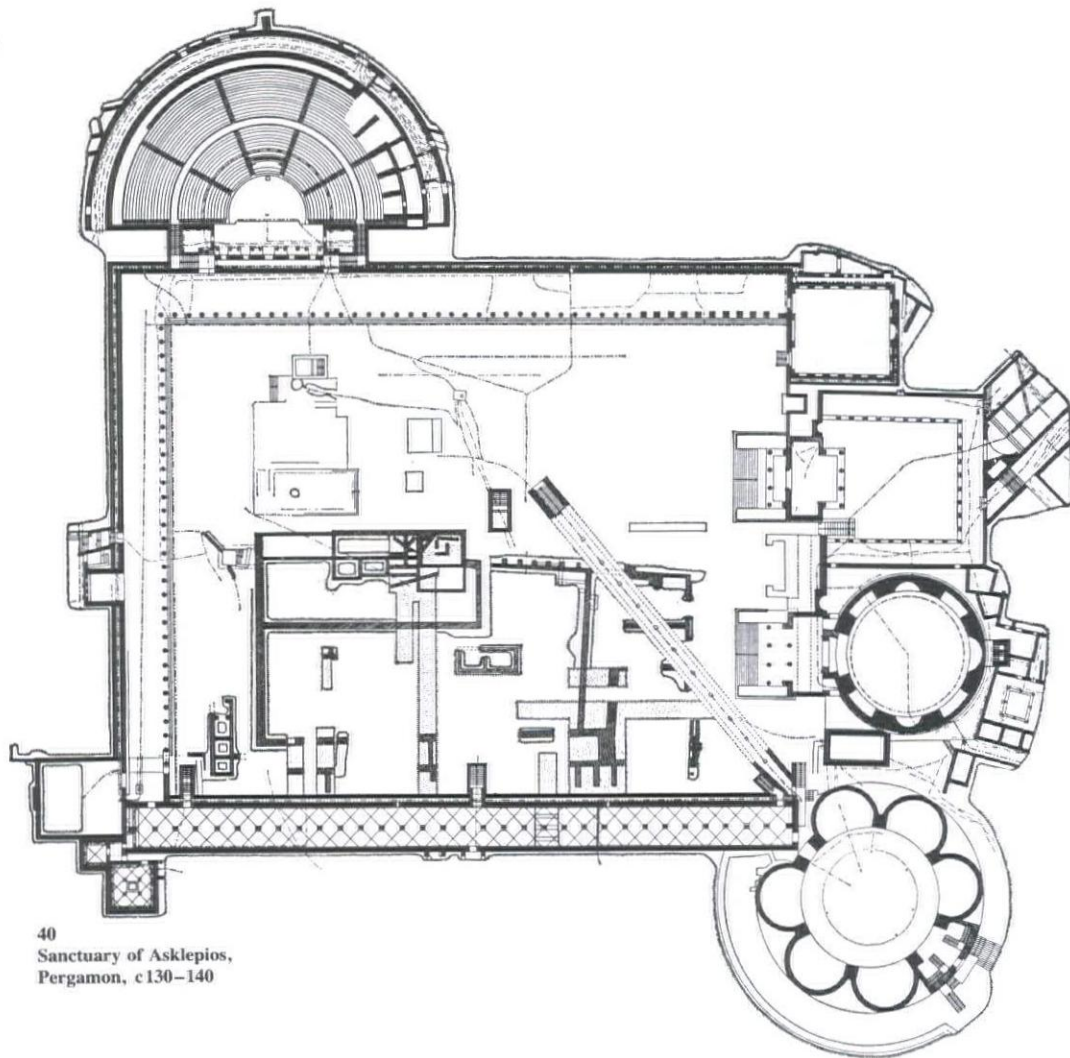
The attainment of constant illusion in a landscape of such presumed clarity and composed of such pedestrian elements marks Vaux-le-Vicomte's unrivaled position. The serial positioning of centers along the axis allows for the constant reevaluation of the significance of a number of positions. The diagrams describing the experience of the garden, however, also coincide with those of its reconception, since reconception is so adamantly proposed by its experience. Thus, the experiential centers of the garden occupy the same places in space as the centers for the garden-as-history occupy in "time." If the château was originally the center of a paradise garden, it has left this special precinct to command the domains of a series of vicinities, contrasting the past vicinity (fig. 39a) with the present vicinity (fig. 39b).

That this all will end at the river seems assured by the square basin along the canal, where the edge on the south side (established by a recognizably classical wall of fountain and sculpture, a sort of intrusion into the age of heroes) is paired with the Grande Cascade to the north, an element that seems to take basement retaining walls as its motif (an offering from the age of contractors). Thus a position for the château is already in preparation (fig. 39e), leaving the fountain to denote center as midway between beginning and end (fig. 39c), and the water table at the end of the Allée d'Eau to mark the point at which the

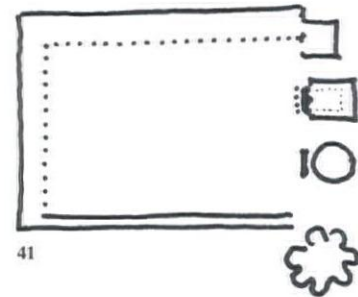
distance from the end is the same as it is "now" from the beginning, a sort of end minus one (fig. 39d), establishing its affinity with the château by allowing the moat to be reinterpreted as an identical pool in which the château is sitting. The diagrammatic thrust of this axis of history extends across the river to a place outside of time yet within its gaze, an Arcadian landscape of mythology, introduced to us by the figures in the grotto and inhabited by the enormous statue of Hercules, a redundant deus ex machina who provides both the motive power necessary to drive the mobile château and further testimony to the character of this sanctuary. His position affords a new perspective of the garden, revealing a model of history as contrivance, a tilted offering on the platter of fiction, fixed on the axis between certainty and myth.



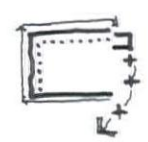
The building itself offers the reading of a differentiated piece emerging as a new independent center-garden pavilion, a scheme relentlessly pursued by the German baroque (fig. 34). As a basic diagram, this notion of the gradual differentiation among pieces or a single undifferentiated piece is relatively common. Within the sanctuary of Asklepios at Pergamon (fig. 40), for example, a sequence of four buildings along the eastern interior facade can be interpreted as a progression from perimetrical organization to central, from orthogonal to radial, and from dependent to independent. In the series the final temple can be seen as a response to the diagonal of the sanctuary's rectangular perimeter, and thus as a termination of the sequence, or as the generator of the diagonal, and thus the origin of the sequence. It can also be seen as the product of the sanctuary's "history," an object generated by a pavilion machine (fig. 41).



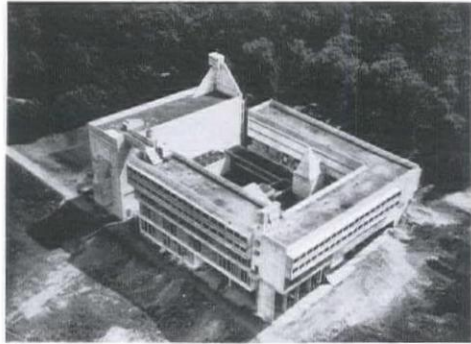
40
Sanctuary of Asklepios,
Pergamon, c130-140



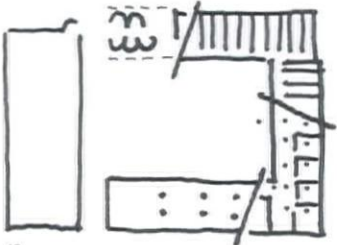
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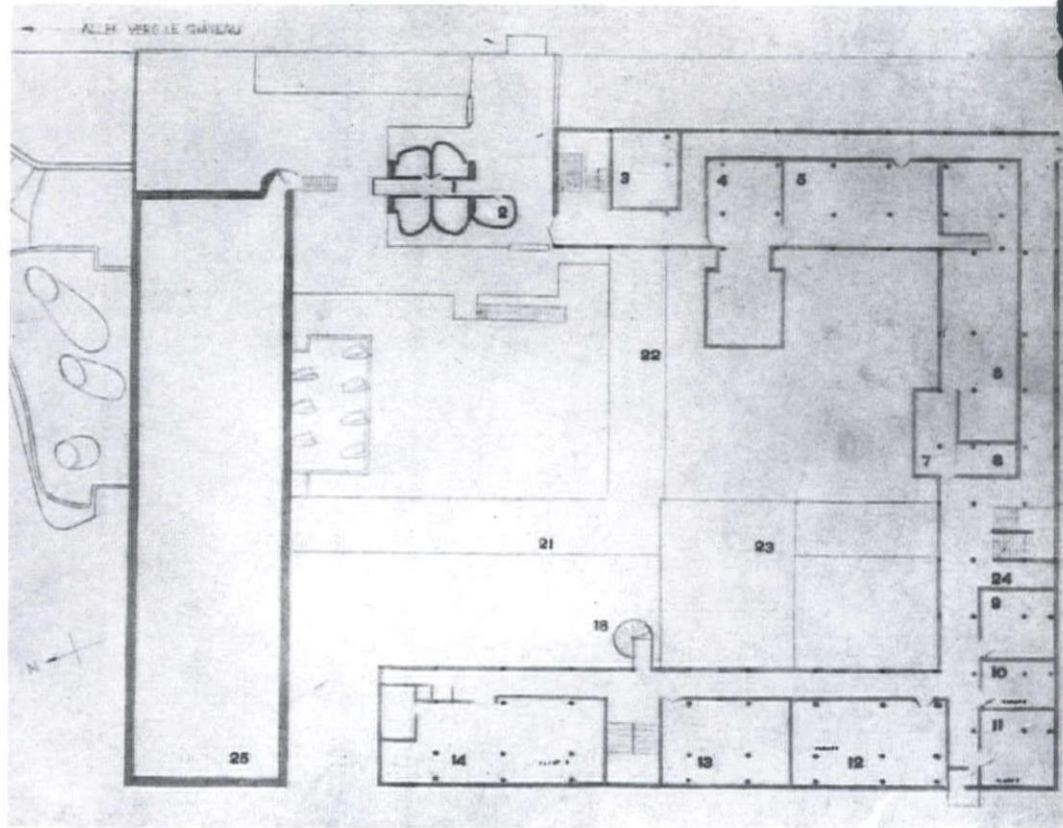
The notion of diagrammatic evolution can be present in very modest ways. Somewhat the opposite of what prevails at the Salk Institute is evidenced at La Tourette (fig. 48). The unruly independence of the visitors' chambers and porter's lodge is checked only by the common access spine, their perimeters remaining totally self-serving. Along the eastern, southern, and western extents of the enclosing block interim spaces become simple segments of a larger volume except for the refectory and kitchen, in which the spaces encompass the entire width of the volume and the structures become ordered to the spaces and celebratory of them, rather than independent or indifferent. The sanctuary marks the complete fusion of space with envelope and structure with perimeter walls (fig. 49). These four conditions of internal organization may be thought of as expression of the individual, submission of the individual, community, and union, all perhaps forming a spatial metaphor for the religious vocation.



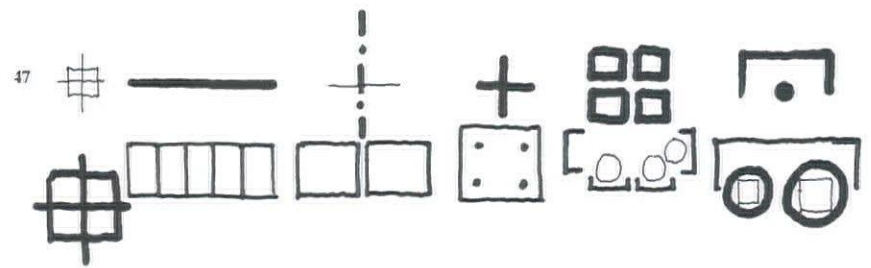
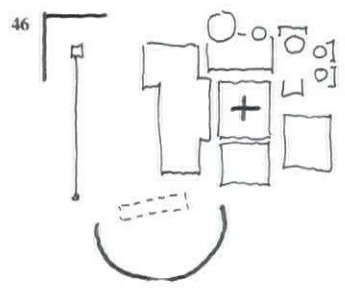
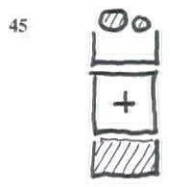
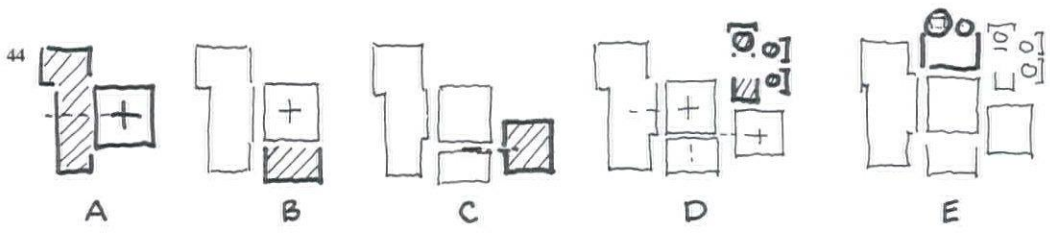
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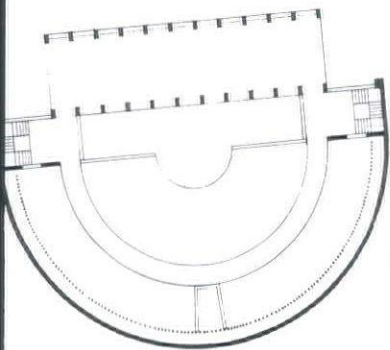
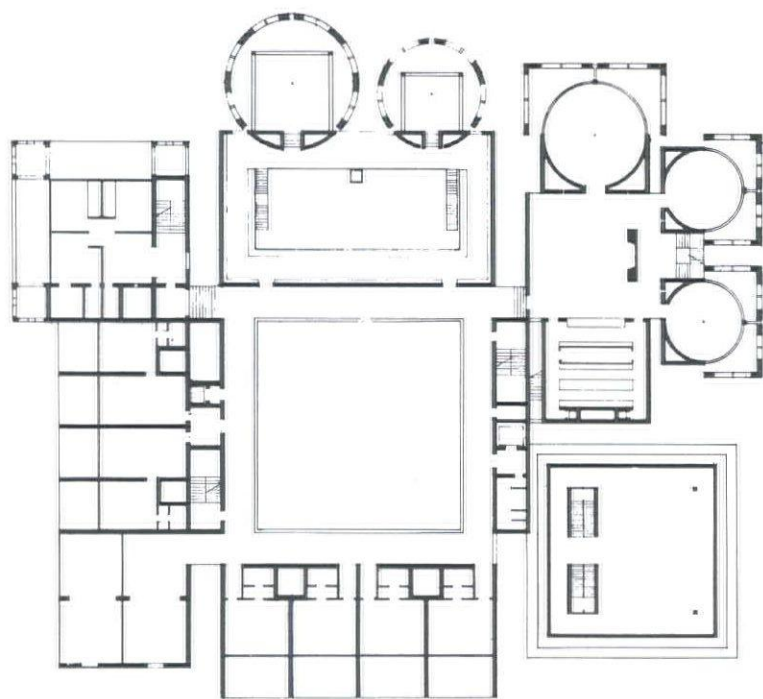
48
La Tourette, Eveaux-sur-Arbreuse, France, 1956-1959, plan and exterior, Le Corbusier



A similar diagram can be discerned at the Meeting House for the Salk Institute (figs. 42, 43). South of the central precinct the rooms depend on the center banquet hall for their organization and size (fig. 44a). To the east, though their organization is still dependent, the rooms begin to indicate independence from the facade (fig. 44b). To the northeast the bar as a series of cells is replaced by the cell as object, a square composition in direct confrontation to the central precinct (fig. 44c). To the northwest a new series of objects (fig. 44d) is sprung in contrast to the previous square, using its corners to spawn new objects, the interior geometrics of which become radial and individuated once the threshold of the central

banquet hall is breached, treating the orthogonal geometry as a fragmenting shell. The motif is reversed to the west, where the shells become radial and self-interested and the organization around a common center is abandoned in favor of more ambiguous abutment. Between these last elements, comprising the reading rooms, and the central banquet hall, lies the library, a space literally poised between two worlds. The world of the object, the independent center, and vicinity is embodied in the reading rooms, in contrast to that of the place, the enclosing perimeter, and the precinct, as defined by the central hall. The contrast is dramatically enhanced by the strong assertion that the library is also to be seen as identical to the emerging bar on the opposite side, except that it is in the process of being vacated by its cells, which thus achieve figural independence (fig. 45). The central hall is bisected by axes that establish both equivalence and difference on the surrounding sides; the underarticulated bar is

compared to the hyperarticulated northwest dining rooms, while the east-west axis juxtaposes the beginnings of articulation at the bar of guest rooms with the ending of articulation at the departing reading rooms (fig. 46). The sequence is prevented from unraveling further by the garden edge and the auditorium, object fragments that restore a semblance of perimeter and readdress the underarticulated bar, subtly implying that the bar as perimeter, rather than the central hall, is generator (fig. 47).



42
Salk Institute for Biological Studies, La Jolla, California, 1959-1965, first-floor plan, Louis I Kahn



43
Salk Institute for Biological Studies, La Jolla, California, 1959-1965, courtyard, Louis I Kahn

In searching for the paradise garden, diagrammatic evolution need not be a modest proposition. The Villa Savoye (fig. 50), for example, might seem less than fruitful territory in this regard; but with a little madness the figures emerge in profusion.

If the ramp is seen as the folding of one arm of a cross-axis onto itself, a reading supported by the adjacencies created at each end of the ramp (figs. 51, 52), this withdrawal essentially moves a notion of center along the axis of the building, as in Vaux-le-Vicomte or Chiswick, from the pinch of the ramp against the east facade (fig. 53a) through the ramp as object center (fig. 53b), circulation as intersection (fig. 53c), and the salon as voided center (fig. 53d) to the west facade in its display of the *U*-plan union (fig. 53e). Intersection as center proposes four modules. Two are

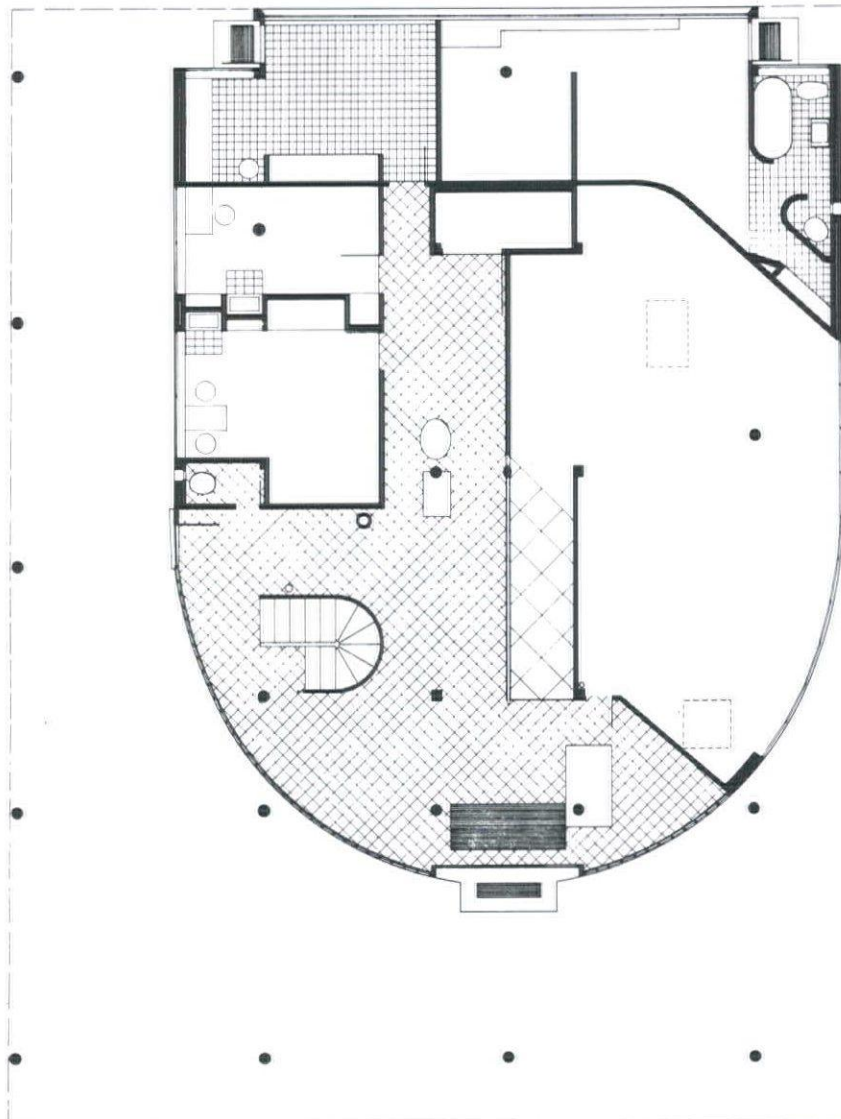
unified by the expanse of the salon, part of which, with the kitchen, forms the "food" quarter, the remainder being the "living" quarter (fig. 54). The bedrooms comprise the third module and the terrace garden the fourth, its occupation by the study reinvoking the garden-integrating strategy, in which the villa pushes a representative part of itself toward the larger landscape to become a garden pavilion, as at Vaux-le-Vicomte. Thus the study itself becomes another candidate for center, all but isolated in the garden by the major axis and especially as it readdresses the salon and establishes a solid-to-void connection between them, not unlike the library at Salk (fig. 55). Simultaneously this opposition supports the perimeter in an argument that the study and salon are part of a continuum and that Savoye is a perimetrical scheme in which a bent bar "becomes" the precinct it sought to define (fig. 56). In a series of evolutionary steps the isolated figure of the object as solid (the study) metamorphoses into the figure of the object as void (the salon and, in extreme, the terrace), transposing the composition from a state of isolation to one of integration.

A more radical search for the paradise motif in Savoye could again incorporate the acute disruption of the free plan by the ramp in addition to the argument of the elevations, especially the remarkably odd-man-out east facade. Since the terrace has already been seen as integral to the bar scheme, rather than as residual space, the villa becomes a *U* plan; if bent back without mercy, it would form a "palazzo," with interior cortile and central entry (fig. 57). Thus Savoye can be categorized as a revisionist villa, negating its antecedents as it extends them, in that it removes villa as type and makes it a subset of its opposite, villa as "antipalazzo." As a diagram, it splits and pushes entry to the periphery and restores center as a series of events along the dominant axis, the power of which diminishes as it moves from the west facade. The focus of cortile, of course, is now dispersed outward to a larger landscape, precinct having been equated with infinite vicinity.

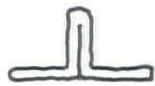


50
Villa Savoye, Poissy, France,
1929-1930, exterior,
Le Corbusier

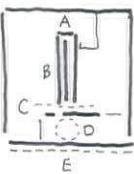
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Villa Savoye, Poissy, France,
1929-1930, first-floor plan,
Le Corbusier



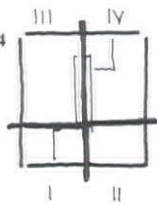
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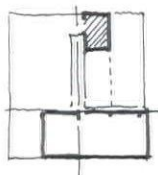
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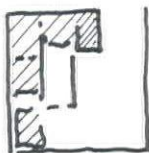
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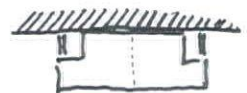
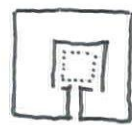
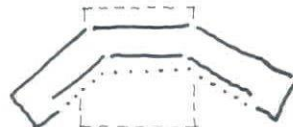
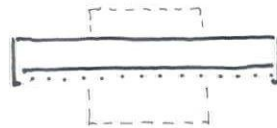
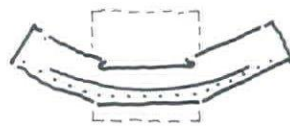
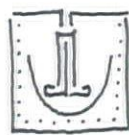
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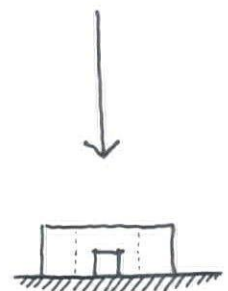
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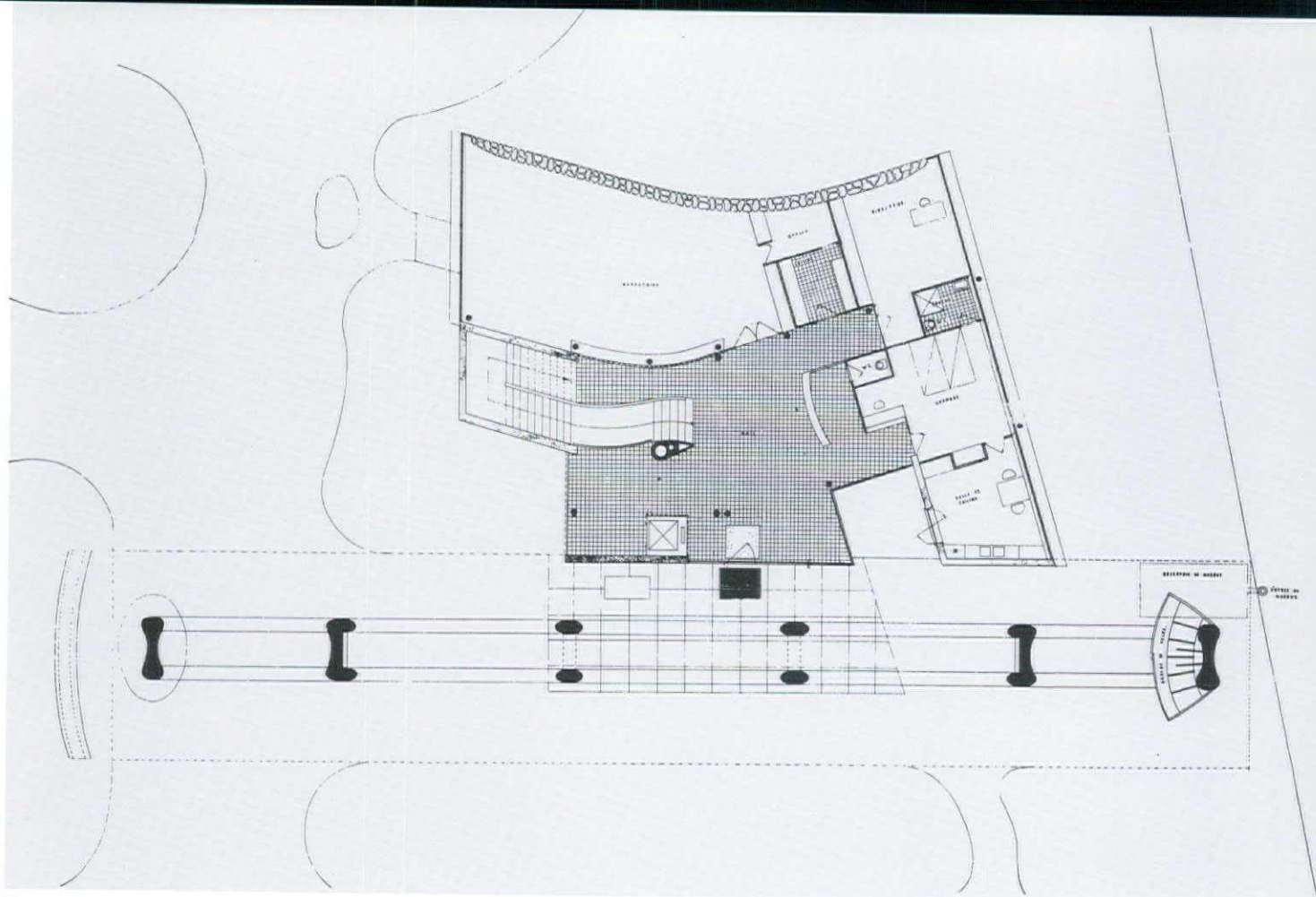


57



61





58
 Swiss Pavillion, Paris,
 1930-1932, first-floor plan,
 Le Corbusier

62



59



61

Given this case of transformation between one element or figure and another, and the ability of one component to adapt the aspects of another — center to perimeter as in Salk, for example — it is evident that rich metaphoric content can be elucidated by diagrams. A diagram of the Swiss Pavilion (figs. 58, 59) might align it organizationally with Vaux-le-Vicomte, presenting a sort of Hegelian history of architecture (fig. 60). First, a primitive rubble wall, insistent in its objectness, is bent just enough to denote a new discovery, defined space, the simultaneous invention of implied precinct, module, perimeter, and center. The discovery is used to reconceptualize the wall as both space definer and structure, causing these roles to be extricated from each other in the salon and the office area. Finally, the two are resynthesized in the residential slab, under which the wall returns in the form of a structural “antiwall” (fig. 61) which in its metamorphosis recapitulates the initial premise of the rubble wall and makes it heroic. Volume is returned to

the wall as the building itself becomes wall, the superstructure being constructed of incremental units like the individual stones. This diagram is essentially another version of the end of time at which point space becomes a transcendent and architecture abdicates its attempt to make place.

While the ground floor is not quite “there” to the slab, which may be seen in section as a total inversion of it, the slab is at the same time a continuation of two conflicting motifs established by the vacuity of the ground floor: palazzo, in which the rubble wall and the slab wall are considered equals, forming a perimeter with a voided center; and occupied precinct, in which the housing slab is the perimeter to the object-center implied by the rubble wall (fig. 62).



60
Swiss Pavillion, Paris,
1930–1932, exterior,
Le Corbusier

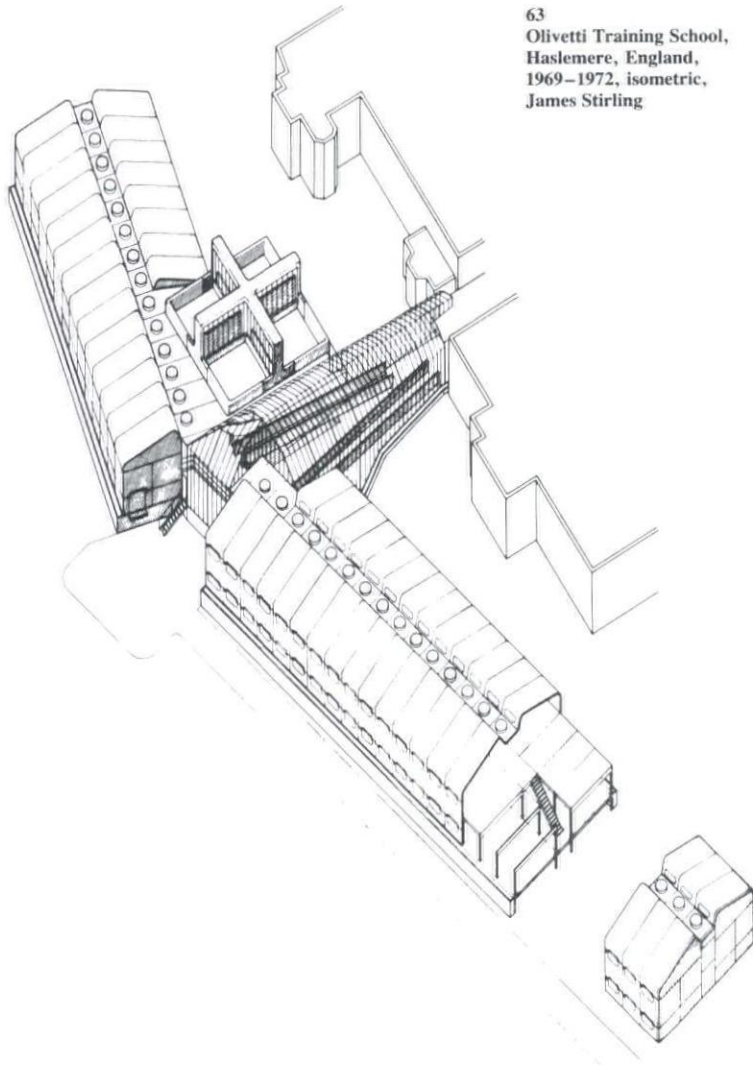
In a sense James Stirling's Olivetti Training School at Haslemere (figs. 63, 64, 65) takes the configuration of wall and bar present in the Swiss Pavilion and combines them in one figure, the broken bar. In this instance the spatial neutrality of the element is compromised by breaking rather than bending; the device indicates enclosure on the side toward the original complex, thus moving the manipulated bar into the role of perimeter (fig. 66). True to the nature of fracturing materials, the outside edge breaks apart as if from tensile stress, while the interior edge is crushed. The break provides an opportunity to establish a cross-axis that, being conceived as a void, is sheathed by a glass structure, with each side claimed by the geometry of the adjacent bar fragments.

The crushed bits on the inner edge — perhaps taking a cue from the transformation of coal to diamond — are reformed into a perfect "gem," a miniature paradise garden whose imperfections are limited to an absent center and a fragmented perimeter. The dimensions of the reconfigured modules reflect the width of the parent pieces, which correspond to the extruded segments of the bar and thus maintain a consistent and recognizable genealogy. The positioning of two

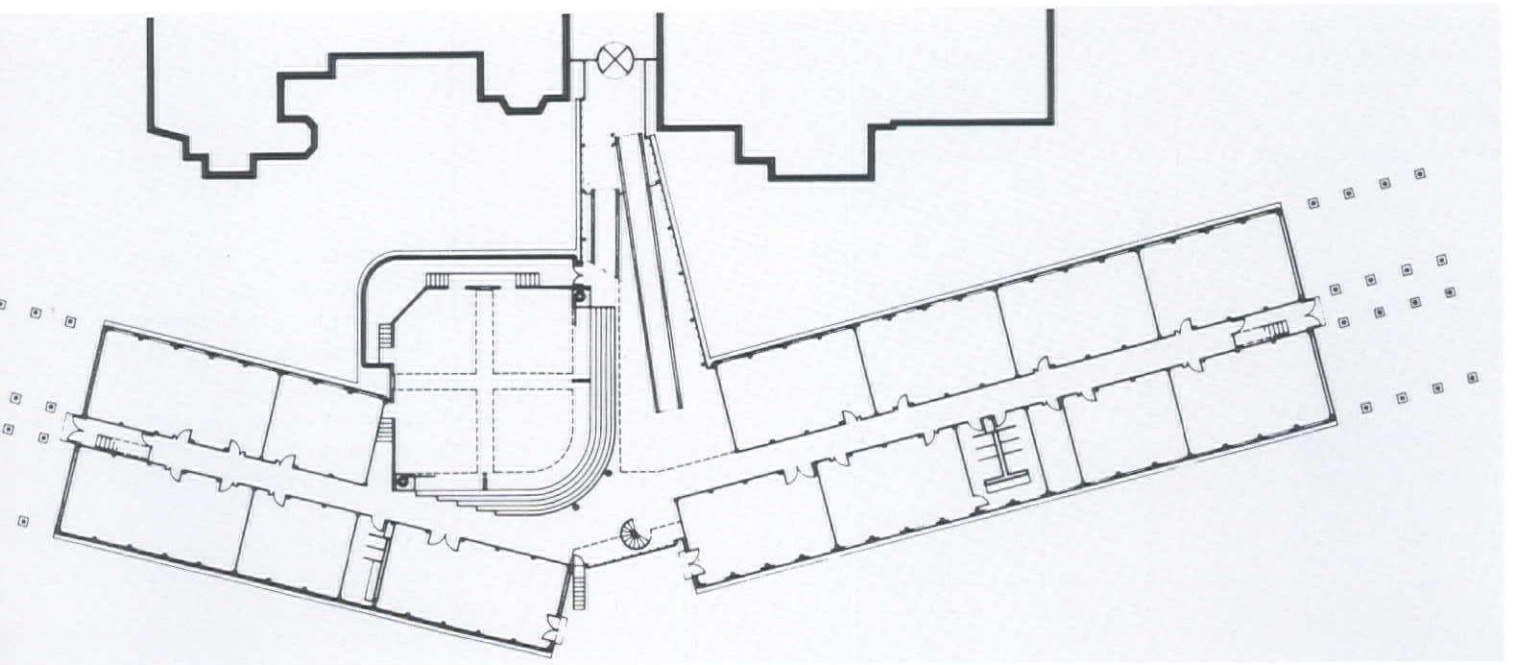
of the new quadrants merely by a slight rotation from the initial configuration (the "rip" being immortalized in the sawtooth stair's edge along the corridor) reinforces this idea of origin. The argument that module begets intersection is echoed here by the transfer of sectional prominence from quadrant to cross-axis, similar to the way the cross-axis creates center at the Villa Rotunda.

Although the surfaces of the glass enclosure can be seen as a mirrored pair, each side belonging to the adjacent bar fragments, the enclosure is also a centralizing feature of the cross-axis, creating the uncanny perspectival differences at each end that allow a single event to support two conflicting diagrammatic representations of one scheme (fig. 67). Viewed from the old building, the addition is read as a tightly wrapping perimeter element, subservient to the old center. From the opposite end, however, the view from the new facility is toward a relatively remote older complex with somewhat

the same configuration as the new, an *H* plan of connected equals, (fig. 68), the dual readings metaphorically suggesting the colonial experience. The spiral staircase complicates the *H* by marking its position in the juncture as a sort of wispy center, a proposition that unites the glass link to the corridors of the broken bar in a figure that stands in open competition with the old complex. The taunting insubstantiality of this object-center is strongly defended, however, by the amassed strength of the four-square multipurpose space, which extends its control from afar, not unlike the French fleet at Yorktown. In this case the instrument of expression is the diagonal, for which the bracketing mushroom columns act as on-the-scene representatives. Thus conflicting diagrams are set up between the new and the old. From the perspective of the old the new building is an addition, while from the perspective of the new the organization is one of equals, in which a new center is shared but bears a predominantly superior relationship to the new, from which it originated. The former can share the diagram of Beijing and the Great Wall, while the latter is akin to Vaux le Vicomte.



63
Olivetti Training School,
Haslemere, England,
1969–1972, isometric,
James Stirling

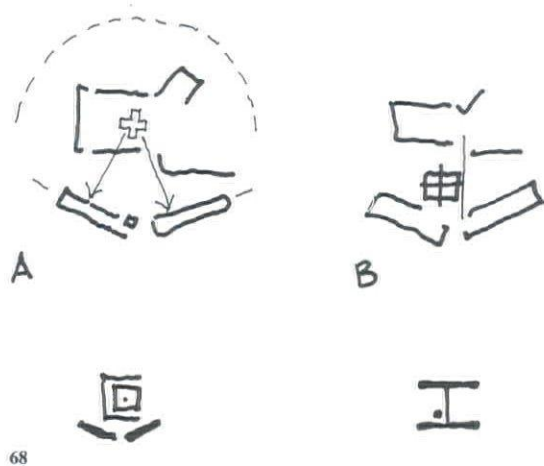


64
Olivetti Training School,
Haslemere, England,
1969-1972, first-floor plan,
James Stirling

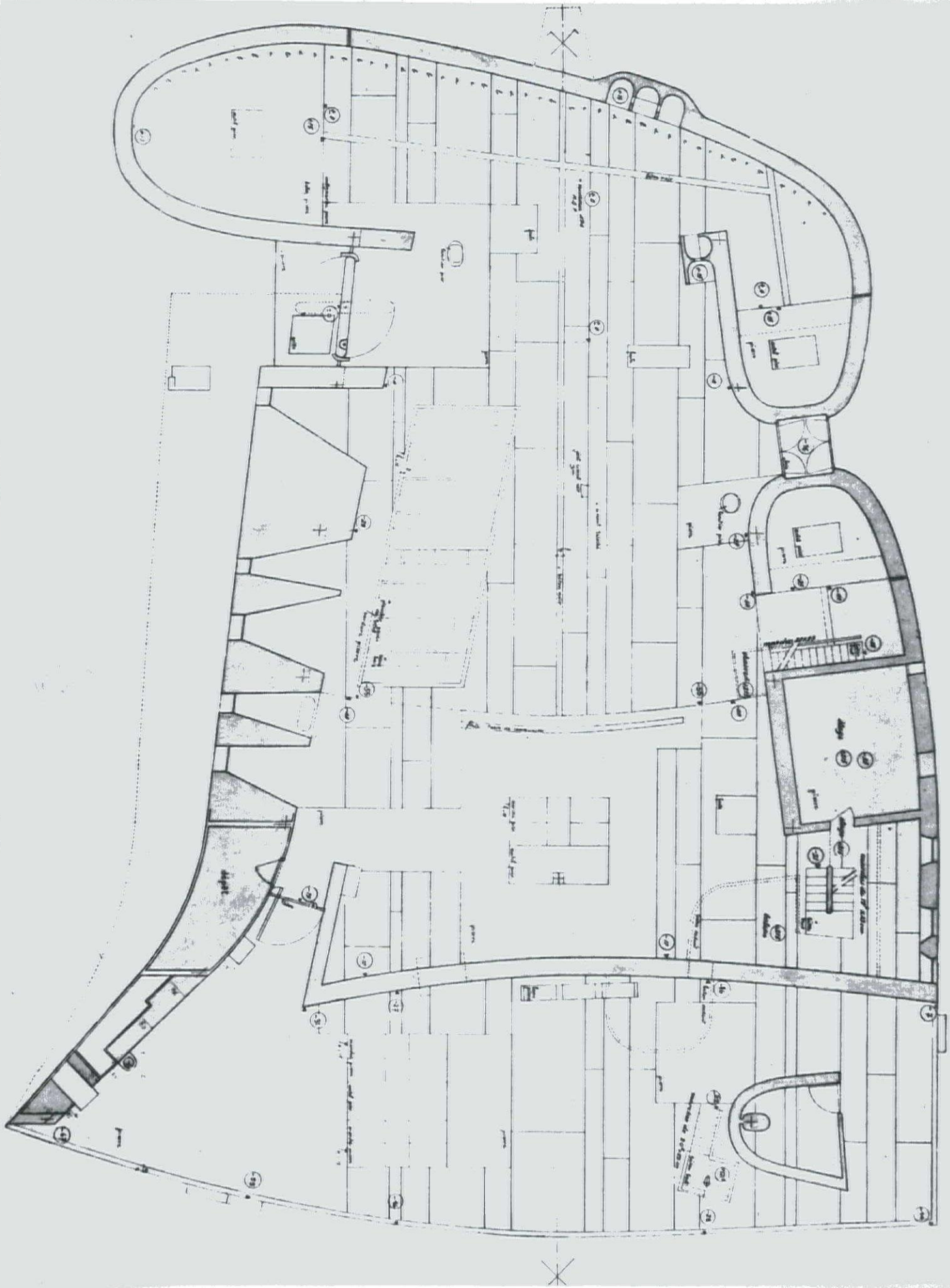
65
Olivetti Training School,
Haslemere, England,
1969-1972, exterior,
James Stirling



67
Olivetti Training School,
Haslemere, England,
1969-1972, interior,
James Stirling



68



If Olivetti is seen diagrammatically as an originally neutral element that deforms into perimeter in deference to another object, Ronchamp is an example of an object that defers to an object of its own creation, or perhaps deforms around an object that is not there, reflecting the relentless "ineffability" afforded this building by its critics. Unlike Olivetti, Ronchamp's continuity is broken not once but many times, and perhaps a useful diagram for an analysis is something along the lines of the Salk Meeting House, a continuity described by the continuous change around a central void.

As a perimeter system, Ronchamp unravels very handily. Specifically the handle is the diagonal protrusion of "The Wall" (figs. 69, 70), a sort of trimmed-down version of the diagram for Pergamon (fig. 71). Other interesting characteristics of this wall include its attempt to encompass the wall behind the altar in its system as an equal, at the same time denying this connection by insisting

on its identity with the alternate wall. Its similarity to the rubble wall at the Swiss Pavilion is noteworthy, although in this instance the obvious lack of uniform width along its length calls forth notices of beginnings and endings. In this last respect "The Wall" may be regarded as a reconceptualized version of the interchangeable walls and columns of the Laurentian vestibule; but in this case a steady progression, rather than a constantly shifting duality, is formed from line to wall to volume (fig. 72). Rather than Michelangelo's scheme, in which the emergent wall is evidenced by the mere two-dimensionality of the surface while corporeality is the domain of the packed columns, at Ronchamp the wall emerges as a volume from the abstracted column of the first edge.

Just as at the Swiss Pavilion, however, the physical existence of the wall does not prevent it from being the springboard to a further conceptualization—that it is a maker of space, evidenced in both buildings by the bends that suggest the beginnings of enclosure and at Ronchamp the thickening of "The Wall" to the point at which it is not merely a manifestation of the corporeality

of the wall but is the transformation from wall to volume itself. At this point, where it is least planelike, "The Wall" metamorphoses into "pure" plane, indicating its reconceptualization as an abstraction declaring that it is capable of capturing as volume the space around it, rather than manifesting volume itself—a capability of which it almost immediately avails itself in the creation of the first chapel (fig. 73). A question mark may be seen to possess a similar narrative progression in its plan form.

Thus within its own unfolding (or more literally in this case, its folding) Ronchamp provides a metaphorical glimpse into the beginnings of architecture, from intimations of concept at the first line through materiality to a return to concept. The entry into the building is established at that point in the perimeter at which the power of wall to make enclosure is most adamant, thus making entry conceivable. One enters, then, at that point where rationality subsumes the



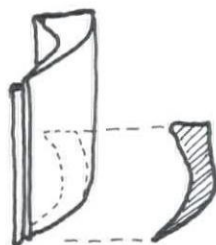
70
Notre Dame du Haut,
Ronchamp near Belfort,
France, 1950–1955, exterior,
Le Corbusier

PERGAMON

RONCHAMP



71



72



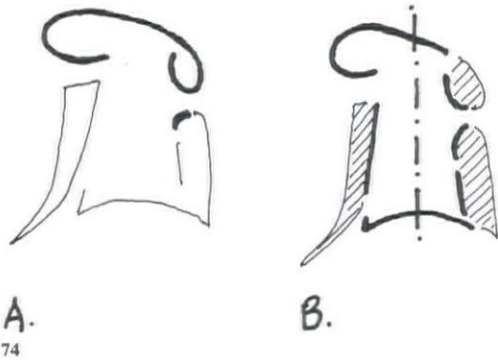
73

immediate materiality of the object to the abstraction of surface and the immateriality of object as space. The large chapel can therefore be seen as an element in opposition to "The Wall" even as it is, in a sense, a continuation of it. The birth of a new element, figural space, creates the same sectional response as seen in Villa Rotunda or Olivetti, giving rise to the towering monitors. The opposition of the chapel to "The Wall" is also testified to by the effort of the chapel to complete itself, an effort at which it both succeeds and fails. It succeeds in that the surrounding plane maintains a unifying concavity, the edges of which establish a notion of closure without ever actually completing it. It fails in that these edges are configured so as to create two distinct areas within the overall perimeter (chapels 1 and 2). This creates a duality rather than a unity; the device separates these areas from each other as much as it unites them. The localized clarity of space

within this chapel area, and thus its isolation from the rest of the church, is constantly checked by its decomposition into smaller distinct units; these are isolated from each other but closely related to the abutting perimeter forms, in an effort to provide constant ambiguity of readings along the perimeter vacillating between separation and attachment (fig. 74).

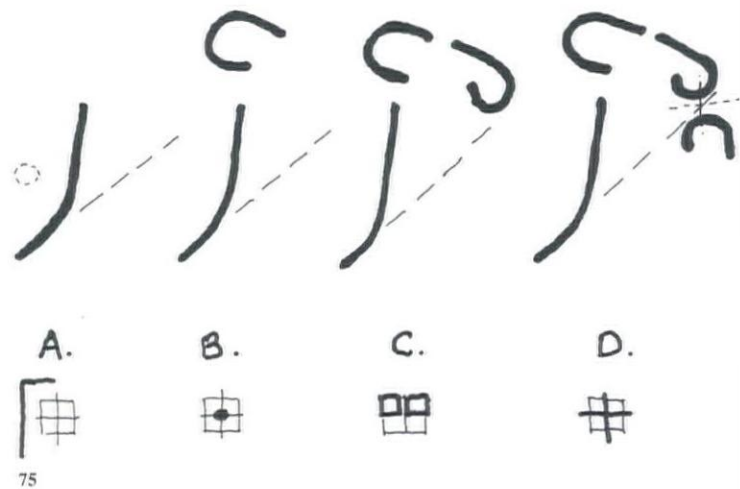
Given the earlier argument, the ambiguity within this area of Ronchamp may be interpreted as a recapitulation of the four elements of the paradise garden, or perhaps as the initial enumeration of the elements at the origins of history – an Eighth Day of Creation, a Pandora's box of mutually generative figures whose presence at the primal scene is made all the more emphatic by their creation from a single element. This element, "The Wall," becomes plane, establishes perimeter (fig. 75a), which generates center (fig. 75b), which replicates into module (fig. 75c), which establishes intersection (fig. 75d). This last element is the device that orders the larger configuration of Ronchamp by creating the central axis.

The axis established by the configuration of the chapel area – the axis of "symmetry" for the building at least in reference to the plan configuration – creates a notion of similarity between two rather disparate aggregates, the opposing interior elevations. This notion reinforces the concept that "The Wall" and the first chapel are to be read with reference to each other and that the array of spaces along the north wall may contain similar relationships, especially those supporting notions of progressive development. Thus, the four spaces may be read as a sequence in the establishment of basic principles: perimetrical enclosure and the creation of precinct space (fig. 76a); the replication of elements and establishment of entry – the Egyptian portal again (fig. 76b);



A.
74

B.



A.

B.

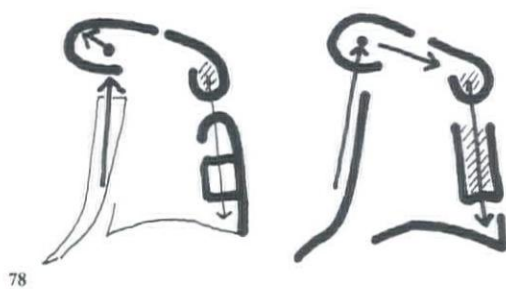
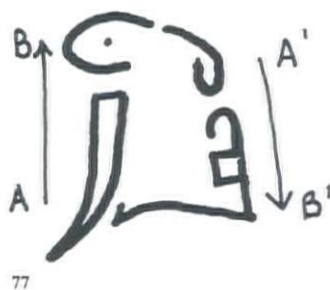
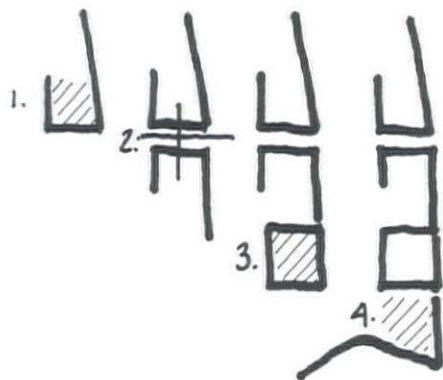
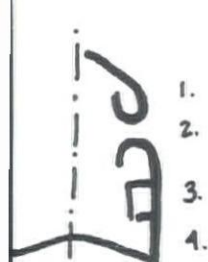
C.

D.

the extraction of precinct from the singular significance as object to the interchangeability of cell (fig. 76c); and the reintegration of inside to outside and the reduction of precinct to nuance, since the walls that define the enclosure for this area clearly belong to other systems (fig. 76d). This way sequence may lead us to interpret the perimeter of Ronchamp as a paradigm for the history of architecture, from the initial isolation of closure to the reincorporation of inside with outside and the reduction of precinct to vicinity and enclosure to fragmented object. The review extends from Ramses to Riegl.

Various other aspects of Ronchamp suggest different interpretations of the same sequence. The diagrammatic similarities between the two "halves" of the perimeter — wall to place and places to space — allow them to be seen as reciprocal figures A/B-A'/B' (fig. 77). Alternately, they can be seen as a continuous progression, wall to place, place to object, objects to bar, bar to space (fig. 78). This last seems an especially successful device for diffusing the special focus of the chapels across a broader area, allowing center for the building as a whole to be established by a perimeter that seems ordered by a figure it is yet ignorant of, the precinct quality of the central space actively embraced only by the special response of the east wall to it (its intruding bend and its axis) and the placement of the altar (fig. 79). When the singular convexity of this wall is viewed from the interior, it

presents a new diagram that suggests a space outside an orthodox reading of the perimeter. Because this space is both integral to the longitudinal axis and final to it, the argument of history can be extended to read "perimeter become center." The creation of enclosure and thus precinct space results in a division of space that will ultimately be redressed by a reunification negating precinct and turning perimeter into center — that is, object itself. This reduction of opposites to a unity in which one member contains the other brings the argument literally full circle, as at Salk, collapsing difference into similarity. Thus Ronchamp can be seen as providing one narrative

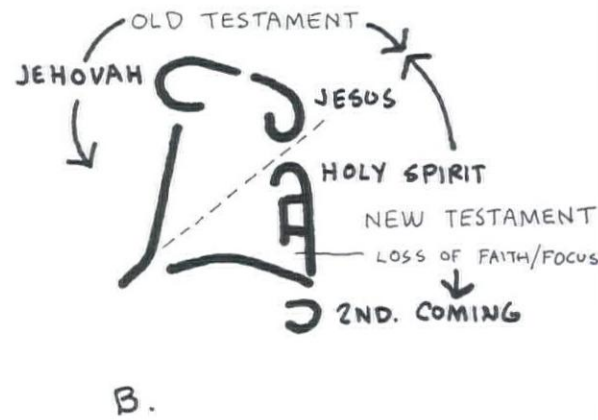
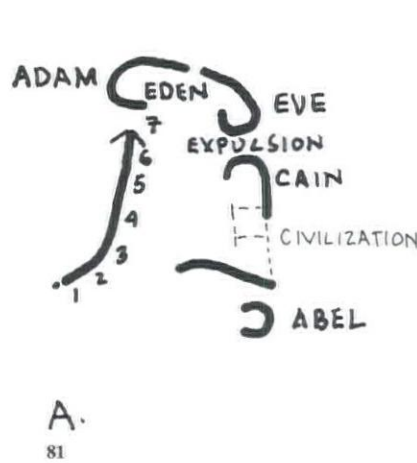
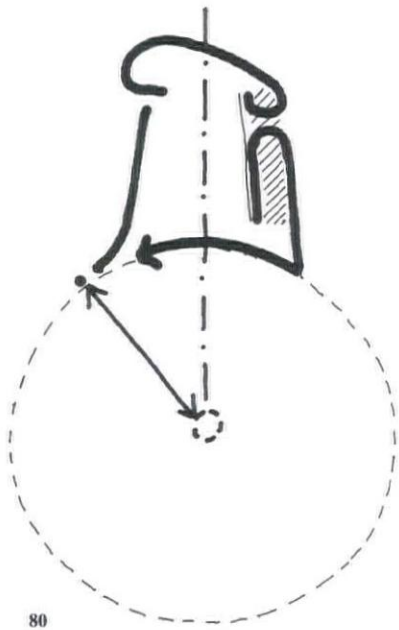


within two. The narrative argues that from a progression which establishes an origin and through a progression which posits an opposing goal, the goal as end point is equally the reiteration of origin (fig. 80).

If it is possible to draw an architectural "history" from this diagram, it lends itself to a theological one as well. In this scenario "The Wall" remains synonymous with the creation myth, the first chapel representing Adam, the second standing for Eve, and the north entry and its break in continuity connoting the expulsion from Eden, followed by the disarray of Babel, with the worldliness of Cain and the dispatch of Abel (fig. 81).

Perhaps a more substantial alternative involves a more careful reading of the formal relationships. If the regulating lines can be regarded as "prophetic," for example, the attempt at closure by the first two chapels can be read as the Old Testament, from Jehovah to the prefigurement of Jesus, a coupling that is itself predicted within the process of creation – again, "The Wall" – which also establishes the diagonal that breaks the sequence along the northern perimeter as surgically as a laser. Thus, subsequent events constitute the New Testament, the third chapel being labeled Holy Spirit, fixing the Trinity with the three towers. This in turn is followed by the modern age and the diffusion of space into less focused forms. Though the perimeter seems played out, there remains the hidden fixity of the plan, with its certainty of a future that will tie the end to the beginning and the future to the past, give focus to the plan, and bring The Second Coming to the original Godhead (the fourth "chapel" addressing the promise of the third and nicely bracketing the elements of the north wall).

In this representation it is interesting to compare two similar but conflicting organizing elements. The longitudinal axis is, in a way, countered by the regulating line from "The Wall" to the north portal. The former proposes that the building is composed of two halves in agreement about a sense of origin that is outside knowing and a sense of destination – that is, a straight-line, positivist notion of history. The second, in a diagram of return, argues for a cyclical notion of history, an origin that is a known, a determinant, and an ultimate destination. The first allows the east wall to be read as odd man out and therefore discounted (except perhaps for a sense of source in the ideality beyond time, the prismatic solids in the cistern). The second proposes that the west wall is odd man out. More specifically,



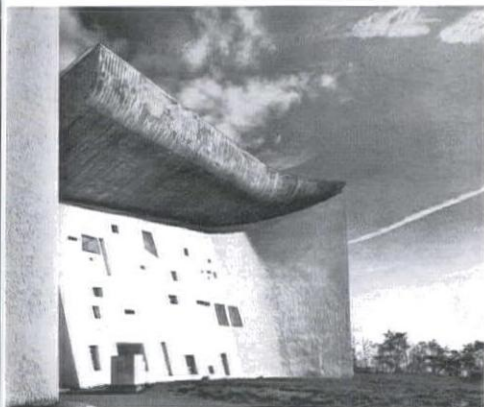
the first refuses the east wall its role of eschatological messenger, while the second denies any ultimate significance to the birth of consciousness and abstraction within the west wall, thus constituting a sort of battle between, perhaps, "humanism" and theological determinism.

The roof at Ronchamp helps to make this argument manifest. A section just inside the west wall reveals the roof to be organized along the longitudinal axis. However, the "handle" of "The Wall" strikes a relationship of equality between the east and south walls along the diagonal axis; the roof supports this relationship at the east end. Within the building, although a center is clearly established in plan by the combination of the east-west axis and the perimeter wall, a sharp pull to the right by the rising roof line at the east elevation focuses attention back toward "The Wall." Thus in the theological as well as the architectural narrative the east wall poses a dilemma of

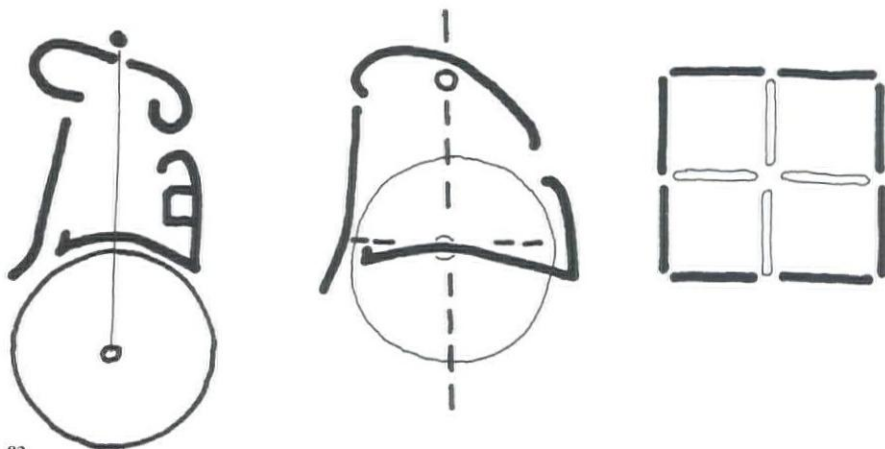
anticipation, whether the future evolves from the past or returns to it. This dilemma also seems central to the production and interpretation of architecture and to the role of recognition. To the degree that the making of architecture is reduced to repeating, the search for type isolated from its manipulation is a quest for reduction rather than for inspection. Invention is the struggle with tradition; in fact, it is the tradition.

It is interesting to note that in Ronchamp the dominating roof form, indicating the closure and purposefulness of the interior volume, is completely eclipsed when the perimeter wall assumes the role of consciousness, abstraction, history, or civi-

lization, appearing only above those areas representing origins or the promise of the future (fig. 82). As is true of the interior, the perimeter organization is forced to look within itself for its meaning, seemingly ignorant of the role of the plan as generator or of the roof's heralding of object and union. Thus Ronchamp itself is a double metaphor between singularity and type, in which the specific is seen to stand for the general, and the uniqueness of "now" is both generated by, while itself generating, the "then." Given Ronchamp's promise of and progress toward completion (fig. 83), one may further understand that at the end of time, when history ceases and the necessity for production and reproduction vanishes, when tradition is reunited with origin, Ronchamp's plan will become one with its perimeter and the building will become its own Jerusalem, the paradise garden.



82
Notre Dame du Haut,
Ronchamp near Belfort,
France, 1950-1955, exterior,
Le Corbusier

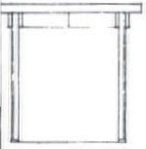


83

Victims

1	Horticulturist	1	Trees/Shrubs/Flowers
2	Gardener	2	Garden
3	Rosewoman	3	Rose Arbor
4	Metal Man	4	Wall of Metal Flowers
5	Park Attendant	5	Park/Entry Gate House
6	Inhabitants	6	Maze
7	Drawbridge Man	7	Drawbridge
8	Trolley Man	8	Trolley
9	Mechanic	9	Box-car Parts
10	Operator	10	Moving Stairs
11	Children JJ	11	Jungle Jim
12	Children SP	12	Sliding Pond
13	Children SB	13	Sand Box
14	Children S	14	Swings
15	Children MGR	15	Merry-Go-Round
16	Children SP2	16	Spinner
17	Children SS	17	See-saw
18	Children PT	18	Picnic Table
19	Physician	19	Office Tower (Genetic)
20	Nurse	20	Dispensary
21	Optometrist	21	Sight
22	Painter	22	Studio A
23	Musician	23	Studio B
24	Poet	24	Studio C
25	Musicians	25	Labyrinth
26	Players	26	Music Hall Units
27	Dancer	27	Dance Platform
28	Librarian	28	Book Towers/Fiction/Semi-Fic/Non-Fic
29	Typesetter	29	Type House
30	Poem	30	No More
31	Mask Repairman	31	Mask Shop
32	Watch Repairman	32	Watch Shop
33	Paper Restorer	33	Work Shop
34	Carpenter	34	Wood Shop
35	Plumber	35	Water House
36	Shoe Repairman	36	Shoe Shop
37	Clothman	37	Shop of Clothes
38	Crochet Lady	38	Crochet Chair
39	Shade Woman	39	Shades of Text
40	Security	40	Structure
41	Researcher	41	Office #2
42	Identity Card Man	42	Identity Card Unit
43	Stamp Man	43	Stamp Place
44	Accountant	44	Office
45	Keeper of the Records	45	Record Hall
46	Giver of the Keys	46	Key Place
47	Taker of the Keys	47	Key Storage
48	Iceman	48	Ice House
49	Fireman	49	Fire Place
50	Zoologist	50	Copies of Recaptured Creatures
51	Butterfly Collector	51	Collectors Place
52	Catfish	52	Catfish Pond – Enclosed
53	Peacock	53	Peacocks Walk
54	People	54	Park
55	Child	55	Playhouse
56	Judge	56	Stairs
57	Room for Thought	57	Room A
58	Room of the Innocent	58	Room B
59	Room for Those Who Looked the Other Way	59	Room O
60	Passengers	60	Silo Passage
61	Toll Taker – Toll Taker II	61	A Bridge Removed – The Tractor
62	Time Keeper	62	Ferris Wheel Clock
63	The Dead	63	The Dead Cry
64	The Travellers	64	Bus
65	The Exiles	65	Attached Units
66	The Disappeared	66	
67	The Application	67	Passport Building





In her youth she cultivated white roses along the southern wall of Perugia. Her life was changed when she visited her Uncle in Benevento. One afternoon as they were descending a slope through the olive trees a large snake (approximately 6 feet) crossed their path. In her fear she whispered to her Uncle,

Did you see that snake?

See what?

That large snake that just disappeared in front of us.

No.

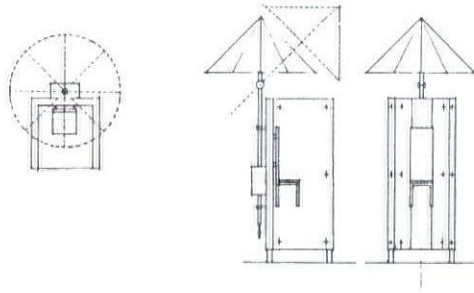
No what?

No I did not see the snake.

But how could you not see him, his tail touched the point of your boot!

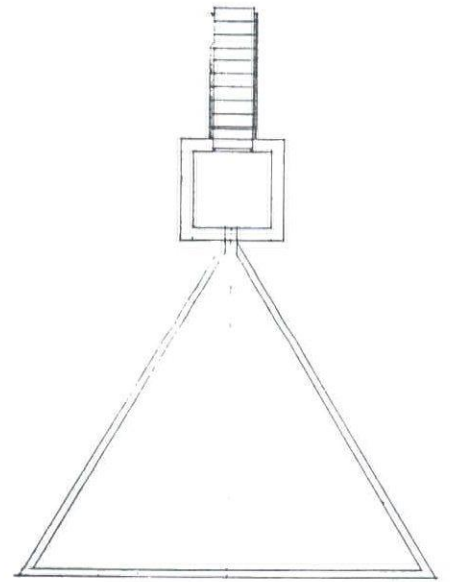
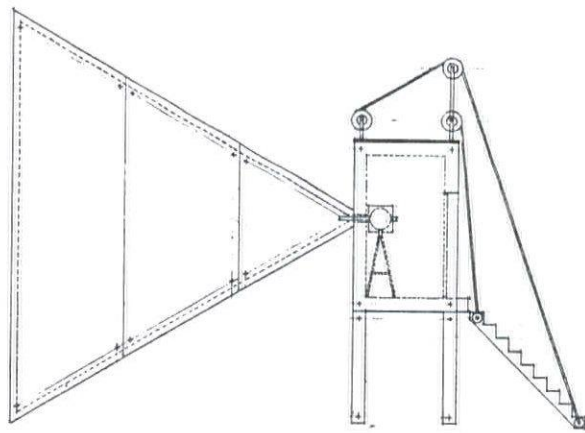
I did not see the snake because I do not believe in them.

She will attend to the Berlin Rose Arbor. The Carpenter has selected the wood for the arbor's structure. The rose to be cultivated will be the black rose. The flower petals will be placed in pewter bowls along the garden path. She anticipates wrapping the rose stems continuously around her naked body until only her eyes are exposed. They are the color of apricot.



Crochet Lady

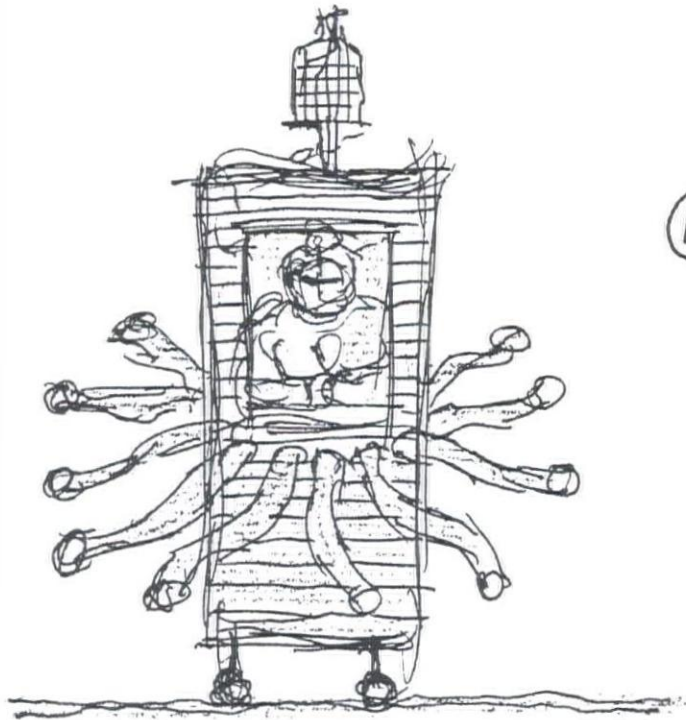
She arrives at dawn and departs at sunset.
She climbs the stairs to her enclosed, suspended chair and crochets throughout the day.
She usually finishes a piece before the snow falls.
Each year she selects a tree which she covers with her shroud of crochet.
She carefully drapes the branches of the tree and leaves her work to the elements.
Her sadness makes the peacocks screech.



Collects identity card
photographs card
Projects film of card onto screen
Once—
destroys negative
explicit faith in memories
hallucination
of signatures

ELEMENTS - STRUCTURES

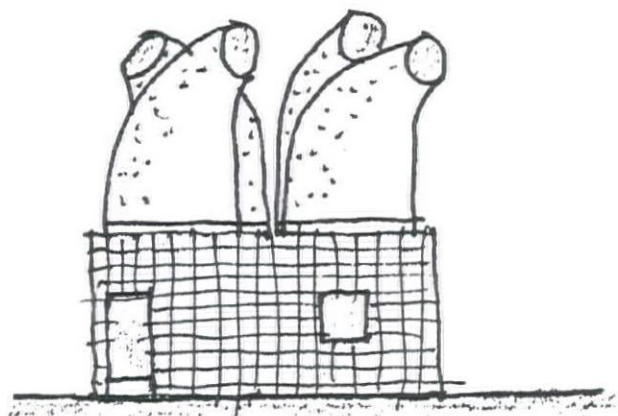
1. Wind Tower
2. Watch Tower
3. Bell Tower
4. Clock Tower
5. Water Tower
6. Observation Tower
7. Guest Towers
8. Pantomime Theater
9. Reading Theater
10. Public Theater
11. Cross Over Bridge
12. Silo Passage
13. Book Market
14. Maze
15. Masque
16. Mask Taker
17. Shopping Booths
18. Public Facility
19. Lottery Woman
20. Waiting House
21. Caretaker's House
22. House for the Eldest
23. Neighborhood Physician
24. Arbitration Hall
25. Conciliator
26. Units A and B
27. Wall Hung Units
28. Hedge-Gate



①9 LOTTERY WOMAN

TO HAVE A CHANCE FOR UNIT (A) OR UNIT (B) A TICKET MUST BE BOUGHT FROM THE LOTTERY WOMAN. THE LOTTERY WOMAN TRAVELS OVER THE SITES WITHIN HER BOX. SHE SELLS THE LOTTERY TICKETS. ONE PUTS THE MONEY IN ONE OF THE TUBES, IT SUCKS IN THE MONEY, THEN A TICKET IS BLOWN OUT FROM THE TUBE. THE LOTTERY WOMAN SLEEPS IN THE TRUCK WHICH BRINGS THE LIVING UNITS [(A) & (B)] TO THE SITES. THE TICKETS CAN NOT BE RETURNED.

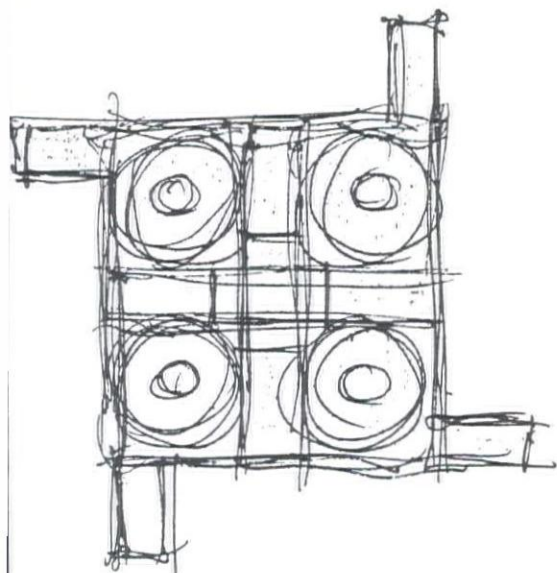
(23) NEIGHBORHOOD PHYSICIAN



84

PHYSICIAN-DISPENSARY FACILITY. THE NEIGHBORHOOD PHYSICIAN OR THE SO-CALLED GENERAL PHYSICIAN RECENTLY HAS BEEN PLACED ON THE ENDANGERED SPECIES LIST. HIS FORETOLD FUTURE DISAPPEARANCE HAS CAUSED SOME ALARM. IT SEEMS APPROPRIATE THAT HIS POSITION BE REINSTATED. WILLIAM CARLOS WILLIAMS WAS A NEIGHBORHOOD PHYSICIAN PARTICULARLY CONCERNED WITH BIRTHS.

FOUR STEEL CONICAL FUNNELS PLACED OVER FOUR CELLS MOVE UPON A 360° DEGREE ARC. THE CONES ARE PAINTED WHITE. THEY LET IN NO SUN LIGHT (DIRECTLY)...INDIRECT LIGHT IS SOUGHT AFTER. EACH CONE HOUERS OVER A SINGULAR CELL.



THERE ARE FOUR CELLS
TO THE FACILITY.

1. RECEPTION
2. DOCTOR OFFICE (PHYSICIAN)
3. EXAMINATION ROOM
4. DRUG DISPENSARY

THE WORKERS INCLUDE

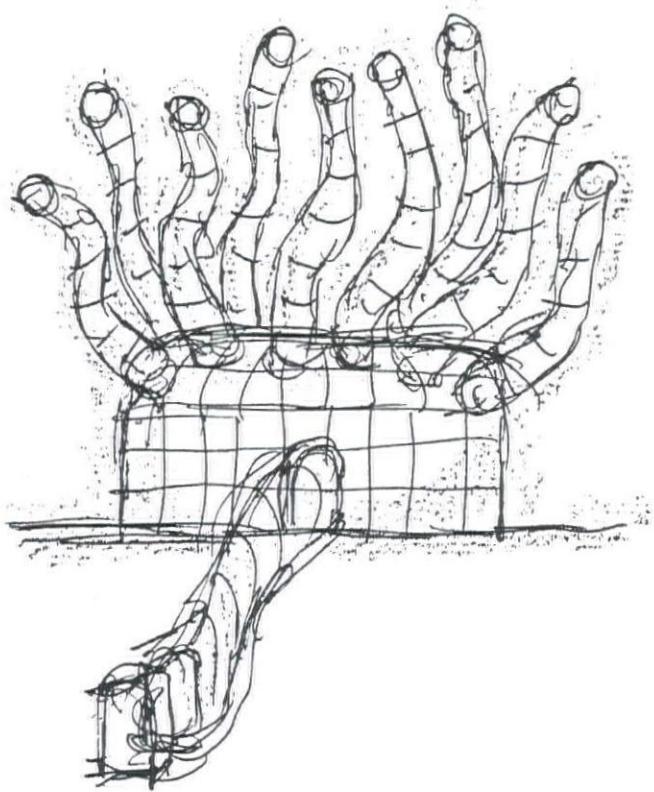
1. THE PHYSICIAN
2. THE RECEPTIONIST
3. THE DRUGGIST
4. THE NURSE

BELOW THE STEEL CONICAL
LIGHT CATCHERS THE CONSTRUCTION
IS STILL TO BE DEFINED.

STUCCO ON BLOCK HAS BEEN
CONSIDERED ALONG WITH WHITE
PORCELAIN PANELS ON STEEL OR
EVEN WHITE CERAMIC TILE ON
A CONCRETE SHELL.

ENTRY RAMPS ARE TO BE
THOUGHT ABOUT.

LOCATION: STRESEMANNSTRASSE



②A ARBITRATION HALL

SEE: DEFINITION:
FOR THE ARBITRATION OF
DIFFERENCES. THIS HALL
CAN BE CONSIDERED THE
COUNTER-POINT TO THE
MASQUE, ONE INVOLVED
WITH THE JUDICIAL THE
OTHER WITH A SILENT
RITUAL.

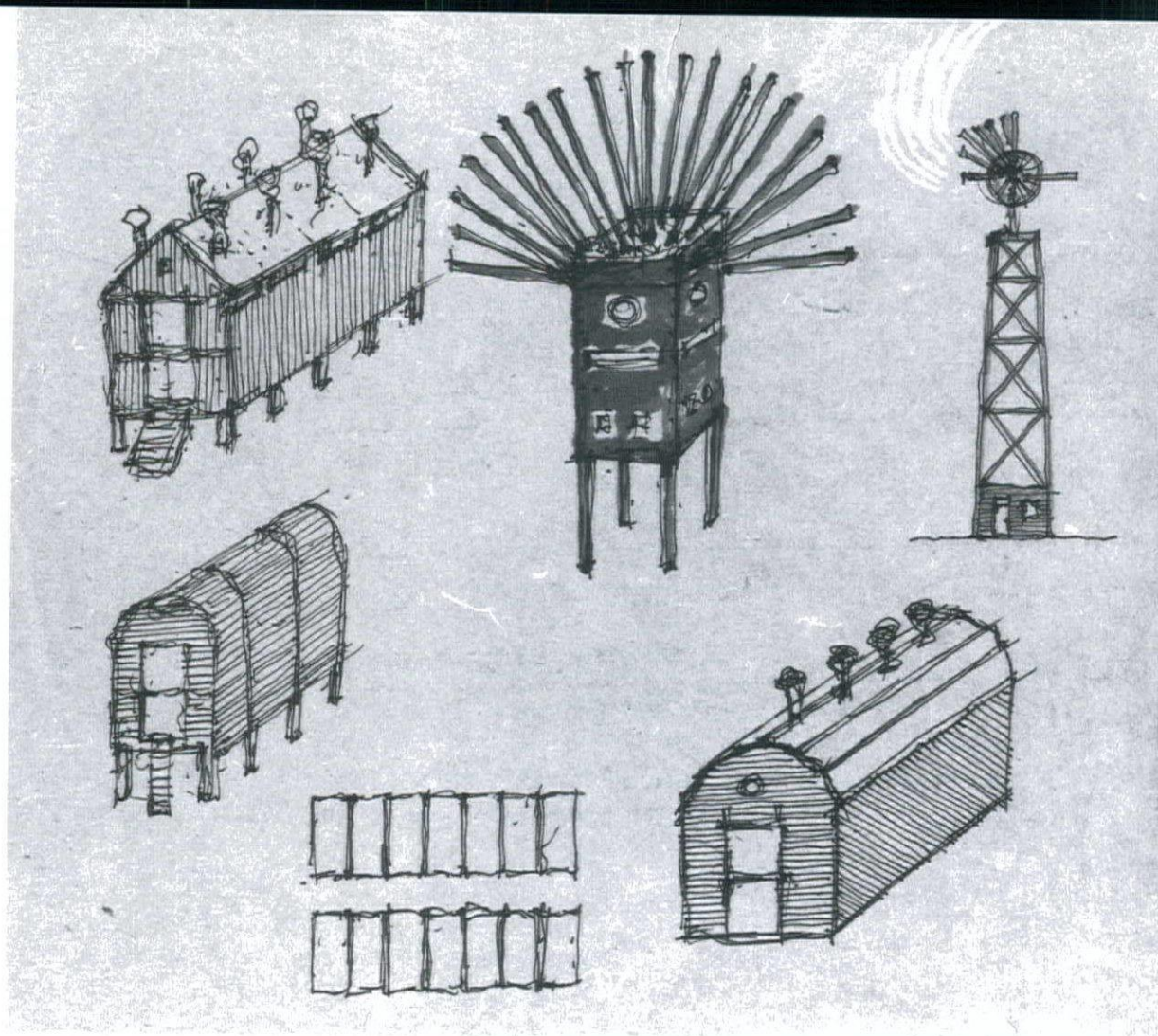
THE STRUCTURE IS CONSTRUCTED
OF REINFORCED CONCRETE
(FLOOR SLAB) AND STEEL,
METAL CLAD. THE MEDUSA
LIKE LIGHT-WELLS (OPEN TO
THE WEATHER) LET IN LIGHT
AND ACT AS A VENTING

A SPECIFIC SET OF
INTERIOR ELEMENTS ARE
CONSTRUCTED OF HARD WOODS
AND ARE CAREFULLY FINISHED
IN BEES WAX.

LOCATION:
NEAR CROSS OVER-BRIDGE

LANCASTER/HANOVER MASQUE

<u>OBJECT</u>	<u>SUBJECT</u>
1. Summer Visitor's Place	1. The Summer Visitor
2. Bargeman's Place	2. The Bargeman
3. Hotel	3. The Transients
4. Tower Hill	4. The Sentinels
5. Retired General's Place	5. The Retired General
6. Retired Actor's Place	6. The Retired Actor
7. Weather Station	7. The Weatherman
8. Plot Division	8. The Surveyor
9. Farm Land	9. The Farmers
10. Farm Grove	10. The Community
11. Garden Plots	11. The Gardeners
12. Clothes Wagon	12. The Old Clothes Man
13. Scare-Crow House	13. The Keeper of Scare-Crows
14. Farm Barns	14. The Farm Animals
15. Animal Hospital	15. The Veterinarian
16. Reddleman's Place	16. The Reddleman
17. Silo Passage	17. The People
18. Store House	18. The Preservor
19. Sower's House	19. The Sower
20. Reaper's House	20. The Reaper
21. Old Farmer's House	21. The Old Farmer
22. Hedge Walk	22. The Elders
23. Horse-Shoe Place	23. The Players
24. Maypole	24. The Children
25. Travelling Performers	25. The Travelling Performers
26. The Post Office	26. The Post Mistress
27. Row-House	27. The Workers
28. Apartment House	28. The Dwellers
29. School House	29. The Students
30. Farm Library	30. The Librarian
31. Music House	31. The Cellist
32. Market	32. The Merchant
A32. Butter Place	A32. The Butterwoman
33. Carpenter's Place	33. The Carpenter
34. Masoner's Place	34. The Masoner
35. Glazier's Place	35. The Glazier
36. Fabricator's Place	36. The Fabricator
37. Repairman's Place	37. The Repairman
38. Chiropractor/Acupunture Place	38. The Chiropractor/Acupuncturist
39. Butcher/Candlemaker's Place	39. The Butcher/Candlemaker
40. The Baker's Place	40. The Baker
41. Farm Hall	41. The Citizens
42. Toll Taker Place	42. The Toll Taker
43. Farm Hospital	43. The Physician
44. Farm Cemetery	44. The Undertaker
45. Masque	45. All
46. Cross-Over House	46. The Convert
47. Transfer Place	47. The Transfer
48. Master Builder's House	48. The Master Builder
49. Druggist's Place	49. The Druggist
50. Vaults	50. The Bank/Key Man
51. Proprietor's Place	51. The Proprietor
52. Farm Manager's Place	52. The Farm Manager
53. Observer Units	53. The Observer
54. Inspector's House	54. The Inspector
55. Trapper's House	55. The Trapper
56. Solicitor's Office	56. The Lawyer
57. Accountant's Office	57. The Accountant
58. Useless House	58. The Useless
59. Suicide's House	59. The Suicide
60. Collector's House	60. The Collector
61. Prison House	61. The Accused
62. Court House	62. The Judge
63. Church House	63. The Priest
64. Death House	64. The Dead
65. Widow's House	65. The Widow
66. Balloonist Unit	66. The Balloonist
67. Voided Center	67. The Voided
68. Time Keeper's Place	68. The Time Keeper



13. SCARE-CROW HOUSE

Structure:

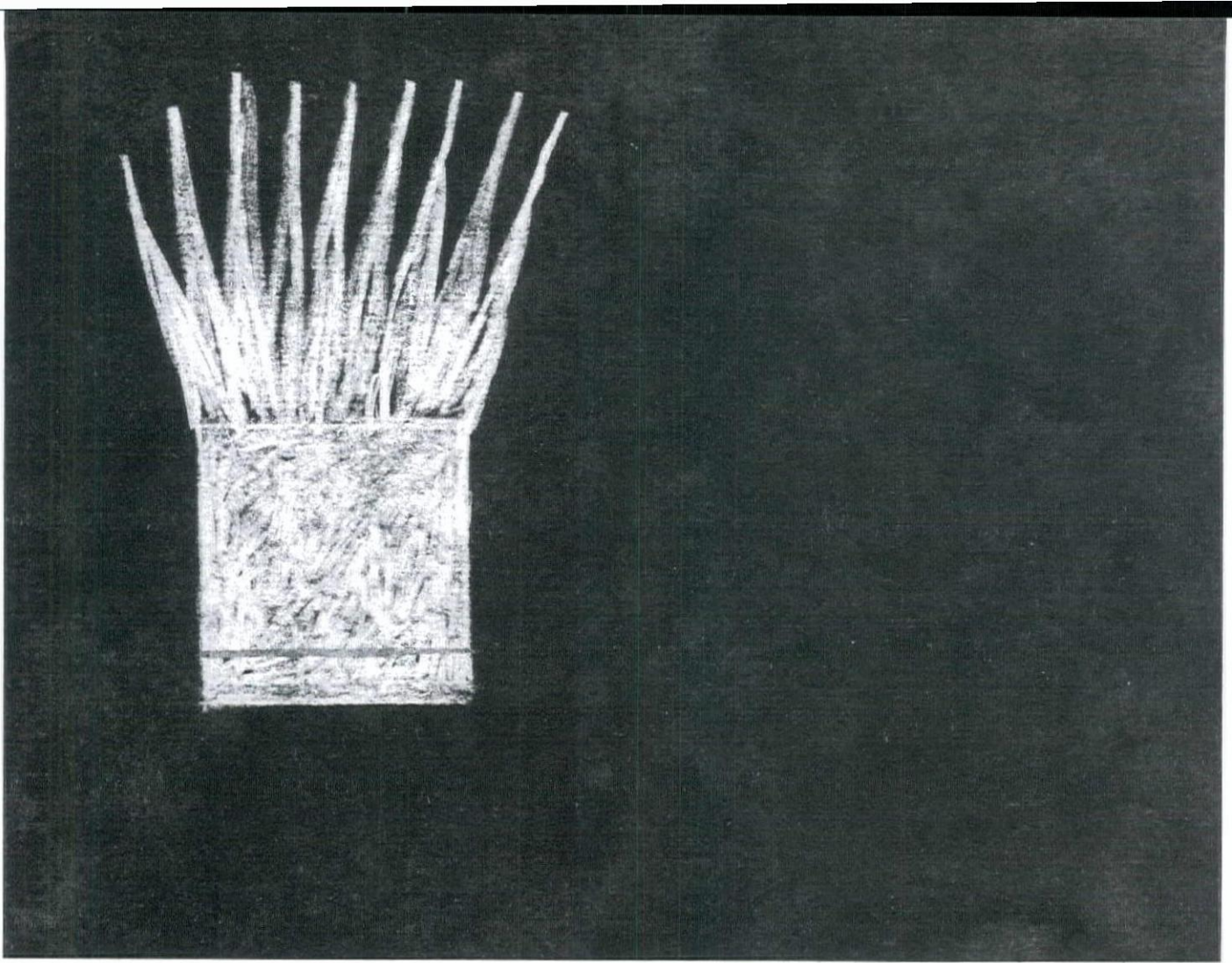
Wood frame
Wood work bench
Bales of straw
Rope
Charcoal

13. THE KEEPER OF SCARE-CROWS

89

Before becoming the Keeper of Scare-Crows he designed and made the costumes for social plays and ritual dances. His concept for the set of the final act of the "Disappearance of the Firebird" caused a sensation.

He fabricates scare-crows in his house. Each one is slightly different. He selects the finest straw, the strongest rope, and the darkest coal. He buys clothes from the Old Clothes Man. In 1968 he produced a sacrilegious work. Within all the farm lands he crucified the scare-crows and sprinkled bird seed over the scare-crow bodies. When the birds alighted on the crucified scare-crows he set the straw afire with a flame thrower.



59. THE HOUSE OF THE SUICIDE

Structure:

Made of steel panels
factory painted white enamel

There is an eye slit in one elevation.
A door in the other. Roof made of vertical
volumetric triangular slivers diminishing
to a tiny top opening. He liked to watch
the points of light move along the walls
and floor.

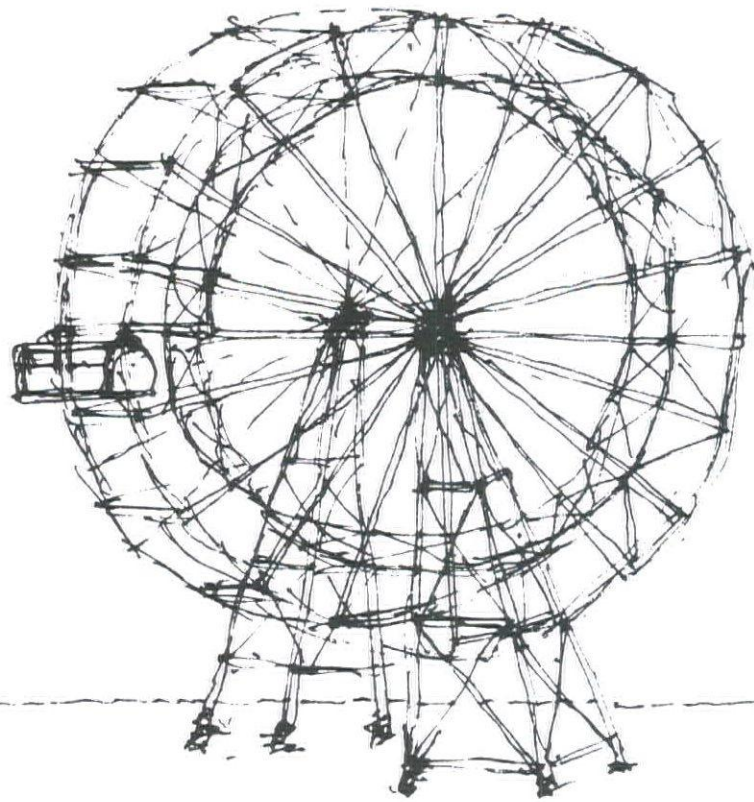
The Farm Community in agreement with the
family sealed up the door by welding.

59. THE SUICIDE

When alive he was obsessed with Cezanne. He believed that the Farm Public missed essential and important characteristics about Cezanne. He felt that Cezanne did not want to be touched. The Suicide could even imagine that Cezanne in his privacy put on white gloves that buttoned down at the inner wrist. He knew that Cezanne dealt with the major themes of murder, rape, incest, fear, foreboding, voluptuousness, suicide, sexuality and nature's silent horror. The Suicide had done an intense investigation into the work of Ingres and he was able to make a connection between Cezanne and Ingres. He was puzzled by the fact that all of Ingres' portraits had claw-like hands. The painted hands reminded him of turtles' claws. Cezanne's landscapes had the aura of dread in them, particularly the ones of rocks and pines. Cezanne's woods were places of premeditation and filled with redemption. The photograph of Cezanne and Pissaro appeared to him to have caught the inability of distance. There remained the problem of the Still-Lives. He mentioned them in wonder. He thought they captured the numerology of dates. It was still-life yet, still time.

91

The fruit bowls came from ornate dish closets where the shelves were covered in embroidery. The vertical hanging drapes were removed from static dry rooms where the wooden caskets of dead relatives absorbed the heat of the sun and the light of the day. Knives were prevelant in the still lifes, also unopened kitchen drawers. The fruit had membranes of soft moss hugging their surfaces. He pondered Cezanne's banality, emptiness, detachment, but what frightened him the most was the irreconcibility of the photo of Cezanne at 40 and the photo of Cezanne at 67. He was unable to put them together. He concluded that there was an impossibility.



68. THE TIME KEEPER'S PLACE

A small ferris wheel where the open seats have been removed. A minimal housing unit is placed and attached to the ferris wheel. The wheel completes one cycle in 24 hours. The ferris wheel and compartment are constructed in steel.

The Farm Keeper of the Time has worked with ferris wheels in Vienna, New York, Amsterdam, Oslo, Hamburg, Antwerp, and Solopaca. His employment (through no fault of his own) was terminated in Solopaca when the ferris wheel collapsed. This was a tragedy, for there were children on the wheel when it fell. The inquest concluded that an unusually high wind caused the destruction. Nonetheless, he will always remember the purple-black drape covering the opening of the central Church of Solopaca. He peered into the center nave of the church and to his horror he believed to see a miniature version of the ferris wheel erected within the aisle of the church. Within each seat of the ferris wheel (which was moving at a very slow pace), was seated a dead child. They had on their Sunday suits and Sunday dresses. He quickly let fall the cloth, climbed onto a carriage which drove him to the station where he boarded a train for Naples. He convinced himself that it was a hallucination.

The object of *architectural knowledge* is *architecture itself*, as it has been historically constituted. It does not consist of abstract functions, but of concrete forms.

Alan Colquhoun, *Essays in Architectural Criticism*,
Oppositions Books

. . . we believe that any vital and relevant architecture *relies on the prior development of theory*.

From the introductory editorial to *Autonomous Architecture*,
The Harvard Architecture Review, v. 3

In the field of architecture we have today become accustomed to two distinct endeavors – architecture “itself” and architectural knowledge – taking for granted the difference and the relationship between the two. Architecture (itself), it seems, is the act, the art, the event that manifests a history; it is the *thing itself*, occurring in plastic materials and “concrete forms”: drawings, models, buildings, and the like. Architectural knowledge, on the other hand – theory, history, commentary, and so on – consists of the examinations, the investigations of architecture, the analyses from the outside looking in. This work is concerned with, and thus *in the field*, yet separate from the thing itself. Knowledge, consisting of *abstract functions*, is manifest (at least) in words, in writing.

This informal brief is submitted simply to introduce a direction of inquiry that makes thematic the relationship between the theory of architecture and architecture itself. We are interested in examining the “self-evident” distinctions that enable (or cause) us to “take for granted” the difference between the two; and interested in why these self-evidencies manifest a hierarchy in the theory-architecture relationship such that “any vital and relevant architecture” might rely “on the *prior* development of theory.”

In the first of the introductory quotations, Colquhoun uses the criterion of *materiality* to identify the difference between architecture itself and theory (architectural knowledge): “It does not consist of abstract functions, but of concrete forms.” This distinction between the abstract and the concrete (for example, between “curvature” and “a curve”) seems obvious, evident beyond question. It appears to boil down, quite naturally, to what is *seen* (the physical), and what is *thought* about what is seen (the mental). There is no more necessary circumstance for investigation than everything that “appears quite naturally.” We will find reason to scrutinize the “naturalness” of this difference in materiality.

Like its nearest modern relative, “*theater*,” the word “theory” comes to us from Greek origins (*theoros*, “spectator,” from *thea*, “a viewing”) associated with *seeing*. This root links it with a host of words currently affiliated with mentality that have associations with sight, such as “insight,” “speculate,” “suspect,” “expect,” “contemplate,” “consider” (from Latin *considerare*, “to observe the stars carefully”) “discover,” and “reflect.” Of course we must be reluctant to rely on etymological analysis as anything but intriguing suggestion, innuendo; after all, the origin of “salary” is salt, as we all know, and we would not take kindly to an erudite employer trying to pay us our salary etymologically (the situation with “wages” would be even worse, its origin being “to promise”!). Nevertheless, since we have temporarily divided “theory” from architecture (itself) on the “natural” basis of the mental from the physical, this physicality implicit in our language of the mental is intriguing and foreshadows the direction of our inquiry.

Recently literary theorists have turned their attention to analyzing the figurative and rhetorical language in critical and theoretical discourse. The problem these analysts pose – what self-evident differences generate the distinction between literary and critical writing? – is similar to the one under discussion here. The difference is that they are concerned with one form of writing in relation to another, while we are concerned with one form of writing in relation to something physical, something other than writing – or so it seems. Remarkably, as they scrutinize discourse with the same analytic tools that have been used with success on literature, they find no substantive distinction. Critical writing, philosophy, and theory, all depend on precisely the same


figurative devices so evident in, and so important to, literature: metaphor, metonymy, anthropomorphism, and so on. The distinction between the two – that is, the distinction between truth and fiction – rests solely in the reader's response. A reader privileges, less than consciously, certain figurative language with the authority of truthfulness and certain persuasions with the authority of knowledge. This situation will bear a closer look when we turn to the relationship between architecture and theory.

It is most important at this point, however, to suggest that *all* rhetorical figures constitute one *thing* referring to a different *thing*. The suggestion in the etymology that a certain visibility is congenital to mentality is strengthened by this inescapable dependence of all theory on figures of the thing, on the “visible” object. All arguments depend on invoking objects to be moved around, perused. Using analytic “tools,” we “look into” an argument's “foundations,” its “grounding.” We determine whether it is “substantial” or “insubstantial,” “material” or “immaterial.” We “see” if it is “deep” or “shallow.” We “reflect” on how well the examples “reflect” the argument, and we “find” how much “light they shed on” the argument. We first “make” arguments and “discover” principles and then “build” theories from these. In short, an “abstract function” is a kind of “concrete form”; it is architecture that provides many of the metaphors of “objectivity” that enable theory. It almost seems that we are “drawing a conclusion,” that a vital and relevant theory relies on the prior development of architecture. And that is almost right – almost.

97

In order to finish our “drawing” and bring it to a “conclusion,” we should first look at the material of architecture, the “concrete form,” if for no other reason than to confirm the visibility of its physical presence. After all, when we have the object in front of our eyes – the “door,” the “loggia,” the “villa,” the “modern skyscraper” – we do not rely on any figurative metaphor to inform us of what we are seeing. Or is the “thing” we are “seeing” already a metaphor? Is the “dooriness” of a physical door not actually a response, a *reading* of that concrete form's relation to other forms? Consequently must we not conclude that there is no such thing as a door but only “dooriness” itself, a metaphor written in form, constituted by relations, by differences? There is nothing more “doorful” about a “concrete” door in its relation to a “concrete” wall or to other “concrete doors” than the doorfulness of the “door which opens with the key to understanding,” the abstract concept of door named by the word “door.”

One might try to rescue a self-evident distinction between the physical door and the word “door” by arguing that the physical door is “an example of a door,” while the word “door” is the name of an abstract concept of door. But this difference between an “example” and a “name” simply reiterates the difference between the physical and the mental that seems to be falling apart before our very eyes. A name,

one might try to argue, is a mental object, it “signs”; an example is a physical object, it “shows.” But a name, a word, is as physical as an example, “loop” is as upside down as an upside down door itself. Are not “door,” “,” and a “real door” all pictures of doors – that metaphoric pictures of the metaphor of “dooriness”? In short, is not a concrete form a kind of abstract function?

Having reached a point of contending that abstract functions are kinds of concrete forms and concrete forms are kinds of abstract functions, can it be still said that the distinction between the physical and mental is really “natural,” really self-evident? Can a distinction that does not exist be “natural”?

The distinction between theory and architecture itself echoes the Cartesian separation of mind (mental) and body (physical). Cartesian separations ostensibly identify neutral and equivalent bases that completely partition and define a field – that is, the vertical and horizontal axes defining a Euclidean plane. But at the same time violation of that neutrality is implied in such figures of speech as “mind *over* matter,” “*higher* intelligence,” “*backward* civilization,” and “*lower* forms of life.” The source of these violations is precisely the source of the relationship between theory and architecture that we take for granted – eminent theory distinct from, but governing, vital architecture itself.

98

Since we have argued that the accepted distinction between the mental and the physical has no substance, we must conclude that the presumed “naturalness” of this separation is so obvious and transcendent as to be immune from need of justification. It suggests itself therefore that the dichotomy represents a need, a desire for the relationships the distinction generates.

This short reflection does not allow for the arduous task of pursuing that desire and the symptomatic blindness it engenders. A look at another *field* in which an eminent mind similarly governs a body itself may suggest the ground to be covered in such a pursuit. In Freudian theory the eminent mentality of the superego, arena of the “higher” discourse of communality, of civilization – that is, of relationships – also governs (from *super*, “above”) an id, an *it* in the physical body *itself*. The architecture and rhetoric of the Freudian theory of the psyche, with a blindness identical to the one in the theory-architecture dichotomy, both speak to the same desire for which the theory cannot account (though it professes to be the theory of desires), which it can only serve.

In light of this discussion, a familiar example of theory preceding architecture – essentialist theory as leading to modern architecture – may be reconsidered. Essentialist theories and aesthetics, minimalism, structuralism, all account for the primacy of a geometric architecture,

an architecture of "essential" form. But what dimension was "minimal" in minimalism? What two elements were so excellently close that their difference could be proclaimed minimal? What quantity, what length could be so wretched that the least of it was the ideal? Essentialist theory's tentative answer? Any movement from essence? What, then, is essential about geometric form? If the paradigmatic primitive hut is "close to" a "pure" enclosed volume in one analysis, one system of weights and measures, is it not, in its primitiveness, "close to" a "purity" of no-architecture in another, where distance is measured in terms of movement from pure, essential nature? The minimalism from no-shelter to shelter could then be the least intervention possible, a minimal naturalism. And in that system of weights, "pure" geometry, as an entirely mental "idealization" of nature, would be the most distant possible metaphor from "pure" physical nature itself. Minimalism becomes a maximalism of sorts. Rather than finding theory preceding a vital architecture, what we find is a matrix, a web of architectural and literary metaphors, of writing in form and language, devoted to persuading simultaneously both the priority of the mental and the integrity of the physical. Our preliminary drawing, then, is the conclusion that a "theoretical article" is as much a "piece of architecture itself" as an architectural object itself is an article of discourse, of theory. Which, strictly speaking, amounts to saying that there is no "theory of architecture" nor an "architecture itself."

What is a paradigm? More than a dictionary description is needed to make the word useful for current architectural pursuits. The words "paradigm" and "archetype" have similar meanings and are sometimes used interchangeably, but there are differences that are worth strengthening. By definition, a paradigm is a pattern, a model, an example; its Greek roots make the literal meaning "to show side by side." A paradigmatic work of architecture is an exemplary model. It is important to note that a paradigm is not only exemplary but also typical. That is, it is the ideal and standard specimen.

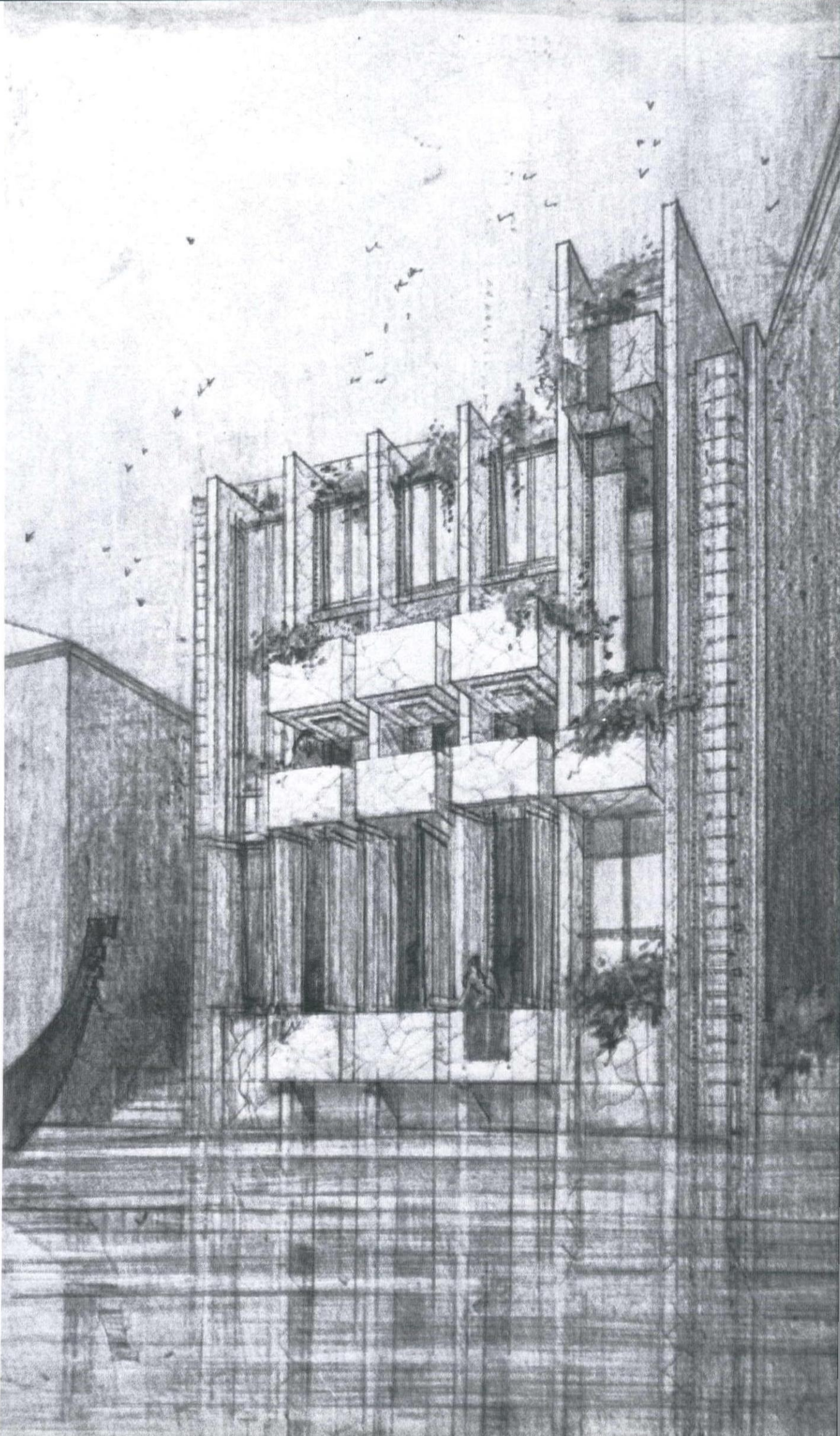
The etymology of the word "archetype" comes from the impression of a seal-mold. An archetype is the original model from which a family of forms develops. To me, paradigm represents a goal—I could even say an unachievable goal—while an archetype represents the original root. That is, today we can call the Parthenon an archetypal temple, although for Phidias, Ictinus, and their contemporaries, the Parthenon could not have served that function.

Paradigm is the future toward which I am striving, and archetype is the origin, that which affects my understanding of what I am doing. Because both can be considered ideal manifestations, paradigms and archetypes have an ideal existence outside the physical world. Specific pieces of architecture can be seen as manifestations of an archetype that exists only in an ideal, Platonic world, or as unachieved paradigms.

I am affected by everything I see, hear and do, but I don't always know how it will come out or, in later years, where it came from. But I don't think about that very much. It doesn't really interest me. I just know that what is of interest is why certain things are recurring.

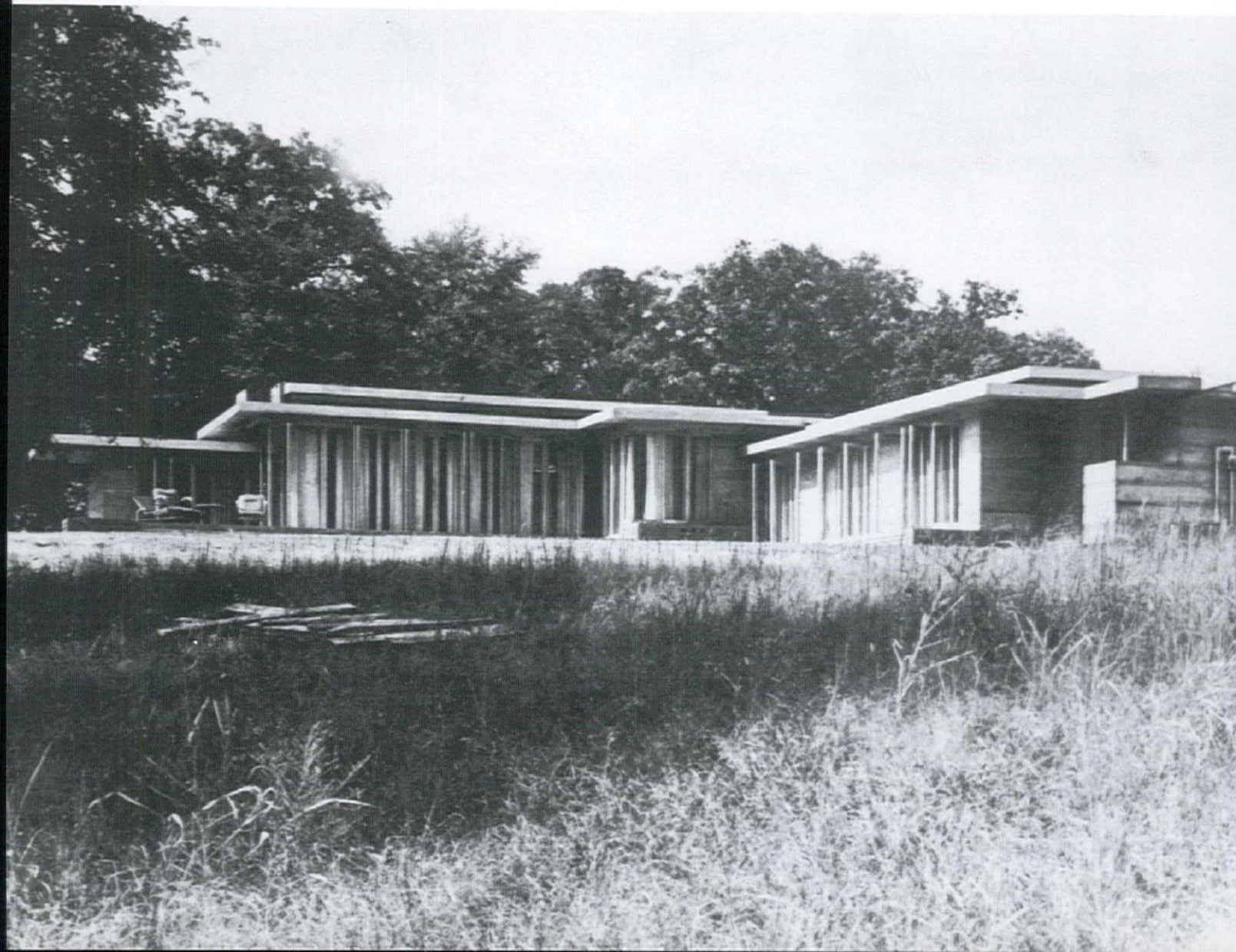
I never sketch when I am visiting. I never take photographs. I don't know how to take photographs. I do know how to sketch, but when I visit any work of architecture, I try to imagine what it is the architect is trying to do and how he imagined it. I try to envision it in terms of plan, section, and elevation, and I memorize certain things. I go to the Acropolis at least once a year, sometimes more often. I know that very, very well. I don't mean in terms of history. I do have some notions about why it is as effective as it is. But I couldn't possibly take a photograph or make a sketch and still concentrate on how it relates to separate things. I've never in my entire life made a sketch of the Acropolis.

I think three-dimensionally. I know that sounds silly, but in my experience there aren't very many people who think in three dimensions. There really aren't. I can tell you when I first thought three-dimensionally, at least consciously. I went to Auburn, Alabama, and there was a course called "Constructive Geometry and Shades and Shadows." The first time I was asked to cast accurately the shadow formed by a curved object on another curved object — which meant projecting lines through space — I realized that there was something called space. That was one of the most exhilarating, exciting moments.



Maseri Memorial Building
project), Grand Canal,
Venice, Italy, 1953,
Frank Lloyd Wright

Stanley Rosenbaum House,
Florence, Alabama, 1937,
Frank Lloyd Wright



I am not at all interested in cartoons of architecture; they are purely an image. As a matter of fact, I am turned off completely by that. As far as I am concerned, the idea of the image being "it" results in caricatures. While caricatures are amusing, they bear the same relationship to art as, I hate to say this, some current buildings to architecture. In my teaching days I would insist on being shown a section, a plan, and an elevation, and if you didn't have it, I would say, "Well, when you have it, I will be happy to try and understand what you are trying to do." The section is as important, or more important, for me than the plan. That is because it does depict the space, it does depict the light in ways in which the plan alone does not do. I don't mean to say not to have a plan, but I do mean to say you must have a section.

Just because I see things in one way, or study things in one way, or go about thinking of architecture in one way, doesn't mean that that works for anybody else. I think everybody has his own way, and I am all for whatever way works. I would be the last one to say, "Don't take photographs," although I have said that. I used to tell my students to leave the camera at home, because the camera angle is a very different thing; it is a way of seeing, but only very specific things. It is not at all a substitute for the feeling or understanding of architecture, I believe, and as a matter of fact, it actually stands in the way.

I am interested in history, but not in the ways that art historians are interested in history. As a matter of fact, I slowly but surely have come to the conclusion that art history is the exact opposite of architecture. I know that is not a very popular thing to say, and that everyone says that not knowing history dooms you to repeat the mistakes of the past, but when I see all these people who say they know all about history, I guess I have to say that I wish they didn't know about history. That is my idea. I don't see how knowing history helps them at all, by and large, with exceptions now and then. You see, I am lucky because I have seen everything, almost. I have seen it, often more than once, many times, and I don't give a tinker's damn, frankly, about history in the usual sense. I really don't. Sorry. I am interested in what *I* can use.

I was twelve or fourteen when I first saw a Frank Lloyd Wright house. That was in Florence, Alabama. I forget now how I knew about this house, but I did, so I got my parents to drive me over. I lived in Athens, Alabama. My father was the head of a school there, a rural school, a Methodist girls' school. I have probably told you about the piano hinges and cantilevered roof, no? The cantilevered carport roof, I suppose, was about eighteen feet. I had never seen anything like that. Well! I was completely delighted with the whole idea that this would hold itself up, and I didn't understand it at all. There it was. I always thought the car looked a little funny, but I loved the roof. The interior of the house was in rather typical Usonian style. I had never seen detailing like that, the idea of storage units, of which there were many of various kinds, being such an important element in the house. I remember specifically the piano hinges, which I thought were the most beautiful things I had ever seen. I still do think they are beautiful, and the idea of the clerestory lighting, quite open above, and the way the light goes onto the ceiling and comes back down. I remember disliking and not understanding the narrowness of the passageways. That seemed terribly constricted to me. I also remember the built-in furniture and how completely satisfying it was, especially the couches. There are very few architects whose work I would go out of my way to see, but I would always go to see anything, even the worst, of Wright's.

105

I regard him as the greatest American architect. I think he is, to a large degree, if not misunderstood, at least the implications of his work have not even begun to be explored. It is easy to just dismiss him as someone who completely understood architectural space and light. What I mean to say is that he was very much interested in responding to site. Others have said he was much better at responding to the site than he was at anything else. But I think that in spite of what he had to say, he often got to the essence of the man-made site. This is perhaps most clear in the project for Venice; I have always regretted that it was not built. The notion that today you have to pick up, by rote almost, elements from what is around you and introduce that into architecture was not at all apparent in Wright's work. He approached it, of course, in terms of scale and materials, and in terms of feel. Some people would dismiss that as an abstraction. I don't see it that way, other than the fact that all architecture is an abstraction.

Wright's interest in natural light is, I believe, much more to the point than any of the International Stylists, including Le Corbusier. It was only in the latter part of

Le Corbusier's life that he began to really understand light, and by that time it was almost too late. Wright had an understanding of reflective light especially, and its animation of space, and the intensity of light as it varies according to psychological demands. I have thought about that very carefully, and I think I understand it. I tried to introduce that into my work. When I first started making buildings in Florida, I didn't understand it at all, and everything was very evenly lit. I would not do that at all today. So perhaps that is the most clear example.

I think it is the understanding of Wright with regard to glare and the importance of reflective light and the varying light, and that would be perhaps the most clear and direct. There are a lot of other things, such as clarity of the structure of Wright, not at all like the work of International Stylists. You must understand that all my life I have been interested in architecture, but the puzzle for me, in many ways, is the relationship of Wright to the International Stylists. Now perhaps for you that seems beside the point, or very, very strange. It has a little bit to do with when you come into this world, and that is when I came to grow. Wright's interest in structure was, to a degree, a psychological one. I am fascinated by his ability to juxtapose the very heavy, which is probably the most clear, almost blatant, too blatant, in Taliesin West with the very, very light tent roof. It isn't that his structures are so clear, because they are not. It is that he bent the structure to form an appropriate space. He would make piers three times the size that they needed to be in order to make it seem really secure. Or he would make the eaveline two or three inches deep by all sorts of shenanigans, from a structural point. My God, what he did to achieve that, because he thought it ought to be light. I would agree with him in a moment, but the International Stylists would not. Well, they did and they didn't. It was the bad and poor ones who did not. They didn't know how, didn't know why. After all, the International Style is based to a large degree on traditional structure on which they put stucco all over, to make it seem light.

Architecture, after all, deals with size. And it is no news, I am sure, that one of the great failings of modern architecture is its lack of understanding of scale. Scale is based on many things, among them dimensions.

It is a question of relationship of parts, and breaking down the scale. You see, I believe a lot has been lost in terms of knowledge by our culture. I guess it is always that way. But the greatest thing that has been lost is the understanding and manipulation of scale. I happen to think that if the scale is wrong, or not understood, or there are not multiple scales, then all is lost. That is one of the reasons we have such great difficulties, because our sense of scale is being assaulted. How does one come to grips with scale? I believe that on a comparative basis drawings can tell a great deal about scale. For instance, if you compare the size of the classical columns in St. Peter's with the classical Greek, you would be amazed at what you would see. What you would see is how the scale-giving elements have been increased in size to the point where you don't get very much sense of scale at all.

What works for one does not necessarily work for another. Some people need highly structured environments, others are better in the exact opposite. I am a great believer in seeing things; in other words, I am not a great believer in schools, as strange as that may seem. I think schools are very, very limited. I think that is borne out by what people do. I think there are certain things a school can do, and by its very nature there are not very many people who cannot go. So, for some people architecture is not at all an art of making things. For me, it happens to be. Some people see it . . . very differently.

All architecture is a highly emotional affair. I believe it is the most so of all the arts, as a matter of fact. Even more emotional than, shall we say, painting and music. Architecture obviously deals with a lot of things, including a lot of mundane aspects, but the final result is highly, highly emotional.

Drafting Room at Taliesin
West, Paradise Valley,
Arizona, 1938,
Frank Lloyd Wright



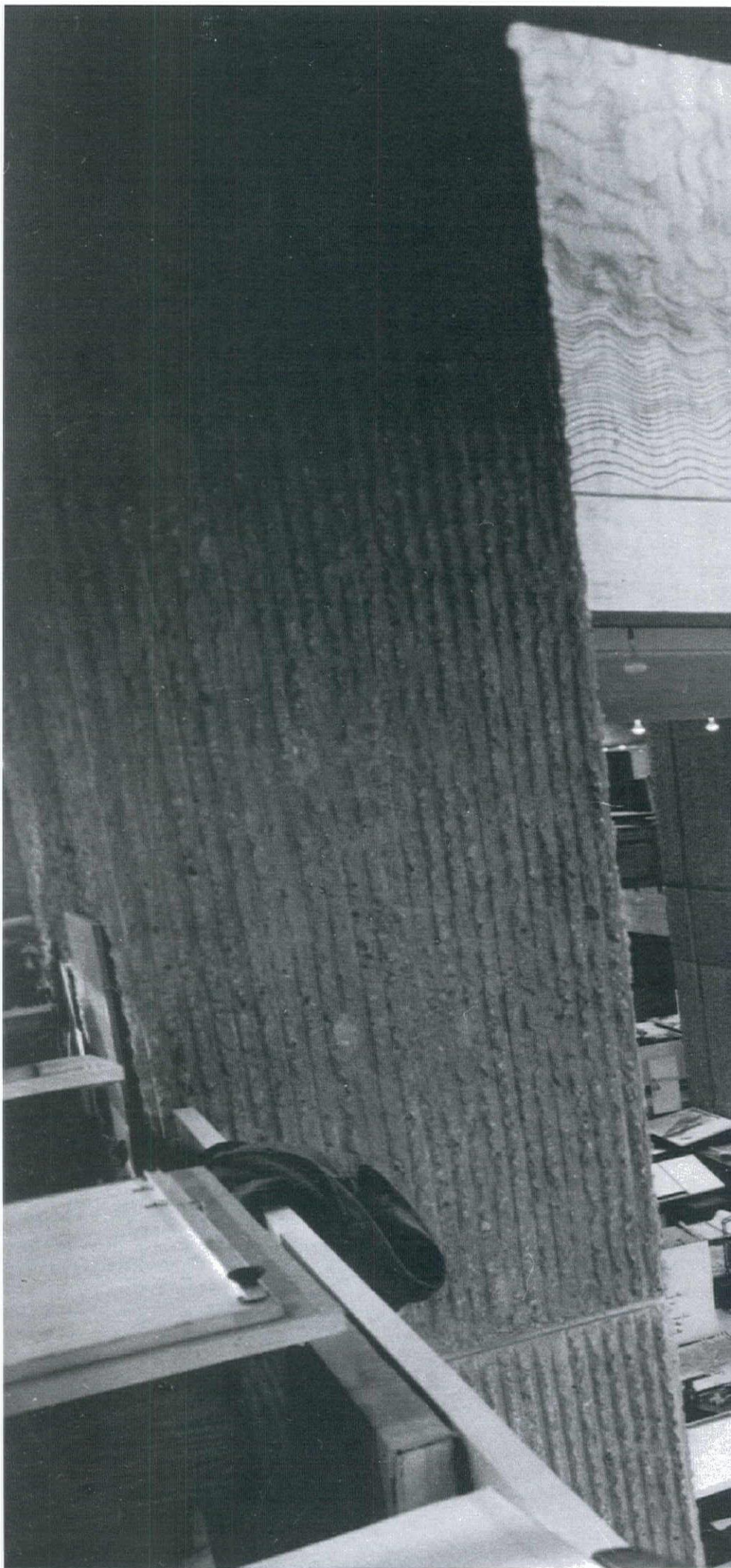
Several members of the Frank Lloyd Wright Home and Studio Foundation in Oak Park have described Paul Rudolph's emotion when he first saw Unity Temple. He was moved to a sincere and selfless admiration to that rarest and purest of human emotions: an objective aesthetic reaction. As so often happens with all our most generous impulses, this feeling was to prove his undoing.

He tried to shape another building on the foundation of his admiration, but the uses and scale of this structure had to be very different; the result, while as magnificent as the charge of the Horse Guards at Austerlitz, was equally disastrous. A contributing reason for the débâcle was the fact that the first stages of Rudolph's design had clearly been based on other models, primarily Corbusian in character. Thin piers of concrete were to rise unimpeded, shaping a clear volume of space. In spite of some sculptural whoop-de-do, the conception was unified and single. In that sense, the building would have been a simple one. But somewhere along the line, the sinister genius of Unity Temple began to take over, whispering in Rudolph's ear, "Enter from the side through a low, dark space and turn left into the main volume, rising up to glory." Unity Temple pulled that off, but so had Wright's Larkin Building before it. Most of all, the Larkin Building was of the multilevel scale that Rudolph required; but unfortunately, it was no longer among us. Rudolph never stood in its central space, the piers rising up symmetrically around him. He could never feel that special singleness, that unequaled continuity. Those of us who were privileged to stand there when the building was already abandoned, already turning to ruin, will remember straining our eyes to pierce the upper darkness, where the broken skylights glowed dimly and the drip of water could be heard — that deadly "drip of dirty water" which Wright so hated and feared.

Rudolph was determined to bring it all back, but the contemporary fire laws prevented him from doing so, because they would not permit the floors to open up through the center of the building. He tried every expedient, even reinforced skylights around the piers, but it was hopeless. He should have abandoned the model, one supposes, and gone back to his first, simpler, probably more appropriate scheme. But his blood was up. He fought the thing through at every level, and the building shows the marks of that struggle, which was exacerbated by the going Brutalist mode of the period. This suggested the vast lintels and, eventually, the sadistic concrete. Wright's way of handling detail in his early work had been utterly different. His stripping had habitually broken down the scale step by step until, as in classical architecture, the grand effects of the whole were qualified and humanized by the articulate language of its small parts. That language is especially eloquent in Unity Temple, where the stripping literally stretches the balconies and carries the eye over and around the piers.

Rudolph had to bludgeon our senses with titanic roarings. It was all that the gruesome zeitgeist of the moment would seem to have allowed. But with every passing year one is more and more pleased that Rudolph fought it out as he did. The pallid criticisms of his detractors seem less and less germane. There his building stands, as indestructible as he could make it — a weathered mountain, an irredeemable ruin — one of the enduring monuments to the marvelous irrationality of art and to the blessed restlessness of the human spirit. It will be there for a long time, our perennial scapegoat, bashed, battered, trashed and burned, still challenging us to get along with it somehow, and with ourselves.

Art and Architecture
Building, Yale University,
New Haven, Connecticut,
1961-1963, Paul Rudolph



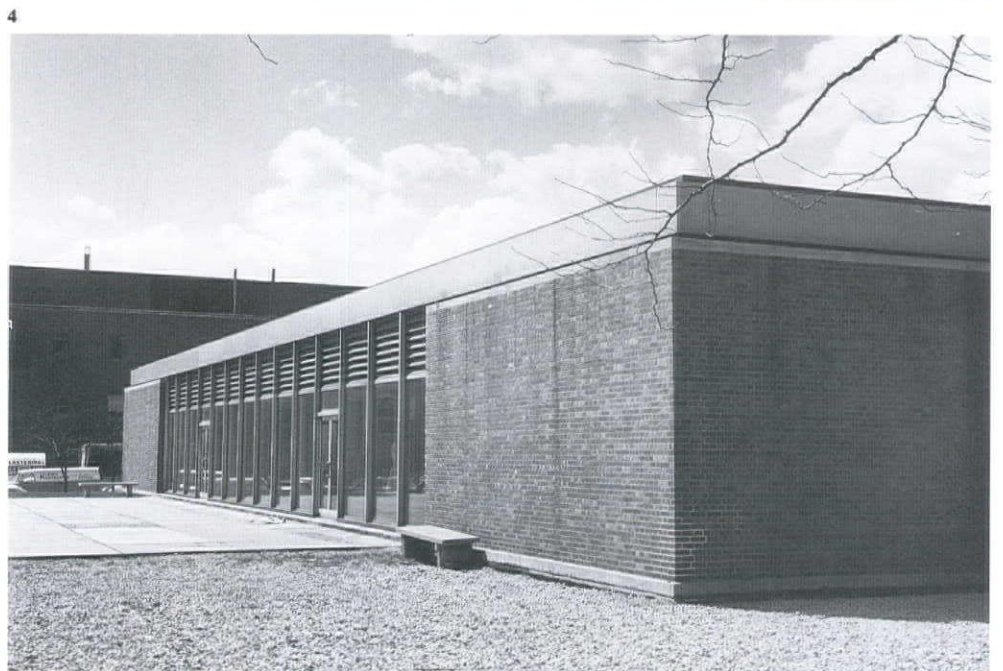
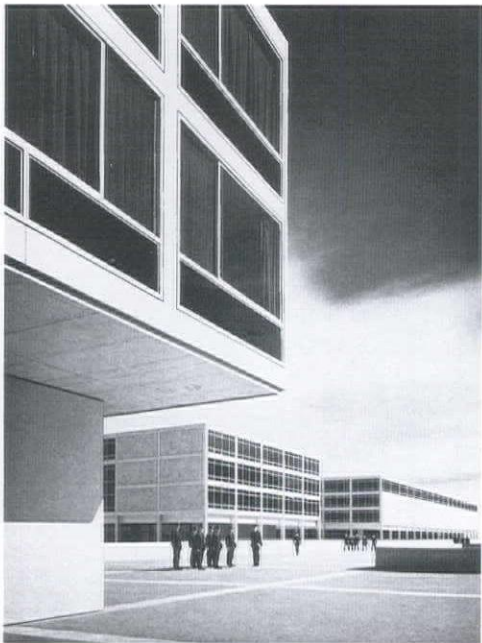


Introduction (Morality)

Mies, formally unschooled and entirely self-taught, seems to have possessed an innate morality as well as an intrinsic generosity that imbued his work with meaning. Mies' buildings were both expressive of a morality peculiar to postwar America and basic to his own beliefs. American architects copied Mies with great boldness; New York's Lexington, Madison, and Sixth Avenues furnish many examples of this simulation. Sometimes reasonable, never contextual, and mostly Godawful, these neo-Mies boxes have come to populate most American cities. As Mies' work developed and his language broadened, his vision established a new American norm or truth. To see SOM (Skidmore, Owings & Merrill) imitating Mies' coping of a clipped steel angle (made symmetrical by Skidmore about the vertical axis) is to understand that one architect was engaged in contending with such essentials as gravity while the other was engaged in formalism alone (figs. 1, 2). To see an English cross-bond masonry wall by Mies (fig. 3) and then to look at apparently the same wall by SOM, only to discover that the headers have been clipped in the latter (fig. 4), is to understand that Mies was authentically resisting natural forces, while Skidmore is engaged in a kind of usury, a simulation of sorts.

Clearly Mies unlocked the door behind which lay the solution to the building needs following the Second World War, just as his imitators unlocked the door to endless and sterile repetition of Mies' signature.

Optimism is never more apparent than when it appears in support of a particular culture. Such a mood existed in 1946, after the Second World War, when America attempted to sustain the frantic zeal of virtue through the peace that followed. It was crucial to find a variety of vehicles to serve as reminders of the correctness of the political – indeed, ideological – condition that had prevailed against fascism. One of these was architecture – the overwhelming, visible cultural form that could represent not only the opti-



1
Alumni Hall, Illinois
Institute of Technology,
Chicago, 1945–1946,
detail, Mies van der Rohe

2
Air Force Academy,
Colorado Springs,
Colorado, detail,
Skidmore, Owings and
Merrill

3
English cross-bond wall,
Chapel, Illinois Institute of
Technology, Chicago, 1952,
detail, Mies van der Rohe

4
Simulated English cross-
bond wall, University of
Illinois Medical Research
Building, 1967, detail,
Skidmore, Owings and
Merrill

5



114

6



7



5
1959 Cadillac Fleetwood

6
Television rabbit ears

7
Levittown, Long Island,
New York

mism of the moment, but also the desire to revel in, as well as perpetuate, the legitimacy of patriotism.

Architecture has always been an optimistic pursuit, grounded in the Platonism of beauty, perfection, the ideal. Architecture, however, also shares a benign anti-intellectualism with the middle-American ethic that holds work (much like patriotism) in and of itself to be sufficient.

Another concept that significantly influenced postwar attitudes was the view of America as a nation of emigrés fleeing religious persecution, national famine, and in some cases, legal authority, with all the attendant insecurities. This disparity of immigrant groups was now considered healed by victory. It was as if a modern crusade had forged a new culture of “the poor and the downtrodden.”

Victory in the Second World War confirmed America’s moral certitude, which seemed both ethically and religiously correct. After all, *our* way of life had prevailed, proving that democracy was both correct and credible. Immediately following the war’s conclusion, signs began to confirm the fitness of the American way. The industrial giant of war could (and resoundingly did) direct its attention to peace – ultimately a more demanding taskmaster. Overnight an immense military force turned into an equally immense work force requiring production for its own consumption. Symbols of a new American attitude appeared. Automobile tailfins (fig. 5) begat television rabbit ears (fig. 6), which in turn begat wingwalls on subdivision houses (fig. 7). There was a surfeit of evidence that war made a poor teacher – at least with respect to good taste. What was clearly needed, particularly as new concepts of urban America were becoming apparent, was a paradigm of good taste – of correctness and authenticity – proving that the victorious Americans of the Second World War were not too immature to responsibly reap the benefits of world dominance and peace. Strangely, and almost without precedent, American society came to look to architecture as a means of establishing cultural credibility.

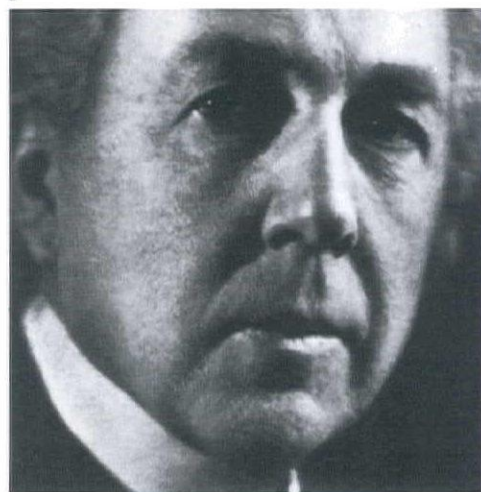
Adaptation of European Modernism as Appropriate Architectural Style

But where, within architecture’s compound, could society look, given the many ebullient new modernist styles? Which, if any, of modern architecture’s methods contained language to convey victoriousness combined with the solidity of good taste? Surely not that of FLW (Frank Lloyd Wright) (fig. 8); he was too patently individualistic, what with his embarrassing taste in clothes, his unfortunate matrimonial record, and worst of all, an architecture that simply could not be copied. Idiosyncratic at its most normative, FLW’s work contained too many elements of unpredictability; it was not something one either could count on or, worse, would want to represent stability (fig. 9). Surely, if America was to elect a style by which to be remembered, it could not be the work of one arrogant architect alone – certainly not a self-announced eccentric genius such as FLW. Even if he could be copied (unlikely), it would be too demeaning for others to commit themselves to such an idiosyncratic original.

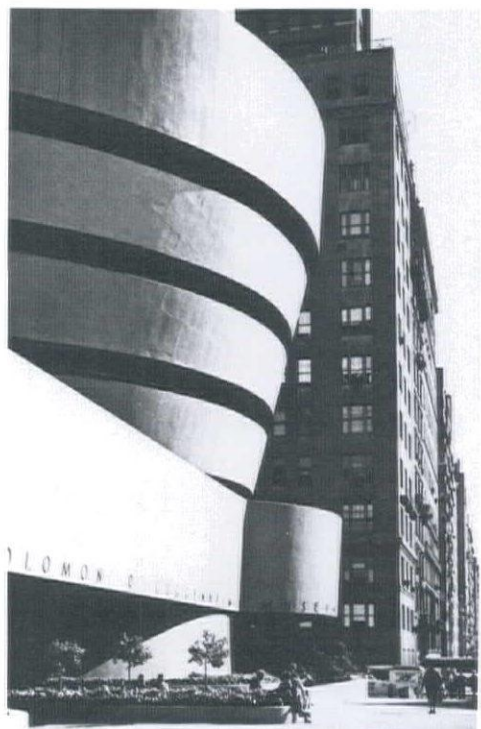
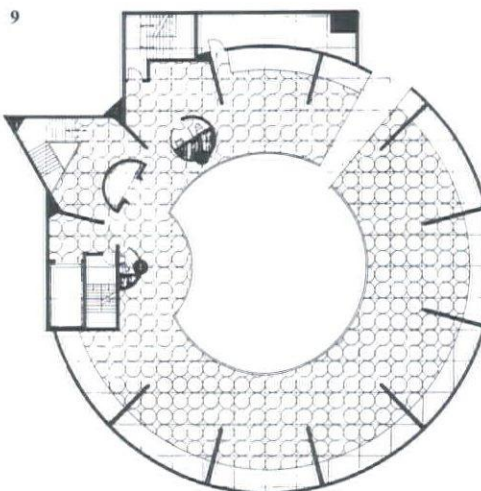
What, then, about Le Corbusier? He, in turn, seemed too European, too intellectual; ultimately his architecture, while admittedly artful, seemed too esoteric. His persona was too haughty, too grand, and too self-consciously inaccessible (fig. 10). Le Corbusier’s apparent dialectical approach, in which ideal repetitious structure played against idiosyncratic partitioning of space, was too conceptual (fig. 11) and simply inappropriate as a role model for a nation gorged on victory (fig. 12). Socratic debate was undesirable; a Platonic synthesis was needed.

Because both Le Corbusier and Wright suffered from unpredictable stylistic shifts within their careers, they did not seem capable of authentically representing a culture desiring a zeitgeist mentality in architecture, one that would not necessarily change its appearance simply on the basis of aesthetics. Le Corbusier’s early (and seminal)

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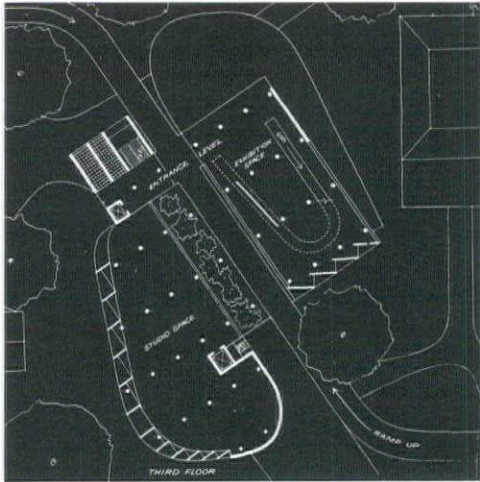
8 Frank Lloyd Wright, c1930

9 Guggenheim Museum, New York City, 1959, Frank Lloyd Wright, exterior view and plan

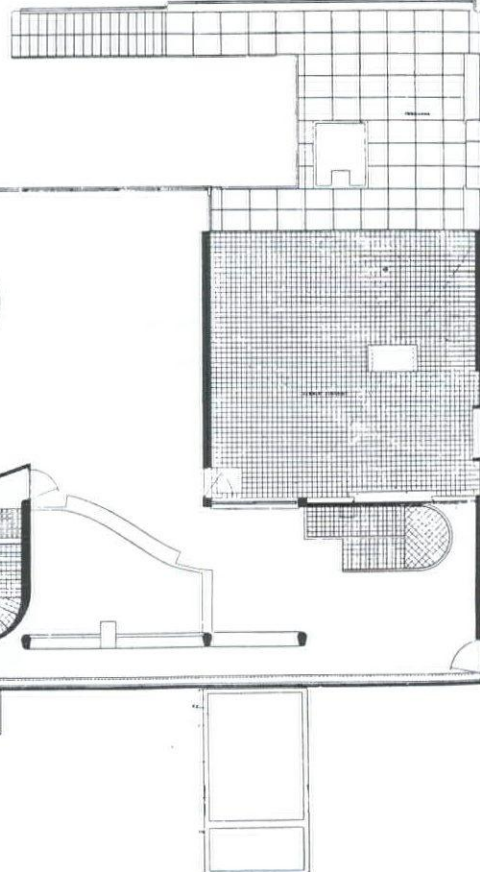
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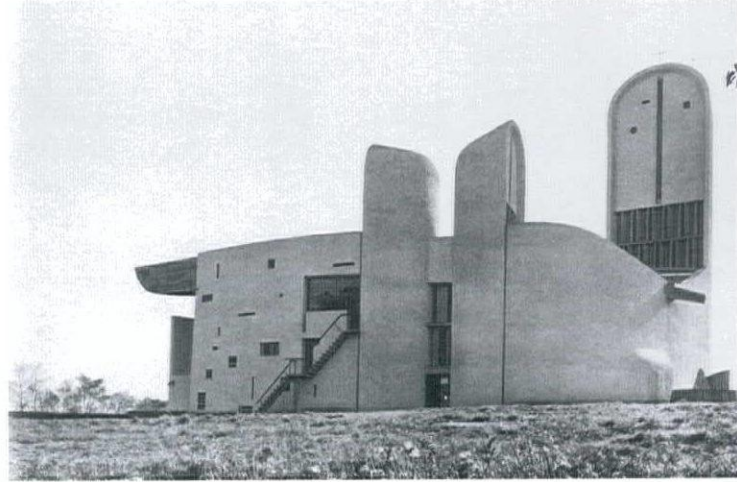


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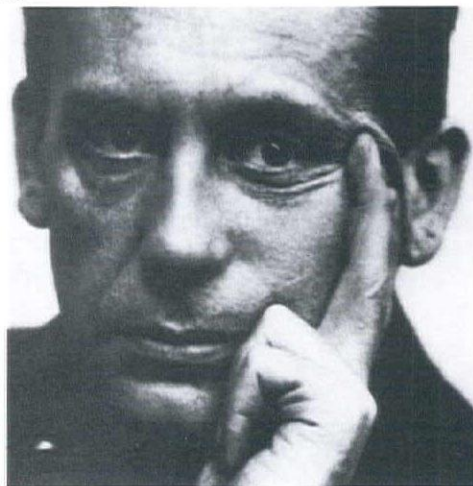
10
Le Corbusier, c.1930

11
Villa Stein, Garches near
St. Cloud, 1927, first-floor
plan, Le Corbusier

12
Harvard Visual Arts
Center, Cambridge,
Massachusetts, 1961–1963,
ground-floor plan, Le
Corbusier

13
Maison Jaoul, Paris, 1955,
Le Corbusier

14
Notre Dame du Haut,
Ronchamp near Belfort,
France, 1950–1955,
Le Corbusier



modernism gave way, somewhat too easily, to the New Brutalism – a style incorporating rough concrete (*beton brut*) and unevenly fired brick, not exactly consonant with the pretensions of good taste (fig. 13). Yet, even that experiment was soon replaced with expressionist eccentricities, such as the Chapel at Ronchamp (fig. 14). Because Corbu was stylistically so inexplicable, some came to think of him as a Swiss – or worse, French – FLW. It was bad enough to have a nineteenth-century native American architect jump stylistically from one thing to another (Prairie School, Usonian, and so on), but when in Corbu's hands the new modernism showed pluralist tendencies in a culture that was virtually uninterested in such multiplicitous quirky concepts, that architect could simply not be thought of as a paradigm.

Then there was Walter Gropius. Very early on – in the 1920s, or the Bauhaus period – he could easily have become the mid-twentieth century's role model (fig. 15). Certainly he looked the part, urbane and cultured; he was the leader of this century's prime-mover technoaesthetic institution (fig. 16) – the first to sense that production had a romantic egalitarian potential. He seemed the right person at the right time, even to the extent of having emigrated to the United States and having accepted the leading position at Harvard's Graduate School of Design. Indeed, until the end of the Second World War and through the early 1950s his graduate students became the most powerful architects in the United States. Philip Johnson, Paul Rudolph, Edward Barnes, I M Pei, Ulrich Franzen, Victor Lundy, John Warnecke, and Joseph Passonneau are among the many who helped to spread the word of Gropius' pedagogically broad methods. The architectural educator, it seemed, never benefited so greatly from the kind words of so many diverse students. The reason why Gropius nevertheless did not fill the role of paradigm is a simple one. His work (inexplicably) lacked the overriding clarity or continuity necessary to convey the image favored at

15
Walter Gropius, c1940

16
The Bauhaus, Dessau, East
Germany, 1925–1926,
Walter Gropius

17
The Architects'
Collaborative (TAC) at the
Harvard Graduate Center,
Cambridge, Massachusetts,
c1950

the time. Worse, his newly formed TAC (The Architects Collaborative), composed mainly of ex-Harvard students, seemed excessively (and regionalistically) permissive (fig. 17). No one knew what to make of him, and no particular interest (or reason) gave the impetus to emulate him or to imitate work that seemed anything but memorable. Even his pedagogical methods appeared intellectually permissive insofar as they produced wildly diverse students. There was apparently nothing to grasp that might express America's postwar mood.

Finally, there was Ludwig Mies van der Rohe, a late (1937) emigré from Nazi Germany. On the surface, he would seem anything but a potential paradigm. Son of a stonemason from Aachen, never formally educated beyond the eighth grade, caretaker of the German Bauhaus long after its initiator (Gropius) had fled and the school's reputation had been assured, and responsible for its closing in 1934, there was nothing particularly exemplary in either the man (fig. 18), or his work to presage the great power he would wield in another country within just over one decade.¹ Even when Mies did emigrate, he came to Chicago, a city not renowned as a cultural or media capital.

Within the decade spanning the Great Depression and the conclusion of the Second World War, American attitudes greatly changed from feelings of cultural and economic insecurity to self-esteem bordering on arrogance. When Mies' persona and his architecture surfaced near the end of the first half of the twentieth century, he and his work seemed just right for America's new directions and tastes (fig. 19). He was not ostentatious, and he conformed to America's need to encourage groups rather than personality cults. His work was elegant and in good taste (fig. 20), and most importantly, his architecture was not unnecessarily demanding on the functional or

intellectual levels (figs. 21, 22). His architecture could be altered internally without vitiating the power of its external appearance. Mies' subtle artfulness did nothing to diminish his architecture's obvious functionality. Justifications of his work did not seem necessary, since the up-to-date technological basis of his buildings spoke to a future that was democratic, if not egalitarian.

Mies' essentially withdrawn yet gentlemanly personality was ideally suited to project the mystique of inexplicability. Unlike others of his time, it was not in his nature to give lectures, participate in architectural juries, engage in symposia, and in general "be seen." Mies wrote precious few papers. Almost without exception, none of his lectures lasted for more than ten minutes; and even these were few and far between. Feigning a lack of sophistication in the English language suited him well, though it is known that he was fluent in both German and English. With the exception of a few hours each week at the architecture school at IIT, and incomplete days at his office, he was not to be seen at all.

When he did speak or write, his statements were epigrammatic and stunningly to the point; Mies was not a man to use fifty words when five would do. What little he said smacked of moral certitude: "Build, don't talk," "God is in the details," "Architecture is the will of an epoch translated into space."²

When he was photographed, his pose generally reinforced his reductivism. Reflective and contemplative by nature, he genuinely projected an image of a man deep in thought (fig. 23). Corporate Americans were enchanted with Mies' European accent, his modest good graces, his nine-hundred-dollar black silk suits, and his artistry — perhaps in that order. That he was philosophically rigorous about his work was insignificant. His architectural production and his genuine humility were an unbeatable

Mies had a simple, direct way of putting things. In 1955, at a party held in his honor in an IIT student's apartment, Mies responded to an inane question about how to become a "designer," a word Mies abhorred—he felt it to be intrinsic to and a trivialization of architecture. "First, you learn how to draw, then you learn how to build, then you are an architect."

118 At a reception for Mies van der Rohe in 1954, he told of the day he closed the Bauhaus. He was called to the Berlin headquarters of the SS, where he was advised that if he did not expel Bauhaus students of Jewish extraction as well as those of Bolshevik persuasion, the SS would close the school. Mies listened, saying nothing. At the end of the interview he went across the street to a wine shop, where he purchased several cases of champagne. He then proceeded to a nearby crystal shop and bought several dozen glasses. He had both the wine and the stemware delivered directly to the school. Walking back slowly, he arrived to find both students and faculty wondering about the many cases of champagne and glasses. He saw to their unpacking and pouring champagne for all. Then he toasted, "Gentlemen, I give you the last day of the Bauhaus." He then ordered the school closed permanently.

Mies never admitted that being in Chicago had any impact on his architecture. In an interview Katherine Kuh asked him if Chicago had influenced him in any way. He tersely replied, "No."

When I was an apprentice architect just setting out in architecture, some believed in Christ and others in Moses; I believed in Mies.

8
Mies van der Rohe at the
Bauhaus, c 1930

9
Mies van der Rohe in
Chicago, after the Second
World War, c 1947

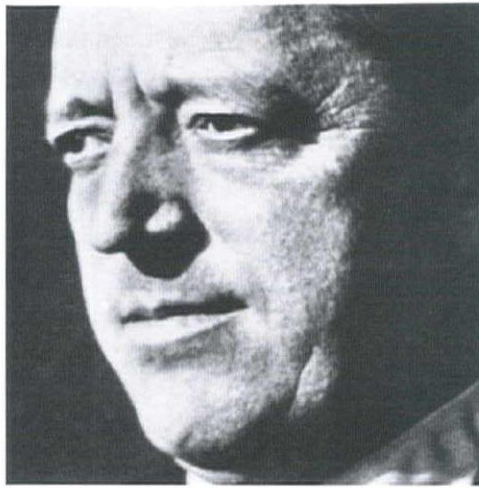
10
Collage Project: Museum
for a Small City, 1942,
Mies van der Rohe

11
460-880 Lake Shore Drive,
Chicago, 1951, early
scheme, typical floor plan,
Mies van der Rohe

12
460-880 Lake Shore Drive,
Chicago, 1951, typical floor
plan as built, Mies van
der Rohe

13
Mies van der Rohe, c 1950

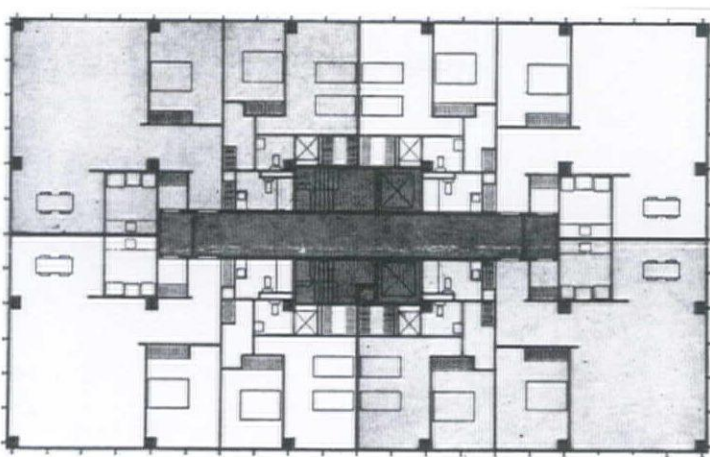
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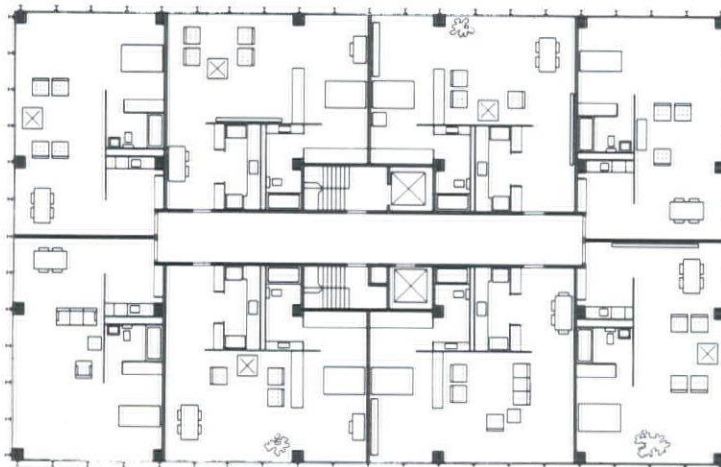
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24
Seagram Building, New York City, 1957, Mies van der Rohe

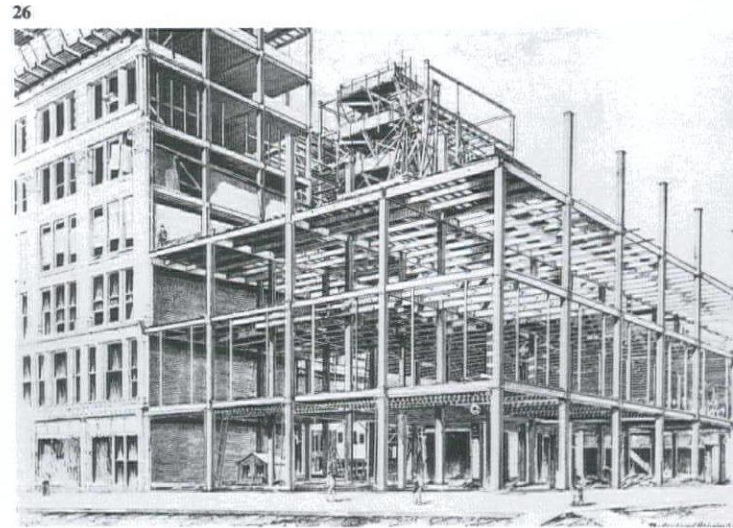
25
Diagram of golden section with Vitruvian man and mullionization



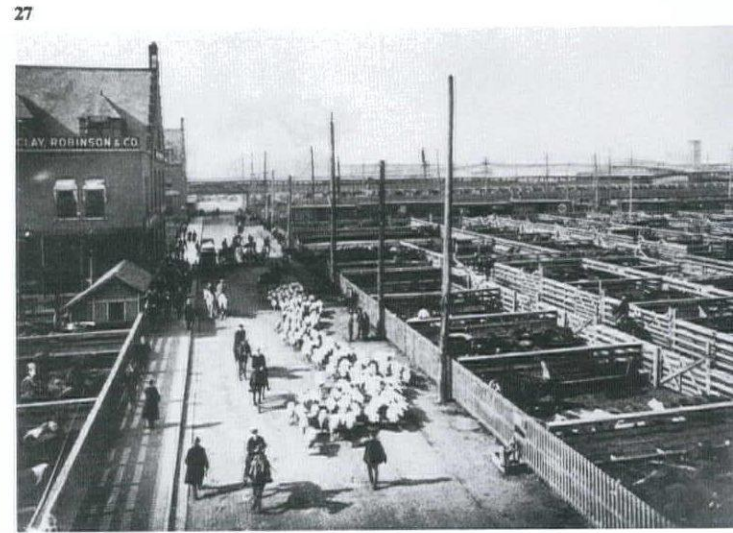
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26
Fair Store [under construction], Chicago, 1890-1891, William Le Baron Jenney

27
Chicago Stockyards, Chicago, c1905



26



27

combination, particularly since they were drummed home by a spate of books of humorless accolades: Ludwig Halbersheimer, Philip Johnson, Arthur Drexler, Peter Blake, Werner Blaser, Peter Carter put out "the word." If Mies' own buildings as well as those by his followers conveyed verification through repetition, books about him conveyed precisely the same form of legitimation. Ultimately overwhelming, the effort was bound, sooner or later, to fail.³

The Hype of Corporate Correctness

America, Americans, and most of all, the image makers of Madison Avenue were thoroughly ready to embrace Mies van der Rohe and his monuments as symbols of the "spirit of the age." The look-alike "new wave" celebrated by C Wright Mills was at once destined and ready to inhabit reductive black and bronze-tinted glass boxes.⁴ Like Ivy League collegians and Brooks Brothers clothing, Mies' glass buildings appeared to be well-bred and neatly tailored, and as such, they were much admired. The appropriateness of Mies' black-box architecture to corporate America was undeniable. On occasion, as in the case of New York City's Seagram Building, it could also suggest majesty (fig. 24). Even as Madison Avenue manipulated trends and tailored taste, Mies buildings continued to demonstrate not only intrinsically good taste, but also permanence — a commodity longingly sought but sparingly achieved.

All at once buildings followed proportions that were beyond question; all Mies buildings are studies in the "golden section": 5'0" modules and 8'0" floor-to-ceiling dimensions, the 5:8 ratio accordingly subdivided; 5:5; 3:5; 1.75:3; and so on (fig. 25). The materials used in these buildings were clearly meant for the long term: stainless steel, bronze, hard-coated and anodized aluminum, verde antique marble, travertine, and terrazzo. Even as it became

fashionable to damn the tastemakers, the paradigm was more often than not a Mies-like building, offering a mentality dedicated to expressing the spirit of the times, with a belief in the possibility of "correctness."

The Power of Mies' Chicago

That this process unfolded in the heartland of America and that it was proffered by a middle-European immigrant is, in retrospect, not particularly surprising. After all, Chicago's population has always been rooted in European vernaculars. The city has effectively been a bastion of middle-class and lower-middle-class emigrés engaged in industrial pursuits; the professions and the arts historically played a comparatively insignificant part in the city's early development: Chicago's first native son trained as an architect, for example, Howard van Doren Shaw, died as recently as 1927. Chicago (and the rest of middle-America) is solidly grounded in several types of production — agricultural, industrial, and in the case of Chicago, architectural. The "Chicago School" met with welcome acceptance after the 1871 fire destroyed the heart of the city.

It was established by such late-nineteenth-century architects as William Le Baron Jenney, John Wellborn Root, Daniel Burnham, and Dankmar Adler, all practical men first and foremost whose commitment was toward getting the job done. The city's desire to match New York in commercial prowess needed a no-nonsense architecture (fig. 26) to symbolize the directness for which Chicago was already known. Traditional forms in the classical language of architecture seemed not only unnecessary, but even willful and vainly elegant when used for the "hog butchers of the world."

The quality of pragmatic plainness, faithfully represented by Carl Sandburg and by later generations of writers, including Nelson Algren and Saul Bellow, depicted the classically unsubtle attitudes connected with Chicago.⁵ Upton Sinclair's description of the venality intrinsic to the meat-packing

I recall that on one occasion a developer tried to justify to Mies the use of hard-coat aluminum cladding on an office building Mies was designing. Scolding the developer, Mies said, "You know, when we did the Seagram Building we studied the possible use of stainless steel, aluminum, and bronze. Bronze was a million dollars more expensive. You know, Dorfman, Seagram's owner, really got something for nothing."

industry in *The Jungle* suggests an environment (fig. 27) at odds with the style and grace implicit in the classical language of architecture. Chicago's impatience with intellectual quibbling is in keeping with its strong belief in the rewards emanating from the process of production.

Mies van der Rohe's coming to Chicago rather than to either of this country's coastal (and intellectual) regions may be seen as almost an act of predestination. From his arrival in Chicago in 1937 it took but one short decade for his power as a paradigmatic architect to take root. Using Chicago as a base of operations and the versatility of American steel as a tool of production, Mies was able to establish a so-called legitimate architecture that was indeed "the will of an epoch translated into space." The reductive elegance of his architecture was destined to represent America's cultural maturity and civility. It seemed possible, after all, to win a world conflict and come out looking like the winner.

How Mies First Established, Then Manifested His Power

Architects can polemicize their positions in three ways: through pedagogic methods; through an emulatable work product; and through an enviable and mysterious persona—particularly when amply documented by others. Mies van der Rohe was capable of and capitalized on all three.

When Mies was named Director of Architecture at IIT in 1938 by its then President and one of the two most avid patrons Mies ever had, Henry Heald (the other patron was the developer, Herbert Greenwald), Mies brought with him two other ex-Bauhaus professors—Ludwig Hilbersheimer (planning) and Walter Peterhans (basic design).⁶ Thus, in one swoop, architecture, planning, and visual fundamentals fell under Mies' control. In his first year as director of the school he took over the education of incoming students, apparently giving up on the education of students already indoctrinated with the school's earlier attitudes. In 1939 he once again taught the first year, and so on until 1941, by which time everyone at the school was effectively under his tutelage. All courses of study (including the history of architecture) were

presented from a particularized rational point of view. Students mastered construction methods, detailing, and the dictates of structure, as well as extraordinary drafting skills (fig. 28). It was as if an American Bauhaus had been melded with a modernist canonical version of the *École des Beaux Arts*.

In a way Mies and his professional colleagues had uniquely created an American work force peculiarly trained in building-construction methods. Peripherally he and his associates were inevitably training architectural educators prepared to "spread the word." Such men as George Danforth, formerly of Case Western Reserve; Anderson Todd of the University of Houston; John Sugden of the University of Utah; and Reginald Malcolmson of the University of Michigan were among those sent "abroad" from IIT and Chicago to teach the principles of Mies modernism in other classrooms at other times. Finally, and inescapably, practicing architects trained by Mies and his followers at IIT were to build in the spirit of their architectural education. Such figures as Myron Goldsmith, Jacques Brownson, Gene Summers, James Speyer, James Ingo Freed, David Haid, Arthur Takeuchi, and even Helmut Jahn, are in varying degrees products of this education. Each in his particular application of structural and constructional rationalism brings luster to the training received under Mies at IIT.

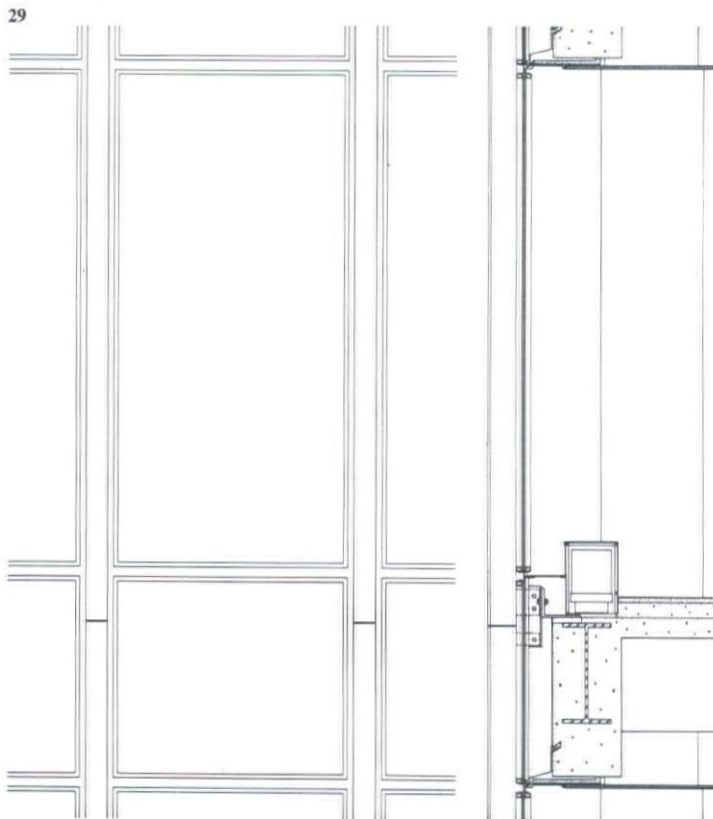
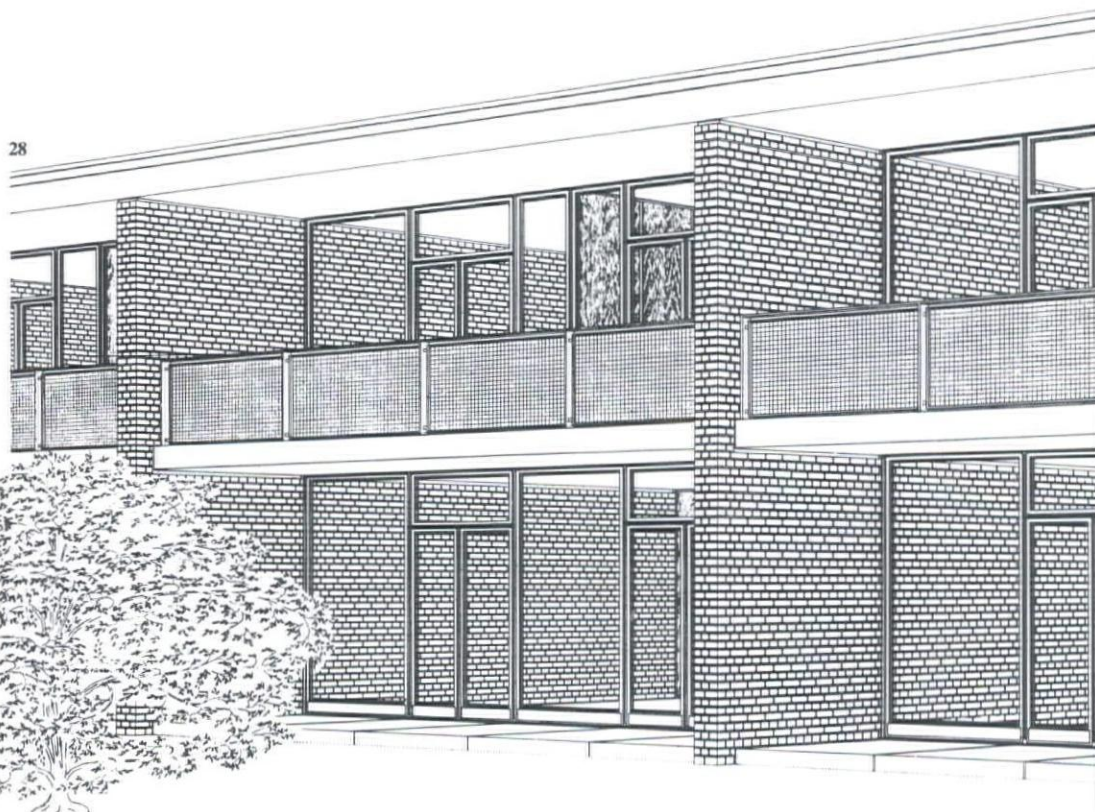
Of greatest importance, pedagogically speaking, was the method of recycling former students into faculty positions. Goldsmith, Brownson, Freed, Speyer, Takeuchi, Danforth, Malcolmson, Brenner joined the school; in fact, virtually the entire IIT architecture faculty was composed of IIT graduates. As the years rolled by, an ever increasing percentage of IIT's graduate students came either from IIT's undergraduate program or from overseas. With the possible exception of the *École des Beaux Arts*, architectural inbreeding has never been more prevalent than at Mies' IIT.

It may be that not since Andrea Palladio has any architect had such a massive influence on successive architects. Throughout the world more buildings carry Mies' stamp than do those by any of his contemporaries. In Chicago alone there are forty-seven buildings by Mies himself, to say nothing of

I remember meeting Herbert Greenwald (a developer) in 1950, when I was twenty years old, and I recall how impressed I was at hearing this ex-rabbinical student tell me that he was more interested in excellence than in profit, thus explaining his commitment to Mies van der Rohe.

the additional two score by his descendant firm. The early reputation of the young, maturing firm of SOM was almost solely based on interpretations (and vulgarizations) of Mies' structural clarity. Such architects and firms as Welton Beckett, Emery Roth, SOM, Howard Barnstone, Craig Ellwood, Edward Killingsworth, Schmidt, Garden and Erickson, and C F Murphy (now Murphy-Jahn) carry a large debt to Mies, without whom their work would not be what it is. Was his pervasive influence the result of form following function, as both residential and office building programs became abstracted? Since there was no semiological imperative to carry the sign of the building as Mies' methods were best suited to carry out such abstractions, it would certainly seem so. Was Mies able to produce elegant, paradigmatic solutions far beyond their intrinsic costs because he understood both the possibilities as well as the limitations of American industrial production in general, and the steel industry in particular? It certainly appears that way. Was he embraced because his buildings bore traces of civility through production that led to an understandable urban fabric, an American urban typology? It definitely seems so. Finally, in an enchantingly simple way, was this not an undemanding anonymous architecture, which all architects might interpret and, depending upon their sensibilities (or commercializing venality), make their own without obvious homage to Mies? One can only infer the truth of this point.

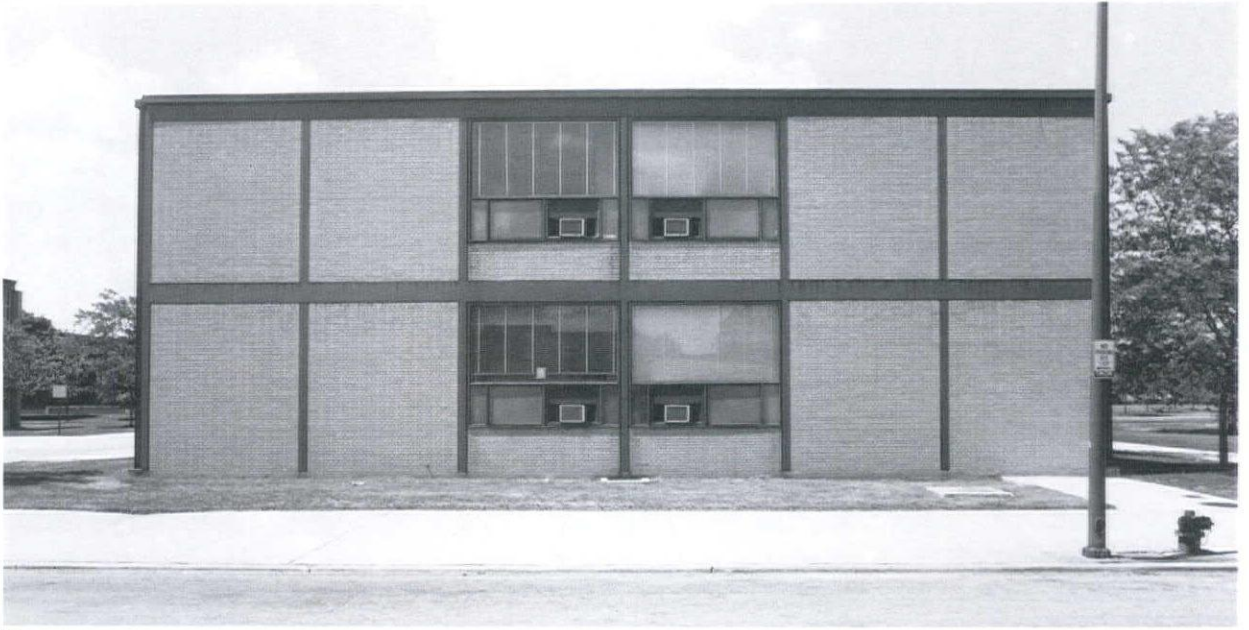
For all of Mies' architecture and its essential capability for apparent emulation, what was really occurring was simulation. Other architects were satisfied with simulating the authenticity present in Mies' work without resorting to the required philosophical rigor that would only make them appear to be too closely connected with Mies and thus subject to increasing accusations of sycophancy. While many architects of the 1950s and 1960s simulated Mies buildings, precious few appeared capable of authentically replicating the essential qualities present in Mies' work. Such elements as proportion, which seemed so exquisite in the Seagram building (fig. 29), seem to show up the lack of authenticity in the earlier fenestration of Lever House directly across Park Avenue (fig. 30). Even the attempt by Schmidt, Gar-



28
Student drawing of two-story row houses with load bearing party walls.

29
Seagram Building, New York City, 1957, Mies van der Rohe





30
Lever House, New York
City, 1952, Skidmore,
Owings and Merrill

31
Alumni Hall, Illinois
Institute of Technology,
Chicago, 1945-1946, Mies
van der Rohe

32
Research Tower, Illinois
Institute of Technology,
Chicago, 1957, Schmidt,
Garden & Erikson



den and Erikson to replicate the beautiful proportion of mullions to spandrels in Alumni Hall (fig. 31) in the research building at IIT seems pedestrian by comparison (fig. 32). No matter how hard others tried, there seemed no way they could match the impeccable sense of ideal proportion with which Mies imbued his buildings. It was as if architects were more interested in interpreting Mies and transforming Mies buildings than in expanding on his language.

And yet in the many transformations that occurred in the quarter-century between the end of the Second World War and Mies' death in 1969, the only buildings that genuinely transformed Mies' ideas about architecture were those few that remained faithful to an aesthetic sensibility derived from structural logic. The most seminal example is Chicago's Civic Center, designed by Jacques Brownson working with C F Murphy. This brilliant structural tour de force seems to transcend Mies only because it is stridently faithful to him (fig. 33). The building's staggering structural clarity (87'-0" spans in one direction!), its proportion, its lucid detailing, and its potent presence in a structurally expressive city make it the preeminent exception to the massive simulation of Mies' work for more than two decades after the war.

126

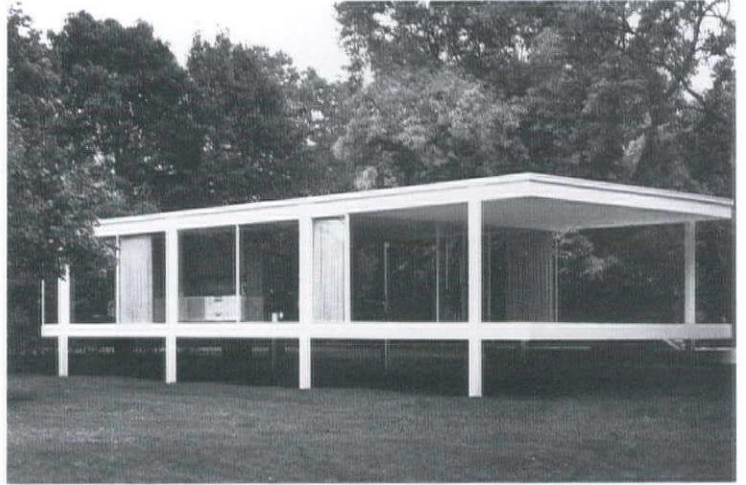
There are, of course, many other neo-Miesian examples, but none so comprehensively transcended or transformed. Each in its own way is flawed. For example, while Philip Johnson's glass house of 1950, in New Canaan, CT (fig. 34), is beautiful in its abstraction, it is precisely because of this (and its lack of clear structural rigor) that it seems to fall far short of Mies' Farnsworth House of 1950 in Plano, IL (fig. 35). David Haid's clunkily proportioned bank of 1977 in Evanston, IL (fig. 36), can be compared to Mies' Social Service building at the University of Chicago in 1965, in Chicago (fig. 37). The Haid bank is unbelievably awkward, whereas Mies' Social Service building is serene in its setting adjacent to Chicago's Midway Plaisance. Similarly, SOM's Chase Manhattan Bank of 1960 in New York, designed by Gordon Bunshaft



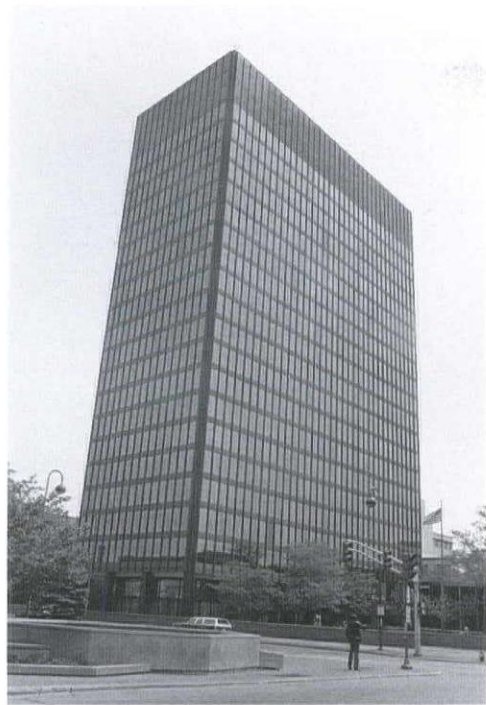
33
Civic Center, Chicago,
1965, C F Murphy



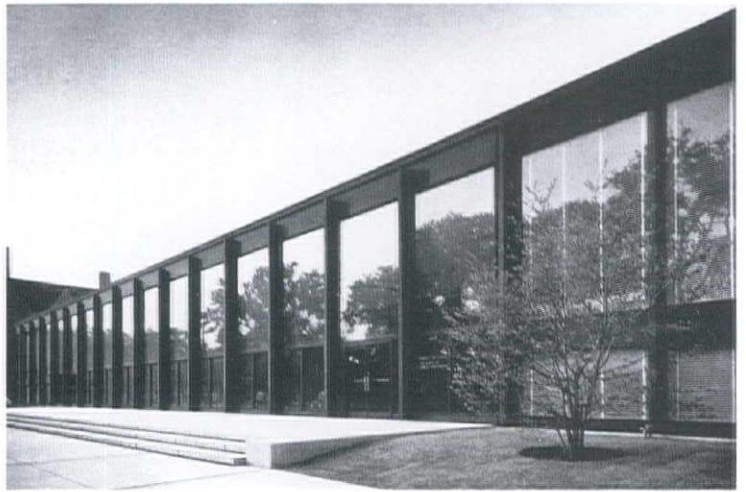
36



37



37
Social Services Building,
University of Chicago,
Chicago, 1965, Mies van
der Rohe



35
Farnsworth House, Plano,
Illinois, 1945-1950, Mies
van der Rohe

36
Bank, Evanston, Illinois,
1977, David Haid



38
Chase Manhattan Bank
Building, New York City
1960, Skidmore, Owings
and Merrill

(fig. 38), is slick without elegance, while Mies's Federal Center Tower of 1964 in Chicago (fig. 39) is majestically elegant.

There is no limit to parallels between what in Mies' hands always seems correct and what in the hands of others generally comes away wanting. This disparity is curious, considering the clarity both of Mies' buildings and his principles. Surely the golden section is as accessible to others as it was to Mies. Surely idealized structures with odd bays, Hellenically derived, are just as available to other architects as they were to Mies. Certainly contemplation and study as methods of design were not exclusive to Mies; presumably they are at the core of all architects' thinking. Practical detailing in an up-to-date technological framework was clearly the spirit of the age. But did Mies alone somehow know what others did not? Did this knowledge give him access to a kind of truth and authenticity denied to others?

How Acolytes Trivialized Mies' (and America's) Optimism

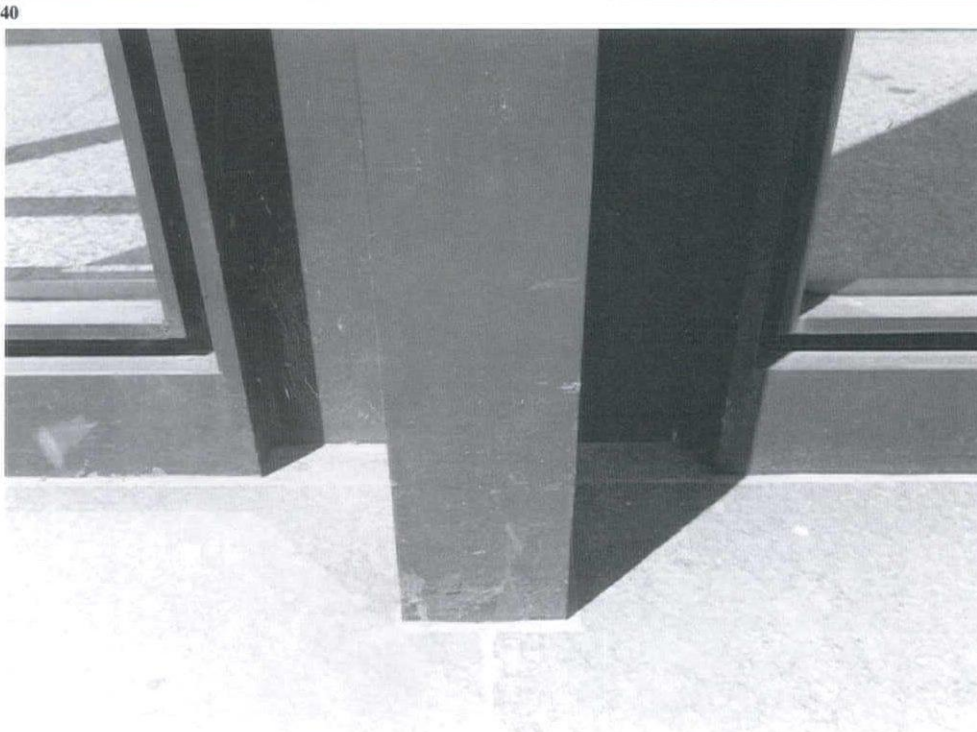
Much of the power of Mies' architecture lies in the essential optimism buried deeply within the Platonic tradition. There is a theory according to which, at the closing of the Bauhaus (and concurrent with Mies' presumed reading of Oswald Spengler's apocalyptic and visionary book, *The Decline of the West*), Mies, in despair, gave up modernism and returned to Schinkel-esque classicism. Nevertheless, his work always embodied optimism as its essential condition of being. It was as if his optimistic search for beauty lay at the root of the renowned contemplative method he employed as he studied his own works in progress. It is said that he would spend hours pondering a full-size model of a structural bay broken into modules of glass divided by steel (or aluminum) mullions; occasionally he might instruct assistants to move something this way or that by as little as a quarter of an inch. It was precisely this kind of reflection that gave his buildings great presence (fig. 40). And it is precisely this personal struggle with architecture that others neglected.

The moral certitude so evident in Mies' epigrammatic statements reflects his search for



39
Federal Center, Chicago,
1964, Mies van der Rohe

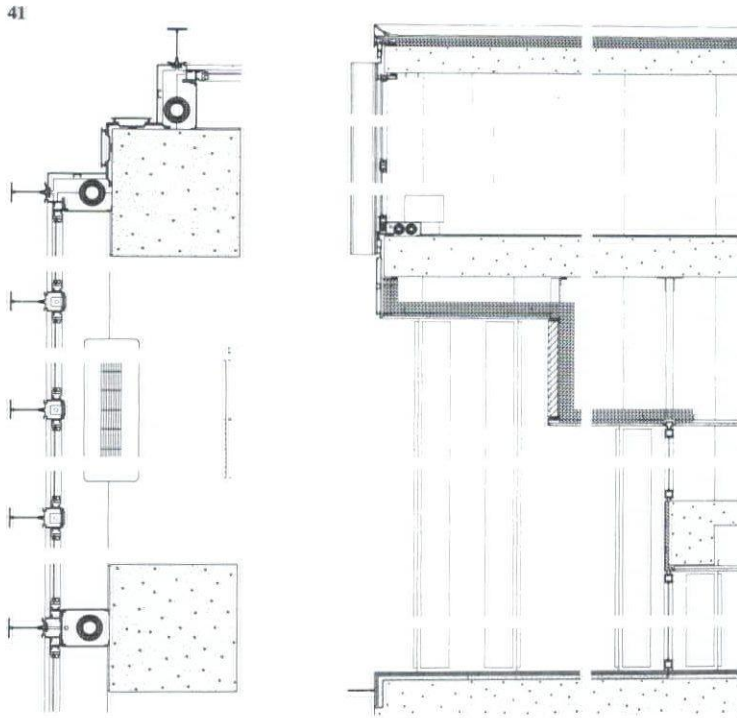
40
Federal Center, Chicago,
1964, detail, Mies van
der Rohe



40

129

I have seen Mies examining a coping detail which a draftsman had asked him about. Predictably, Mies responded, "Yah, I will think about it." Six weeks later I was also there to see Mies finally answer the question. Clearly he had thought about the detail all that time.



130 41
Aluminum-clad corner
columns of Commonwealth
Promenade, Chicago, 1955,
detail, Mies van der Rohe

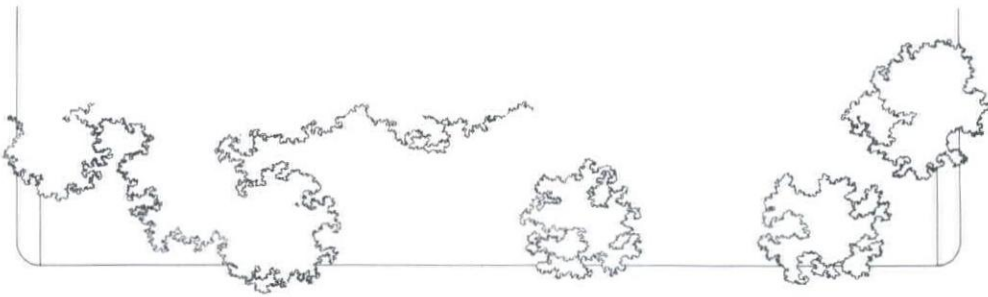
42
Housing Towers, Chicago,
1950, Pace Associates



excellence in his work. Each material that composes each building becomes an element for study. Hellenic in origin, Mies' buildings are both intrinsically and symbolically isolated from their surroundings. That each material is, in turn, detached from every other material suggests that the building details are thought of in microcosm; that is, the building's essence is forcefully and consciously composed of those elements that make it. Therefore "God is in the details."

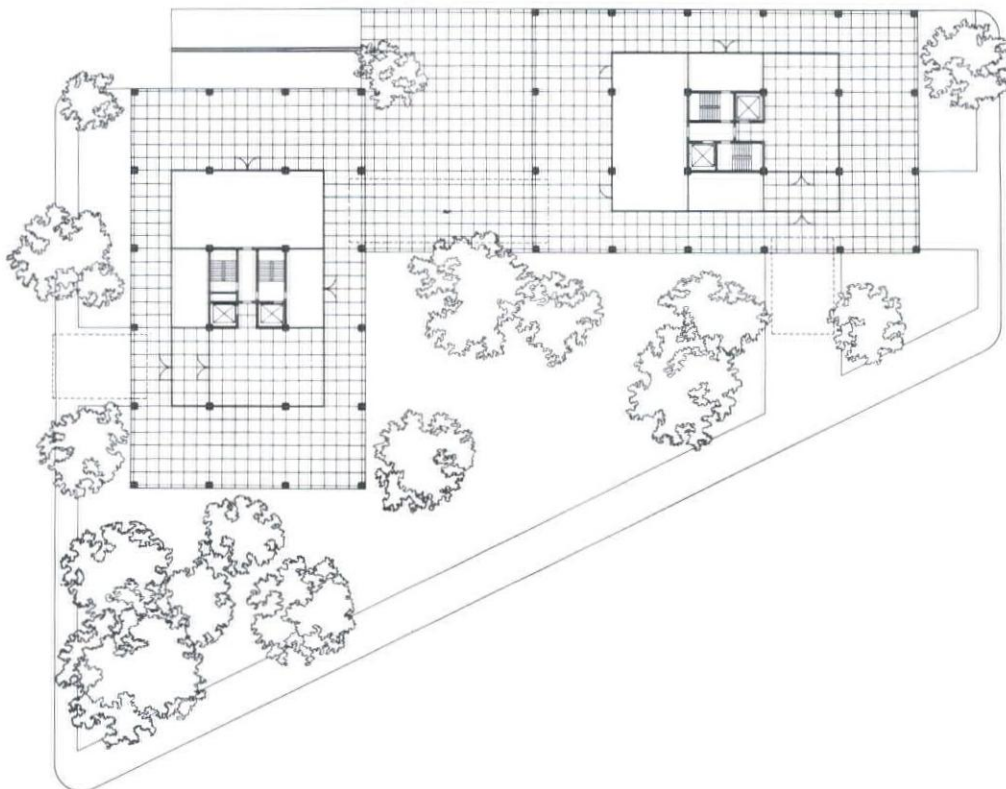
The struggle is intrinsic to the mythic quality of Mies' architecture. The architects who standardized Mies' architecture, never inspired or deterred by myth as they engaged in acts of simulation, were responsible for some of the trivialization that occurred in American architecture during the 1950s and the 1960s. Others believed that Mies' isolation of each material from every other material of a building, dividing it into its essential subsections, was inconvenient and unnecessary. His aluminum-clad corner columns of the twin Chicago apartment towers, "Commonwealth Promenade," of 1955 isolate sections of the three-dimensional column into two-dimensional planes of metal plates separated by an absent center (fig. 41), while Pace Associates' housing towers in Chicago of 1950 simplistically (with economically derived "practicality" in mind) express the three-dimensional column literally — unclad (fig. 42). While the former deconstructs the column into its component two-dimensional parts, based on Mies' interpretation of "the breakup of the box" so evident in his early European work (for example, his brick villa project of 1923 and his projected house for a bachelor of 1924), the latter, unencumbered by either aesthetic concerns or philosophical rigor, simple-mindedly "uses" the column's expression while suggesting an interest in structural clarity.

On a larger scale the suggestion that in a city such as Chicago Mies structures imply both a building typology and an urban typology is based on Mies' understanding of the demands of the Cartesian grid that orders the Chicago street system. His siting of the apartment towers 860 and 880 Lake Shore Drive of 1951, as well as the adjacent towers at 900 and 910 Lake Shore Drive of 1955, disregard Lake Michigan's diagonal edge (fig. 43), being related in parallel and perpendicular juxtapositions to the insistent grid of Chicago's post-1871 plan. Further, each pair of buildings implies a missing element in the corner of each site (fig. 44), resulting from their perpendicular juxtaposition. This site planning stems from a kind of Wrightian antecedent Mies (and other European architects of either De Stijl or Bauhaus persuasion) found so compelling



43
860-880 and 900-910 Lake
Shore Drive, Chicago,
1951-1955, Mies van
der Rohe

44
Site diagram showing
incomplete corner of
860-880 Lake Shore Drive

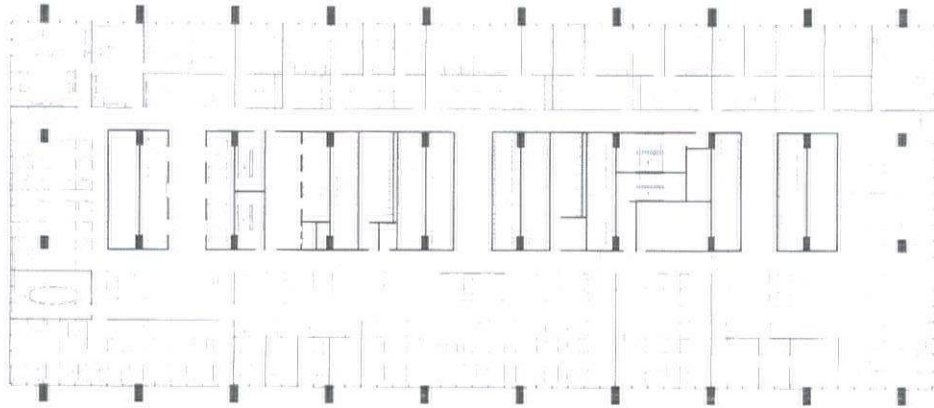




45
Pepsico building, New York
City, 1960, Skidmore,
Owings and Merrill

46
230 West Monroe, Chicago,
1963, Perkins and Will





47
Chase Manhattan Bank
building, New York City,
1960, typical floor plan,
Skidmore, Owings and
Merrill

in Wright's 1910 Wasmuth Exhibition in Berlin. Much of Mies' most interesting work, curiously, is in pairs.⁷ The free-standing characteristic of each pair of buildings suggests a new, strangely intriguing four-sided urban typology absent in the buildings of sycophantic followers. SOM's and Gordon Bunshaft's Pepsico tower of 1960 in New York City has a four-sided equivalency perceived on only two of its sides (fig. 45). Perkins and Will's 230 West Monroe tower of 1963 in Chicago suffers from much the same problem, less brilliantly conceived (fig. 46).

While Mies interpreted a city grid into the three-dimensional matrix of the skeleton frame, others who followed understood the grid more simplistically as capable of absorbing diverse conditions. Thus, while Mies' original intention of dialectically opposing the free-plan apartment subdivision of 860 Lake Shore Drive to its ideal odd-bay structural framework, SOM saw the subdivision of an arbitrary odd-bay structural framework as a "modularization" (fig. 47). Paradigmatic thinking by capitalistically driven acolytes leads, it seems, to trivialization. The worst of American capitalism – the short-term gain of limited flexibility through modularization – removed what possibilities existed for "the spirit of the age" to develop a permanence comparable to Hellenic architecture. That Mies was to be "used" (for profit) as a role model by American architects is one of the unfortunate results of a population too eager to find a paradigm to manifest its conceits. The lack of morality evident in the situation is a reflection of the shallowness of those belief systems that supported victorious America's righteous attitudes after the Second World War. American involvement in Korea, and later in Vietnam, signaled a growing cynicism concomitant with the erosion of both America's and Mies' essential optimism; his work was increasingly standardized, trivialized, and ultimately degraded.

The ultimate misuse of Mies came from the misunderstanding of his intellectualism. His interpreters were far more concerned with the chance to manipulate orthogonal grids to incorporate functional idiosyncrasies than in Mies' essential historical and cultural continuity, which established his authenticity. Interested in expediency, such architects found solace in popular acceptance as technical virtuosity allowed them to superimpose grid upon grid. The philosophical antecedents that guided Mies' concerns appeared insignificant to architects who only saw Mies as a means to greater and greater production. His imitators – or simulators – saw no importance in the moral essence central to the process that inspired his architectural production. Mies' struggle toward achievement through synthesis represented an intrinsically American hybrid sensibility that was lost upon a generation of followers apparently more deeply committed to a capitalistic use of production than to the essential architecture of the language implicit in Mies' architecture.

How Vietnam Changed All That

Tragically, as the 1960s came to a close with America's participation in an unwanted struggle in Vietnam, Mies' usefulness as an architectural paradigm came to an end. It was 1923 when he uttered his optimistic phrase heralding a constructive polemic: "Architecture is the will of an epoch translated into space." Now it came back to haunt him as he neared the end of his life. In the late 1940s Miesian ideas reflected the will of the epoch, as an expression of a desire for cultural coalescence that would lead to a Platonic permanence essential to American intentions. Conversely, the late 1960s provoked a Socratic distancing from a repugnant reality requiring debate and dialogue rather than the perfection implied by the Platonist view of Mies' architecture. It is intellectually unimaginable that Mies' struggle with an unresolved dialectic was overlooked by those now seemingly more interested in architecturally interpreted populist concerns. To equate America's defeat and its fall from grace with a failure of Mies' vocabulary and to substitute new, more pluralistic paradigms useful to the "new revisionism," was to throw out the baby with the bathwater. As American architects returned to the comfort of the

classical language of architecture, they failed to see that Mies' language had every bit as much poignancy.

As the 1960s came to a close and American values came into question, there seemed no need for a zeitgeist mentality in architecture. If Mies was correct that "architecture is the will of an epoch translated into space," then the late 1960s – a time neither of peace nor of American unity – did not need, or indeed want, a singular architectural expression of the age. It was no longer appropriate to synthesize a culture that now thrived on its fragmentation: its unmanageable war, its debates on the virtues of high art versus low art, and its replacement of permanent value systems with fashions and trends – a situation so clearly illustrated by Robert Venturi in *Complexity and Contradiction in Architecture*.⁸

Mies' death in August 1969 coincided with the end of a decade that witnessed the demise of modernist power. His ultimate failure as an architectural paradigm parallels America's failure to recognize its own culture in other than one-dimensional terms. Architects could view Mies as paradigmatic only when American culture was simplistically interpreted to be appropriate in the most simplistic Miesian terms. This situation is an admission of the lack of cultural comprehension by such disciplines as architecture, whose members were ill-equipped by their modernist, Bauhaus-like, technologically based, culturally impoverished education; they therefore missed the point entirely about Mies and his architectural production. It took fifteen years after Mies' death to perceive a larger, more comprehensive picture of what he and his work really meant. The dismissal of both his architectural and cultural significance, now that America is more realistically viewed, is an unnecessary lapse of faith in moral values that were nevertheless continuously, albeit quietly, present in both American architecture as well as American culture.

I, for one, miss Mies. Chicago was a better place, architecturally speaking, when he was alive.

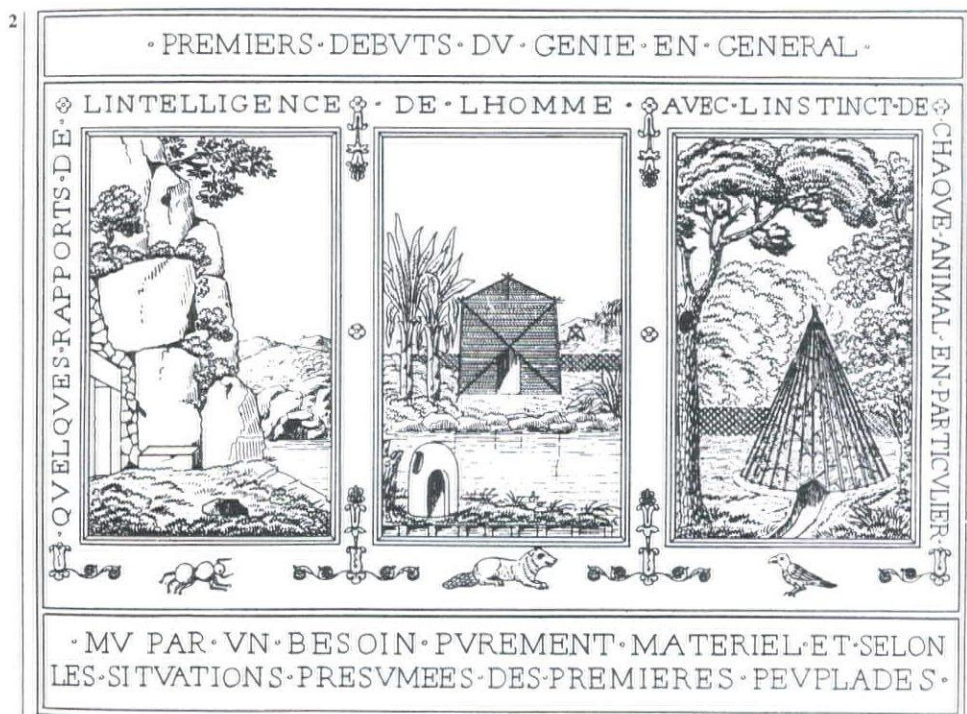
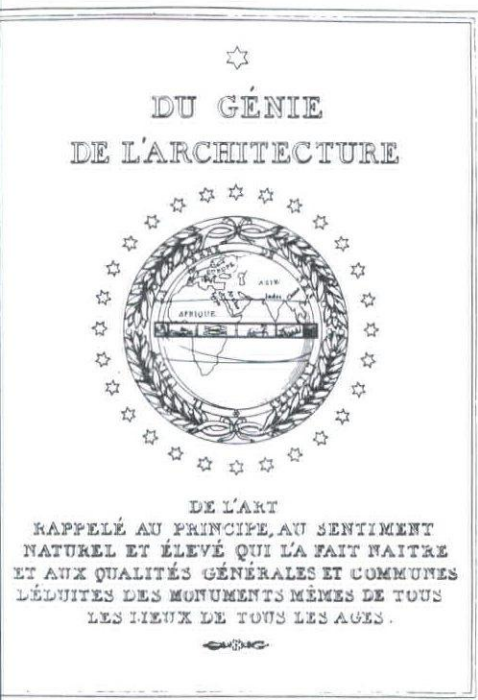
The idea of type, developed in the late eighteenth century as a way of joining a philosophic return to origins to an approved aesthetic norm, became, in the first decades of the nineteenth century, a means of controlling the apparently relentless flow of historical change and transformation.¹ What for Quatremère de Quincy, writing in the late 1780s was an idea of “primitive form” that almost genetically determined the architecture derived from it, was, for the next generation of Romantics, a concept of cultural and stylistic character, embedded in a specific epoch and embodied in a set of equally characteristic building types.² The word *type* was no longer used as a synonym for archetype, root, or first form—the connotations inherited from the Neoplatonic and Biblical tradition—but rather with reference to its Greek etymology from *typos*, meaning “blow,” “mark,” “character of

writing.” “Architecture writes history,” noted the utopian socialist Charles Fourier, and it was as a kind of cultural and social script that the monuments of the past were increasingly interpreted.

Historicizing the idea of type was, in one sense, anticipated by Quatremère de Quincy himself. Forced, as a historian, to account for the very different styles of architecture in different countries emerging outside the classical tradition, he relativized the notion by positing three “types” of three different architectures: the *cave*, or the type of Egyptian temples; the *tent*, or the type of Chinese wooden building; and the *hut*, or the type of Greek—and therefore classical—architecture. Each style inevitably was marked by its original: the Egyptian was doomed from the start to a heavy and cumbersome structural principle that, after the

temple had once been evolved, was without issue; the flimsy and ephemeral nature of oriental works stemmed directly from the temporary qualities of the tent; the abiding and permanent virtues of the Greek temple and its subsequent continuous renewal in the classical tradition were a response to the open and strong type of the hut, as described in Marc-Antoine Laugier’s celebrated paradigm quoted by Quatremère. These types were also joined to the occupations, and therefore the mores, of their builders: the cave to the hunter, the tent to the herdsman, and the hut to the farmer. Thus they represented stages of a civilization in which progress was expressed in the growth of settlements.³

But this kind of historical typology was essentially static, following Montesquieu’s system; it called for a restoration of original



Greek aesthetic values along the lines of Winckelmann’s idealization of the “type of Greek beauty.”⁴ It established a plural root of architecture, only to urge a return to a single root. In this sense Quatremère’s theory, despite its originator’s openness to and wide reading in German philosophers around 1800, was opposed to the new historicism of Herder and his young Romantic followers, who elevated change and transformation, mutability and evolution to the status of historical law and who, in theory at least, called for a relativistic vision by which every epoch and every culture was judged according to its own internal criteria.⁵ In practice, of course, many philosophers and historians simply used this opening to propose as paradigmatic either the Classic or the newly discovered virtues of the Gothic; Goethe himself espoused both in quick succession. But the criteria for historical valuation had been irrevocably changed,

and the potential for new cultures to enter the canon, exhibited by the rise of medievalism, was firmly established.

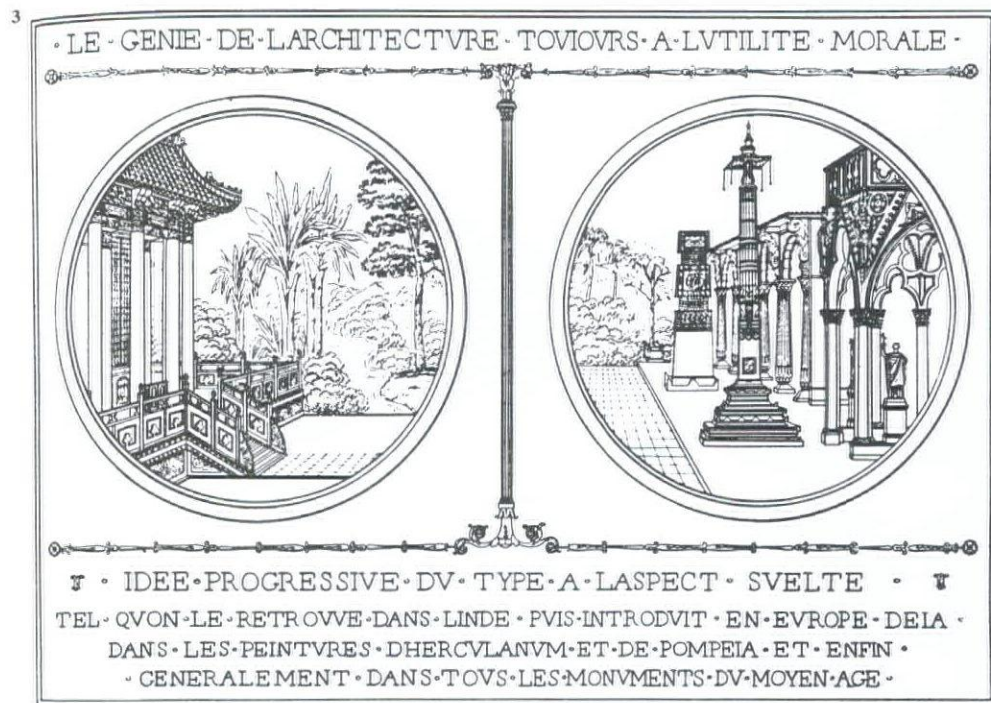
Here the need to supplement the existing idea of type by a more sophisticated notion of language became clear; for each historical culture, viewed as a whole, was represented by an array of types as diverse and as complex as the society it sheltered; and if these types were truly representative of their culture, they must be so many variations, conceived within the same visual language—itsself a part, as Vico and Herder had demonstrated, of the rhetorically expressive apparatus of the civilization as a whole. The differences among the architectures of peoples might then be explained, not by reference to deviance from a single root, but by the special conditions of climate, customs and institutions, races and tribes; these were the conditions that ac-

counted for the great diversity in languages themselves.⁶ The question was not so much about the ways by which one culture had sustained a particular line of development (a question that inevitably led to the suppression of distasteful aspects of that culture), but concerned the special genius of each culture, its type. The question would have to be answered by meticulous deciphering of the signs of architecture in every age, a close reading of monuments like that conducted for the hieroglyphic inscriptions of Egypt and the runic patterns of the Celts. The writing of the walls was as much a part of historical inquiry as was the writing on the walls.

This shift was exemplified in the writings of such minor historians as Saint-Valéry Seheult, whose *Le Génie et les grands secrets de l’architecture historique* was published in 1813, or J A Coussin, whose

Le Génie de l'architecture appeared in 1822, as well as in the fundamental texts of French Romanticism from Chateaubriand to Victor Hugo. Far more than a simple change in emphasis or an arbitrary formalism,⁷ it represented, in fact, a radical overturning of the way in which architecture itself was conceived; its results were felt not only in history and literature but also in design and practice. Since Vitruvius, buildings had been considered assemblages of structural elements, regulated by geometry, and planned according to the needs of different typical programs; they were only secondarily understood to communicate (by applied motifs, choice of Orders, richness of materials) their place and role in society. Now they were understood to be, first and foremost, examples of an art of expression, of emblematic rhetoric. And while historians might argue for such a concept from

methodological premises – what was a building, after all, if it was not a kind of text, to be submitted to all the new techniques of textual verification? – architects, who designed new buildings in which their role as conveyor of messages dominated their function as structure or form, were no longer bound by the proprieties of conventional classicism or the shared assumptions of patronage circles. Rather, they became open to as many historical and individualistic associations and allusions as their subject might justify. What had been a fairly consistent language of architecture was now broken into a veritable Babel of languages or fragments of languages derived from multiple architectures. What had been a discipline of sorts, guided by plan and structure, became subordinated to the free play of facades. The mad experimentation of Jean-Jacques Lequeu, the fantasy of



each society a set of characteristic forms, types that quintessentially embodied the language and comprised its highest form of expression. The surging waves of empires rising and falling, cultures gestating, coming to fruition and decaying, the effects of revolutions and wars, all were the organic backdrop, the continuity of change that, from epoch to epoch, threw up into high relief one or more perfect types, from which might be deduced the nature of the respective society at its most typical. These types displayed, as it were, chronologically in the unending panorama of history were emblematic and formal points of rest and comparison; they stopped history for a moment and allowed it to be examined systematically, like one of Cuvier's skeletons; as Schinkel wrote, they were "the moment where one might make an orderly entry into the unbreakable chain of the universe."¹¹

In this first age of historicism the objects described in this way as types were few in number and entirely predictable; the most important were the pyramids of Egypt, the temples of Greece, the Pantheon in Rome, the Gothic cathedrals. The tenacity of this picture-book vision of the past was astonishing in one respect; repeated by Hugo and Hegel, it remained the dominant schema for historical interpretation into the late nineteenth century, used even by the sophisticated historian Alois Riegl to describe the different kinds of vision coded in each epoch.¹² On another level the number of variations in the description of the "type" was enormous: the cathedral of Chateaubriand was not the same as that of Hugo or of Viollet-le-Duc; Hegel's pyramid served different purposes than did Riegl's; and so on. The stability of the type allowed each successive historian to reinvent its mythical form; the type could therefore take

J M W Gandy (who himself attempted but did not finish a many-volume work on the universal history of architecture) were only two of the most dramatic examples of this tendency.⁸

Some writers were optimistic about this new freedom. Saint Valéry Seheult – who called himself a “history architect” as a painter might call himself a “history painter” – found in the idea of architecture as a language the principle of all true design. First, as he noted, he found it difficult to conceive of the art in any other way:

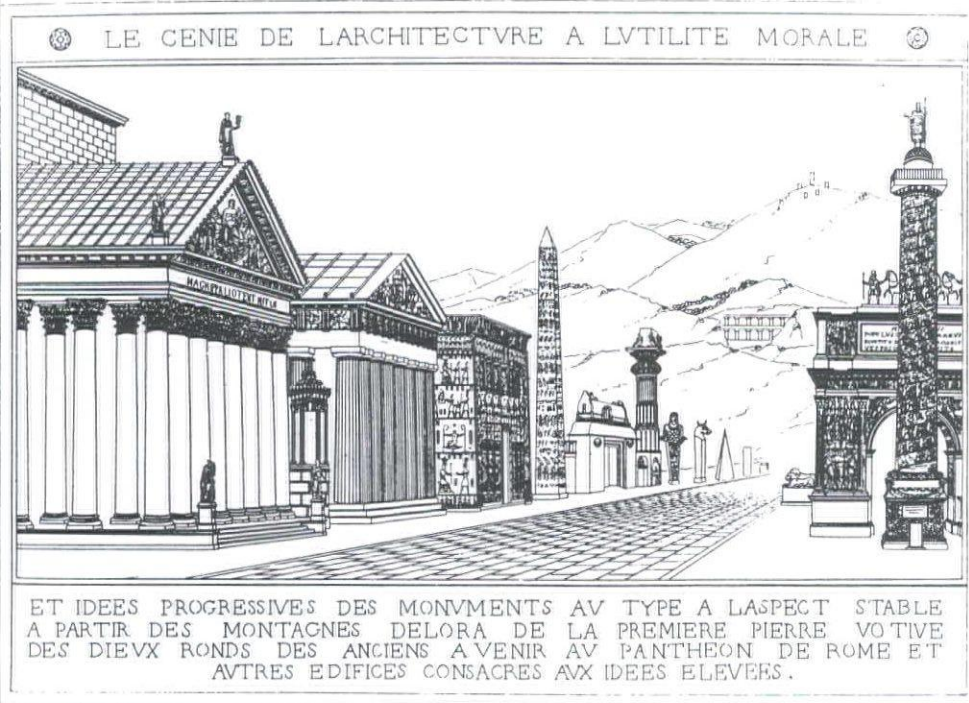
How can one envisage architecture: as a language, an art or a science? A monument, it will be discovered, has a language, since the building must converse with the spectator, indicating to him its underlying aim. A language is the totality of words used by

a nation to express its needs and thoughts by sounds, or by written characters that speak to the eyes. Architecture, expressing feelings and different thoughts by significant characters, is thus a language.⁹

The historian could therefore assume that, from the beginning, buildings were simply variations on the general written and poetic language of their users, and the architect could assume his task to be the creation of an “exterior form that announces the aim of the building” by means of an appropriate language, itself derived from history. The language of architecture, Seheult concluded, has only two possible tenses, the past and the present, the former providing the latter with its words. The future neither could be imagined nor was it a proper object of architecture, the aim of which was to eternalize events that had occurred or were

occurring. Thus trapped within its own history, architecture became an endless play of significations, of words already spoken detached from their original contexts and recombined. The architect appeared to be thrown into an old curiosity shop of remnants and relics, much like the hero of Balzac’s *Peau de chagrin*, where the bewildering pile of objects from all periods awaited, as Balzac observed, its Cuvier to bring some typological order into a collection otherwise meaningless for its antiquity alone.

Thus in the grand historical narratives of Seheult and, later, of Arcisse de Caumont, Charles Nodier, and Hugo, the idea of a cultural language of the monuments was controlled once more, but this time historically, by an idea of type.¹⁰ For these Romantic historiographers there existed in



5



139

on new meanings and offer itself to new purposes.

For in keeping with its original metaphysical definition by Quatremère de Quincy, even for a historian the type need not actually have existed in a particular time or place to be useful; indeed, its quasi-mythical status allowed it to be the repository of unverifiable ideological formulations, at the same time that it provided a vehicle for the historian’s task of *restoration*. Where, in actuality, the day-to-day use of a particular language worked against systematic completeness, since each actual example presented only a fragment of the total expressive powers of a people, the type might be constructed out of the whole didactically and experimentally, so that the entire lexicon of an architecture could be seen grammatically displayed in its proper relationships. The type bound together a

purified set of signs in a naturalized and organicized context, demonstrating that what would otherwise have been intolerably arbitrary was motivated by institutional form. In this way Chateaubriand could build a cathedral out of the primitive forest; Augustus Pugin could construct it with rational stonemasonry; Hugo could raise it from hieroglyphic symbols. Each version of the type, building on its predecessors, gave veracity to a particular vision of the past and instrumentalized its use in the present.

But not all were hopeful that the proliferation of styles could be in the present controlled by an active theory of type. Taking Seheult literally when he declared that architecture possessed no future tense, Hugo concluded that “architecture, alone among all the arts, has no future.” In this perspective the historical buildings of France assumed the urgent value of irre-

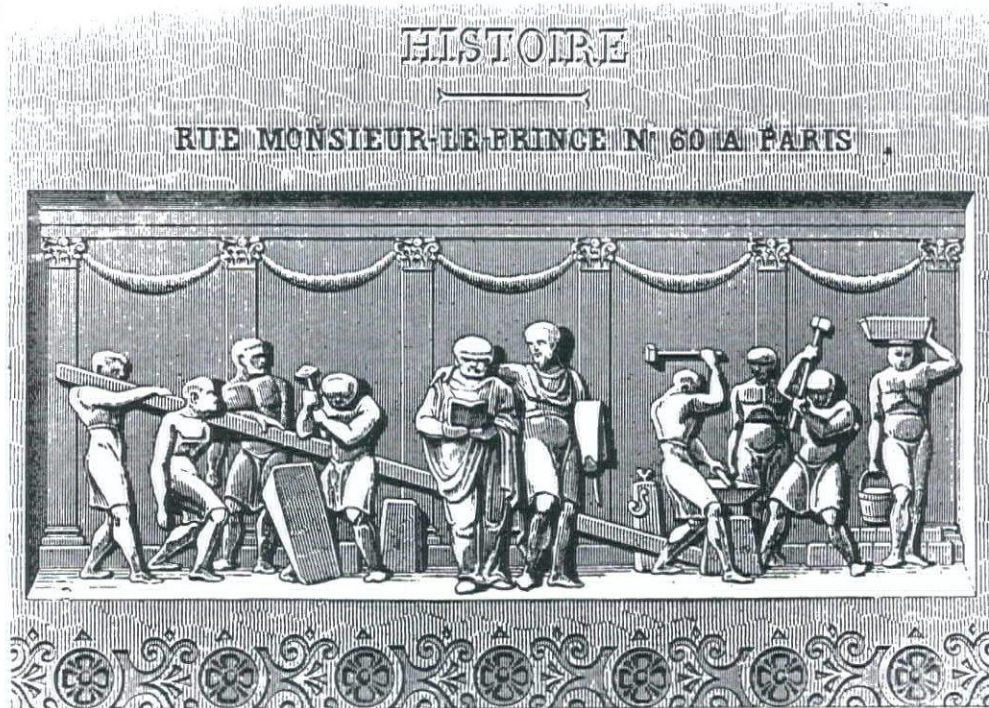
trievable and rapidly disappearing museum specimens; the architect should become the “architect-restorer” whose careful science would no longer demolish or vandalize but would judiciously and sensitively repair.¹³ For this task he needed a deep insight into the nature of past buildings, their “character, according to each century and each climate”; in *Notre-Dame de Paris* Hugo provided the didactic complement to his manifestos, declaring “War on the Demolishers” in the form of a close reading of historic, and especially of Gothic, architecture. As he pointed out in the Preface to the definitive edition of 1832, an aesthetic and philosophical treatise on the history and interpretation of architecture underlay the narrative of the Romantic novel.¹⁴ Even as in earlier historical narratives the flow of history was interrupted by the emergence of described types, so in *Notre-Dame* theoretical chapters erupted into the story: one on

Notre-Dame itself, one on a panoramic view of Paris and its typical monuments, one on the hermetic art of interpretation, and one, the most celebrated, condensing the history of architecture conceived as a form of script.

With cutting irony Hugo raised all the commonplaces of character and type repeated in the Académie des Beaux Arts and codified in the three volumes of Quatremère's *Encyclopédie méthodique* between 1788 and 1825; they found their fulfillment not in neoclassical or modern buildings, but in the Middle Ages. As he noted in the idealist description of a medieval Spanish town that serves as a preface to *Les Orientales*, all the buildings there "carry their purpose written in their architecture." Repeating almost by rote the academic maxim in the context of his criticism of the new Bourse, Hugo stated

that "it is the rule that the architecture of a building should be adapted to its purpose in such a way that this purpose is proclaimed by the appearance of the building alone"; measured by such criteria, Alexandre-Théodore Brongniart's classical arcades could, Hugo thought, shelter "indiscriminately, a royal palace, a House of Commons, a town hall, a college, a riding school, an academy, a warehouse, a law-courts, a museum, a barracks, a tomb, a temple, a theater." And if a building should also be constructed with regard to the climate, then the Bourse failed again, with its flat roof appropriate for the Orient. Finally Hugo derided the choice of style, which gave the Bourse of France the form of a Greek temple: Hugo envisaged the stockbrokers and the "courtiers of commerce" beneath the colonnade which surrounds the monument, developing their philosophical theories during religious feast

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140

guage. Columns, walls, even plans and the massing of entire buildings were read as more or less elaborate ciphers, their embedded meaning more important than their structure or function. Further, each stage of linguistic development was revealed as somehow inadequate; the developing complexity of social thought demanded, as a historical principle, ever-changing forms of expression.¹⁶ No sooner was a type established than it was immediately undermined from within by an expanding culture that worked to break the constraints on speech set by an earlier form. Letters were placed side by side to make words, words massed to form sentences, sentences grew into books. Each type was obsolete, so to speak, the moment it was perceived as typical. Even Notre-Dame, the center of the work, was, Hugo stated, "not a type." Standing between the Romanesque and the Gothic, it represented a moment not of full flowering but of transition. As such, it stood, em-

blematically, for the theme of the book. Architecture, its theory drawn from the irrefutable evidence of cultural revolutions and social change, could never, in Hugo's terms, regain its ancient status. As a language, its meanings were lost; as a repertoire of types, it had failed to keep up with historical change. Yet Hugo was concerned that he not be misunderstood; both in *Notre-Dame* and in his 1832 Preface he left an opening for the contemporary architect; but it was a possibility without false hopes or misplaced theoretical application. Modern architecture, "if it was to be revived again by accident," would have to recognize its changed cultural position, and "submit to the law of literature." What he meant by this enigmatic statement — more satisfying in its rhetorical symmetry than in its implications for architecture — is not entirely clear; certainly none of the attempts to produce an *architecture parlante* since the late eighteenth century met with his approval, even

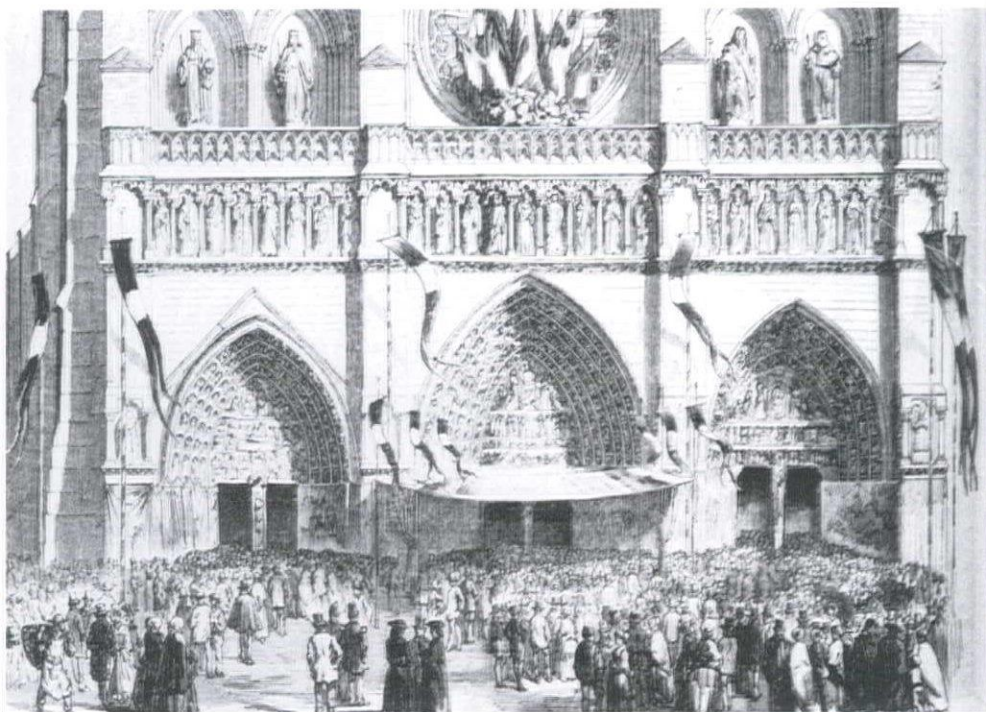
days.¹⁵ The poverty of architectural signification, the lack of regard to individual typification, and the natural conditions of the place, and the banalization of secular life, all worked to the conclusion that architecture was dead.

Hugo's obituary for architecture was supported by more than his scorn for contemporary architects, however; it was justified and explained by history itself. For if the political and social history of civilizations were calibrated with the history of visual expression, of writing, it became evident that at a certain moment architecture, which from the earliest times had served to memorialize and teach by means of signs and symbols, had lost its primary place as the social "book," only to be usurped by the book, now rendered ubiquitous by the technique of printing. From the time of

Gutenberg, architecture had suffered a progressive loss of cultural power and significant form in proportion to the implacable ascendancy of the book, which, "second tower of Babel," had found its popular audience and political role in the nineteenth century. This ringing conclusion of the chapter "Ceci tuera cela" gave the lie to any assumed nostalgia for the Middle Ages on Hugo's part; architecture was definitively a prisoner of history; it might be repaired and restored, but it could never be revived. It is significant that, by his choice of "1482" as the book's subtitle, Hugo put all those who wished to read *Notre-Dame* in the spirit of nostalgic antiquarianism pervading the novels of Scott on notice that such withdrawal from contemporary issues was impossible. The year 1482 saw the publication of the first printed Bibles, which once and for all rendered medieval

Paris a museological specimen; it was the year when all previous books of stone were returned to their own past, there to remain as witnesses to an epoch already dead, to be laboriously deciphered, even as Claude Frolo tried to unravel the lost hieroglyphic meaning of Notre-Dame itself.

And if the history of writing thus ordained the demise of architecture, the history of architecture as script threatened to unsettle the history of architecture as type. The architectural types cited by Hugo, from the standing stones of Carnac in Brittany through the pyramids and Solomon's Temple to the cathedrals, were no longer conceived, as they had been by the generation of Jean-Nicolas-Louis Durand, as structures and forms corresponding to the religious and secular programs of institutions; they now appeared as stages in the evolution of lan-



1 Title page from J A Coussin, *Le Genie de l'architecture*, Paris, 1822

2 "The Beginnings of Architecture," from J A Coussin, *Le Genie de l'architecture*, Paris, 1822

3 "The Development of Gothic Architecture from the Orient," from J A Coussin, *Le Genie de l'architecture*, Paris, 1822

4 "The Road of Architectural Development," from J A Coussin, *Le Genie de l'architecture*, Paris, 1822

5 Title page by H Labrouste for the *Revue Générale de l'architecture et des travaux publics*, edited by César Daly, 1839

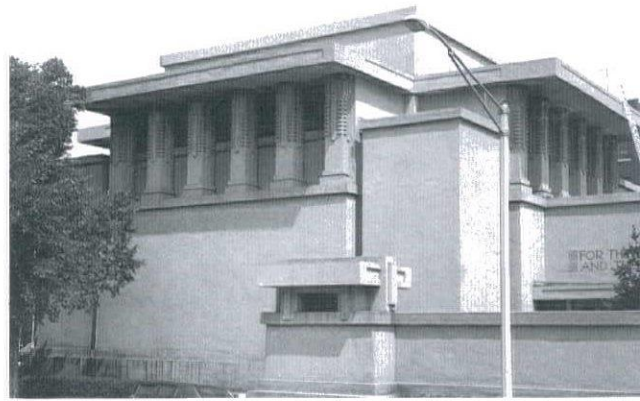
6 Detail from Title page showing the Architect leaning on the shoulders of the Philosopher, by H Labrouste for the *Revue Générale de l'architecture et des travaux publics*, edited by César Daly, 1839

7 Notre-Dame de Paris during the Fête de Libération of 1830, from E Texier, *Tableaux de Paris*, Paris, 1852-1853

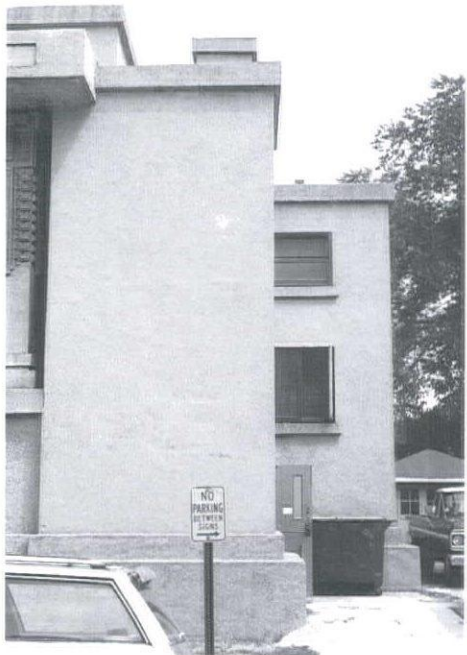
though, read historically, they were adduced to prove his point. Perhaps, as has been remarked, the libraries of Henri Labrouste, and especially the Bibliothèque Sainte-Geneviève, might be seen to carry Hugo's burden, with walls literally inscribed with the names of authors, as if the building had taken on the form of a giant catalogue.¹⁷ That Labrouste himself understood the implications of *Notre-Dame* was clear; the frontispiece he designed for Cesar Daly's *Revue générale de l'architecture et des travaux publics*, significantly enough in the shape of a tombstone shows in the bas-relief drawn beneath the list of subjects into which the old art has been divided the figure of the architect standing somewhat uncertainly beside a philosopher reading a book; it is toward the reader that the designer looks, and not to the team of silent builders, now reduced from craftsmen to workers, who carry out their assigned tasks at the rear.

Such utopian socialists as Victor Considérant and such modernists as Tony Garnier and Le Corbusier were to dispute Hugo's conclusions with attempts to revive the idea of typology, inventing a repertoire of types to fit industrial society; but they worked, paradoxically, within the terms set down by Hugo, reducing architecture to its "bony skeleton," its "geometrical form," and basing its expressive character on the structure and shape of the functional type. Post-modernists have also disputed the irrevocable judgment of the Romantic author. They have tried to return to a measure of meaning by evoking the languages of the past in more and more colorful combinations; but in following, more or less consciously, the theories of significant elements laid out by semiology, they have generally fallen again into the trap described by Hugo: the fragmentation of once whole languages—the isolation of specific motifs that are, in this sense, simply repre-

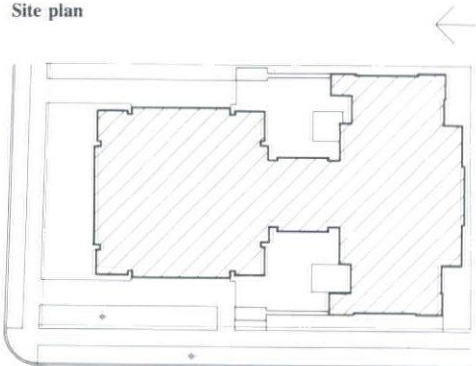
sentative of loss—has been achieved at the expense of any typological structure. More often than not, the application of these caricatured emblems of history has served only to accentuate their reduced poverty, hung as they are on the thin-sided boxes that enclose contemporary postindustrial culture. From this we may conclude, not that the late twentieth century presents historical conditions exactly similar to the early nineteenth, but that the architectural ideology that conceives of design as divided between type and style, structure and language has demonstrated enormous staying power, even in the face of cultural critics who, like Hugo, have attempted to show that the life of a language is dependent on the way in which it works at once to constitute and to subvert a type; that the one without the other is only a partial means of expression; that considered apart, both languages and types are so many dead historical forms.

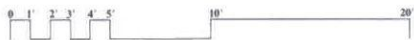
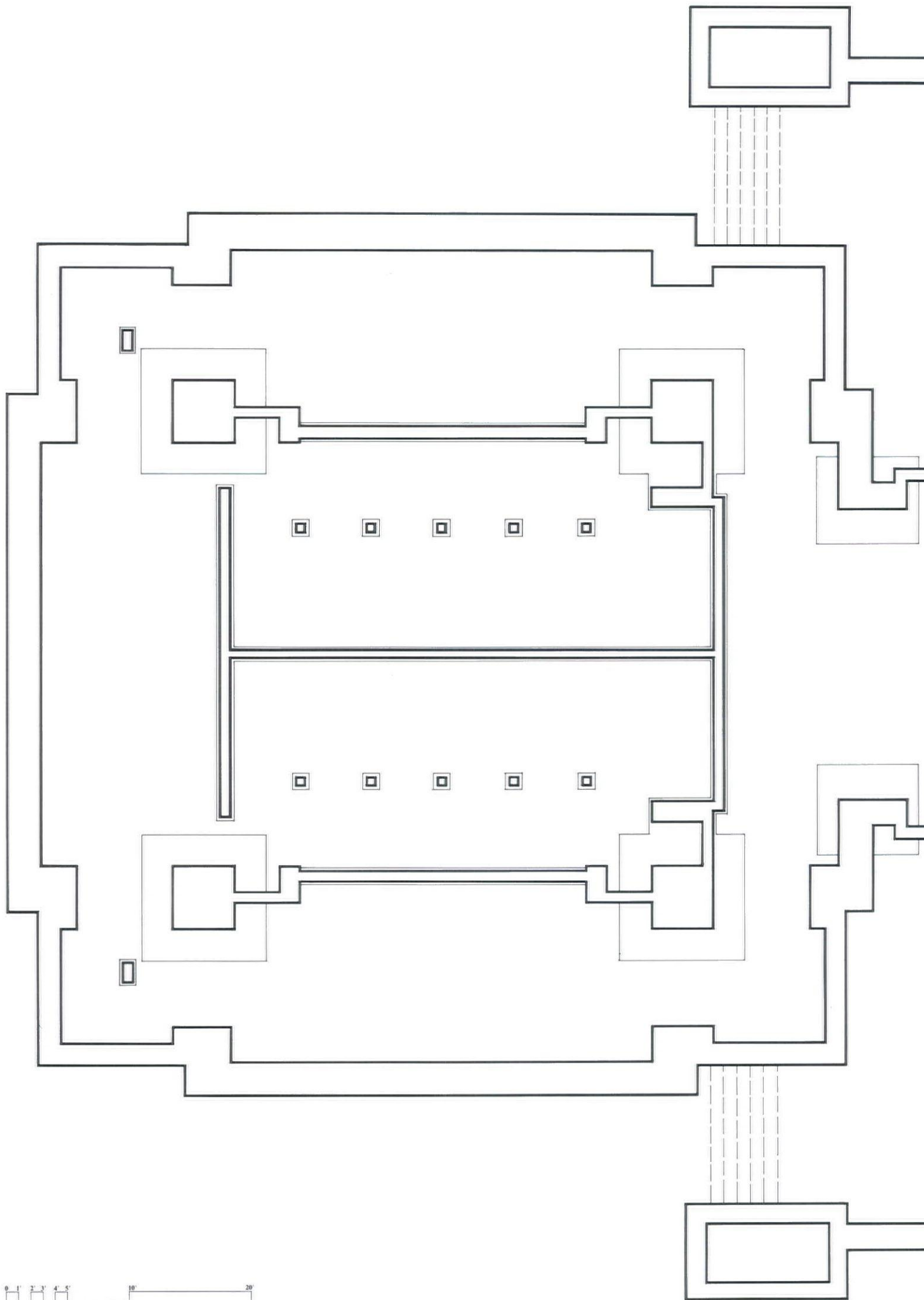


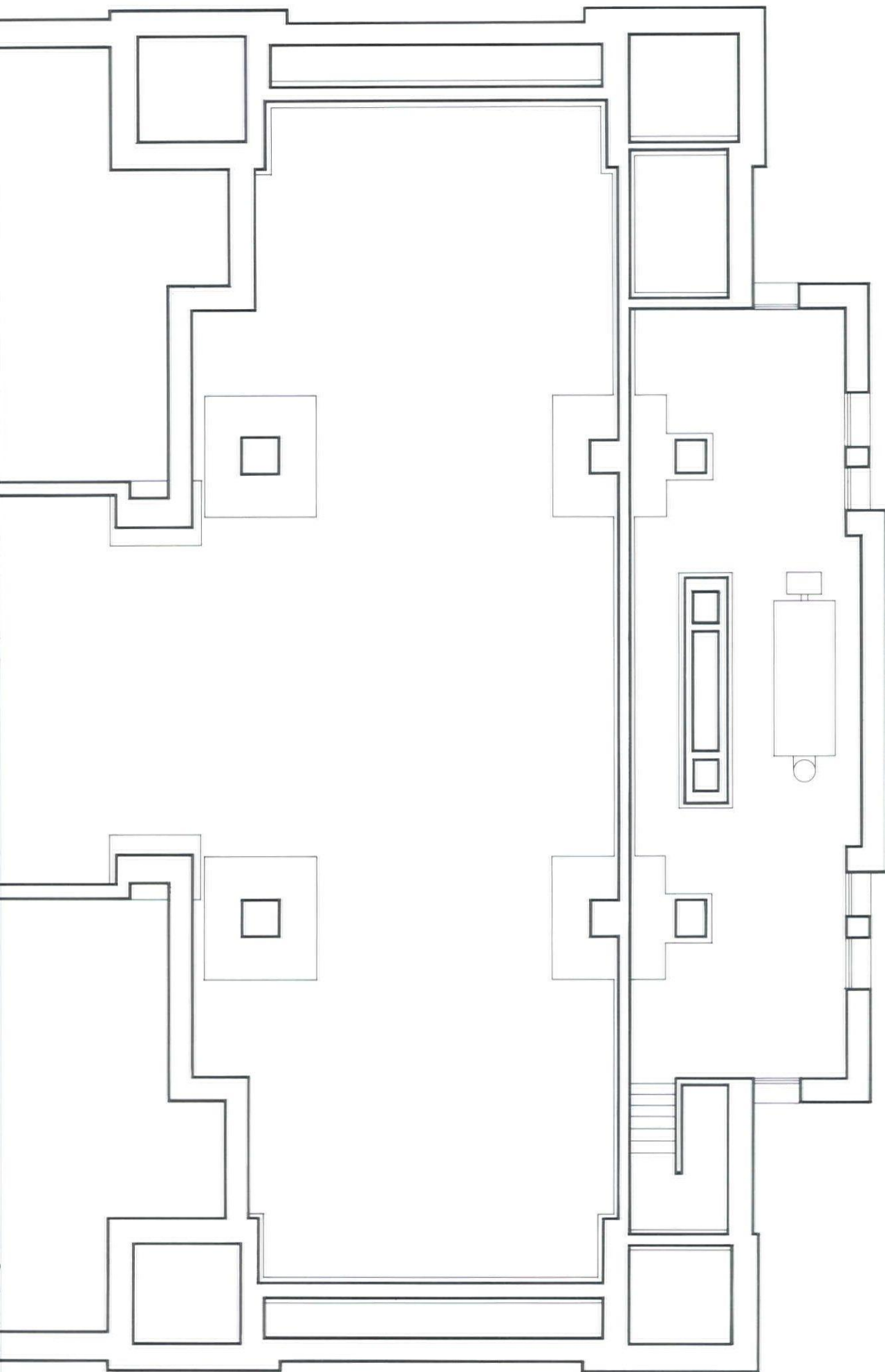
These drawings of Unity Temple are the result of our desire to document an American building which, over the years, has been much admired yet never fully made available to students of architecture. A series of visits to Oak Park and subsequent periods of drafting both in New Haven and New York, produced this collection of drawings. It is our hope that they will reveal the richness and quality we found in the building.

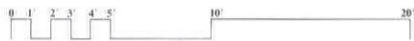
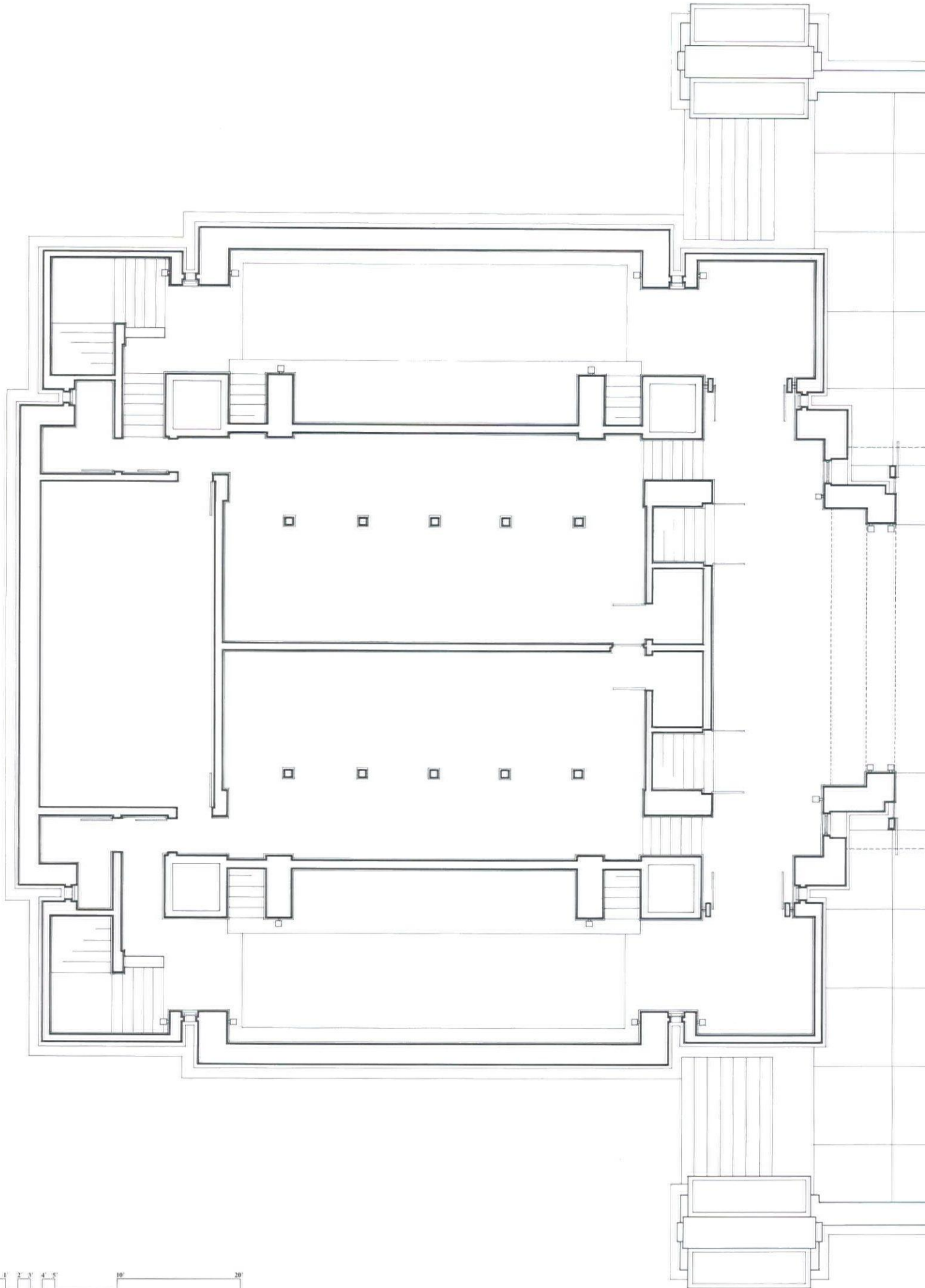


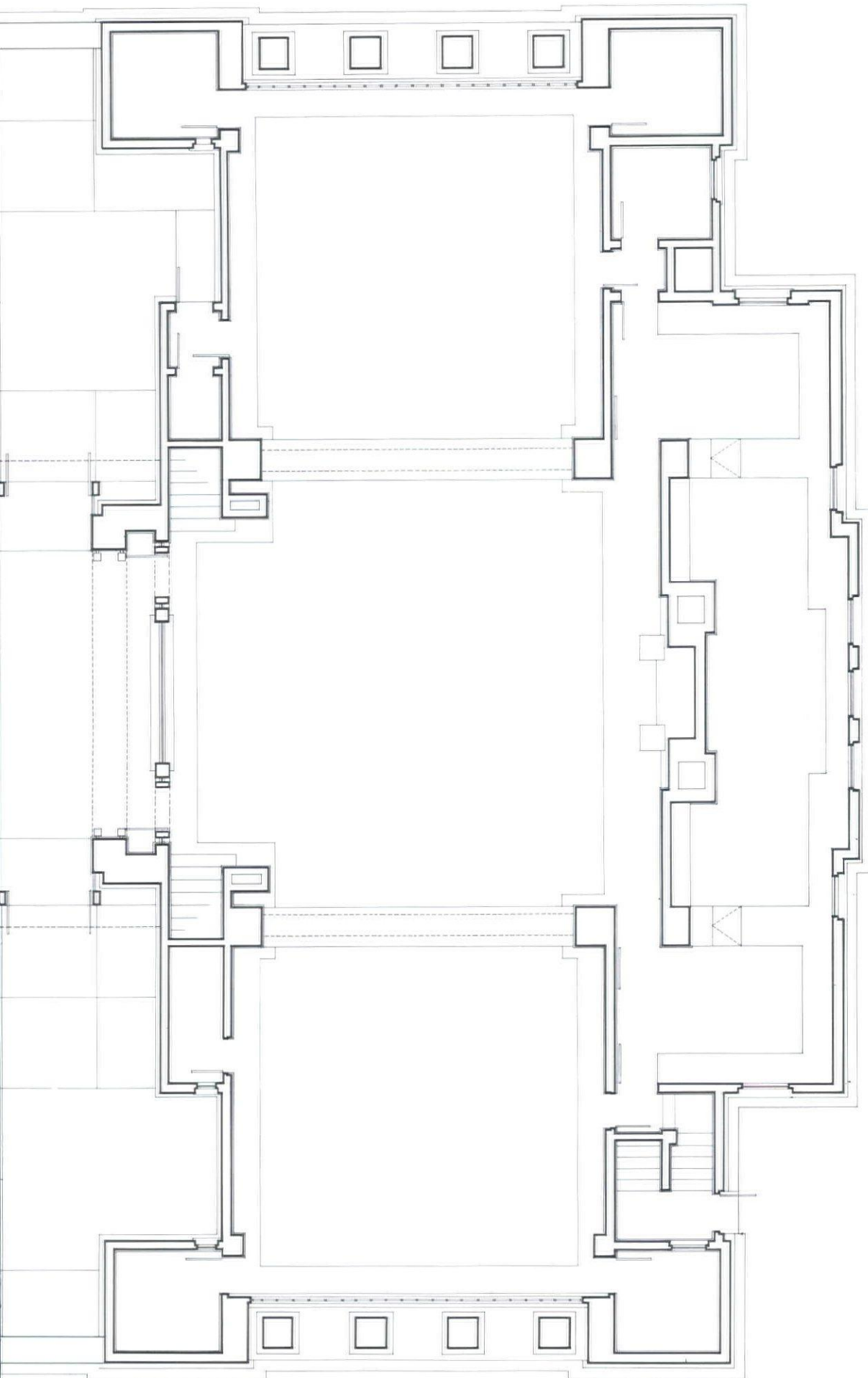
Site plan



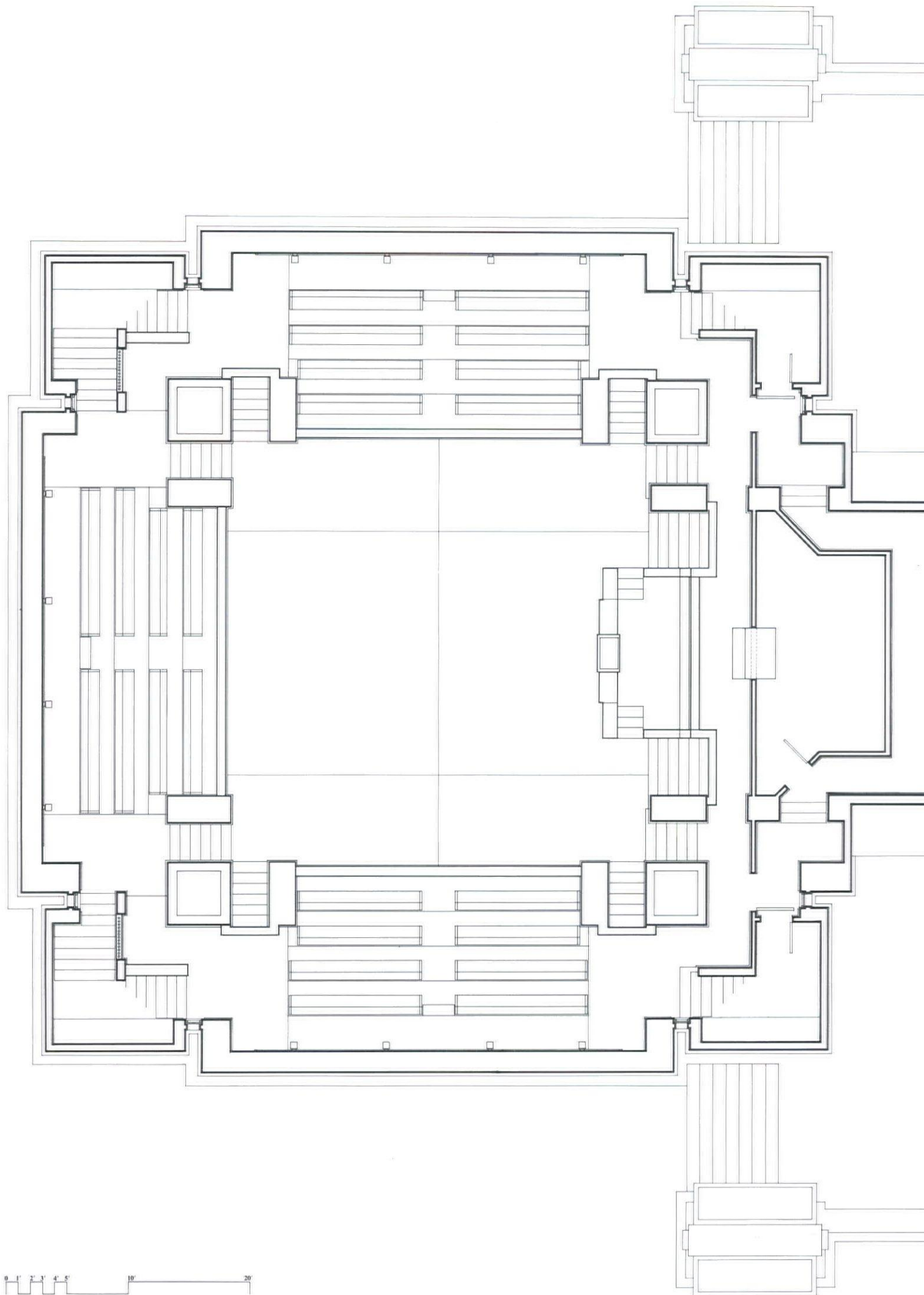


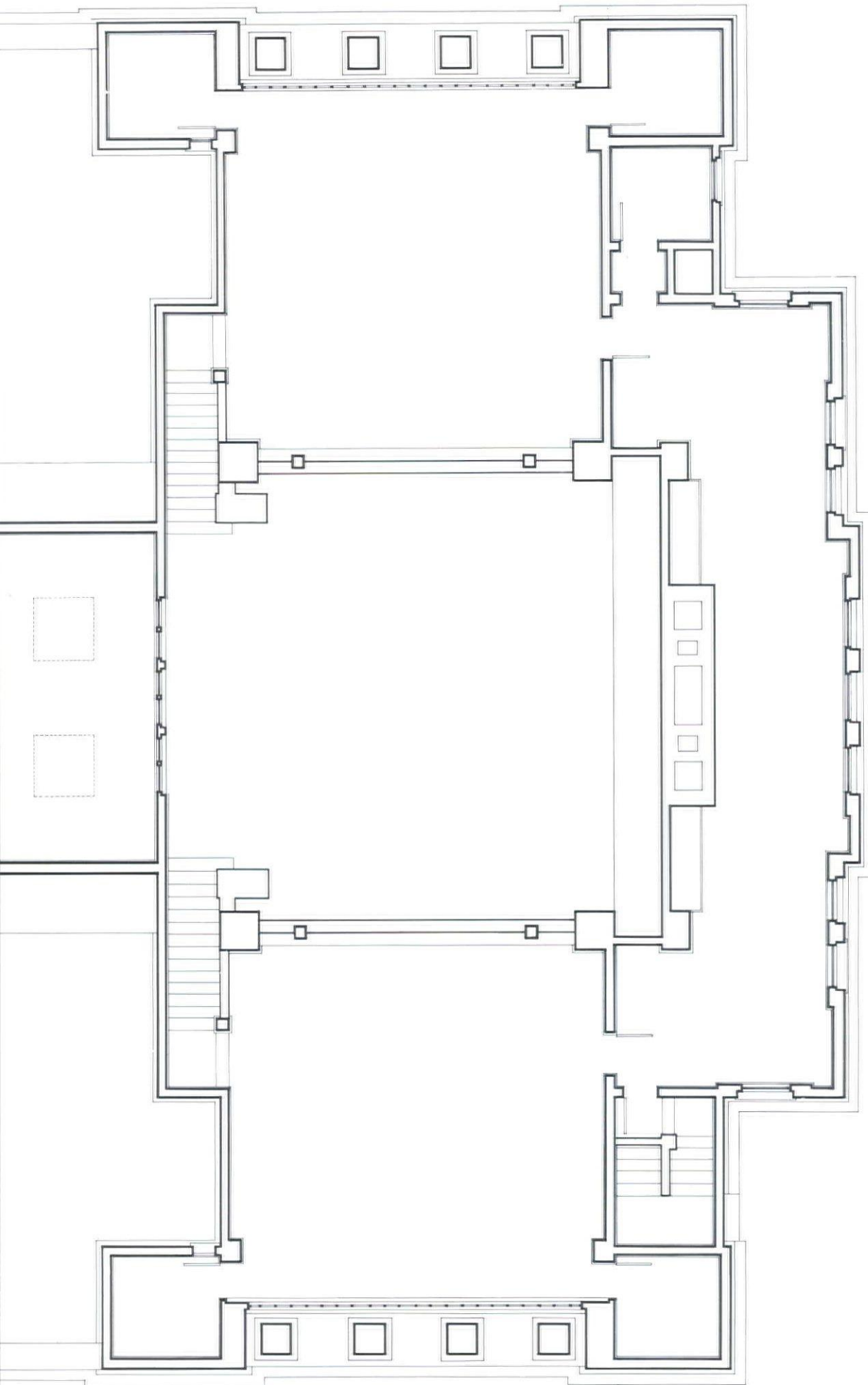




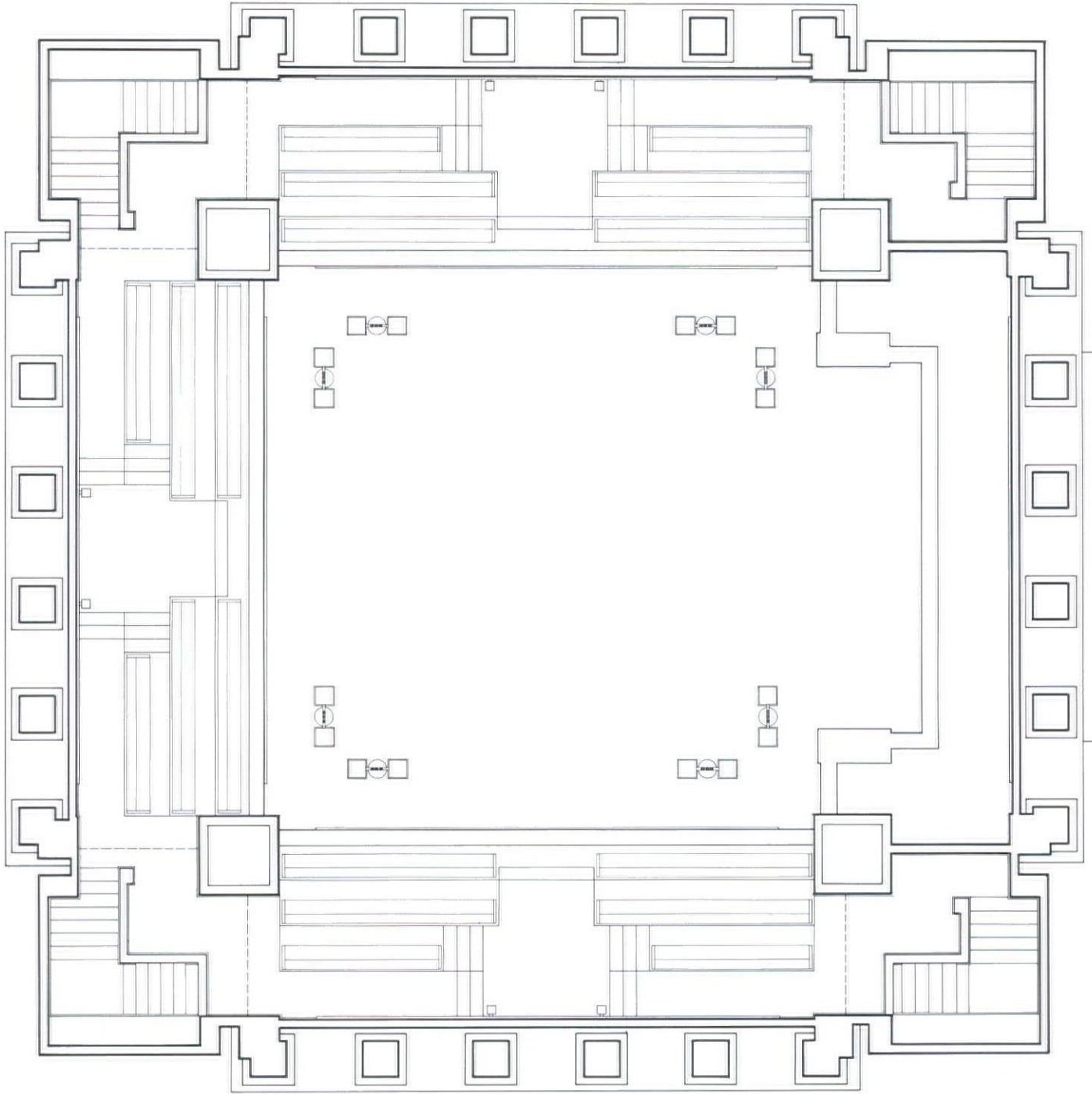


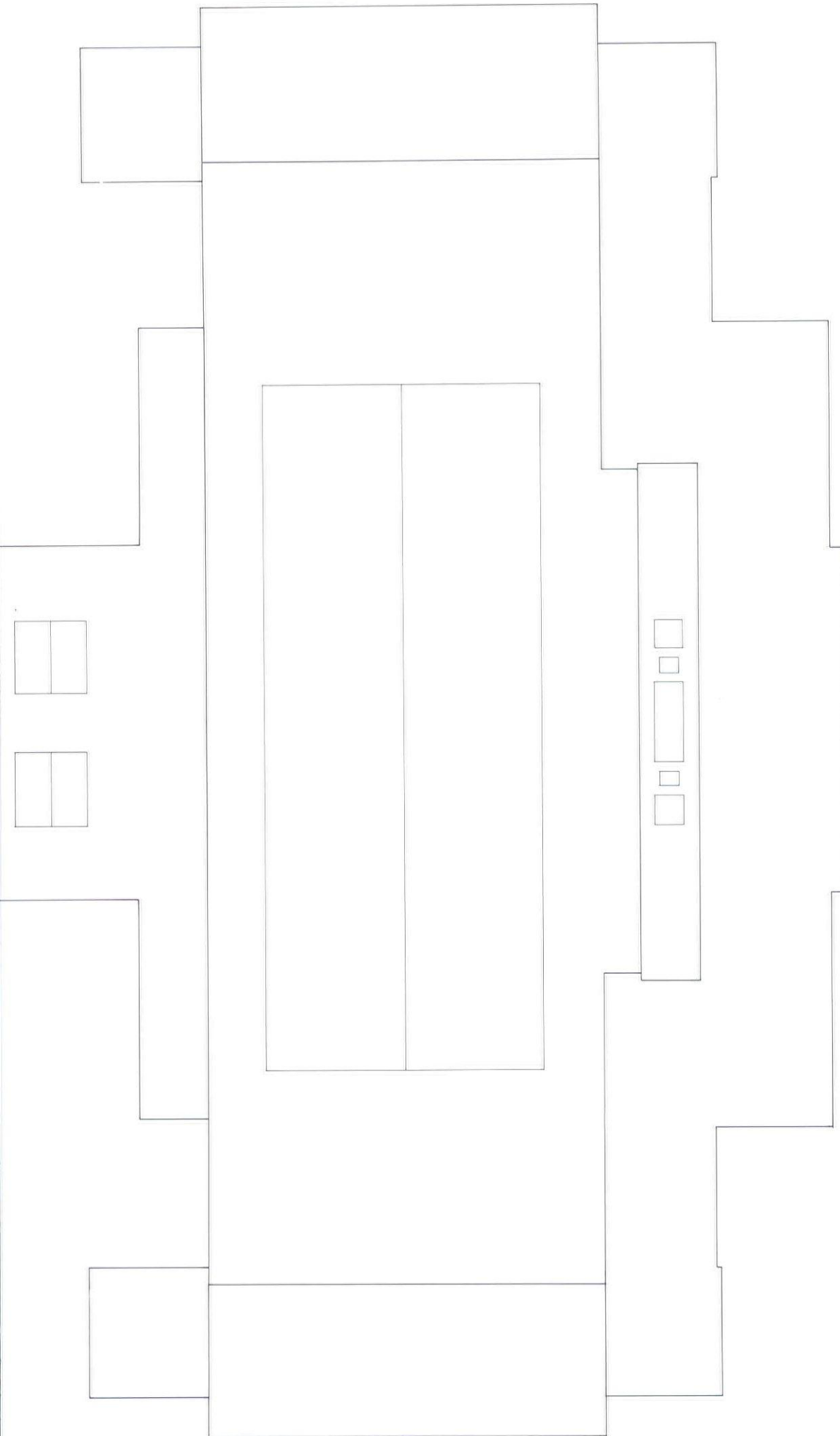
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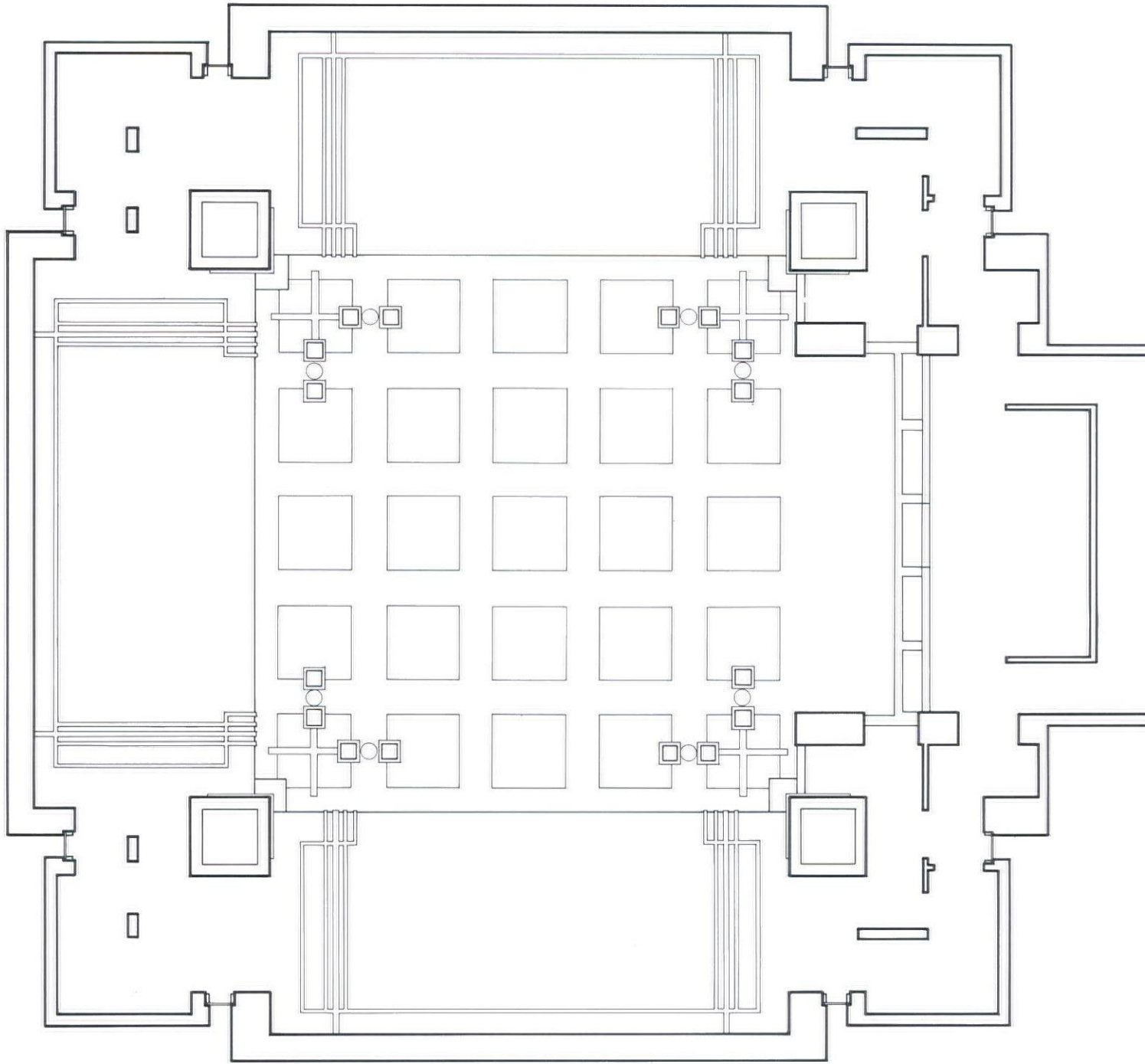


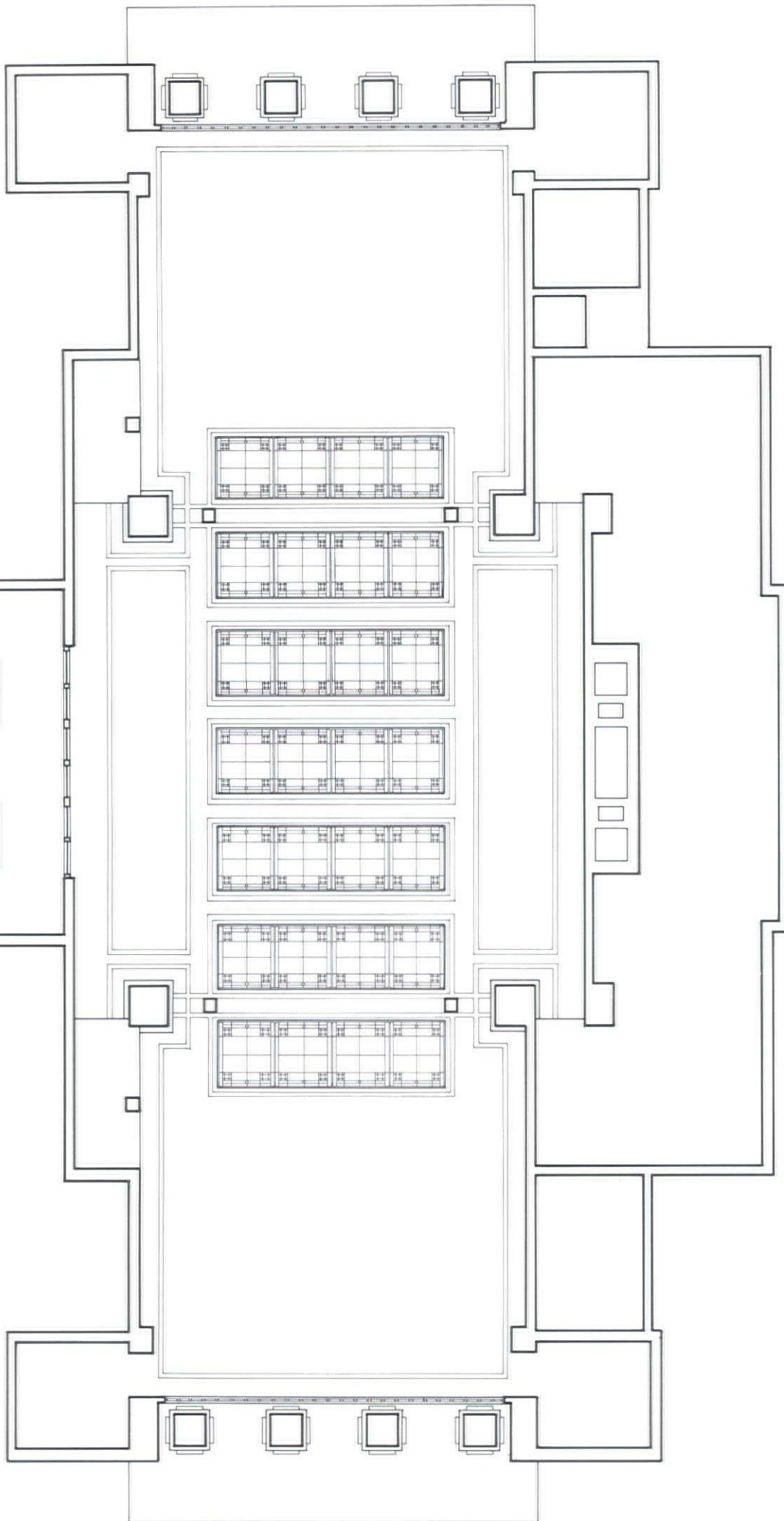


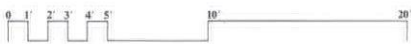
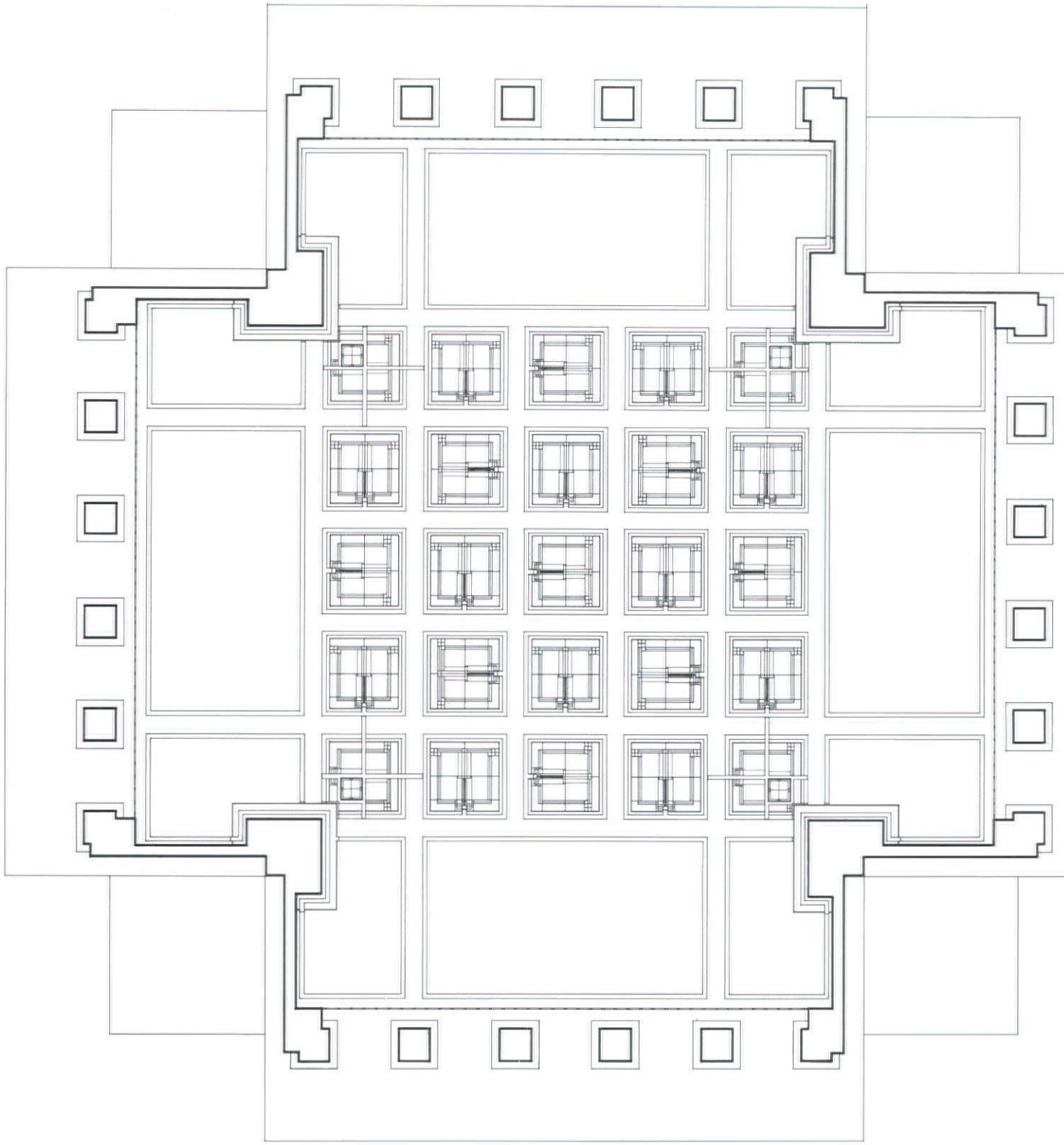
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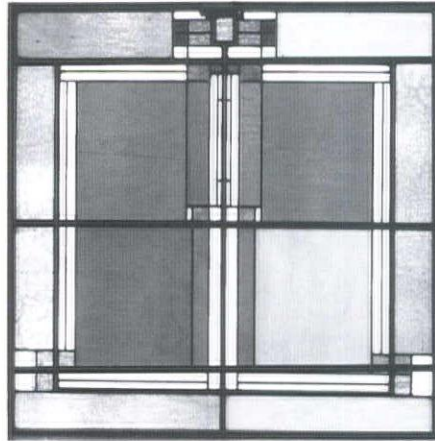




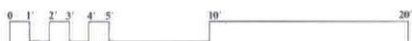
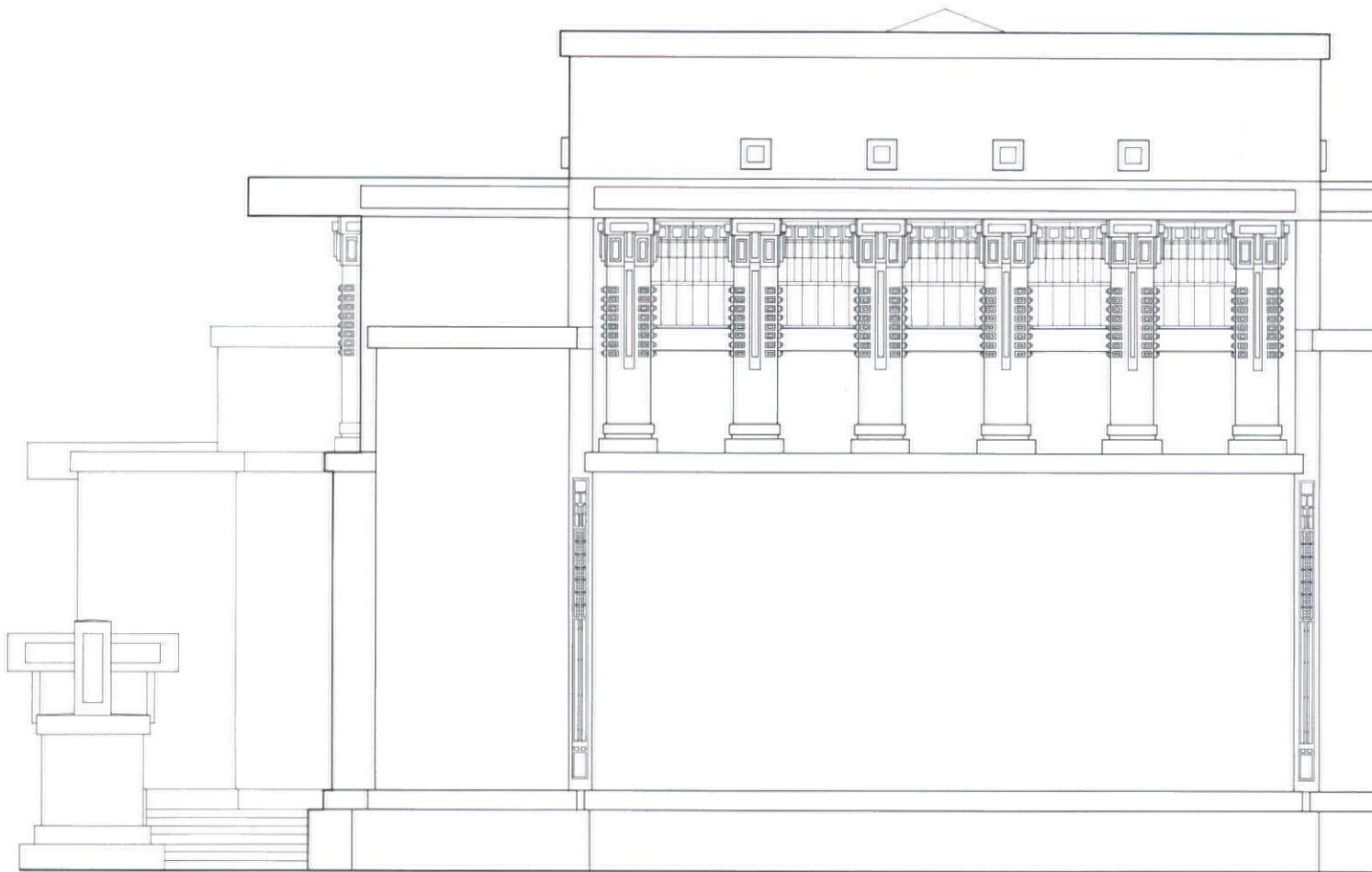


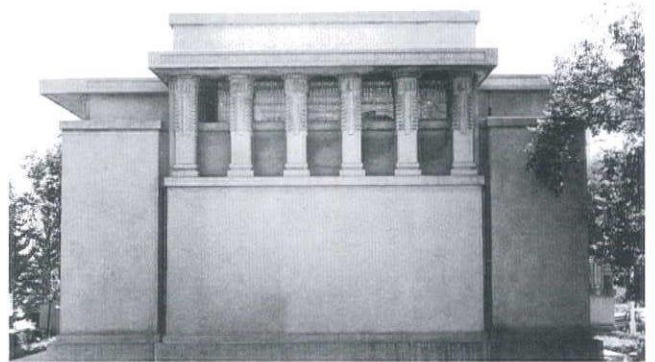
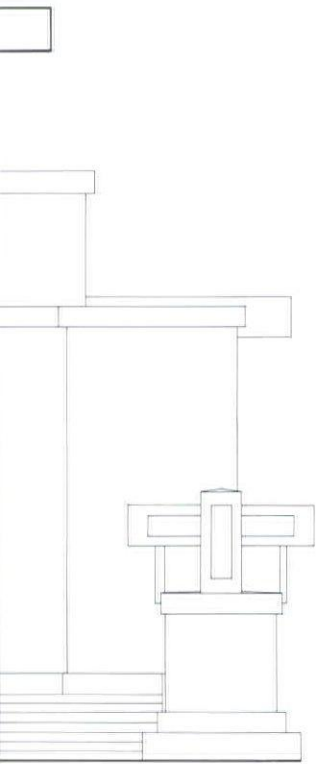


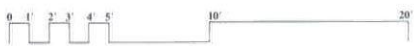
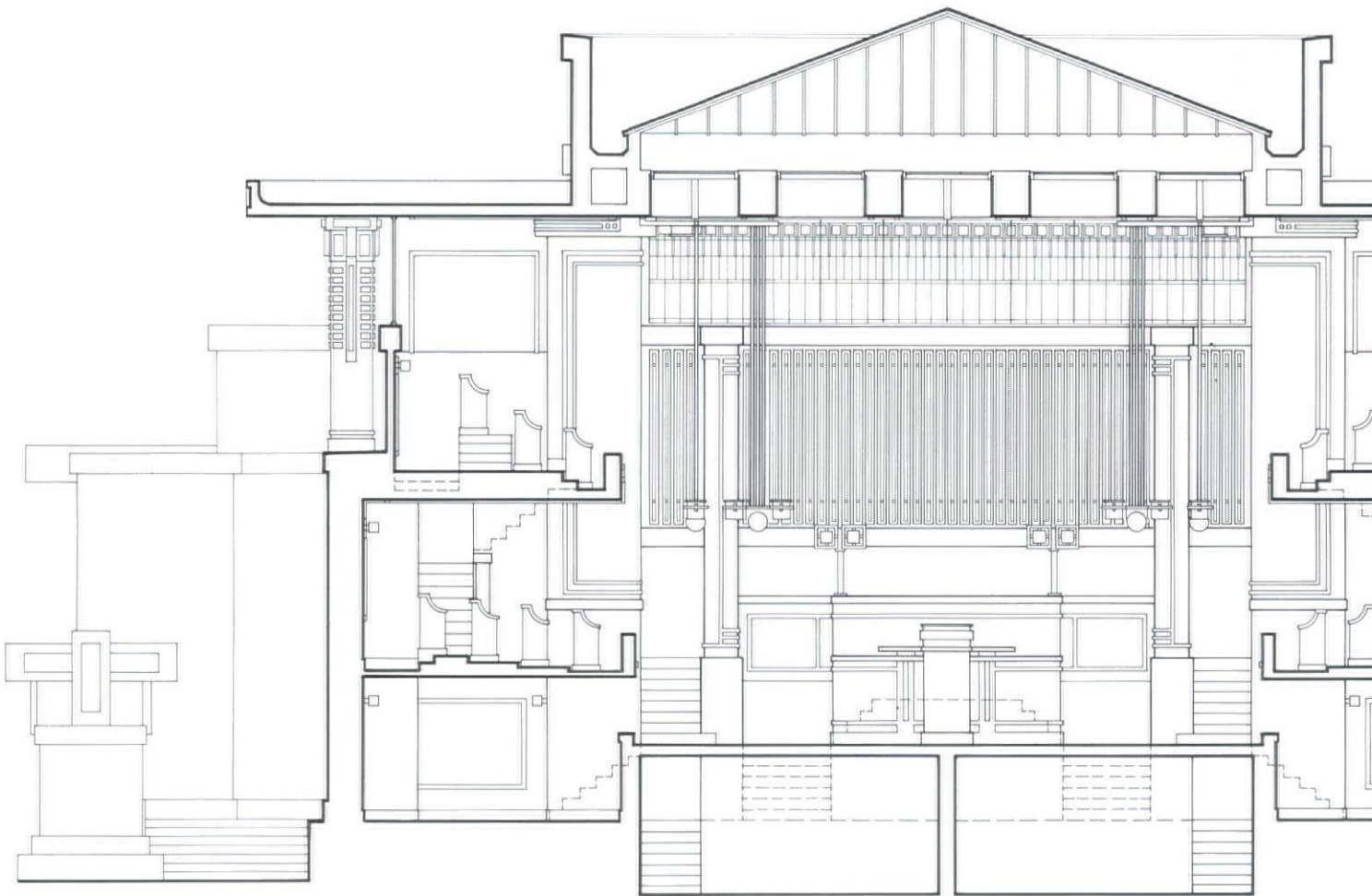


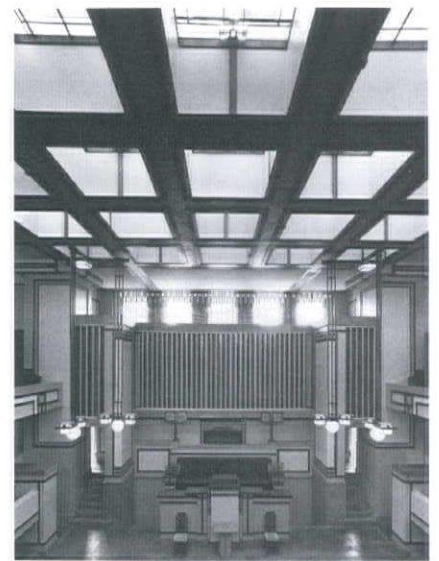
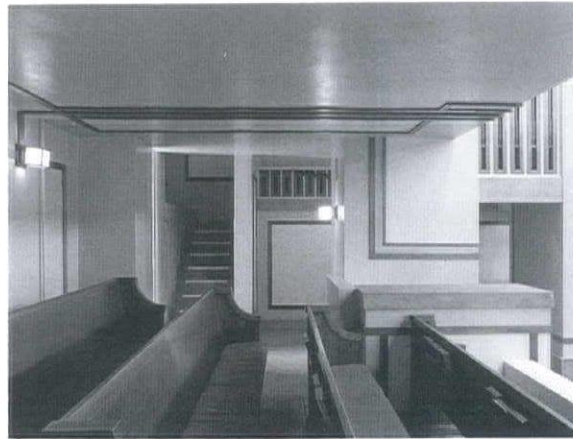
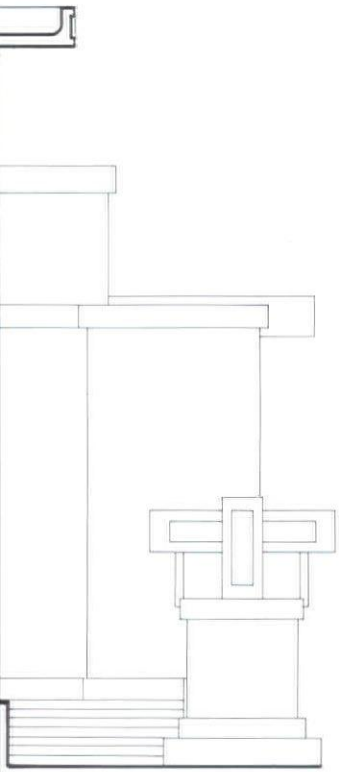


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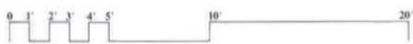
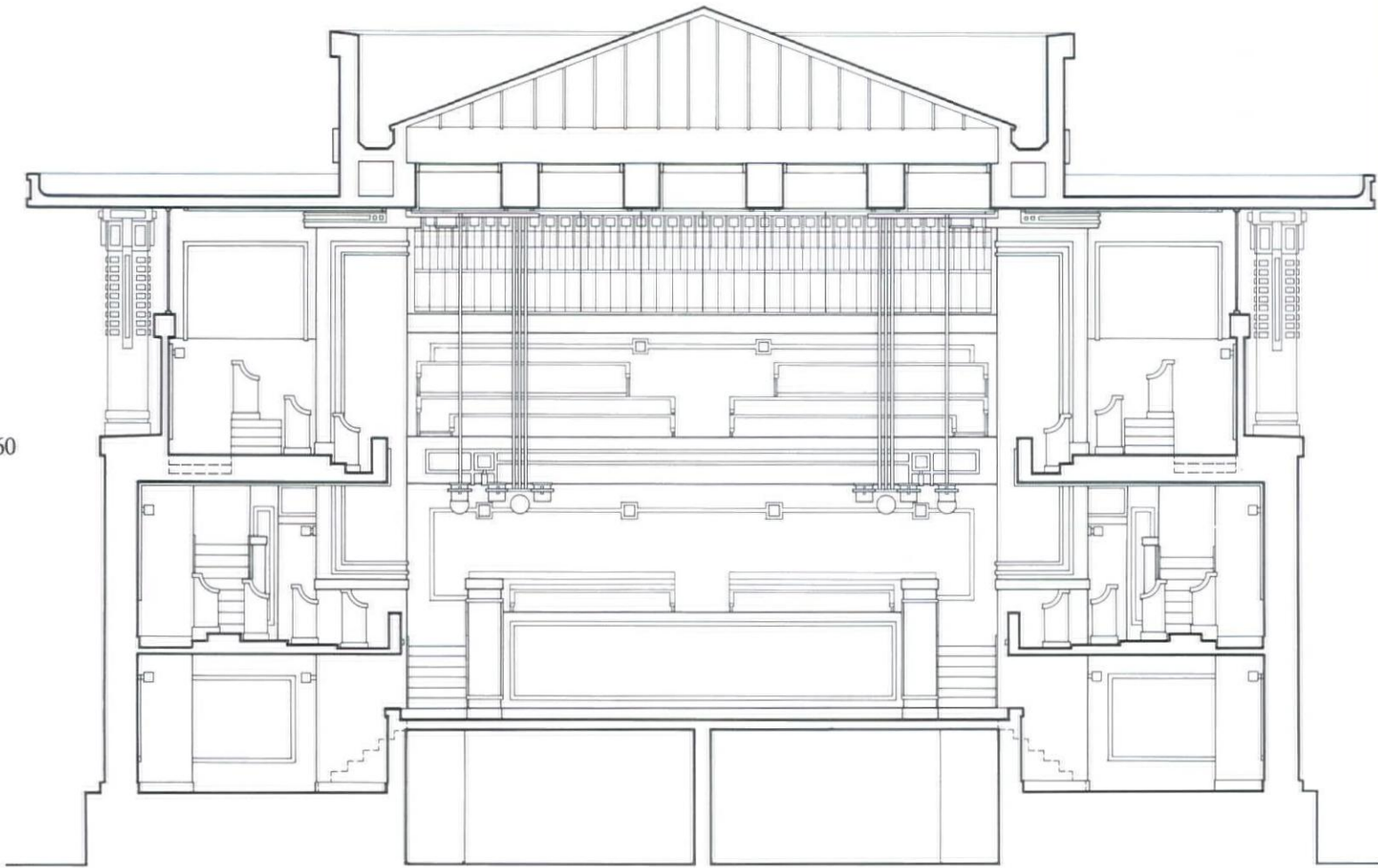


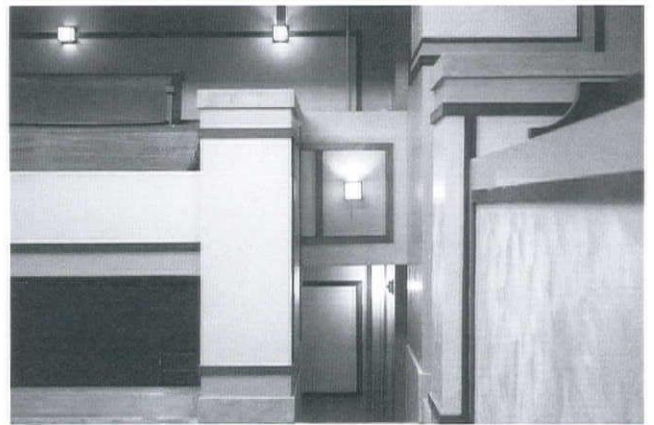
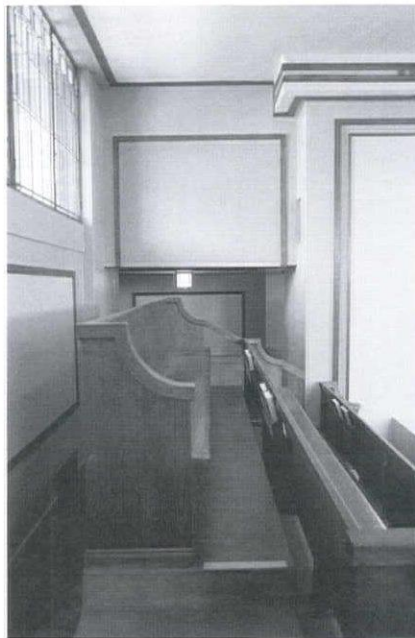
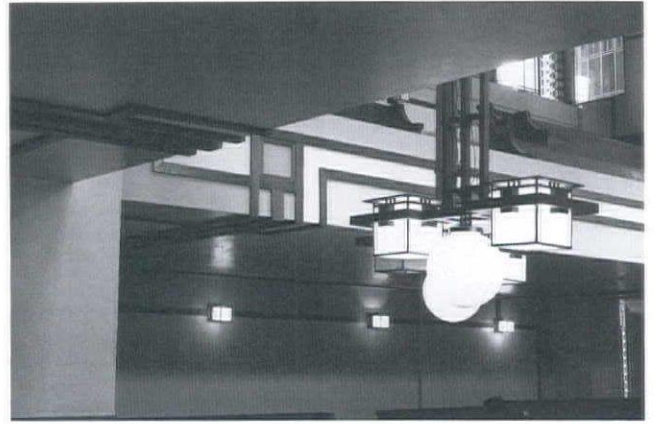
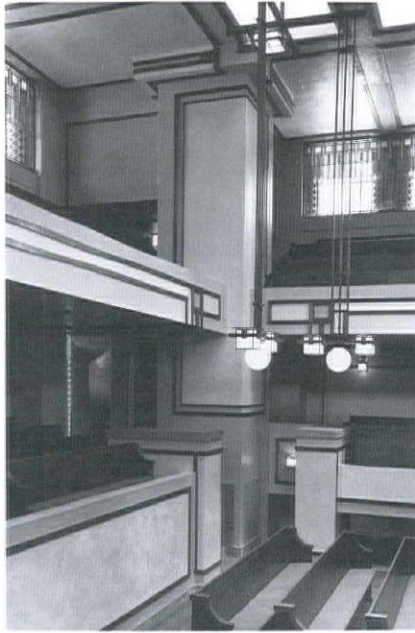




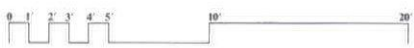
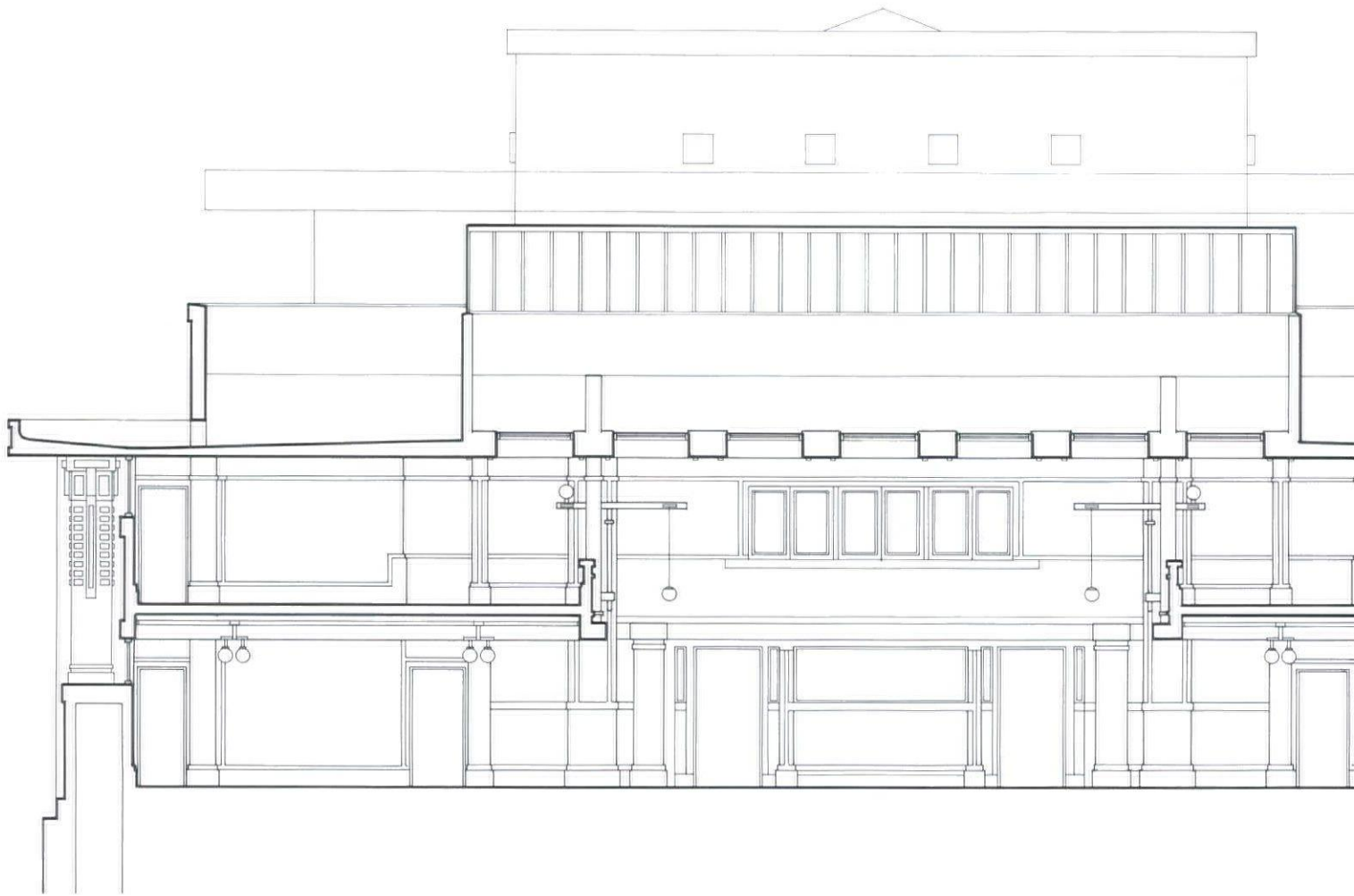


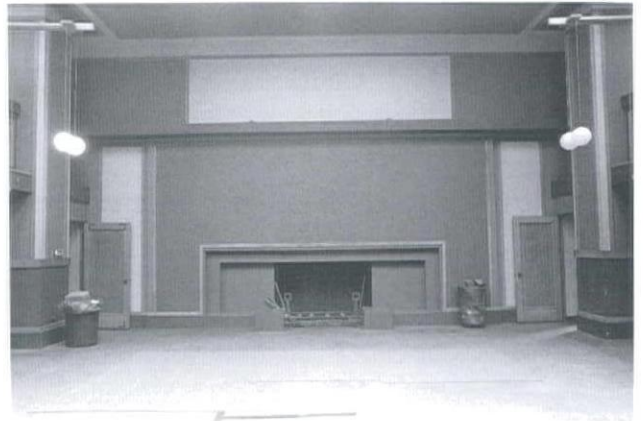
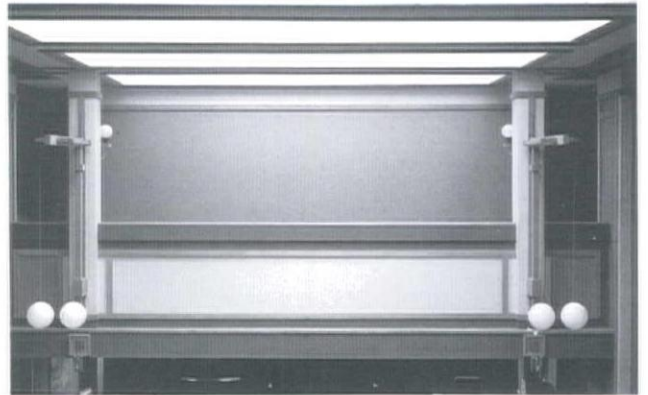
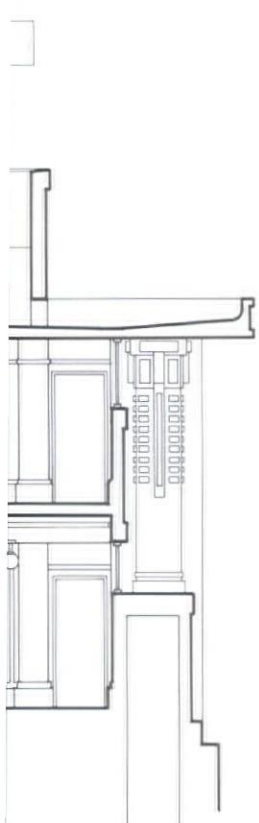
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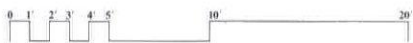
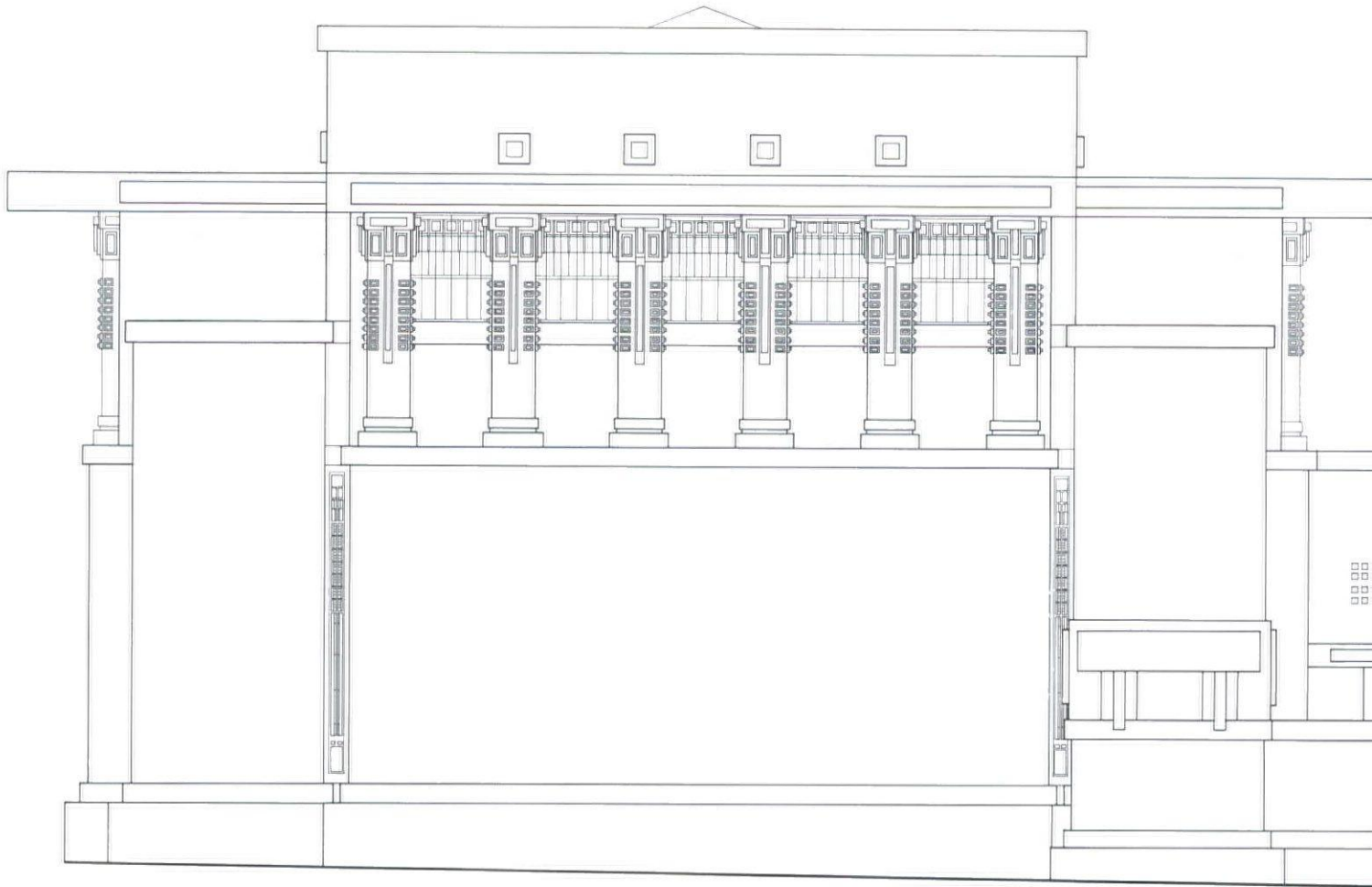


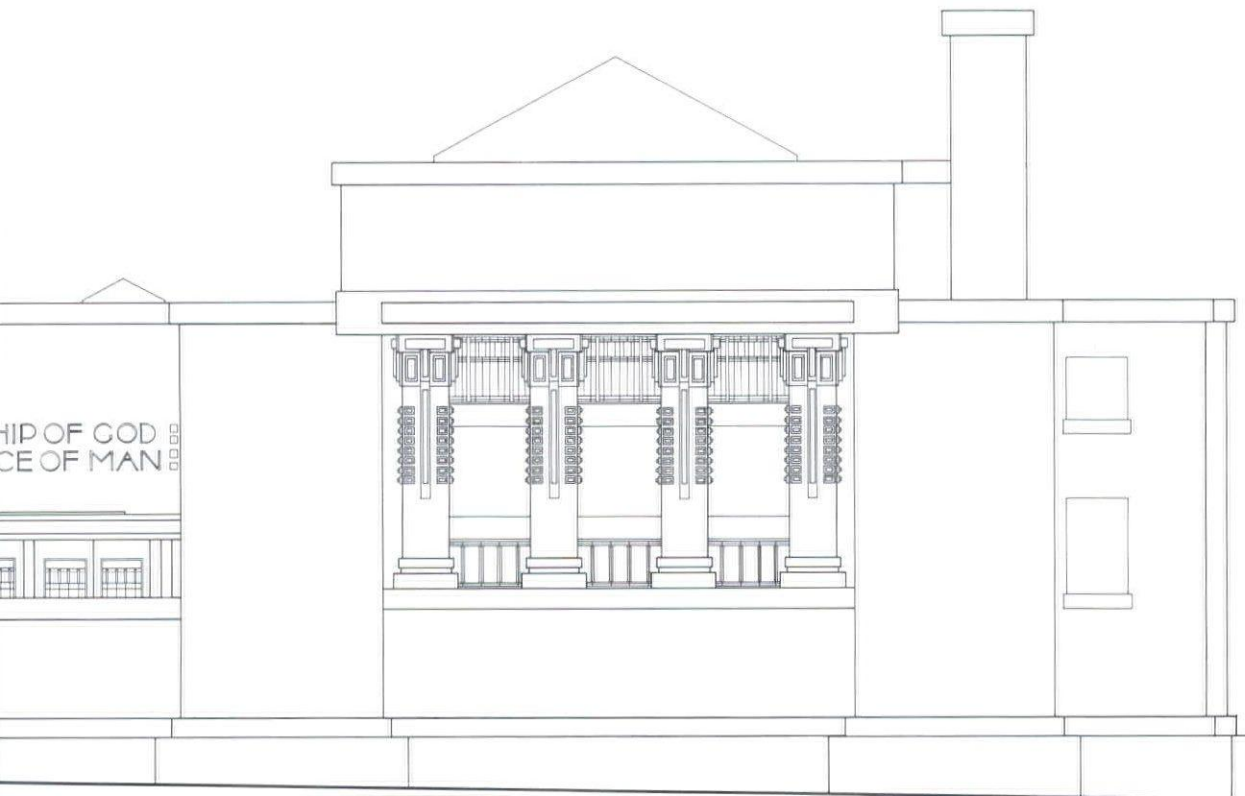


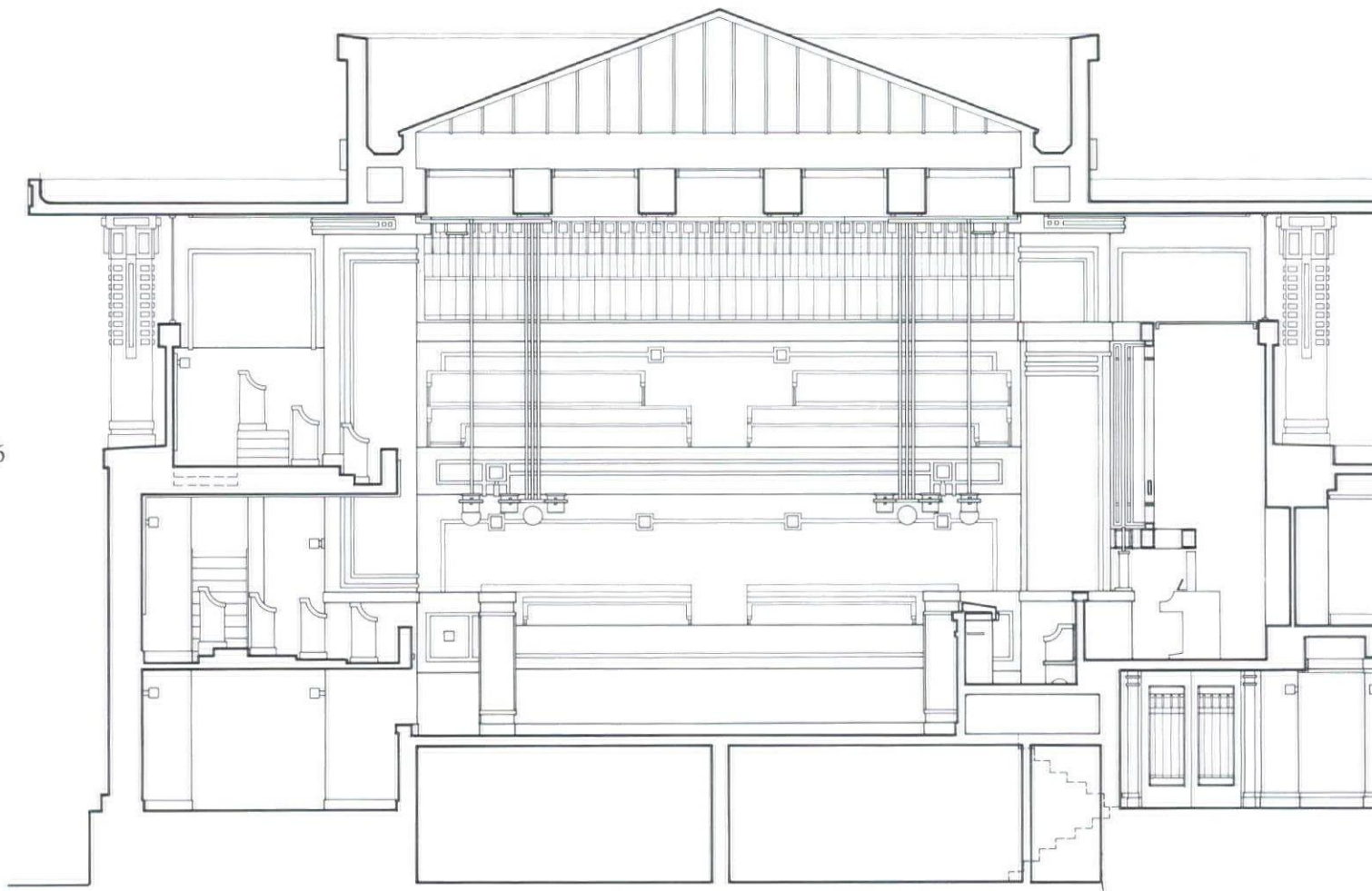
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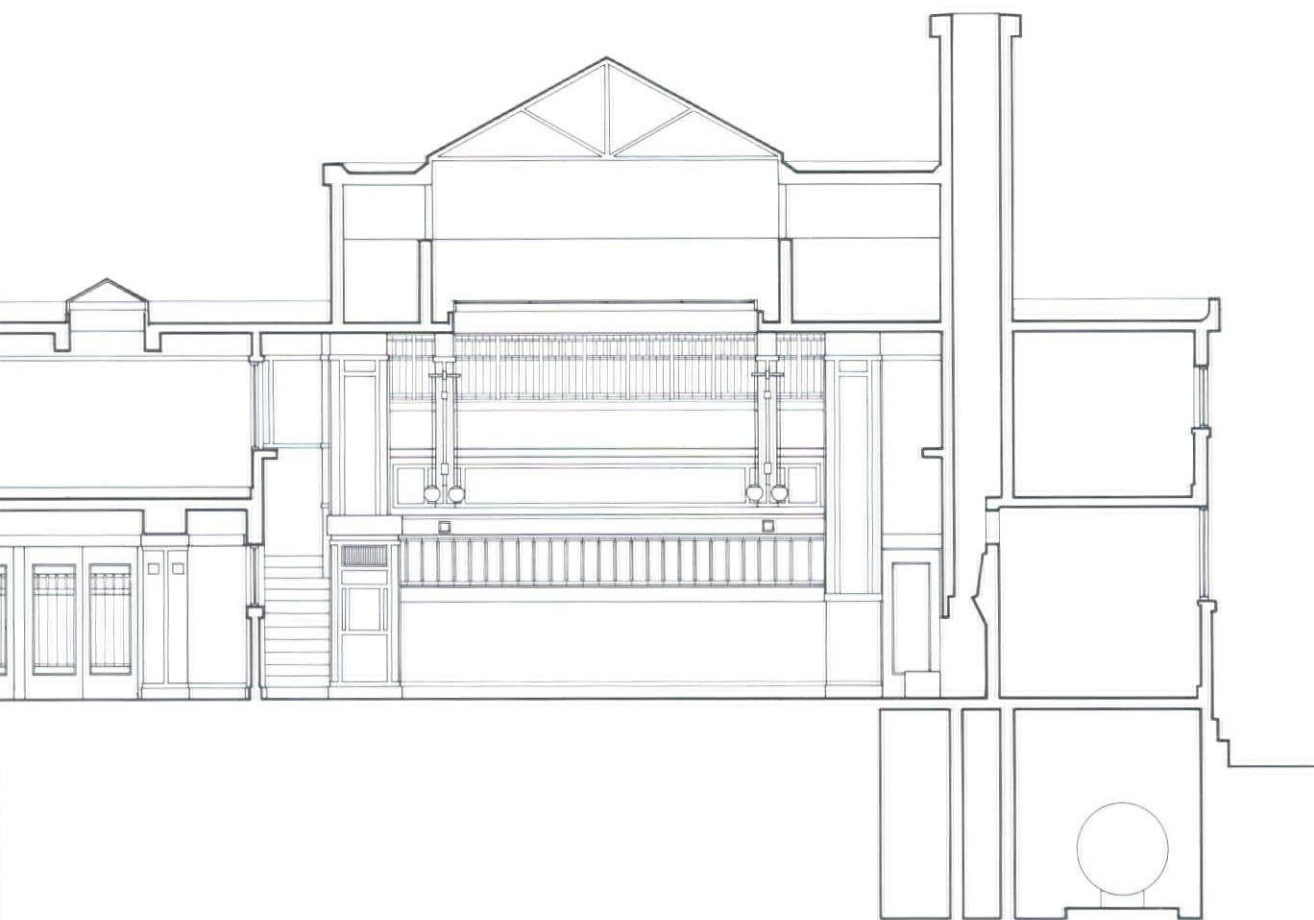




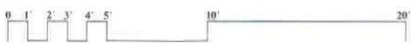


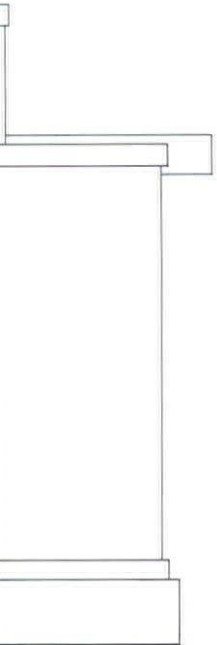


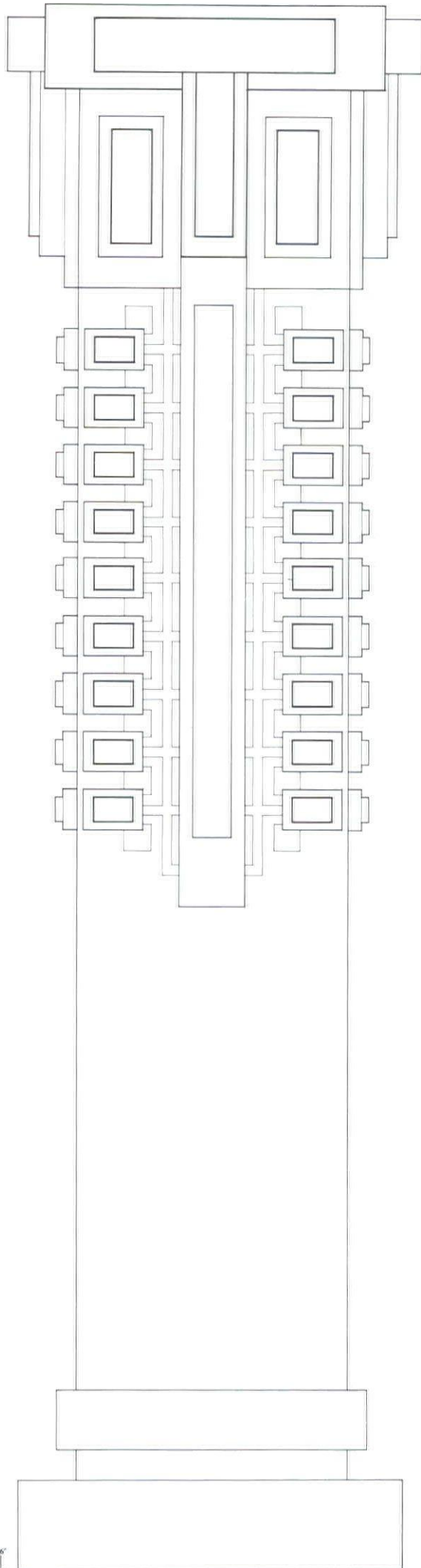


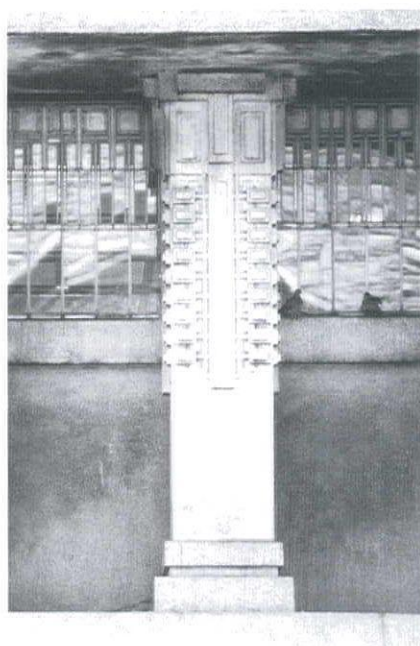


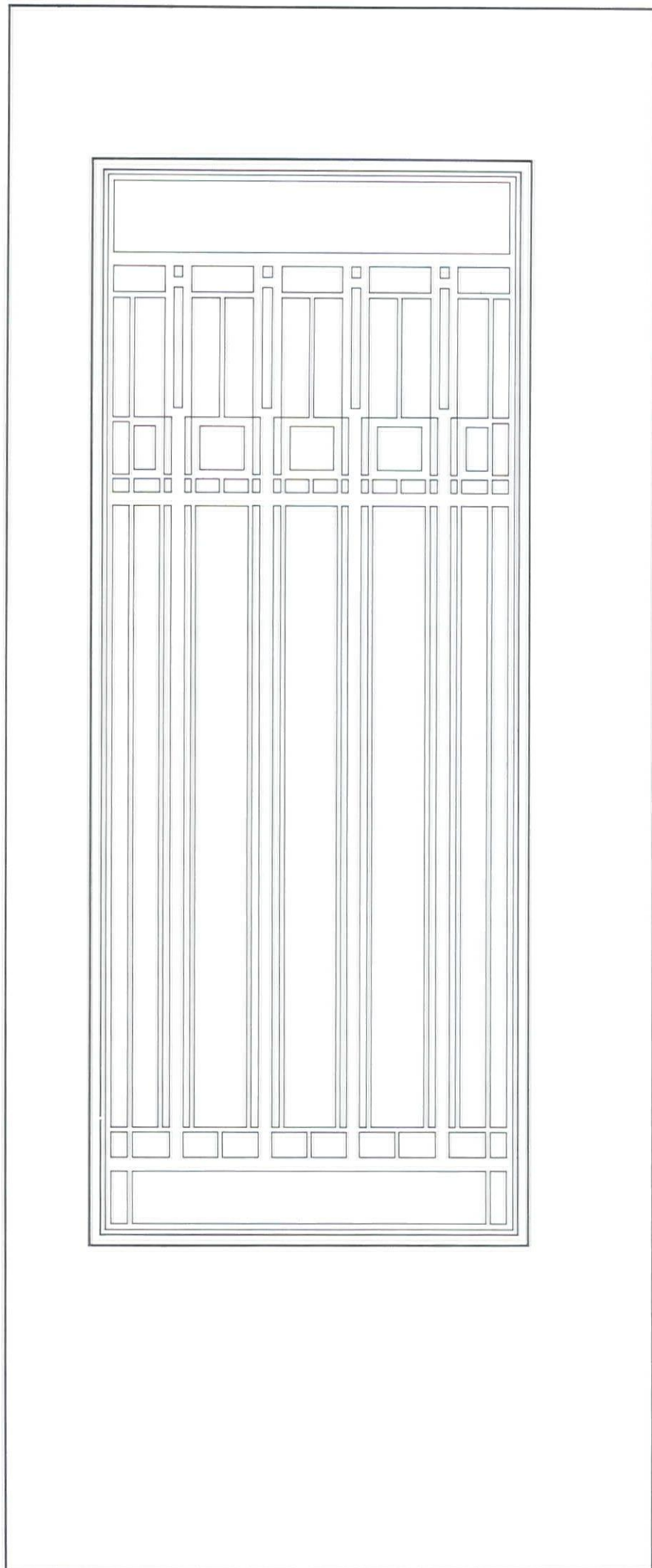
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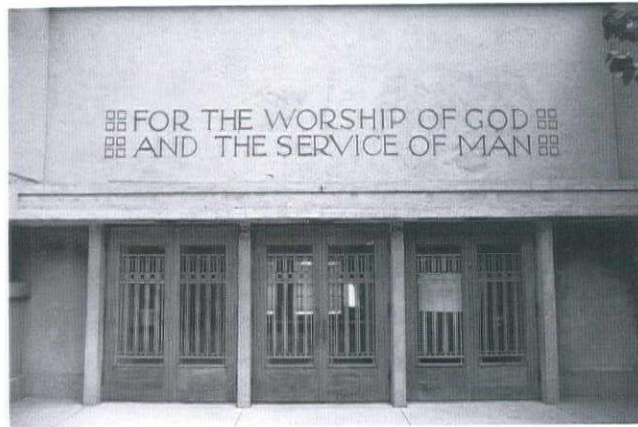




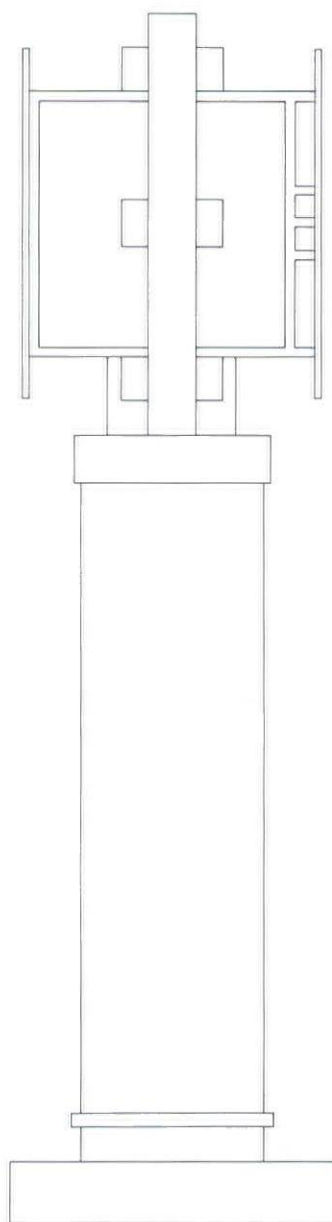
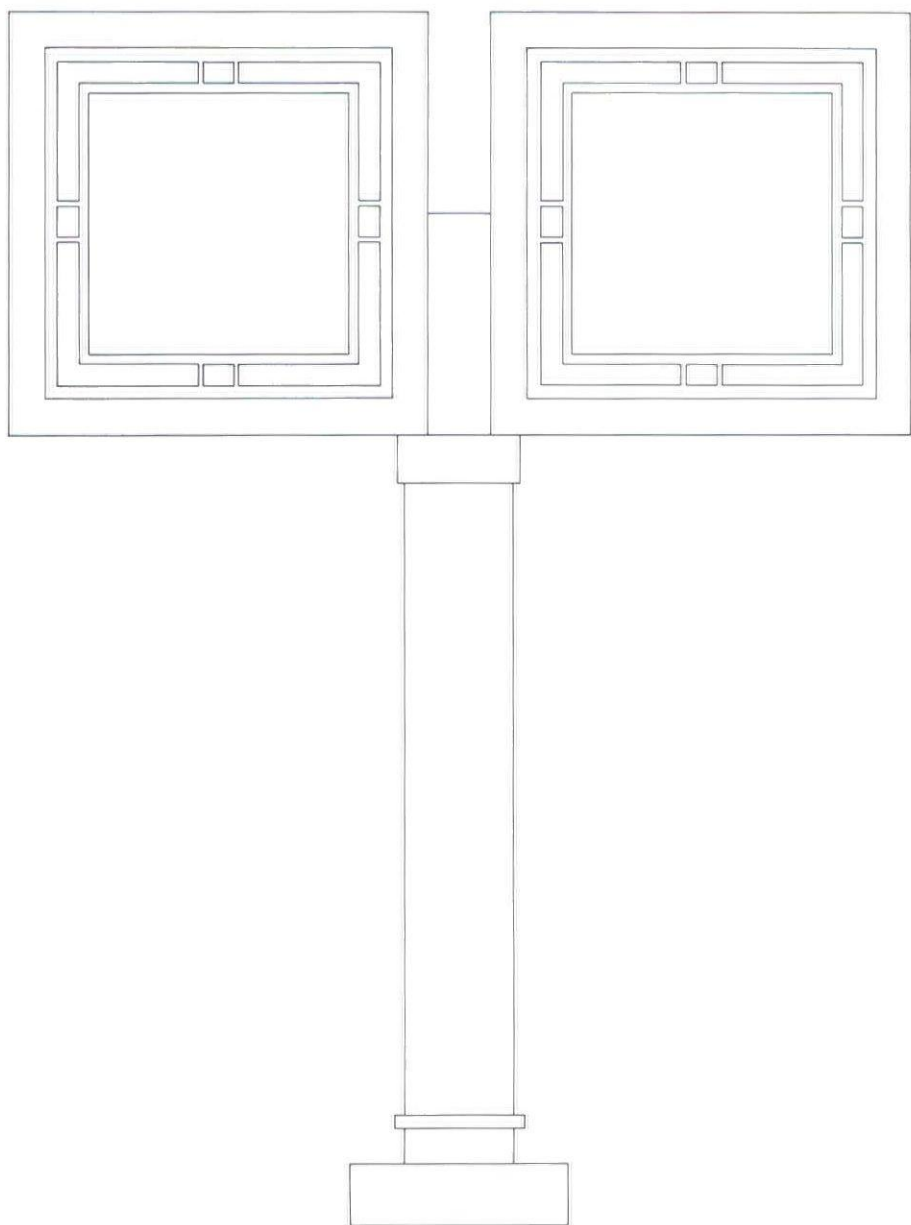




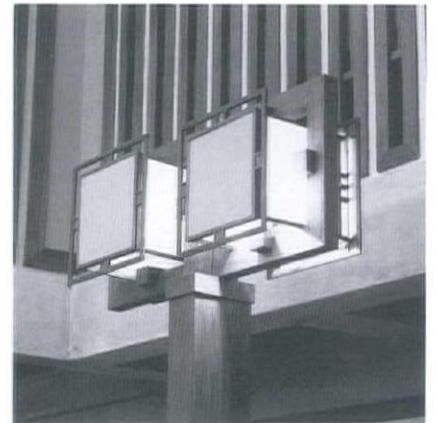
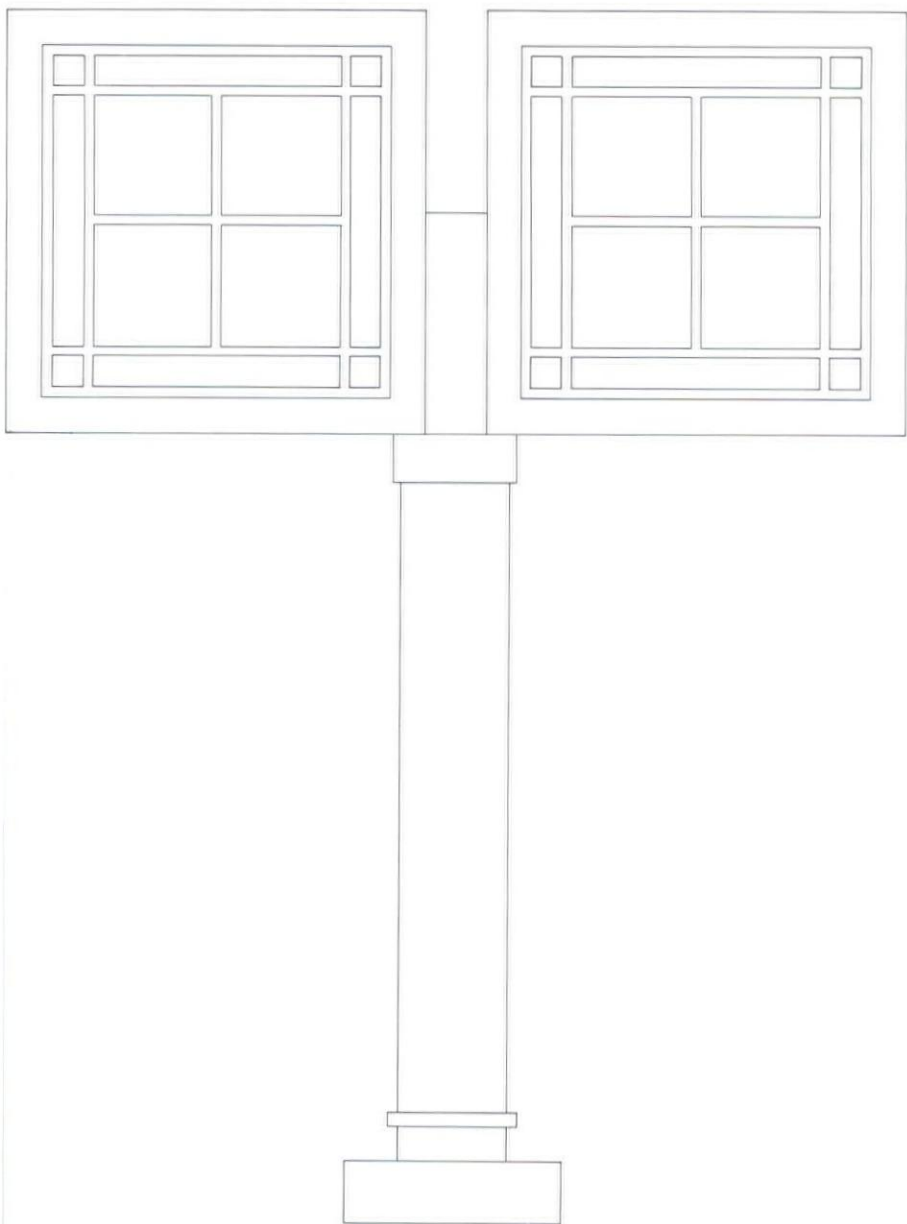
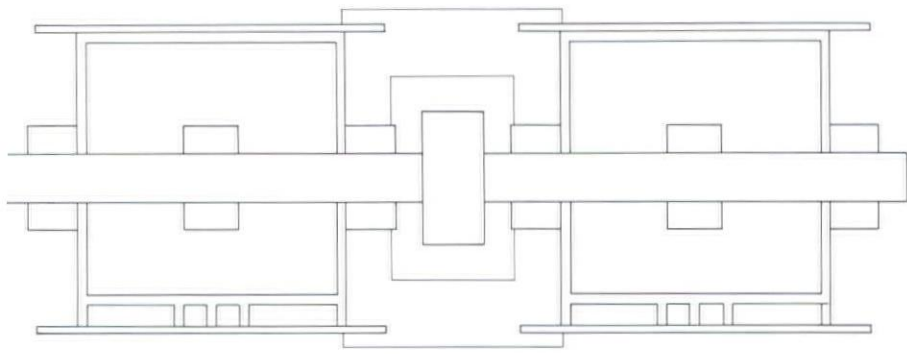


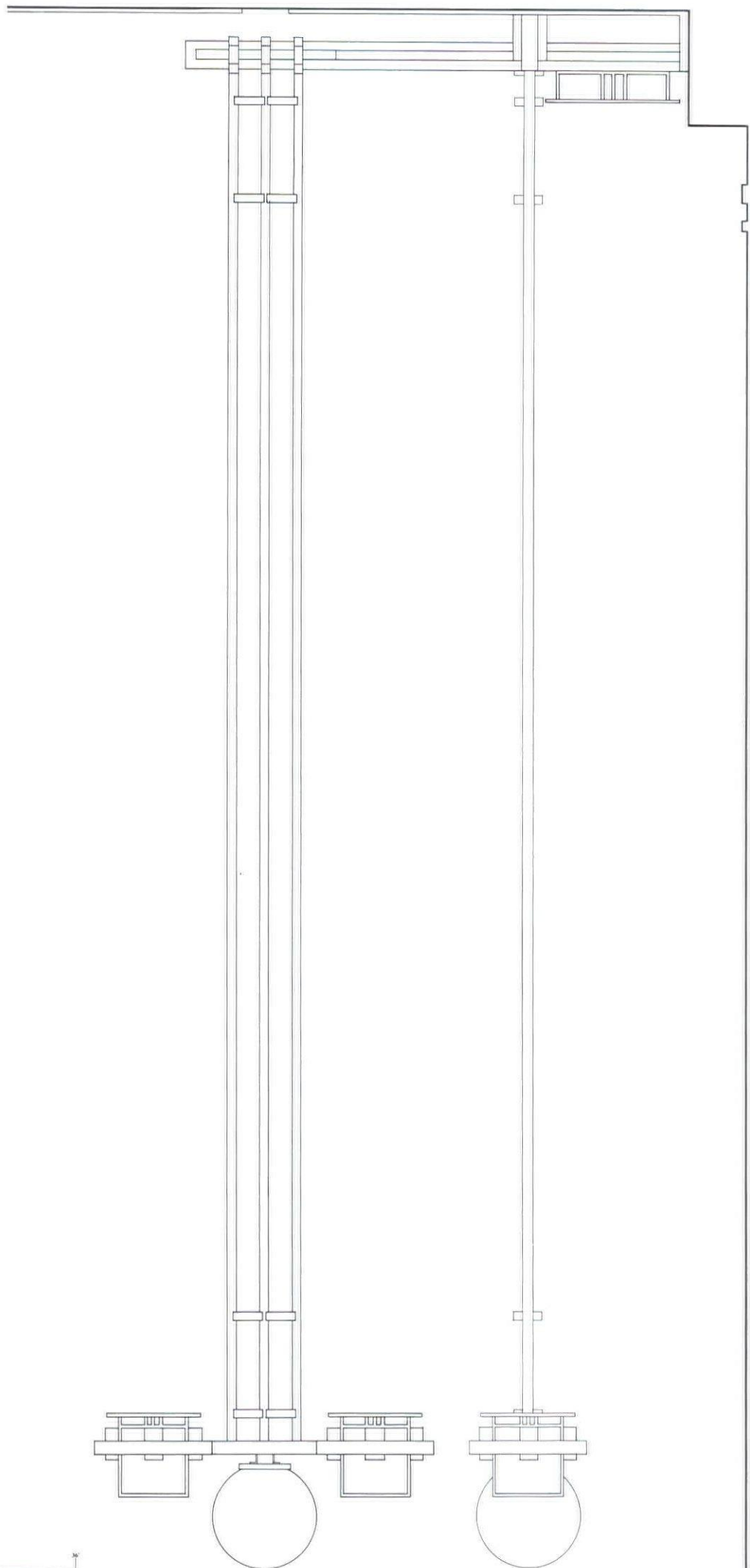


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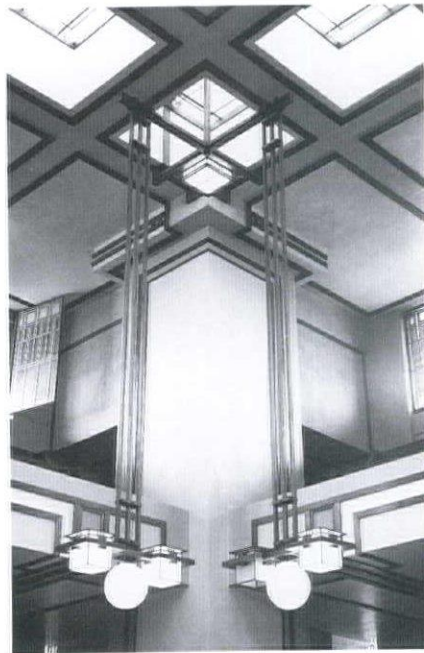


Light standard at altar,
front elevation, side elevation,
back elevation, plan

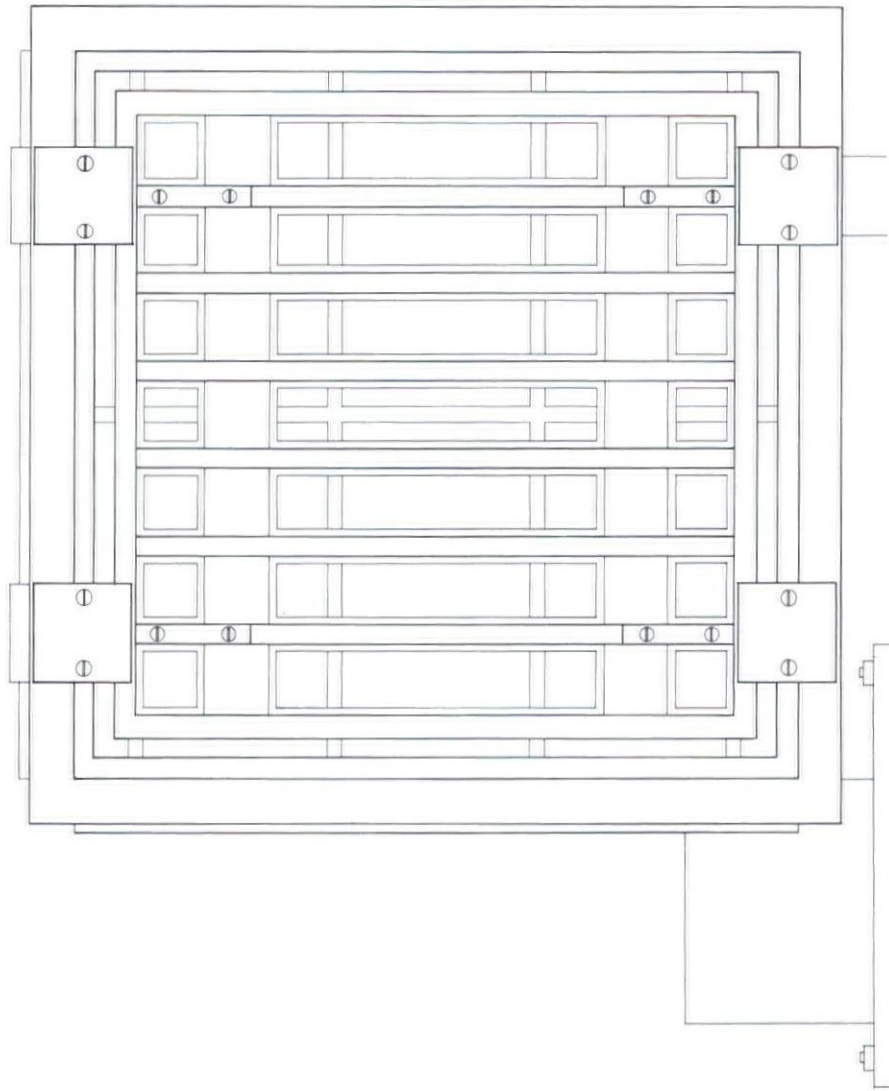
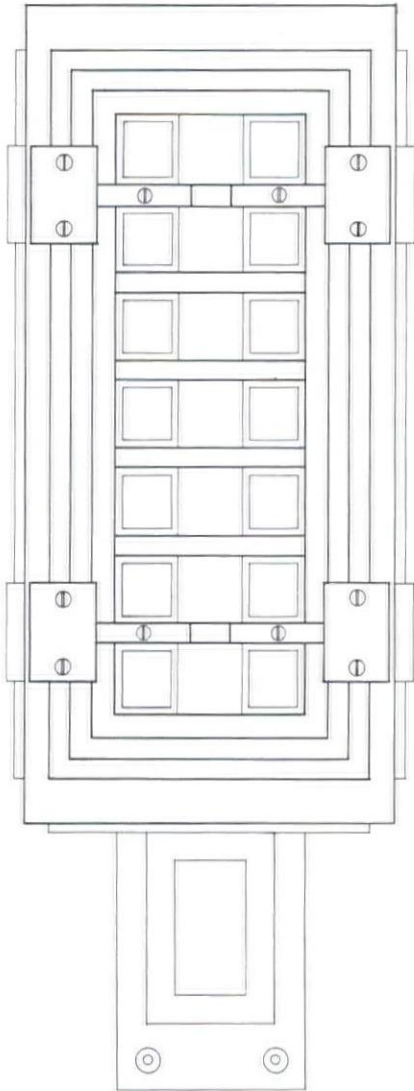




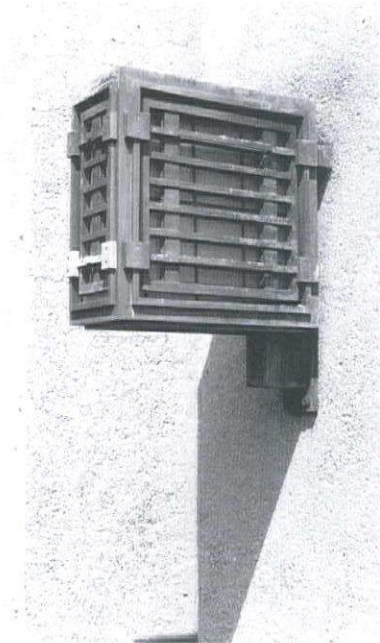
Hanging light fixture,
sanctuary, front elevation,
side elevation

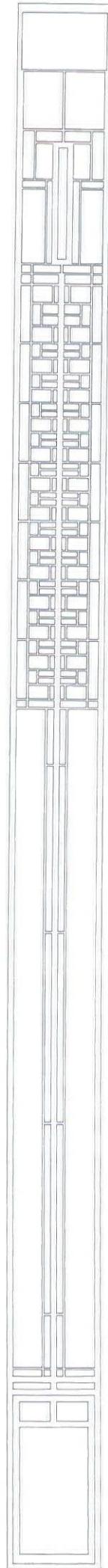


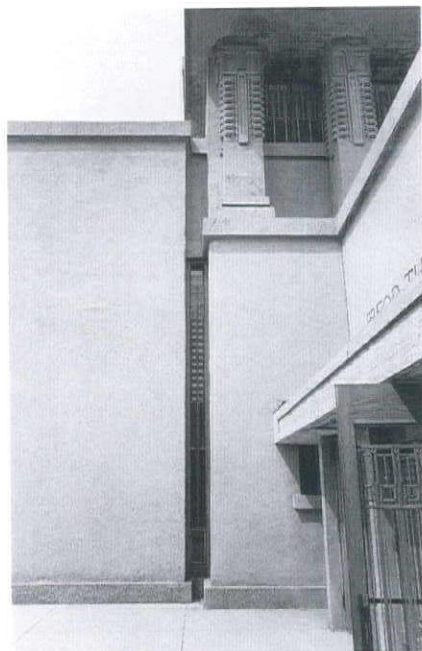
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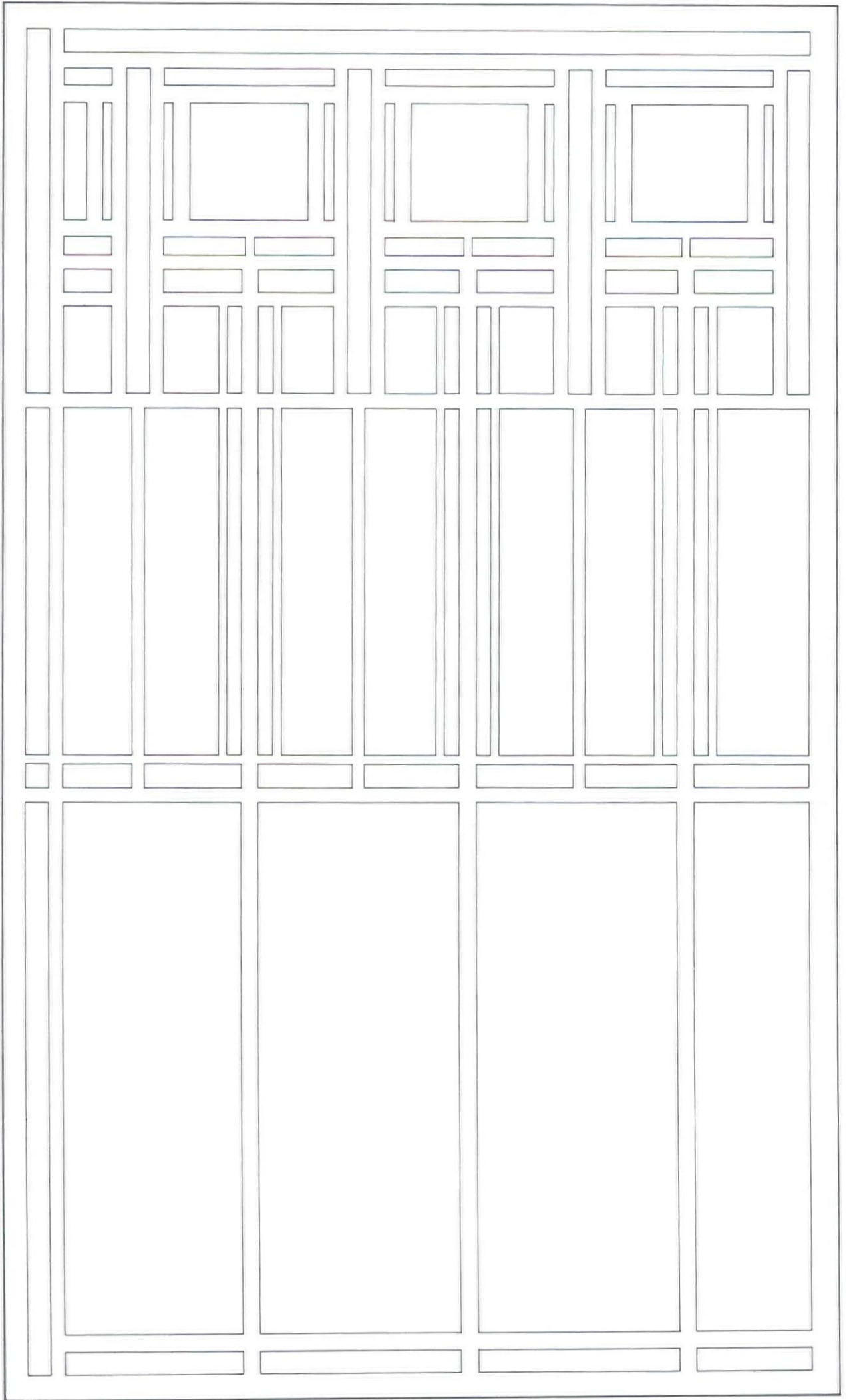


Exterior light fixture,
entrance, front elevation,
side elevation

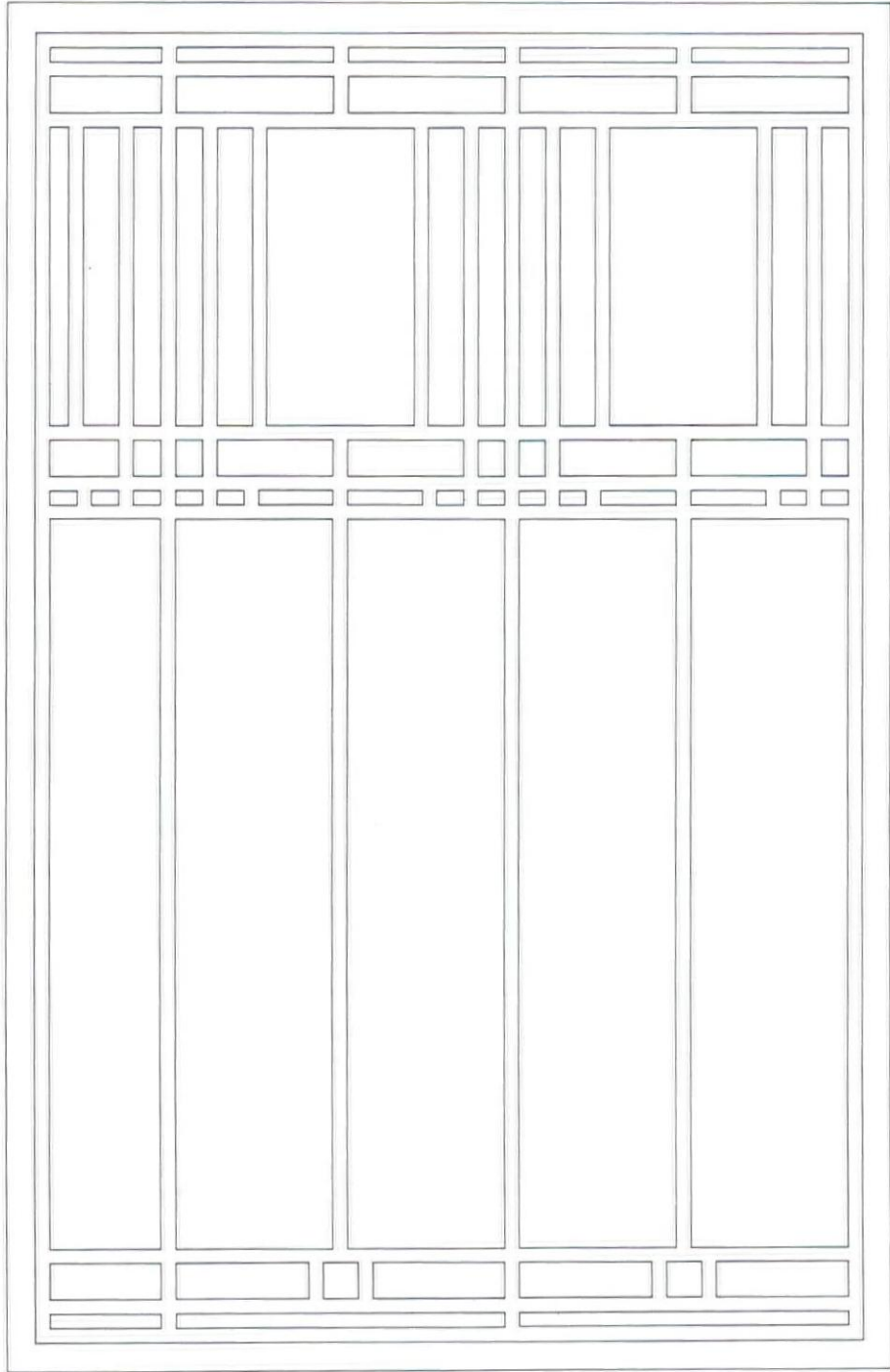


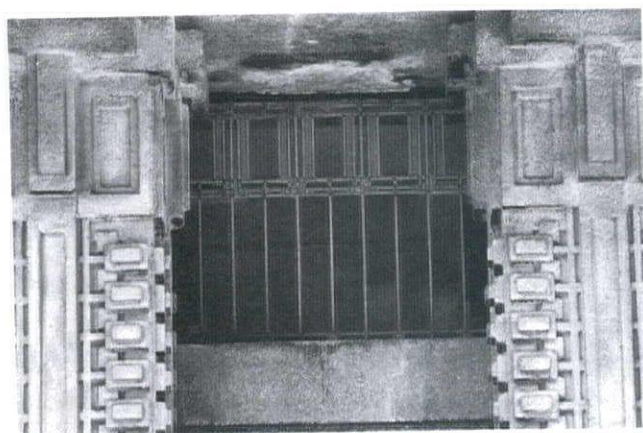


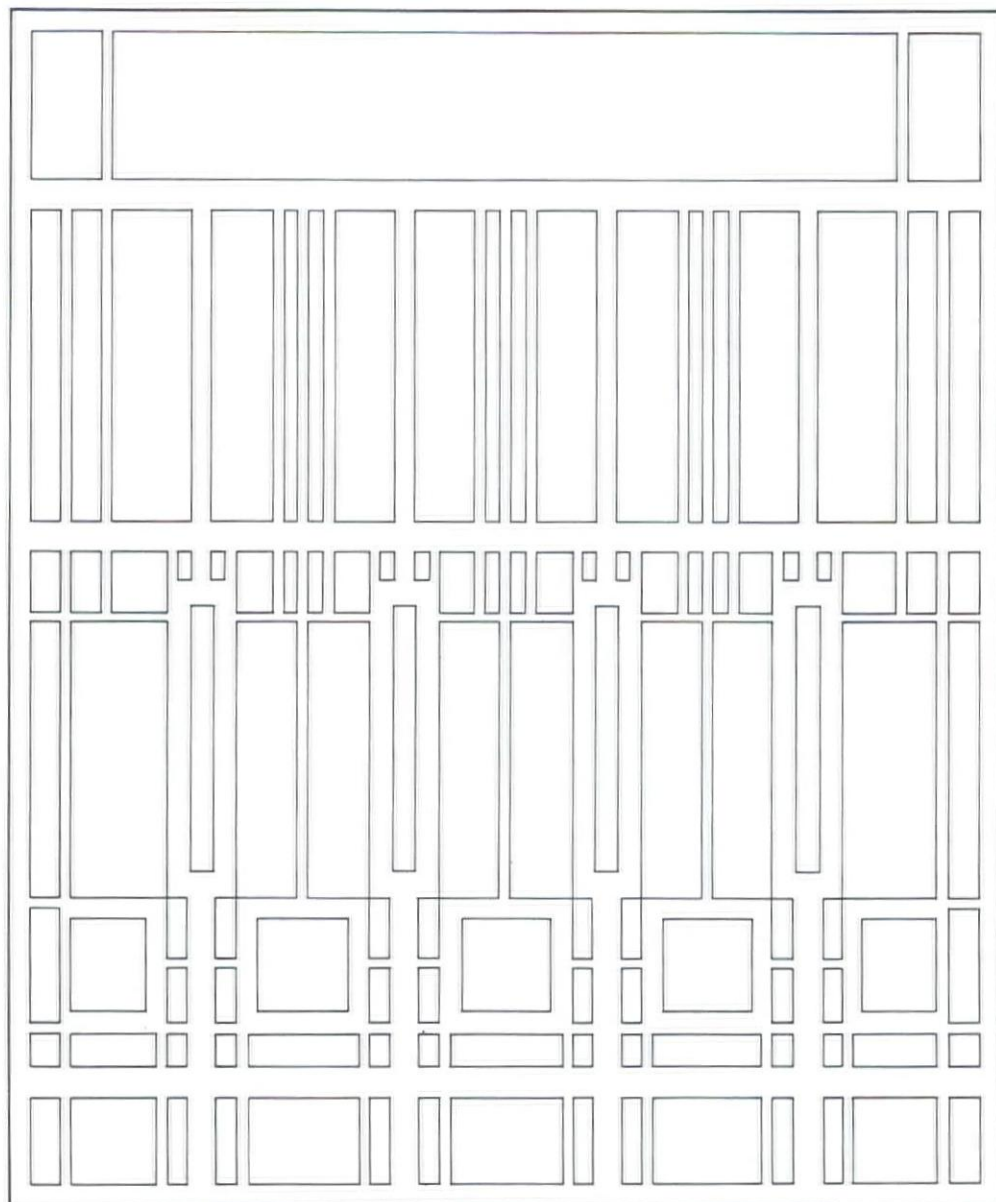


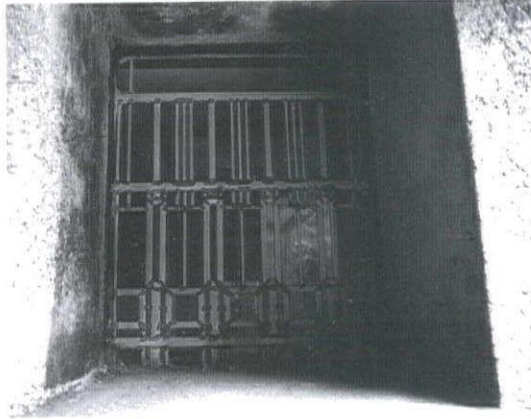












1
T S Kuhn, *The Structure of Scientific Revolutions*, Chicago, 1970

1
Since the beginning of the genre of villa literature, there has been an ambiguity as to whether "villa" refers to the estate, to all the buildings on the estate, or merely to the residence. In antiquity the owner's residence was called the *villa urbana*, to distinguish it from an agricultural building, which would be called a *villa rustica*. Palladio calls the former a *casa di villa*, the whole estate being *villa*. It will be more convenient here to accept contemporary usage, in which "villa" means the main residence.

2
In the articulation of villa ideology, I am much indebted to the innovative treatments of Reinhard Bentmann and Michael Muller, *Die Villa als Herrschaftsarchitektur: Versuch einer kunst- und sozialgeschichtlichen Analyse*, Frankfurt a. M., 1970, and of Grazia Gobbi, *La villa fiorentina*, Florence, 1980.

3
Pliny the Younger, *Letters*, V, 6, pp. 43 fs.

4
Andrea Palladio, *I Quattro Libri dell'Architettura*, 1570, Book II, p. 45.

5
W. Boesiger, H. Girsberger, eds., *Le Corbusier, 1910-65*, Zurich, 1967, p. 47.

6
On the evidence of Girolamo Priuli, a Venetian writing in the early years of the sixteenth century, this economic situation obtained in his time in the mainland territories of Venice. "Since the noblemen and citizens of Venice had enriched themselves, they wished to enjoy their success and to live in the Terraferma and elsewhere, devoting themselves to pleasure, delight and the country life, meanwhile abandoning navigation and maritime activities. Those were certainly more laborious and troublesome, but it was from the sea that all benefits came. We can judge the damage inflicted by the Terraferma on the city of Venice from the way in

which her intoxicated nobles, citizens and people bought estates and houses on the Terraferma and paid twice as much as they were worth. . . . Nonetheless, there was no man of means, among nobility, citizenry [that is, professional class], or populace [working class] who failed to buy at least one estate and house of the Terraferma . . . [where] they could go and stay and return in a day or two." (Quoted by Alberto Tenenti, in J. R. Hale, ed., *Renaissance Venice*, London, 1973, p. 11.) I believe this phenomenon to have been different from the situation in the nineteenth century in that the unprivileged small landholders built not proper villas with the symbols of the ideology, but shacks and farmhouses. For an overview of the types, see Martin Kubelik, *Die Villa im Veneto: zur typologischen Entwicklung im Quattrocento*, 2 vols., Munich, 1977.

7
An impressive discussion relevant to this study is Fernand Braudel's *The Mediterranean and the Mediterranean World in the Age of Philip II*, New York, 1972.

8
This type has fallen into a gap of architectural history. It would make a great dissertation subject.

9
A similar arcaded podium has been discovered recently in the Roman villa of Sette Finestre outside the ancient town of Cosa in southern Etruria; this villa is also cubic in plan (see A. Carandini and A. Settis, *Schiavi e padroni nell'Etruria romana: la villa di Sette Finestre dallo scavo alla mostra*, Bari, 1979).

10
I have dealt with this problem in a paper, "Sources of the Renaissance Villa," *Papers of the Twentieth International Congress of Art History* (1961), Vol. II, Princeton, 1963, pp. 6-18, that suggests the Byzantine villa at Galeata outside Ravenna and comparable Venetian thirteenth-century palaces as possible missing links to explain the transmission of the type.

1
I am indebted to Ned Kaufman of the University of Chicago for providing the phrase "blending of essences." He used it in a talk he gave at the Ruskin Symposium held at the British Art Center of Yale University on September 24, 1983.

2
J Ruskin, *The Seven Lamps of Architecture*, New York, 1977 (original, London, 1849), p. 83

3
Ibid., p. 91

4
Ibid., p. 133

5
Ibid., p. 208

6
Ibid., p. 135

7
Ibid., p. 83

8
J Ruskin, *The Stones of Venice*, volume II: *The Sea Stories*, New York, 1979 (original, London, 1851), pp. 185, 186

9
Ibid., p. 200

10
J Ruskin, *The Seven Lamps of Architecture*, op. cit., p. 110

11
Ibid., p. 101

12
Ibid., p. 165

13
Ibid., p. 142

1
K Frampton, *Modern Architecture: A Critical History*, New York, 1970

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Architectural Design, volume XXXII, Octob 1962

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V Hugo, *Notre Dame Paris*, eighth edition, Paris, 1832

4
A Moles, "The Three Cities," in A Hill, *Directions in Art, The and Aesthetics; An Anthology*, London, 1970

5
Skyline, April, 1979

or a brief review of the emergence of the idea of type in the late eighteenth century, see my "The Idea of Type: The Transformation of the Academic Ideal, 1750–1830," *Oppositions* 8, Spring 1977, pp. 95–133

de Quatremère de Quincy, "Type," in *Encyclopédie Méthodique; Architecture*, volume III, 1825; translated in *Oppositions*, op. cit., p. 147–150

de Ignasi de Solà Morales, "From Memory to Abstraction," *Lotus International* 33, Milan, 1981

Diderot, "Grec," in *Encyclopédie, Supplément*, 1777; the article speaks of Winckelmann's explaining "un type du eau" created by the Greeks

For a clear account of this historiographical shift and its influences, see Isaiah Berlin, *Vico and Herder*, New York, 1976

The history of language studies parallels that of cultural history in this period; see H Aarsleff, *From Locke to Saussure*, Minneapolis, Minnesota, 1982

Neither Seheult nor Coussin was well known in his time, but both were representative of a fashion for inquiring into the "genius" of art, following Chateaubriand's *Génie du christianisme* of 1802; Jean Mallion, in *Victor Hugo et l'art architectural*, Grenoble, 1962, surmises that Hugo knew Coussin's text. The best work on romantic historiography in France and England during the nineteenth century is by Bann, *The Clothing of Style*, Cambridge, 1984.

For Jean-Jacques Lequeu, see J Guillaume, "Lequeu et l'invention du mauvais goût," *Gazette des Beaux-Arts*, September, 1965; for Gandy, see Brian Lukacher, "Phantasmagoria and Emanations: Lighting effects in the Architectural Fantasies of Joseph Michael

Gandy," *AA Files* 4, London, July, 1983.

9
S-V Seheult, op. cit. p. 7

10
Arcisse de Caumont, antiquarian and archaeologist, founder member of the Société des antiquaires de Normandie, delivered his "Essai sur l'architecture religieuse du moyen age" to the Société d'émulation of Caen in 1823; this became part of his well known *Cours d'antiquités monumentales* of 1830–1841. Charles Nodier was the author of the text accompanying the engravings of Cailleux in *Voyages pittoresques dans l'ancienne France*, 1820–1840. Hugo was directly influenced by both scholars.

11
C F Schinkel, quoted in H Pundt, *Schinkel's Berlin*, Cambridge, Massachusetts, 1972

12
Hegel's lectures on aesthetics, delivered in Berlin between 1823 and 1829 and published posthumously in 1835, gave a monumental position to each of these types according to epochs defined both epistemologically ("symbolic," "classic," "romantic") and historically (Egyptian, Greek and Roman, Medieval and Modern). For Riegl's interpretation of the same types, see his *Spätromische Kunstindustrie*, Vienna, 1901, discussed by Barbara Harlow in "Realignment: Alois Riegl's image of Late Roman Art Industry," *Glyph* 3, Baltimore, 1978.

13
Hugo, "Guerre aux démolisseurs," *Revue des Deux Mondes*, V, part two, March 1, 1832, reprinted in *Littérature et philosophie mêlées* [1834], critical ed. by A R W James, volume II, Paris, 1976, p. 173. The first section of this piece, entitled "De la destruction des monuments en France," written in 1825, was first published in *Nouveau keepsake français*, Paris, December 17, 1831.

14
The preface to the eighth edition of *Notre-Dame de Paris* was added by Hugo in 1832 to explain the insertion of three

"new" chapters, including "Ceci tuera cela"; that is, those containing the most extended architectural-aesthetic arguments. His claim that they had been "mislaïd" at the time of first printing is examined by Neil Levine in "The Book and the Building: Hugo's Theory of Architecture and Labrousse's Bibliothèque Ste-Geneviève," *The Beaux-Arts and Nineteenth-Century French Architecture* ed by Robin Middleton, London, 1982, who provides convincing arguments to link Labrousse to Hugo's architectural ideas.

15
Hugo, "Paris à vol d'oiseau," *Notre-Dame de Paris*, op. cit., volume II, p. 3

16
This idea of an "economy" of the written character was a commonplace of late-eighteenth-century theory, following Bishop Warburton's *Divine Legation of Moses*, 1738–1741, part of which, concerning the "descent" of writing from pictograms through hieroglyphs to alphabetic script, was translated into French by Leonard des Malpeines in 1744 as *Essai sur les hiéroglyphes des Egyptiens* and used by Condillac and others as a base for their origin of language theories

17
See Levine, op. cit.

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