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ECLECTICISM, MODERNISM, SOCIAL DARWINISM, AND VITALISM: THE SAN FRANCISCO WORLD’S FAIR OF 1915

Much more than in Europe, already stocked and overflowing with classical masterpieces, do we here, on the edge of the white man’s world, need to see realized and visualized some of the spirit of the masterpieces of old. It’s a long, long way to the Acropolis, and what we need here is some of the godlike simplicity of the Athens of Pericles, and something of the monumental and massive dignity of Imperial Rome. What is paltry, what is poor, we have always had with us.


In 1915, San Francisco mounted a vast international exposition, commemorating the United States’ completion of the Panama Canal, and trumpeting the city’s own recovery from the devastating earthquake and fire of 1906. Architects, engineers, politicians, sculptors, and businessmen joined together to construct an idealized built environment of monumental classical proportions. Visitors to the fairgrounds were greeted by a colossal “Column of Progress” modeled on Trajan’s Column, followed by an entryway ensemble, the “Court of the Universe,” designed by McKim, Mead and White in emulation of the forecourt at Saint Peter’s Basilica in Rome. Echoes of classical architecture reverberated in architect Henry Bacon’s “Court of the Seasons,” derived from Hadrian’s villa, and in the massive “Palace of Machines,” modeled on the Baths of Caracalla. Thus the western edge of the American republic sheathed its raw, “paltry” youth in the imposing garb of classical grandeur. While Europeans had, by 1915, repudiated the strict conventions of Beaux-Arts classicism, Americans in 1915 enthusiastically embraced the visual forms of classical dignity as legitimation of a traditional legacy they had never inherited.

The masking of a 1915 Palace of Machines behind a ponderous façade suggesting Caracallan Rome was not unusual for a world’s fair. All such expositions were marked by the juxtaposition of new forms of production with culturally inherited modes of thought. One of the primary functions of the 19th-century world’s fairs was to offer a showcase for technological progress, scientific invention, and advanced industrial production. They provided the forum in which the public was first introduced to many of the miracles of the modern world: the telephone, wireless telegraph, and Corliss engine of 1876; nighttime electricity in 1889; the automobile, moving pictures, and x-ray in 1900; and transcontinental telephone calls and aviation in 1915. New architectural forms often accompanied these startling displays. Indeed, scholars of architecture and urban design have examined the 19th-century expositions as successive chapters in the history of modernism. From the Crystal Palace to the Eiffel Tower, exposition structures often were the laboratory for the new materials and methods of construction that eventually yielded the stripped-down, exposed-parts functionalism of the International Style.

Yet, although the world’s fairs celebrated the launching of a technological future, its unprecedented products and forms had to be tempered, accommodated, and contained by traditional mentalities. The juxtaposition of old and new often created tension and ambivalence, which were expressed verbally or spatially. The interplay of past, present, and future in the world expositions, and the meanings attributed to the confrontation of tradition and innovation, varied according to national context and historical circumstance. As the 19th century waned, the intensity and explicitness of tensions between old and new embodied at the world’s fairs deepened. Late in the century, both European and American world’s fairs relinquished the unashamed confidence of the mid-century exhibitions, and disguised the forms of technological modernism within the trappings of historicist culture. Thus, at the Paris Exhibition of 1900, the elaborate exterior stone façades of the Grand Palais enveloped its giant interior iron frames; at the 1889 Exhibition, with its wrought-iron Eiffel Tower and Palace of Machines, the equation had been reversed. Similarly, the “White City” Chicago Exhibition of 1893 and the 1915 Panama Pacific International Exposition rejected the exposed wrought-iron of the Philadelphia Centennial of 1876, replacing it with Beaux-Arts-derived ensembles of overloaded classicism.

Although this trend suggests an increasing reclamation of tradition as the century progressed, it would be wrong to characterize it in terms of an “antimodernist” defeat of an incipient “modernism.” No tradition is static, and the reappearance of historical eclecticism and classicism in architecture in the late 19th-century world’s fairs was charged with contemporary meanings and transformations. Indeed, what first appears as a retreat to the past emerges, on closer analysis, as the formulation of another configuration, equally modern, constructed from historicist elements. In the Paris Exposition of 1900, for example, the “traditional” stone façades, preferred to the exposed wrought-iron latticework of 1889, were punctuated by a new visual language—modernist allegory. French painters and sculptors presented as allegories of “electricity” young women in chic, contemporary hairdo (the “chignon” bun), and mounted academic murals in which the popular actress Sarah Bernhardt was seen greeting the president of the
Third Republic. The most spectacular infusion of "modernism" in this seemingly traditional fair was the entryway of 1900 that replaced the Eiffel Tower of 1889: a monumental sculpture of a young woman in couturier clothes and chignon, atop a wide triumphal arch. Designed by Beaux-Arts-trained artist René Binet to symbolize the luxury sector and decorative arts, "La Parisienne," the quintessential consumer, was as modern in her way as the Eiffel Tower was in its.  

The Anthropology of World’s Fairs: San Francisco’s Panama Pacific International Exposition of 1915 enables us to explore the equally complex and contemporary meanings which infused the American return to classicism, embodied in the San Francisco World’s Fair of 1915. Though Americans longed for history and tradition, and appropriated the conventions of the European Beaux-Arts as a surrogate lineage, they invested this heritage with distinctively American values and problems. World’s Fairs illuminates with rich historical specificity the ways religious, cultural, and political meanings shaped the creation of an artefact of ancient civilization in the midst of California in 1915.

The San Francisco Panama Pacific International Exposition, like other 19th-century world’s fairs, was compared by contemporaries to a “living encyclopedia,” a “vast, public, international university” in which all human knowledge and experience were contained and represented. Burton Benedict, an anthropologist, does justice to this comprehensiveness by organizing his book as a collaborative effort of scholars drawn from different disciplines: an art historian, an architectural historian, a political historian, and a literary critic. The analytic tools used by each exemplify a range of methodologies, and in some cases break new ground in interpreting the relations between culture and society.

Benedict’s opening essay provides a broad overview of world’s fairs in various nations and over time. Benedict argues that international expositions were both expedient economic tools and extraordinary cultural expressions. Drawing on the anthropological theory of Mauss and Durkheim, he identifies the fairs as “collective representations,” and as unique, total symbolic systems which can be analyzed as keys to national ethos. One of Benedict’s central ideas is to compare international expositions with the Northwest Coast Kwakwùilt Indian ritual of the “potlatch.” Like the potlatch, each world’s fair aimed to “outdo” and “shame” rival nations by mounting a bigger, better, and more expensive spectacle than its immediate predecessor. The potlatch, where rival tribes gathered at lavish feasts, and the host tribe conspicuously destroyed goods most valued in the community—from rare food to coins—does have some affinity with the interplay of creativity and destruction in the world’s fairs. Nation-states did lavish extraordinary expenditures on these temporary spectacles, in which the principles of profit and economic efficiency were subordinated to the imperative of gaining prestige by outshining national rivals.

Benedict’s world’s fair as potlatch is intriguing, though readers should remember the profound differences between small, tribal ceremonies and state-organized international exhibitions. Historically, European fairs, in particular, may be compared more with the opulent, ephemeral festivals staged by royalty and the aristocracy, from lavish royal entries to the spectacular celebrations of royal marriages and births.

While proposing anthropological categories for the interpretation of the expositions, Benedict provides important information about the changes in world’s fairs over time. He points out, for example, the evolution of product display from a single pavilion, where goods from different nations could be instantly compared (1851 and 1867), to separate national pavilions (1878 and 1889), to individual company and corporate pavilions (1893 to 1974). This sequence broadly reflects the changing political economy of Europe and the U.S. from the mid-19th to the 20th century. Cross-national comparison of goods flourished in the high period of international free trade; the emergence of separate national pavilions coincided with an era of economic protectionism and economic nationalism; and the replacement of national pavilions by corporate ones represented the return of the internationalism of the early fairs, in the new guise of advanced corporate capitalism.

Benedict also suggests that the categories different nations used to classify their “living encyclopedias,” and the way these classifications changed over time, expressed different national views of how an ideal city and society could be organized. Though they should be tested on a case by case basis, his general taxonomies offer an important conceptual point of departure for grasping the meaning and function of world’s fairs.

The remaining essayists move from Benedict’s diachronic sweep to synchronic and historically specific interpretations. Marjorie Dobkin contributes a well-researched, sophisticated discussion of the political history which shaped the planning and construction of the 1915 exhibition. She describes how the fair was initially conceived in 1904 as a celebration of the prosperity of the San Francisco business community, whose leaders construed the fair as a bold “advertisement” of San Francisco as gateway to the Orient and South America. The original planners, led by banker and former mayor James Phelan, called in urban designer Daniel Burnham, director of Chicago’s 1893 World Columbia Exposition, to formulate a plan linking the fair to permanent improvements and urban renovation for San Francisco. Burnham proposed sweeping changes in the city’s shape, inserting elegant boulevards and numerous parks in descending concentric rings from Telegraph Hill.
The plan was never realized; it languished after two natural disasters and one man-made conflict altered the tone, scope, and goals of the 1915 exhibition. The 1906 earthquake and fire attached to the planning of the 1915 San Francisco fair urgent needs for urban reconstruction, rendering the aesthetic unity of Burnham's plan a luxury. The Burnham plan was also the first casualty of an intra-elite conflict: a series of trials from 1906 to 1909 mounted by the Progressives against corporate graft in municipal government bitterly split the San Francisco business community between Progressive reformers and corporate Republicans. Dobkin discusses how the graft trials poisoned the planning of the 1915 exhibition, whose organizers closed ranks against the Progressives, excluding some of the original initiators of the fair from its board of directors.

Dobkin intricately reconstructs the elite factions who politicized the fair, and the ensuing conflicts between local, state, and national officials as the fair moved toward completion. Architects and designers will be particularly interested in her analysis of the politics of siting for the fair, the influential patrons who sponsored each of three competing architectural ensembles, and the legacy of the 1915 fair for San Francisco city planning. Dobkin likens the 1915 fair to a mirage, and exposes the intense discordance beneath the stated themes of harmony, peace, and class unity.

Gray Brechin's essay, “Sailing to Byzantium,” provides a useful and interesting description of the design innovations that enlivened the fair's derivative classicist architecture. The exhibition, he convincingly demonstrates, promoted four areas of architectural originality. First, it extended the convention of Beaux-Arts ensemble planning by the “court scheme,” coordinating the fairgrounds into four major arenas, each with its forecourts, sculpture, and pavilions. Second, the fair experimented with bold technical inventions of indirect lighting. Massive mirrors and ship masts were used nightly to dart reflected colored lights to the surfaces of the buildings, enveloping them in a shimmering “film of light,” a “soft, shadowless radiance.” These dazzling effects anticipated the great scenographic techniques later used in the cinema. Third, architects of the 1915 fair exploited advanced technology to simulate the effects of age in their buildings. McKim, Mead and White, commissioned to design the “Court of the Universe,” executed their ensemble with a new facing material adapted from their experience with the construction of New York's Pennsylvania Station. There the architects had saved
money without sacrificing ceremonial splendor by using a new material to line the vast interior walls of the station: travertine, which resembled marble. In 1915 they used travertine to cover the exterior façades of their buildings, whose mellow ivory, rose, and yellow striations made the structures appear “earth-beaten, weathered, and rooted in an ancient past.” Thus a resourceful, inexpensive technique created the illusion of antiquity, rendering the fair, in Yeats’s words, an “artifice of eternity.”

The 1915 exhibition architecture was also marked by an unusual and intense colorism, which lightened the imposing classical gigantism of the structures. A popular painter and watercolorist, Jules Guérin, was put in charge of visually coordinating all levels of the fair’s built environment. Guérin required, for everything from architect’s drawings to plans for sculptural programs and landscape designs, the application of a single vibrant palette: the bright yellow and oranges of the California poppy, the azure of the San Francisco Bay, the intense green of the foliage, and the ruddiness of the soil. Guérin’s goal was to create a formal coloristic harmony above the individual historicist structures: “just as a musician builds his symphony around a motif or a chord, so I must strike a chord of color and build my symphony on this.” Contemporary commentators noted the juxtaposition of playful, intense coloring with ponderous formality in the exhibition architecture:

Painted pilasters skip up and down the dignity of travertine stone piers.
The dead spleen of Vitruvius should gather grit to see so lordly a scheme go through the color pots. Yellow domes atop these classic piles proclaim against the cerulean blue in unmistakable paean, “Who did this thing?”

Brockhin’s essay concludes with a discussion of the impact of the four areas of design innovation in the fair on subsequent architects and architecture. Bernard Maybeck, for example, who contributed the startling Palace of Fine Arts in 1915, continued to use the fair’s featured color palette in his later works. And, as Brockhin indicates, the application of intense orange to the San Francisco Golden Gate Bridge in the 1920s explicitly invoked the precedent of the unusual, theatrical coloring unique to the 1915 exhibition. Perhaps in the playful combinations of classical elements and lively colors typical of Post-Modern architecture we see an unacknowledged legacy of the fair.

The last two essays analyze the particular meanings the visual arts of the fair carried for their creators and viewers. Art historian Elizabeth Armstrong characterizes the iconography of the plastic arts at the exhibition in her essay, isolating a visual paradigm which united posters, murals, paintings, and sculpture: the imaging of aggressive male power. The official poster of the fair, for example, “The Thirteenth Labor of Hercules,” represented a taut, muscular, and gigantic nude male figure tearing two continents asunder to make way for the Panama Canal. These “highly evolved virility figures” reappeared, as Armstrong mentions, in the central allegorical sculptures of the fair, which included the tensed aim of the “Adventurous Bowman” and the combative vigor of the “Fountain of Energy.” Armstrong explains the pervasiveness of powerful male figures, and the relative dearth of female allegorical iconography, as symbolic of contemporary theories of Social Darwinism. The fair’s visual paradigm was infused with what one commentator called “rough, brutal, evolutionary ideas,” which assumed not only the ascent of man over other life forms, but a “clear-cut Anglo-Saxon race supremacy.” The evolutionary aspect of popular Darwinism was represented literally in a sequence of painted murals unfolding the “successive stages of the world’s growth, following man’s metamorphosis from sea life to the present.”

Sculptural friezes at the fair extended this literal rendering in works entitled “Natural Selection,” “Survival of the Fittest,” and “Primitive Man.” The interpretation of Social Darwinism as racial supremacy was also evident in the fair’s visual arts. Artists commissioned for the exhibition assumed the fair to be, in their words, “the ultimate frontier of the race’s march eastward from its cradle in Asia,” where “the civilization of the Anglo-Saxon faces its antitype, the oriental!” Spectators entering the exhibition
under the arches of the Tower of Jewels were greeted by the huge murals of William Dodge, in which the “mystic” primitive East was disposed on one side, against the striving “adventurous” West on the other. Reiterating the theme, A. Stirling Calder mounted, on triumphal arches 160 feet in the air, two towering sculptural groups: “The Nations of the East” and “The Nations of the West.” An allegory of “The Spirit of Enterprise” surmounted the sculpture of the Anglo-Saxon race; the “orientals,” lacking the drive for progress, were depicted as “exotic but primitive peoples with little hope of improvement,” symbolized by a central inattentive figure lumbering forward on the back of an elephant draped in ornate harness.

George Starr, a literary critic, provides a striking complement to Armstrong’s analysis of the visual arts in his concluding essay, “Truth Unveiled: The Panama Pacific International Exposition and its Interpreters.” Where Armstrong identifies the particular ideas that shaped the fair’s iconography, Starr illuminates the reception of the arts, and the ideas underlying them, by a middle-class public. Starr’s probing of this reception provides important methodological guidance for cultural historians, and links his efforts to those of scholars like Michael Baxandall, who has offered startling insights into the “cognitive skills” and “habits of mind” that shaped the way art was processed by particular publics in particular historical moments.

Starr explores a fit between the pervasive allegory of the art at the fair and Americans’ “appetite for allegory in 1915.” He argues that the visitors to the fair were not passive consumers, but active “decoders,” who relished translating visual arts into their verbal equivalents. By analyzing guidebooks, memoirs, and newspapers, Starr indicates that American fairgoers were intent on finding profound moral messages beneath the surfaces of murals and sculptures, and earnestly approached visual art for its literary meaning and intellectual significance. Guidebooks exhorted the viewer to engage in the “close and strenuous work” necessary to decipher the meaning of allegorical art, and, with their guidebook’s clues in hand, spectators exercised their interpretive zeal. Starr suggests that the typical visitor to the fair was not a pleasure seeker but a determined and hard-working devotee of “what was morally, intellectually, and culturally good for him.”

Starr links the penchant of the 1915 visitors for “mechanical allegorizing” to distinctively American religious and cultural habits. He suggests the continuity of the 1915 approach to visual art as the repository of elevating moral messages with the Puritan distrust of sensuality, and an ascetic need to turn pleasure offered to the eyes into material for productive thoughts. Starr characterizes the visitor to the fair as determined to engage in “purposeful activity like church-going,” ferreting out profound truths from the arts with a resolve “combining the high-mindedness of religious devotion with the dignity of labor.”

Like his earnest “crackers of codes,” Starr does not take his own findings at face value. He probes a wide range of sources to suggest a profound tension between the fairgoers’ high-minded intellectual activism and their yearning for and yielding to a purely synaesthetic collective ritual. Starr’s analysis of the contrast between the daytime and nighttime experience of the 1915 fair isolates a striking pattern of contradiction between the fair as moralizing sermon and the fair as irrationalist spectacle. He demonstrates how fairgoers welcomed a release from their plodding allegorical exercises and, freed from the constraints of dissipating reason, embraced vitalist splendors.

Starr shows the thrilling impact wrought by the fair’s nightly use of indirect atmospheric lighting. Ponderous and legible by day, at night the fair’s monumental architectural homilies in stone were transformed into a shimmering fantasy land of shifting sensual delights. The massive entryway Tower of Jewels, for example, accosted the public by day with murals trumpeting Western invincibility and Anglo-Saxon racial superiority. At night, the messages on the tower’s surface dissolved into a field of unstable, fragile lights—thousands of pieces of cut glass, hung from wires, and backed by mirrors. At night, shuddering in the wind, the glass novagems lit up, offering spectators a kaleidoscope of colored light.

Starr provides a second telling example, contrasting the meaning of the exhibition’s “Court of the Ages” by day and by night. By day, architect Louis Henry Mullgardt’s court epitomized the boastful thematic program of progress and Social Darwinism. A huge sculptural fountain preceded the imposing court pavilion, around the sides of which unfolded the friezes of “Survival of the Fittest” and “Natural Selection.” By night, as Starr perceptively demonstrates, the “evolutionary clock runs backward, and Reason no longer has the last word,” for the rational, the ethereal, and the ideal give way to “simmering molten liquid” amidst “a warm red glow.” The entire court and sculpture were powerfully transformed at night by extraordinary red light and scenic effects, described in this way by one contemporary commentator:

Steam rising from the base of fountain; figures silhouetted in warm red glow... Serpent cauldrons around edge of pool, to heighten weird effect, by the flickering of gas lamps... Effect of simmering molten liquid... Steam used in court... Main Tower, only tower without direct lighting thrown on exterior; religious feeling, increased by candlesticks... steam to suggest smoke drifting upward.

Starr indicates, based on contemporary documents, how the primeval nightly spectacle inspired ecstatic wonder among fairgoers, who compared it to a form of collective “worship” and to a “gorgeous,” “intoxicating,” “primitive pageant.” Nightly, light and scenography transported vis-
itors far from the genteel Protestant moralizing of their
daytime experience.

Starr does not explain the broader implications of this
contrast between the daytime and nighttime ethos of the
fair, yet his imaginative reconstruction of the tension be-
tween intellect and instinct confirms what historians have
construed as a widespread cultural crisis in America in this
same period. Historian Jackson Lears, for example, sug-
gests that Americans in 1915 were in the throes of a distinct-
ively American “reaction against positivism,” nourished by
James’s and Dewey’s promotion of an indeterminate universe,
by the revelation of the power of the irrational in the
individual mind, and by the emergence of a “post-positivist
science.” Lears’s work traces the stirrings of cultural crisis
among a broad cross-section of the American middle class,
the members of which he characterizes as questing for new
nonrational sources of authority, and for spiritual and
psychological regeneration. Lears identifies three responses
to the American fin-de-siècle crisis of reason, each of which
resonated in the 1915 exhibition: the turn to cults of warrior
violence; a vogue for orientalism in philosophy and the
arts; and the eruption of Catholic revivalism.3

Starr’s analysis of the way fairgoers yielded to ecstatic
sensual “worship” and “intoxicating pageantry” in the fair’s
nightly architectural scene suggests a kinship to the irra-
tionalist tendencies found by Lears. Starr’s isolation of the
tensions between allegorical moralism and vitalist commu-
nication experienced by visitors at the 1915 fair offers compelling
evidence for the broader cultural crisis besetting the Ameri-
can middle class in the first decades of the 20th century.
His essay, and the other fine material in _The Anthropology
of World’s Fairs_, give us access to the hidden world of
meanings lurking beneath the ponderous stability of the
fair’s architecture of classicism, historicism, and rational-
ism. This book will irrevocably change the way we approach
early 20th-century architecture. It is an unusual assess-
ment of the indivisibility of cultural, political, and archi-
tectural history.

1. For an analysis of this juxtaposition in 1889, see Debora Silverman,
“The Paris Exhibition of 1889: Architecture and the Crisis of Bourgeois

2. From the reviewer’s _Nature, Nobility, and Neurology: The Origins
of French Art Nouveau, 1889-1900_ (forthcoming, University of Cali-
ifornia Press).

3. T. J. Jackson Lears, _No Place of Grace, Anti-Modernism and the
Transformation of American Culture, 1880-1920_ (New York: Panth-

William H. Pierson, Jr.: AMERICA’S CASTLE
KENNETH HAFERTEPE

The story of the conception, design, and construction of the
Smithsonian building in Washington, D.C., is one of
American democracy at work in the realm of public ar-
chitecture. As told in _America’s Castle_, it is the story of
the conflicting ideals of powerful, well-meaning men, and
of the agony of a building as it was altered, torn down, and
rebuilt, according to the dictates of fate or politics.

Hafertepe’s account is vivid, persuasive, and eminently
readable. Based on a wealth of documentation, and de-
veloped with a keen sense of timing and suspense, it takes
the reader with disarming ease and clarity through the
bewildering reports and correspondence, the complex
events and personalities. It is the most detailed account yet
of the making of the Smithsonian and adds significant new
information to the now familiar story of the building. Of
particular interest is the author’s treatment of the very
early phases of the design, including an analysis of A. J.
Davis’s unsolicited project of 1840, and a recounting of
the role of the architect Robert Mills in the development of
the original Smithsonian scheme. Hafertepe also reveals
for the first time, and in impressive detail, the central role
of Joseph Henry, as the first Secretary of the Smithsonian,
in the early evolution of the building. In fact, Henry emerges,
in the author’s view, as the hero in the prolonged confron-
tation of ideas and ideals which shaped the institution.

Henry’s principal opponents in this confrontation were
Robert Dale Owen, the congressman from Indiana who
introduced the bill establishing the Smithsonian, and the
architect of the building, James Renwick. The bequest of
the English scientist James Smithson was intended for the
“increase and diffusion of knowledge,” and the very loss-

ess of this specification opened the door to widely differing
interpretations. Owen’s bill was humanistic in tone, calling
for a large building with a museum, library, and art gallery,
as well as scientific research facilities. On the other hand,
Henry—a theoretical scientist from Princeton (then the
College of New Jersey)—saw no need for a large building
with wide-ranging purposes. He sought instead to shepherd
the bequest toward scientific research and publication. The
result was a mortal conflict of diametrically opposed views,
a conflict which forms the heart of Hafertepe’s account.

That account has one serious flaw: its author is judgment-


al on the side of Henry. Hafertepe’s exposition of Henry’s
role in the Smithsonian is the most important and interest-
ing part of his book, written with a keen awareness of its
dramatic potential. But to heighten the impact of that
drama, Hafertepe uses Owen and Renwick as foils, with
the result that both men emerge with their reputations
substantially dimmed, and the building, the innocent and tragic victim of disagreements among men, actually ends up as one of the antagonists.

The first casualty was the original plan, as developed by Robert Owen and his brother David. In the author’s drive to press Henry’s opposition, this plan never receives a proper hearing, and is treated as a kind of conspiracy by the two brothers to get a foot in the door early. Actually it was an intelligent and workable scheme, prepared by thoughtful and able men who knew precisely what they were doing. As the author reports, Robert Dale Owen was a cosmopolitan figure with liberal views; it says something about Henry that in his drive to block Owen’s reappointment to the Board of Regents, he found it necessary to evoke the congressman’s views on birth control. Owen’s idealism and wide-ranging curiosity gave him a very special sense of the function of architecture in a democracy, and his conception of the Smithsonian reflected that broad vision—and, as it turned out, the views of the majority of those in a position to affect the outcome.

What is particularly disturbing about Hafertepe’s handling of the Owen scheme is that he never identifies David Dale Owen as other than Robert Dale’s brother, which obscures David’s expertise in the matter. David Owen brought the highest possible credentials to the original planning efforts; like Henry he was a distinguished educator and one of the leading scientists of his generation in America. From his location in New Harmony, Indiana, he led the earliest geological surveys of the upper Midwest, and his laboratory (of architectural interest itself) served as headquarters for the United States Geological Survey until 1856 (when the USGS was transferred to the new Smithsonian in Washington). In addition, in its short span of existence the school at New Harmony where David Dale Owen taught produced more prominent American field geologists than Harvard, Yale, and Princeton combined. When Robert Owen turned to his brother for advice, he was seeking the help of one of the best-qualified men in the nation. Yet their plan, so carefully articulated by Renwick in the massing and arrangement of his original design, was, from an architectural point of view, almost totally destroyed by Joseph Henry during his incumbency as secretary. The author, in his assessment of Henry’s changes, never considers their impact on the original design, which seems essential if the architect is to be held accountable for the outcome.

Hafertepe’s bias against James Renwick is also conspicuous. Throughout the book the two principal witnesses against the architect are Henry himself, to whom Renwick represented what he hated most, the building; and George Templeton Strong, prominent New York lawyer and diarist, who despised Renwick and never missed an opportunity to attack him and his architecture in the most disparaging and often scandalous terms. Both men were prejudiced, even angry observers, yet their opinions of Renwick are quoted by Hafertepe at length, and form the basis of many of his judgments. Renwick, on the other hand, has no advocate, nor is his case ever fully presented. Hafertepe writes, for example, that after the collapse of a portion of the interior framing in the main building Renwick reported to the Board of Regents, and later testified before them. We never learn, however, what that report contained, nor
what the architect said before the board. Perhaps no records survive, but if so, the reader should be informed, out of fairness to Renwick.

In incidents like the collapse, where faulty materials or construction must certainly have been the cause, the architect may well have been partly if not wholly to blame. But before judging him one must examine his structural specifications carefully, and compare them with the changes forced on him later by others. In this respect, it is imperative to point out that Renwick’s specifications for the building, written after some modifications to the original design, were actually printed and are a matter of public record. The author, however, never specifically refers to this document, nor does he list it among his sources.

In considering the historical role of the Smithsonian, Renwick’s printed specifications are of immense importance. They not only provide solid evidence against which to judge subsequent changes, but also show that Renwick was innovative in his thinking. For example, they call for fireproof construction of a very special kind for part of the building: the floors of the Chemical Lecture Room and the Students’ Working Laboratory were to be carried by a system of iron beams between which segmental vaults of brick were to be sprung. The spandrels between the beams and arches were to be brought to level with a mixture of lime, sand, and gravel—in other words, concrete. Thus the floors and the ceilings below were to have been completely fireproof. Hafertepe does not mention this, nor does he explore the question of why the architect’s innovative recommendation was not carried out until much later in the century. If it had been, the interior of the Smithsonian would have been the first federal building in the United States to employ this advanced method of fireproofing. Ammi B. Young would shortly use the same method throughout a number of important federal buildings, including his addition to Robert Mills’s Treasury Building. It became standard in large-scale late 19th-century public buildings in the United States, and remained so until the invention of the metal frame in the late 1880s.

Hafertepe’s bias against Renwick is most evident in chapter 6, which carries the heading “... Not to be Trusted.” Even the most generous reading of this chapter leaves the impression that Renwick was both incompetent and untrustworthy. It is true that Renwick could be a very difficult man: he was self-assured, even arrogant, and a snob; he was also socially well connected and politically astute. The notion that he was incompetent and untrustworthy, however, is so contrary to the evidence of his career as a whole that it prompted a check of the letter from which the phrase came. When that phrase is seen in the context of the entire letter, a more reasonable interpretation is that Henry was questioning Renwick’s ability to estimate costs, not his personal integrity. At issue was the cost of certain changes to be made in the lecture room; Hafertepe charges that “Renwick was attempting some gains of his own,” and in support of this allegation he writes:

[he] had originally estimated that the new plan for the lecture room would cost another several hundred dollars. Henry responded that he “would have nothing to do with the change if there is any extra expense to it.” Later that evening the Secretary was informed that the contractor had been willing all along to make the changes at no additional cost.

It is significant that in this passage Hafertepe chose to paraphrase the critical last sentence, in such a way as to raise doubts about the architect’s motives. What Henry actually said was that the contractor “had concluded to do it for the same as the cost of the first plan.” Surely, “had been willing all along” does not mean the same as “had concluded.” The first implies a radical difference of opinion between Renwick and his contractor; the latter suggests that the contractor made his decision for reasons that need have had nothing to do with Renwick. In this case it is hard to see how the architect could have schemed to gain financially.

Hafertepe also assures the reader that “all the changes were made . . . ‘without increasing the expense of the building.’” The Building Committee report for 1849, however, gives quite a different picture: “the changes above mentioned [which are the ones Hafertepe describes] will be accomplished, on agreement with the contractor, at an extra cost of $100.” Renwick would thus seem to have been at least partly right in his original estimate. Hafertepe of course may not have been aware of the Building Committee’s report, although it comes from one of the documents he cites. His paraphrased sentence, however, which actually changes the meaning, is difficult to view as unintentional. Indeed, in the face of the documents themselves, the author’s treatment seems an inexplicable lapse in discipline, especially in a book published under the imprint of one of the nation’s bastions of impeccable scholarship.

One of the most divisive issues in the Smithsonian controversy was the Romanesque style of the building. In 1849, over the vigorous objections of Joseph Henry, Robert Dale Owen published Hints on Public Architecture, an intelligent and revealing defense of the Romanesque in general, and of the Smithsonian building in particular. Hafertepe devotes an entire chapter to an informative analysis of this work. Especially interesting is his comparison of Owen’s ideas on architecture with those of Henry, which he draws primarily from one of Henry’s unpublished essays. Again, however, his sympathies are with Henry, and because of his intense preoccupation with the battle of architectural wits, many positive aspects of Hints are blurred. Owen’s position is also weakened when Hafertepe introduces, in support of his arguments, an unfavorable review of Hints written by
the architect Robert Cary Long, and published in *The Literary World*. In his discussion of this review, Hafertepe concentrates on the most abusive of Long’s charges rather than on his fundamental criticisms, so that Long’s intentions are misconstrued. Seen in its proper light, the review provides an illuminating insight into the architectural ferment prevailing in the United States at the time the Smithsonian was built; but to understand Long’s role in this ferment it is necessary to establish his credentials (which the author does not). Long was, in fact, an archetypically eclectic who was versatile in several styles, but had a strong penchant for the Greek. He was also an architectural purist. He thus regarded the Romanesque as a crude, uniformed style, and Owen as a dangerous “Architectural reformer” whose conceptions of architecture as “an Art of utility” posed an ominous threat to his own rarified vision of what it should be.

Far from dampening the impact of *Hints*, Long’s review, by its very opposition, turned out to be a powerful affirmation of the innovative character, not only of the book, but of the building as well. Long’s fears proved uncannily prophetic; Owen’s book became a powerful force in the permutation of the Smithsonian’s bold new round-arch idiom into the broad reaches of American architecture.

Hafertepe’s book is really about Joseph Henry; he therefore does not deal with the larger issue of the relationship of the Smithsonian to American architecture as a whole. There is one hopeful moment, however, when he speaks briefly of “a style referred to as the Rundbogenstil.” Unhappily, this reference is fleeting, but had the author explored it, he would have discovered that the *Rundbogenstil* was a rational and vital style which flourished in Germany in the 1830s, and in the late 1840s was one of the several influences which would shape the American round-arch mode. Ironically, the last building discussed by Hafertepe, the United States National Museum Building, is one of the finest examples of this mode in Washington. More than that, it is situated next to the Smithsonian where its complex, round-arch rhythms move in sympathetic response to those of its progenitor. The building, as the author so emphatically reports, is fireproof, but he does not mention that the technique for constructing the floors is the same as that first recommended by Renwick in the Smithsonian.

On the whole, Hafertepe’s architectural analysis is sound, but in a few instances his judgment seems unsure; two of these are worth mentioning. The first, a question of method, is found in the discussion of the similarity between the central motif in the north façade of the Smithsonian, and the façade of Renwick’s earlier Church of the Puritans in New York. Hafertepe observes that the Smithsonian towers were “more slimly proportioned” than those of the church, a judgment based on the engraving of the church that illustrates his book. Illustrations of buildings in the periodicals of mid-nineteenth-century America, useful as they are, are seldom reliable on matters as discrete as proportion, and this one is no exception. Actually, the architect’s original drawing, which is in the New York Historical Society, reveals that the proportions were exactly the same on both buildings.

The second instance is substantive, and also occurs in his discussion of the Church of the Puritans. Hafertepe asserts that Renwick’s “sources for the church in general and the gable arrangement in particular were the Romanesque churches of Germany, which had been illustrated in the second volume of Thomas Hope’s *Historical Essay on Architecture*.” The author shows a plate from Hope’s book to illustrate his point. His identification of Hope as the source for the gable is correct, but not his contention that the church in general is also German. The façade is conspicuously French. Its tripartite scheme derives, in fact, bay by bay, window by window, door by door, and tower by tower, directly from one of the great abbey churches of the Ile de France, St.-Denis. Even the crenellation, which the author finds “arbitrarily applied” by Renwick, comes from the same source. There are some modifications in detail, and all the openings have been round-arched, but the source of the overall design is unquestionable.

Hafertepe ends his story with the death of Joseph Henry, and in a single-page valedictory recognizes that Owen’s concept of the Smithsonian prevailed and ultimately led to the institution as it exists today. But even in this valedictory piece, it is the tortured building that is blamed for Henry’s failure to achieve his goals. The author’s final sentence reads: “Owen’s Castle forced upon Henry a far different Institution from the one he so strongly advocated.” In view of what happened during the late 19th century in American architecture, the Smithsonian building cannot be left as an obtrusive nuisance, even though to Henry it may have been. To reaffirm its integrity as a work of architecture a final observation seems in order. The Smithsonian was a seminal monument in one of the most pervasive and important architectural developments of the period. The round-arch mode, as it took shape in this country, would find its way into every type and level of building, including commercial and industrial architecture, and would climax in the powerful, poetic work of Henry Hobson Richardson. The Smithsonian was one of the initial steps in this process and thus paved the way for the emergence of Richardson as the first truly American architect, and the Richardsonian as the first truly national style. There can be no doubt that the Smithsonian was Joseph Henry’s cross, but the final truth is that this remarkable building, with all its youthful awkwardness and groping insecurities, survived Henry’s persistent efforts to destroy it, and in the end become a respected symbol of the nation’s struggle toward cultural identity.

*America’s Castle: The Evolution of the Smithsonian Building and Its Institution, 1840-1878*, Kenneth Hafertepe, Smithsonian, 1984, 206 pp., illus., $19.95.
Edward N. Kaufman: THE STATE OF THINGS VICTORIAN

The trajectory of Victorian studies has not been entirely predictable. It started in the 1920s and 1930s with a group of English scholars and amateurs, began to turn solidly academic in the 1950s, blossomed in a fine series of books and exhibitions in the early 1970s, and then appeared to stall—surprisingly, for the trend toward an appreciation of historicist architecture took off decisively at just that moment. But a cultural coup had swept away the Victorian incumbents and installed the insurgent young Beaux-Arts, who quickly captured the imagination of architects and have held it ever since. From a certain point of view, the outcome was inevitable, with England becoming an insular concern, a provincial sideshow to the center of taste, which was once again firmly established in Paris. One might have thought that the revived taste for eclecticism and for the 19th century would spill over, or at least down, to the Victorians, but the study of Victorian architecture during the 1970s remained curiously immune to the historicist vogue for the Beaux-Arts. That the reverse is true—that the Beaux-Arts trend in recent architecture has been uninfluenced by the Victorian vogue—goes almost without saying.

The reasons for this may have to do not so much with architecture as with the structure of the fields concerned. After all, the intelligentsia’s preference for things (or thoughts) French has been overwhelming: the list of recent culture heroes is markedly French—Foucault, Ladjurie, Barthes, Derrida, whoever—and certainly English history and sociology, with their more pragmatic traditions, have been hardly prestigious. Then, too, Victorian architecture is frequently (and misleadingly) cast as Gothic, and the preference for classicism among architects has been absolute. “Architects don’t like Gothic,” said one to me not long ago, meaning that Victorian did not have a chance. They may not agree on what classicism is, but all know it is something worth having. Scholars argued for decades over the nature of Gothic (something to do with ribs), but nowadays no one seems to care. Classicism has simply captured all the strongholds, from watercolor rendering to urban planning; it has even captured the vernacular, in one of the strangest alliances in architectural history (after all, no style was more deeply imbued with a concept of the vernacular than the Victorian Gothic).

Yet the Gothic has never entirely disappeared for long, at least not in the last nine hundred years or so. It is there now, at Pittsburgh Plate Glass, and will no doubt surface elsewhere. The Victorian Gothic, and the Victorian Vernacular, are also hovering about, at least in England. In the meantime, the study of Victorian architecture, classic as well as Gothic, has taken off again and is undergoing a decisive shift in character. If the Victorian never captures the practical imagination of architects, it is at least well on its way to academic tenure, as three recent books—an interpretive study and two catalogues—demonstrate.

The first is The Face of the Past: The Presence of the Medieval Inheritance in Victorian England. In it, Charles Dellheim poses a central question for 19th-century architectural historians: what was the significance of historicism, especially medievalism, in Victorian culture? How, he asks, did the Victorians “rework tradition to suit the needs of their unprecedented society,” a society marked by rapid industrialization and dramatic shifts in economic and class structure? How explain the seeming paradox of a dynamic present absorbed in the contemplation, and even re-creation, of a static and distant past? To do so, Dellheim moves from general topics like the functions of tradition, the growth of local archaeology and history, and the tension between provincial and national consciousness, to case studies in preservation (Kirkstall Abbey and the city churches of York) and municipal architecture (Waterhouse’s magnificent Manchester Town Hall). The writing is cheerful and engaging, the material deftly presented.

Dellheim is not a historian of architecture, and occasional slips may make the architectural reader nervous. On the whole, however, his architectural history is sound, and his approach has much to teach us, particularly the way he embeds the problem of architectural historicism within the larger problem of making and using tradition. Local politics and travel writing thus claim parity with restoration theory, iconography, and the debate over architectural styles. Further, the secular is emphasized over the sacred, the middle-class over the aristocratic, the vulgar over the elite, and the provincial over the metropolitan, adding up to a notably different picture of building culture than the one architectural historians are accustomed to draw. Anyone who has ever sought an alternative to the architectural model of provincialism, distorted as it is by value-laden concepts of quality and artistic priority, would do well to study the book.

So would anyone interested in critical, and especially popular, responses to architecture. Dellheim mines an impressively broad range of sources, including journals, letters, travel guides, popular histories, newspaper reports, political speeches, minute books, and popular poetry. His technique is similar to that so convincingly advanced by Juan Pablo Bonta in Architecture and its Interpretation (London, 1979). It also recalls the work of English scholars like Mark Girouard and Clive Aslet, who have been so adept at incorporating scraps of letters, journals, manufacturers’ catalogues, guidebooks, and the like into their writing. Yet were Girouard or Aslet to include a popular cartoon,
it would most likely be with a minimum of comment, letting it make its own point. Dellheim, on the other hand, will describe rather than illustrate it, carefully underlining the meaning. In Girouard’s book the cartoon would be funny; in Dellheim’s, it is evidence. Yet Dellheim is fairer to his evidence than the English writers, who tend to use it merely as a graceful point to their argument. Dellheim always emphasizes the diversity of his sources. Indeed, he likes to observe how opinions are shaped by circumstances and serve different interests—a healthy acknowledgment of the impurity of critical judgment, and a salutary reminder to architectural historians who hold by the objectivity of their opinions.

Objects are centrally important to architectural historians, as they are to Dellheim, who believes that the Victorian perception of the past was primarily “a visual rather than a verbal faculty, cultivated in the landscape more often than in the library, shaped in a direct encounter with material objects.” He refers more than once to the imposing “physical presence” of medieval remains, arguing that they were just as “real” to the Victorians “as the railway and the factory.” No doubt he is right, but I suspect we are also witnessing one of those always interesting lapses from “objectivity,” as Dellheim the historian makes his own choice between paper and stone, the library and the landscape. In the end, he stays close to the library; his book relies heavily on written sources, but he salvages the excitement and puzzlement of his encounter with buildings by projecting it on the Victorians. And who can blame them (or him) for their obsessive interest in the reality of buildings? Who has not wondered at the stolid yet ungraspable “thereeness” of a million tons of masonry, or at the perplexing power of a thing to exist?

Events and attitudes are real, too, and their reality is often just as difficult to grasp—if consistent failures to do so are any guide. After all, those critics who not long ago claimed that exhibition halls and railway stations were the “real” architecture of the 19th century were implicitly denying the reality of other kinds of architecture: for them, Gothic revival churches and town halls were not (to use Dellheim’s phrase) “as real as the railway and the factory”; historicism not as real as modernism. More sympathetic historians, asserting that historicism was “really” a cloak for something more meaningful (such as the roots of international Modernism), have also denied the reality of the historicist attitude. In a sense they have subtly refused to acknowledge that historicism happened, and though many books have by now dealt appreciatively with historicist architecture, Dellheim’s is one of the first to accept that simple fact.

He not only accepts historicism, he constructs a respectable academic case for it. He begins by remarking that what is “most telling” about the medievalist works of Pugin, Coleridge, Carlyle, Disraeli, and Ruskin is the “humane vision” of the authors, whom he goes on to describe as “modern pilgrims in search of solutions to contemporary problems.” This is hardly novel, but Dellheim then shows how Liberals like E. A. Freeman also constructed historical visions of the Middle Ages to serve their views of the present. “Liberals and conservatives alike legitimized their causes by invoking medieval symbols,” thereby lifting the phenomenon of medievalism beyond the domain of a single class or point of view. Dellheim consistently emphasizes the active nature of history or tradition-making, believing—along with E. A. Freeman—that politics and history always influence each other. Whether in the self-image of the Bradford wool merchants or the internal politics of the Archdiocese of York, Victorian medievalism was “concerned with contemporary dilemmas”: therefore, argues Dellheim, it was not (as its opponents have claimed) an anachronism but a fundamentally “modern” phenomenon, as modern as the “unprecedented” society that produced it. Thus Dellheim effectively counters the strongest argument against historicism.

Architectural historians should be aware that Dellheim’s interpretation is shaped specifically in opposition to the
view of medievalism as a form of "anti-modern dissent," a protest against the realities of industrial society and the expression of an outmoded and dying aristocracy. Architectural historians are more accustomed to the view that medievalism—at least in the hands of Pugin or Morris—held the seeds of modern architecture. Dellheim shows that neither of these simplistic explanations can be sustained, that medievalism was propagated by many different groups, and for a wide variety of reasons. Yet, it is interesting that he accepts the assumption, basic to both of the old views, that the 19th century was a fundamentally modern and progressive age. Recent research (some of it mentioned in the last chapter) has suggested on the contrary that the staying power of old ways and old wealth was much greater than previously thought, and I suspect that architectural research will confirm this. Then Dellheim's paradox, the paradox of the "Gothic arch and the iron rail," will unravel, and a new explanation of historicism will be wanted.

That an altered perception of history might call forth a new explanation of it should occasion no surprise, for Dellheim and E. A. Freeman are surely right, that history serves present goals and values. This book is significant precisely because it begins to shape those changing values, especially a growing taste for historicism, into a cogent historical explanation. As recently as 1970, Sir John Summerson—surely the most sympathetic critic of Victorian architecture—felt compelled to explain the "Problem of Failure" in that architecture. Dellheim's interpretation, on the contrary, is based on the premise that it succeeded, and his book may be the first explanation of the success of Victorian architecture.

"There is no comprehensive study of John Pollard Seddon," says Michael Darby in the introduction to his eponymous catalogue—a state of affairs that may not surprise readers of this journal. Yet for forty years before his death in 1906, Seddon was a prominent member of his profession and a leading Gothist. John Pollard Seddon is not the "comprehensive study" Darby might have written; it is both more and less than that, a catalogue of the almost two thousand drawings by Seddon in the print room of the Victoria and Albert Museum, accompanied by about 110 black-and-white illustrations, a biographical introduction, and chronology which conflates a catalogue of buildings, a list of published articles, and a list of exhibited drawings. (There is also a complete set of microfiche illustrations which can be ordered from Ormonde Publishing in London but which was unavailable to me.) It is a prolegomenon to a study of Seddon; but its importance goes beyond its subject. The Royal Institute of British Architects, the leading repository of Victorian architectural drawings, has been releasing an impressive series of book-length catalogues; the V & A, second only to the RIBA in the value of its holdings, starts its own series with this volume.

Like Darby, the author of our third book is out to do something about the disorganized state of Victorian source materials. Roger Harper's original object was to study the phenomenon of architectural competitions in Victorian England. But, finding "no firm basis from which to start the study, nor even to establish possible lines of enquiry," he decided to create such a foundation. The result is Victorian Architectural Competitions, an index of more than 2500 competitions as reported in the leading British architectural journal, the Builder, between 1843 and 1900. Actually, there are four indices—places, names, dates, and building types—so that one can easily look up, say, competitions for breweries (only one, in Darlaston), or competitions announced in 1876 (forty-seven), or competitions held in Pudsey (two, for almshouses and a mechanics institute), or competitions won by Szlumper and Aldwinckle (two, both in Wales).

It is as catalogues, then, that both books will principally be used, and no doubt well used. But neither is perfect. Seddon's flaws seem relatively harmless (a school in the catalogue becomes a parsonage in the photograph; note is not always taken of differences, sometimes substantial, between drawings and executed buildings). With Victorian Architectural Competitions I am not so sure. I checked it against a subject I have researched fairly thoroughly—the works of "Lamb, Edward Buckton"—and promptly discovered two competitions which had escaped my notice. On the other hand, only 5 of the 23 competitions on my list were included
in Harper's, and there were discrepancies between the architects' and the geographical indices. Where were the other competitions? A few evidently escaped Harper's attention, but most of them were never reported in the Builder. So this is a valuable index, but it is not a complete one, and it will not save you from a dusty, frustrating trip through the Builder, not to mention the Building News, the Civil Engineer and Architects' Journal, the Ecclesiologist, the Architect, and the British Architect, to name the most important of the other Victorian journals.

In pointing this out, I do not mean to criticize Harper for not doing something he did not set out to do. But I do want to indicate the enormous gap between the profession's need for information and the research tools available to it. Darby has given us access to 5.6 percent of the V & A's 35,000 architectural drawings, Harper to a respectable sample of the century's architectural competitions. But how slowly do such tools accomplish the task! We urgently need a complete index not only to the Builder, but to all the important Victorian architectural magazines; an index of exhibitions, including those of the little-known but all-important Architectural Exhibition Society; catalogues of drawings, not only in the leading London collections but also in those chaotically indexed but indispensable County Record Offices; published corpora of photographs, beginning with the National Monuments Record; accurate and well-indexed lists of monuments to supplement those provided by Buildings of England.

Whether this will ever be achieved none can say, but the process is underway, and for this scholars will be grateful. Not everyone will rejoice, however, at the relentless professionalization of the field which is taking place. Amateurs will quite properly resent it and indeed have resented it for some years, for they can already see the day when they will no longer be able to make significant contributions, or even hold significant opinions. But professionals too should fear the future. In the past, every encounter with the Builder was a pioneer voyage, with the promise of discoveries not merely at the end, but along the way. A trip through the Corpus Architecturae Victorianaee will be a very different thing, and so will the research that results. It will no longer be possible to launch balloons fueled only by ambitious hunches and freighted merely with the best research that circumstances allow. Soon only regular academic engines will run. We may often bemoan our inability to find out what we want to know, but how lucky we have been to have lived unplagued by the horror of "Notes" on previously unknown works by minor masters, untroubled by efforts to distinguish between the hands of assistants, innocent of attributional trivia and the fear of scholarly trespass. All this will change, and the very tools which aid our work will speed the change. Our students, or theirs, will know the search for minor figures who have not been "done."

In the meantime, let us press for our corpora, our indices, our commendably serious interpretations, and let the future take care of itself.


John Pollard Seddon, Michael Darby, Victoria and Albert Museum (dist. Faber & Faber), 1983, 120 pp., illus., $24.95.


Alice Jurow:

DECORATED WALLS OF MODERN ARCHITECTURE

KAKUZO AKAHIRA, editor

The wall—the sensual quality of its material, the detailing of its surface, joints, and openings—is perhaps the most basic medium of exchange between person and building, the starting point of communication, experience, intimacy. Decorated Walls of Modern Architecture is a handsomely produced book from Japan featuring some 200 color photographs of 32 European buildings, buildings in which the wall, inside and out, is always more than a plane. The contents range in date from Guimard's Castel Béranger (1894-1898) to Aalto's Tuberculosis Sanatorium (1929-1933), and the chronological organization offers a useful reminder of the extraordinary diversity of this period. The intoxicating Art Nouveau of Guimard and Gaudí appears side by side with the sober (but no less rich) rationalism of Baudot, Berlage, and Perret; the chaste neoclassic simplicity of Wagner, Behrens, and Loos is interwoven with historicist and expressionist romanticism from Östberg, Asplund, Saarinen, and Steiner; and finally, white International Style volumes alternate with muscular exposed-concrete Gothic as we reach the mid-twenties.

The selection seems a very personal one, always pervaded by a sense of the relationship between the observant traveler and the felicitous architectural detail. The limited number of locations (Vienna, Paris, Barcelona, Amsterdam, Stockholm, plus several towns in Germany, Switzerland, France, and Finland) adds to the feeling that we're looking at a set of particularly fine travel photos, but this limitation reinforces the special strength of the book—it is not a complete survey but rather a study of
parts which can evoke the quality of the larger whole. The intention is clearly to present less obvious and less frequently published examples of the period, as well as unusual views and obscure details of more familiar works. For example, Wagner's Majolikahaus (looking somehow fresher and cleaner than usual) is shot close enough for individual tiles to be seen, and is accompanied by a rare closeup of his adjacent design at Linke Wienzeile 38, with its even more elegant gilt decoration. Olbrich's Secession Building, most often seen head-on, reveals when circumambulated a wealth of applied and incised ornament—animal (owls!), vegetal, and geometric. Similarly, Steiner's Goetheanum is shown in eight unique views, including a couple of pulsating interiors and an undulating shinglescape of the attic story.

In general, of the buildings presented, the less familiar are more thoroughly documented. Thirteen photographs are devoted to the variety of brick ornament and castle forms of Ragnar Östberg's Stockholm City Hall. Further voluptuous and inventive essays in brick are seen in two Amsterdam housing projects, the Eigen Haard estate by Michel de Klerk and the de Dagoraad estate by P. L. Kramer. Some of these less-known works do indeed have a resonance with the present, as suggested in K. Yamashita's preface: Wagner's Kaiserdam Control Building appears startlingly Post-Modern, complete with watery semiology; while Georges Chedanne's 1903 steel and glass façade of the “Parisien Libéré” office still has a stunningly high-tech look. Perhaps one of the loveliest surprises in the book is an early work of Aalto's, the 1925 Civil Guards House, a trio of elegant structures whose tile roofs and wood siding give them a remarkably California look, made outstanding by robust proportions and sophisticated classical allusion.

The photographs themselves are magnificent. Often striking images in their own right, they zoom in confidently to an eye-catching texture or shape: ceramic buttons embedded in the façade recesses of Perret’s rue Franklin block, a delicate crescent moon patterned into the brickwork of the Stockholm City Hall, the visual pun on a diamond-faceted window in Berlage’s Diamond Society building (interestingly echoed on the following page by a three-dimensional glass star window in Gaudi’s Villa Bellesguard). Lighting conditions have been used superbly to highlight subtleties—the grotesques on the Castel Béranger’s entrance columns have never been more clearly legible. The focus (and it’s sharp) is almost entirely on closely viewed details; overall views of the buildings are usually printed small and seem a bit perfunctory, as if their familiarity is assumed. Fair enough—a stone walrus cornerpiece and a truss connection studied with blue-painted rivets are more important aspects of Berlage’s Amsterdam Exchange than is its long rambling streetfront.
Decorated Walls of Modern Architecture provides a valuable documentation of previously under-represented buildings and a very pleasurable sourcebook of images; it should be equally desirable as a deskside reference, a coffee table indulgence, or a companion volume to less lushly illustrated histories of the period. It's a book that hardly needs text, yet the notes on each building (despite occasional lapses into translation-ese) are, like the photographs, well focused, picking out significant technical and historical details. Two appendices, adding further information on the architects and the buildings, are untranslated; another—an endearingly friendly touch—consists of a set of annotated maps, complete with Metro stations, showing how to find each of the buildings included. But they're unlikely to look any better in person than they do in these pictures; the budget-conscious would do well to buy this book and save the cost of plane fare.

Decorated Walls of Modern Architecture, Kakuzo Akahira, editor, Graphic-sha Publishing Co., Ltd., 1983, 158 pp., illus., 3500 yen (approx. $30.00).

Micha Bandini:

MODERN ARCHITECTURE, 1851-1945
KENNETH FRAMPTON

A new book of photographs and texts on modern architecture, by Kenneth Frampton and Yukio Futagawa, has been lavishly produced by Rizzoli. It is a reprint in hardback of two softcover volumes (Modern Architecture 1851-1919 and 1920-1945, published by A.D.A. Edita, Tokyo) by the same authors, with written text for the most part extracted from Kenneth Frampton's Modern Architecture: A Critical History (Oxford University Press, 1980)—a fact that is somehow missing from the credits.

The organization of this compendium, edited by photographer Futagawa, is complex: ten chapters, each a short, illustrated essay, are interspersed with a series of buildings, selected presumably for their significance to the Modernist debate, photographed mainly by Futagawa, and arranged in strict chronological order, from Joseph Paxton's Crystal Palace (1851) to Villanueva's City University, Caracas (1944-47, 1952-57).

The aim of Frampton's captions for the photographs—again often excerpted or paraphrased from his Modern Architecture—is to provide detailed analyses of the buildings, as a counterpoint to the chapter essays, the parallel texts expanding the book's historiographic outlook. In adopting this technique, Frampton gives the impression that he wishes to explore a more fragmentary, nonlinear, richer history of modern architecture, and not just of Modernism; one that would come to grips with the omissions of previously accepted histories. But the impression cannot be sustained in the light of his own important omissions (Lutyens, Lethaby), the feeling of déjà vu inspired by most of the captions, and, perhaps most of all, the irritating use of the word “anticipated,” which conveys a penchant for a linear, progression-oriented historiography: Sullivan's “exotic, all red architecture” anticipates Wright's Larkin Building and his Johnson Wax Building, which itself anticipates Louis Kahn's articulation into served and servant elements.

The somewhat casual relationship of the photographs to the text is also evident in their placing, which is chronologically ordered and internally consistent, but does not permit cross-referencing with the chapters. Moreover, the attempt to expand the captions into a parallel history sometimes misfires; the Red House caption is devoted more to Webb's connections with the Arts and Crafts Movement than to the building itself; the historical account of Toni Garnier's Cité Industrielle is flattened by being made to appear the direct result of his Prix de Rome project; and the internal ambiguity of the Italian Rationalist Movement is reduced at a stroke by making Terragni and Libera (who never went to school in Milan) fellow students at Milan Polytechnic.

A general index and good footnotes would have made this book more us-
able. Unfortunately, there is no system for referring the alphabetical index of architects (compiled by Anthony Alofsin) to the text and captions, which are both more than occasionally marred by spelling mistakes (Giaccomo for Giacomo, Lingotti for Lingo
to, Suisse instead of Suisse).

Since the approach which underlies this book is very close to that which led Frampton to construct his Modern Architecture: A Critical History (1980), I will not engage in yet another discussion of the book. I will only draw attention to the criticism made by Alan Colquhoun and Manfredo Tafuri in a special issue of Architectural Design (#52, July/August 1982) and by William J. R. Curtis,* all three of whom expressed misgivings about the reductionism and randomness of the text, while praising the attempt as a whole.

For me, the difficulty in understanding what the book is trying to achieve has four distinct sources. First, its scope is unclear. Anthony Alofsin’s index, which includes C. R. Cockerell (1783-1863), William Butterfield (1814-1900), and Norman Shaw (1831-1912), suggests a domain that is never explored. Second, the limits of the period are arbitrary. Some may hold that the “true” root of Modernism is in the Engineering tradition, but why should that tradition be deemed to start with the Crystal Palace in 1851? Why not go back to Giedion to Coalbrookdale? Third, either the concept of Modern architecture should be opened up in its diversity—making it impossible either to bound it between two dates or to exclude architects for stylistic incompatibility—or a formalistic definition should be described, a criterion to justify all reductions and omissions. And fourth—one cannot help but ask—what does this apparent arbitrariness accomplish, and whom does it aim to please?

The purpose of this text may be not to reinterpret the Modernist discourse, or to familiarize a new public with its problems, but rather to provide the publishing world with a new, elegantly bound book of beautifully executed photographs. Futagawa’s work is unquestionably very seductive and, from a reader’s point of view, a good reason to acquire the book; but one must stop and examine the visual images to discover the somewhat “limited” use of the camera which he allows himself.

A typical Futagawa image is a simulated straight elevation or central single-point perspective which is not merely reminiscent of an architect’s drawing, but in certain cases (e.g., C. F. A. Voysey’s Broadleys) almost indistinguishable from it. Futagawa’s camera-drawing-machine does not attempt to achieve any dynamic dimension; it chooses to present Modern buildings as monuments and works of art while ignoring the camera’s potential for capturing the impact of architecture.

The effect of freezing the images is to freeze Modern architecture into a hieratic, timeless art product: the final impression the book gives is of a consumable item destined for a lay audience desirous of increasing its tasteful collection of coffee table books.

For the student in search of an introduction to Modern architecture, Frampton’s less expensive and smaller Modern Architecture: A Critical History (Oxford University Press, 1982) is a better value. To those seriously considering study of the subject, Bene
dolo’s two-volume History of Modern Architecture (MIT, 1971) and the less readable but historiographically more astute Modern Architecture, by Tafuri and Dal Co. (Abrams, 1980) are still the only possible alternatives.

*Diane Ghirardo:
OLYMPIC ARCHITECTURE
BARCLAY F. GORDON

There is a special genre reserved for histories of international expositions and world’s fairs; most recount how, despite modest beginnings and innumerable problems, the hosts manage to pull off successful celebrations. Whatever blemishes mar the actual events, historians emphasize that which functions most smoothly—positive statistics on gate receipts, number of displays, and so forth. These accounts, which depict an unbroken trajectory of progress and growth, seem designed to educate visitors and to stir parochial loyalties (and encourage attendance at future events); critical analysis seldom figures in.

Barclay F. Gordon’s Olympic Architecture: Building for the Summer Games falls nicely into the genre, although he does bring some analytic rigor to the story. Only in the late 19th century did the cult of physical well-being give rise to the international spectacle of the Olympics, and Gordon’s book tells a story of occasionally slow, but always steady progress. From an event which most closely resembled a county fair, the Olympics have grown to be big business and a significant weapon in the East-West propaganda wars. In 1896, when Baron Pierre de Coubertin inaugurated the Olympics as the modern recreation of ancient Greek competitive sports, thirteen nations sent their athletes to participate. Eighty-eight years later, roughly 120 nations sent 12,500 participants (athletes, trainers, and others) to the games. Hosting the most lavishly appointed games has become a matter of fierce patriotism in cities such as Moscow, Tokyo, and Montreal. Since the 1930s, architecture has played a significant role in defining a city’s Olympic Games: Munich will always be associated with Frei Otto’s

Modern Architecture 1851-1945, Kenneth Frampton, Rizzoli, 1984, 464 pp., illus., cloth $65.00; paper $29.95.
tensile structure, and Berlin brings the vast Olympic Stadium to mind. But things did not start out this way.

For the first four decades of operation, the games were held in existing or relatively modest new facilities. In 1900 (Paris) and 1904 (St. Louis), the games were held in conjunction with international expositions, but because this diluted their singularity, the International Olympic Committee abandoned the practice.

Nonetheless, the early association with International Expositions was telling, for within a few years the games had begun to take on the character of nationalistic celebrations. Los Angeles (1932) and especially Berlin (1936) provide early examples. The 1932 games introduced new scale and glamor, with the construction of the massive Memorial Coliseum, the new concept of the Olympic Village, and the array of monumental buildings spread over one hundred square miles. Los Angeles itself—from City Hall to private gas stations—was patriotically decked out with red, white, and blue flags and banners.

For reasons he does not state, Gordon mentions Los Angeles only briefly. He begins his comprehensive analysis with Berlin. Germany’s preparation for the games was firmly in the grasp of Hitler; scale rather than technological innovation marked these games. The monumental architecture as well as Leni Reifenstahl’s famous film remain sinister mementoes of the growth of totalitarianism and racism during the 1930s. Among the ominous signs of racism were anti-Semitic placards lining the road to the Winter Games, and Hitler leaving the stadium rather than shake the hand of Jesse Owens.

However, with the exception of Munich (1972) and Moscow (1980), politics rarely intrudes on Gordon’s discussion of the games of the last century. Instead, he traces the evolution of the design of sports facilities, technical achievements and innovations, and the struggles to accommodate new demands. His account is full of fascinating bits of forgotten information (how tickets were printed by nuns in a convent to avoid corruption in Mexico in 1968), and his technical discussions are in clear, readable prose. We learn how swimming facilities altered over the decades and about changes in the designs of Olympic Villages and their subsequent conversion to housing or hotel space. This type of material is handled with grace and fleshed out with plenty of details, but with larger issues Gordon is less comfortable.

He mentions the terrorist activities at Munich (1972), but not the defiant gestures of the American blacks at Mexico City (1968), and makes only passing reference to the trauma of the Depression in 1932. At the time Hitler refused to touch him, Jesse Owens would not have been allowed to sit or eat with whites in many places in America. Gordon is right to note the irony of the U.S.S.R.’s pronouncements on brotherhood after invading Afghanistan—but the U.S. made at least as many pious pronouncements in Mexico in 1968, in the midst of the defoliation of Vietnam.

The games have been politically charged for years, as the architectural and other fittings make abundantly clear. Japan was denied the Olympics in 1940 for political reasons, just as London received them in 1948 for political reasons: the former as a punishment for initiating war, the latter as a reward for helping to win it. Gordon chose not to mention Melbourne (1956) because although “they were important to the Olympic movement, the preparations at Melbourne...
got caught in a political tug-o’war so devitalizing that almost nothing of architectural consequence was built.” This is precisely why he should have looked at it, to understand the nature of the political problems and their influence on future planning. Abitare, the Italian monthly, published a lively special issue dedicated to the Los Angeles games in November 1983, complete with a historical guide to the city and an analysis of previous Olympic Games. In contrast to Gordon’s book, political issues receive considerable scrutiny.

The issues Gordon prefers to avoid are precisely those which should be addressed about the Olympics: the nationalism, the excessive expenditures when more important social needs are sorely underfunded, the role of television, and the increasing control of the games by big business. The nature of the spectacle itself has changed over 88 years; Los Angeles may represent the break, just as it did 52 years ago. Previous host cities built lavish new facilities for the games, designed to impress both the participants and the visitors, but television has changed that. The 1984 Summer Games, with their handful of new structures (funded by American businesses eager to cash in on the favorable publicity), acknowledge that the lion’s share of the audience and the funding comes from television. There is little need to lavish money on new buildings which appear only briefly on the screen. Perhaps this signals the partial fulfillment of Victor Hugo’s prophecy, 150 years ago: architecture has been replaced not by the printed word, but by the communications industry.

Nancy Stieber: 
THE AMSTERDAM SCHOOL
WIM DE WIT, editor

Dutch architects of the 20th century, unlike their relatively somnolent predecessors, attacked architectural problems with an intensity which consistently produced seminal contributions, belying the smallness of Holland by a disproportionate creativity. The undisputed mastery of Berlage, and De Stijl’s innovative perceptions during the first decades of the century were followed by a steady stream of achievement, extending in more recent times to the penetrating works of Aldo van Eyck and Herman Hertzberger. We are only now beginning to assess the prodigious and multifaceted nature of Dutch 20th-century architecture, as historians disclose figures like Duiker, Buys, van Loghem, Granpré Mollière, and the members of the Amsterdam School, led by Michel de Klerk.

The Amsterdam School, which flourished in the years just preceding the early death in 1923 of de Klerk, its most gifted proponent, owed its flamboyant forms to an amalgamation of sources, including Danish and Dutch vernacular brick techniques and the Dutch Jugendstil (the “Nieuwe Kunst”). At its best, the Amsterdam School produced an evocative and richly connotative architecture, plumbing the wells of unconscious association. Its most significant contributions were urban, particularly in Amsterdam, where enlightened public patronage led to the wide application of the style in housing projects, street furniture, and public buildings.

At a time when architects are rediscovering the magical allure of ornament and symbol, the buildings of the Amsterdam School speak with a certain conviction. During the fall of 1983 the Cooper-Hewitt Museum presented
a fine overview of the Amsterdam School in an exhibition of drawings, photographs, posters, and models, drawn for most part from the archives of the Nederlands Documentatiecentrum voor de Bouwkunst. Americans were given an opportunity to examine the roots of the movement in the work of Berlage and Ed Cuypers, to follow the career of de Klerk, and to marvel at the array of housing put up in Amsterdam.

The accompanying catalogue, The Amsterdam School, Dutch Expressionist Architecture, 1915-1930, edited by the organizer of the exhibition, Wim de Wit, was compiled somewhat more modestly of five essays which represent current scholarship from the Netherlands, Italy, and the United States. The first two essays are the strongest and the best introduction to the issues raised by the Amsterdam School. Wim de Wit lucidly presents the intellectual history of the style, first delineating its formal debts to the "Nieuwe Kunst," then clarifying the positions in the central debate around community and individual. Dutch architects sought an architecture which would respond conscientiously to the community while retaining the capacity to reflect individual genius. De Wit emphasizes the commitment of these architects to individual expression and rightfully dismisses a naive version of their political commitment—without, however, negating the political significance of the architecture itself.

In the second essay Helen Searing traces, in her delightfully clear prose, the early career of de Klerk, the seminal figure of the school whose work naturally dominates the catalogue. Given the centrality to the Amsterdam School of his architectural vision, this careful examination of his first projects provides a much-needed guide to the development of the formal characteristics of his style. Searing finds the design of a mortuary chapel for a 1910 competition to be the first indication that de Klerk had mastered the plastic integration of his three-dimensional ornament with the larger architectural mass—a quality so characteristic of the later work of his contemporaries.

The remaining three essays are each somewhat less satisfactory. Maria Stella Casciato considers the utopian nature of de Klerk's work. She draws a sensitive cultural portrait, neatly distinguishing de Klerk's joyous luminosity from the mystical defeatism of the German Expressionists. The essay is profusely illustrated with closeup photographs of de Klerk's work, photographs also published in her recent Italian study of de Klerk's Spaarndammerbuurt housing projects, written in collaboration with Wim de Wit. The essay is, however, less convincing when it turns from a close scrutiny of de Klerk's drawings and buildings to a theoretical discussion based on the rather forced application of terms from Nietzsche and Tafuri. Petra Timmer presents material previously not available in English about the furniture designed by the Amsterdam School. Drawing largely on work carried out at the time of the major Dutch exhibition on the Amsterdam School in 1975, Timmer describes the zoomorphic shapes of the tables and chairs and reminds us that these objects evoke the social and aesthetic dilemma of the luxury crafts of William Morris. Most disappointing is a short essay on social housing, which summarizes the conditions that led to large-scale housing construction in Amsterdam without appreciably adding to information already available in English. The essay bypasses the relevant issues of architectural patronage which would have provided social context for the formal and intellectual issues raised elsewhere in the catalogue.

While this catalogue in no way purports to be a comprehensive account of the Amsterdam School, the five essays, linked by neither methodology nor style, do succeed in introducing the school's intellectual concerns, its ideology, its development and application. They define the rich set of issues raised by a style whose eccentric forms signify an architectural strategy of individual and eclectic symbolism, unconfined by existing canon, yet replete in accessible referents; an architecture that appealed to popular taste while enhancing architectural discourse.

The Amsterdam School, Dutch Expressionist Architecture, 1915-1930, Wim de Wit, editor, MIT, 1983, 171 pp., illus., $25.00 pb.
Marc Treib:

ALVAR AALTO: PRESENTATION AND INTERPRETATION

For one brief moment, Alvar Aalto sat squarely on the periphery of the Modern Movement, an architectural anomaly defying precise explanation and evaluation. Aalto occupied an ambiguous position throughout his career, though the nature of the position changed with the architectural and critical climates. Born in 1898 in the central Finland town of Kuortane, he completed his studies at the polytechnic institute in Helsinki in 1921, an education that included the tutelage of Armas Lindgren, an important member of the senior generation and former partner of Eliel Saarinen. At the time of Aalto’s graduation, classicism, or the particular Nordic strain thereof, was rising to predominance. Less a full-blown neoclassicism of the Beaux-Arts variety than a tentative employment of sparse and often simplified classical embellishments over expanses of simple stucco surfaces, its re-emergence signaled a return to the monumental and to restraint. At this juncture in the mid-twenties, the path forked, leading toward either the historicism of the revivals or the modern idiom—though the differences, as we see them today, were barely distinguishable. On certain structures, only the sparse space ornament distinguishes one from the other.

Upon completion of his studies, Aalto worked briefly in Sweden, which led to contact with younger architects such as Gunnar Asplund, and an increased exposure to the new building in Sweden and (one assumes) Denmark, where Scandinavian classicism reached its most complete realization. Returning to Finland, he built several structures in the south Ostrobothnian town of Seinäjoki, with which the majority of Aalto studies begin. These structures for the Civil Guard are suspended somewhere between the diluted classical idiom of the rural farmstead and the newly resurrected polite strain. But even in these small civic structures, Aalto’s concern for detail and proportion distinguishes his architecture from many other buildings of the time. Already he had begun to emerge as a personality with a distinct point of view and personal aura. Then something happened.

In the late twenties Aalto built two structures that remain to this day the most full-blown examples of Modernism in Finland. The first, the premises for the Turun Sanomat newspaper in Turku, used reinforced concrete structurally to accommodate a mixed industrial and office program according to the tenets of the “free plan.” From the street, a smooth plane of stucco and glass alone divides inside from out. A colossal enlarged image of the front page of the newspaper—a device borrowed from the Construc-
tivists to the east—added to the sense of modernity and the instant. In 1928 Aalto won the competition for the tuberculosis sanatorium at Paimio (some twenty miles east of Turku), which was built during the next five years. An astounding structure even by today's standards, the concrete and glass sanatorium combined both the Gesamtkunstwerk tradition of turn-of-the-century romanticism with the slick contemporaneity of the continent. Conceived as a suntrap, neat and orderly toward the south, wild and piled to the northeast, the sanatorium complex soon assumed canonical status in studies of Modernism. It included the right stuff: greenery, air, light; large expanses of glass; whiteness; an expressed structure (at least in part); and a good sense of its own production.

But Modernism in this pure form occupied only a brief moment in Aalto’s career, and, from the extreme of Paimio, the architect “retreated” first to a more integrative or eclectic expression and then to the idiosyncratic blending of materials and formal vocabularies for which he is best known today. While there have been at least a score of books on Aalto, attempts to explain him have been spotty. The majority of these studies have been general essays that merely locate him, in Finland or in Modernism or in both, or provide a chronology of projects to offset the photographs and drawings.

The four books under review fall into four discrete categories. William C. Miller’s Alvar Aalto: An Annotated Bibliography is a tool for the scholar and the professional, and provides insight into what has been published rather than why. The special issue of the Japanese periodical Architecture + Urbanism is primarily a book of recent images that functions best, perhaps, as an introductory guide. Malcolm Quantrill’s Alvar Aalto: A Critical Study outlines in detail the progression of Aalto’s work, attempting to explain the developments within the formal manipulations of scheme and material. And, finally, Demetri Porphyrios’s Sources of Modern Eclecticism: Studies on Alvar Aalto establishes Aalto within a broad, post-Enlightenment intellectual tradition, and in so doing weakens the focus on the architect himself.

The Porphyrios book is not an easy text, yet it is challenging and worth the reading. The author’s writing style will grate on and frustrate the normal—that is, non-academic—reader. The product of a dissertation, and still smacking of polemics, it is peppered with words “in quotation marks,” and expressions in German, French, or Latin. One rants at the various ex analogia somethings and wonders why the author doesn’t just write in simple English. In sum, it is difficult going—but it is also intelligent and well reasoned.

Porphyrios shuns the usual chronological approach and in its place examines, in six chapters, a series of themes which characterize or are characterized by Aalto’s work. These insights are not really limited to Aalto, however, but apply to the sweep of European architecture as a whole: Aalto is used as the specific, yet archetypical (and somewhat heroic) case of a general category of idea. The first chapter, for example, positions Aalto in the land of heterotopia rather than homotopia, and, lest we think he is oversimplifying, he cautions: “This word should be taken in its most literal sense: that is, ‘the state of things laid, placed, assigned sites so very different from one another that it is impossible to define a locus common to them all.’ ” A footnote informs us that these are, in fact, the words of Michel Foucault (The Order of Things, 1973 [English translation]) from whom Porphyrios borrows reams of Latin words, and concepts of classification. “Heterotopia, therefore,” he continues, though by nature discriminatory, achieves cohesion through adjacency: where the edges touch, where the fringes intermingle, where the extremities of the one denote the beginning of the other, there in the hinge between two things an unstable unity appears.

Since architecture is open to interpretation, one can take issue with the author’s personal reading. Aalto, at least to my mind, does not dwell in the same region of heterotopia as does, say, Frank O. Gehry. In Gehry’s work, for example, his recent aerospace museum in Los Angeles or the earlier Whitney house project, the pieces do indeed fit the above definition: they read foremost as discrete objects, torn or scattered in what appears at first glance to defy a sense of coherent organization. Aalto rarely—if ever—approached this extreme of the differentiated fragment. One usually finds, as in music, the unifying bass line to which the vagaries of the melody and harmony refer or from which they depart. In chapter 3, “The Retrieval of Memory,” Porphyrios emphasizes that Aalto was acutely aware of history and precedent, and that it is the distortions or particularizations of a type that contribute much to the power and presence of his buildings, and their worth as cultural objects. If one expects a coherent, or let us say homotopic, argument, it would appear that there are some contradictions here. The argument for the acceptance of typology, however distorted or reinterpreted, undermines the argument for Aalto’s categorization as heterotopic. Perhaps a more permissive and eclectic theory, like the architecture itself, is needed to explain it. (This may have in fact been the author’s intention.) Yes, Aalto did exaggerate (or in West Coast architectural argot “celebrate”) certain features of his structures, offering prominence to the auditorium in the concert halls or the council chamber of the town hall. But these were rarely (never?) left as freestanding or freely-formed objects, in the manner of Hans Scharoun. In their place is a “base,” or
ground, typically of an orthogonal geometry, against which the more exotic shape—angled or curved—is played. This predilection may have ultimately derived from Le Corbusier, though the idiom became personal to Aalto in his later work. As several authors have noted, Aalto is thus the classic “both/and” architect, building on a tradition while simultaneously turning it somewhat on its ear.

In the later chapters, which depart from a more purely formal analysis of Aalto’s architecture, Porphyrios discusses the dichotomy of the country and the city, the natural and the made, as one of the most critical intellectual themes of the 19th century. Chapter 5, “Florilegia Naturalis,” is one of the strongest and best written, and skillfully weaves the development of the National Romantic and the Arts and Crafts movements into the sensibility of Finland’s emerging political nationalism. Aalto is cited as an architect whose work integrates both the natural and constructed strains, resolving their disjunction in a single, disparate form. Aalto’s conceptualization of nature, on the other hand, is not the sense of the organic that was central to Frank Lloyd Wright. Aalto used nature as a metaphorical model to lessen the tension between production and craft. In nature, the cell is the basic unit, the “genetic module,” as Porphyrios terms it. But from the cell develop conglomerates of infinite variation and possibility, each possessing its own sense of unity and identity as a whole. Einstein shared the same concept of logic and process when he stated that the “Old Man (i.e., God) would never play craps with the universe.” Here the heterotopic aspects of Aalto’s architecture noted in the first chapter challenge the rigidity of industrial production.

Rounding out the set of environmental concerns, chapter 6 settles on urbanism. In many ways, this is the chapter most difficult to accept as an explanation of Aalto, though it has its merits in relation to Europe as a whole. While Aalto designed some excellent urban structures—notably the PYP Bank of 1964 and the Rautatalo of 1955—he was hardly an urbanist in the same vein as his illustrious predecessor Elise Saarinen. Aalto seems more at home in the country or the woods, where the building mass is inflected to particular conditions; where the structure draws its meaning from its environmental context. The success of those urban structures noted above is due more to the sense of fit to specific setting than to a sense of urbanism in general. The façade of the PYP Bank, as Porphyrios notes, is brilliant in resolving the formal problem of relating calmly to the buildings that flank it; even the use of the enclosed glassed court, beautifully handled at the Rautatalo, derives from the traditional perimeter block arrangement in general and structures such as Lars Sonck’s 1911 Helsinki Stock Exchange in particular. These were, thus, less Aalto’s own inventions than inferred reinterpretations of traditions, betraying his recurring, almost classic restraint in matters urban.

Aalto’s noted love of Italian hill towns notwithstanding, the formation of urban enclaves seems to have been his Achilles heel. At the Seinäjoki complex, for example, the buildings (which include a town hall, library, municipal building, and church) do not really coalesce to form a defined exterior space, in spite of their closure in plan. The space as perceived—rather linear and lacking stasis—leaks around the buildings and disintegrates at the street that divides the civic from the religious structures. The Helsinki Plan of 1964 offers a fan-shaped plaza to link the eastern and western parts of the city, but creates a public open space of a scale untenable considering the existing population and Finland’s environmental conditions. And the linear sprinkling of cultural institutions along the Töölö inlet does little to reinforce the strength of the city’s tissue.
This raises the critical issue in the evaluation of this book. While it gives a comprehensive overview of European architecture and thought in the last two centuries, Sources of Modern Eclecticism remains a book with split concerns. The sweep of ideas is grand and convincing, yet one often feels that the concepts are neither specific to Aalto nor derived specifically from his thought. To serve as Porphyrius’s answer to the current predilection for Post-Modern historicist pastiche is a great burden for Aalto alone to bear. While one is sympathetic to Porphyrius’s intentions, and impressed by the panoply of images and sources and the comprehensive scholarship— rare in foreign appraisals of Scandinavian architecture—a feeling remains that the book could have done better to investigate Aalto per se, set against the larger drift, rather than focus on that drift with Aalto as a protagonist. In spite of its turgid style, the book remains critical reading for an understanding of the world of architectural ideas in which Scandinavia and the work of Alvar Aalto are embedded.

**Alvar Aalto: A Critical Study**, by Malcolm Quantrill, is a book of quite another sort. The approach is, for the most part, chronological, although the actual structure is difficult to discern precisely. While each of the projects is outlined almost as in an annotated catalogue raisonné, the periodic expansion of many of these notes digresses from a strict chronology. The text is a bit trying and in places hard to follow; this will be particularly true for those without a working knowledge of Aalto’s architecture since it consists primarily of a verbal description of plans and projects, serving to explain the organization or details that appear in the illustrations. Or, let us say, should appear. The appalling lack of illustrative material is extremely frustrating even to those solidly familiar with the Aalto oeuvre. Lacking a strictly mathematical tally, I would guess that of the projects which receive detailed analysis fewer than one in three are actually illustrated, rendering most of the description incomprehensible. One wonders why the number of projects wasn’t cut by two-thirds, and the observations and ideas conversely expanded.

This is not to say that Quantrill does not offer perceptive insights into Aalto and his architecture. The opening chapters, which discuss the periods immediately preceding Aalto’s emergence onto the Finnish scene, are excellent, the most interesting in the book. The tide of Finnish architectural expression shifted from a moribund classical idiom in the late 19th century to an exuberant nationalistic romanticism by the century’s end. A positivist could view the path as leading surely toward Modernism, the classical excursion of the twenties and thirties being a digressive interlude. By the thirties, the position of Modernism—or Functionalism, as it was usually known in the north—was firmly entrenched. But that decade also witnessed the reversion toward a new romanticism of wood and other natural materials and an increased fusion of the heroic modern with the traditional rural. Aalto, of course, was central to the shift, and structures such as his 1938 Villa Mairea integrated ideas and motifs from several schools on both the apparent and metaphorical levels, as Quantrill and Porphyrius note each in his own way.

Quantrill is obviously an admirer of the master, but to his credit he is not uncritical. He is quick to point out, for example, that Aalto’s attempts at the creation of urban spaces were, for the most part, failures:

In a situation where the utmost tightness and coherence of space and volume was required to breathe into Seinajoki, a fast developing “expanded” town, the spirit of urbanity, Aalto provides a loose collection of buildings that simply do not connect either spatially or visually. . . . He was to repeat this error of judgement in the context of urban space when he came to design the centre of Rovaniemi in 1963.

With these observations one must sadly agree.

In his “critical study,” Quantrill offers several intriguing conclusions. Like Porphyrius, he notes Aalto’s inclusionist proclivities, speaking of his ability to form spaces and masses by “agglutination.” In materials, in formal vocabulary, in the relation of primary to secondary spaces, Aalto established his own personal hierarchy of expression. Quantrill also concludes that Aalto must at home in nature, where it was possible to add “external features, frequently made up of rough natural timber members as a means of softening or blurring basic architectural forms.” Thirdly, he notes the “prevalence of the courtyard plan.”

The courtyard is a Finnish prototype employed both in traditional rural farmsteads and urban perimeter blocks. In the country, the court or double court offered spaces protected from the elements and possible hostilities; in the city it guaranteed continued access to air and light and sky. By the late 19th century, as noted above, the roofed courtyard appeared in urban construction. Saarinen included a light court in almost all of his urban proposals for the inner city; Frosterus in his 1916 Stockman department store design centered his scheme around a glass-roofed court. Aalto depended on the court—open or enclosed—to structure many of his best works. His own Munkkiniemi Studio (1955), his town hall for Säynätsalo (1952), and the Seinäjoki church (1966) all feature a tightly defined unroofed court. On the other hand, the more urban Rautatalo, the National Pensions Institute (1956), and the later Academic Bookstore (1969) feature what Quantrill terms a *piazetta*, a skylight-filled space which focuses the surrounding offices or display spaces and centralizes the
composition. Seen in this light, the sweep of Aalto's work displays concerned continuity, impressive diversity, and formal development.

It is a pity, at least to my mind, that Quantrill did not write another sort of book: a text structured on themes within Aalto's work, their development through time, their sources, their successes, and their failures. As the book now stands, it is too long to sustain the reader's interest, particularly considering the inadequacy of the illustrations. (It really is time that someone undertook a comprehensive photographic survey of the Aalto structures as they are today, instead of using the same tired photographs we see in almost every text on the subject. While the Quantrill book includes photographs by the author, many seem derived from color slides and are not of suitable quality.) Certainly Quantrill is best when he is critical; he notes:

If there is a difference, therefore, between Aalto's functionalism and the functionalism of other masters of modern architecture it is this: for Aalto the function itself should have a ritual basis so that the form which derives from that function can have symbolic meaning.

This is a broad statement, and one is bound to uncover exceptions to its claims, but for the most part it rings true. In almost all Aalto's work there is an affinity with the tactility of architecture, its material realization, as well as with the people and activities for which it was designed. Quantrill also notes the surprising, and somewhat ironical, resemblance between Aalto's auditoria and his churches, and observes that often the secular buildings evoke a greater sense of spirituality and mystery than the religious structures themselves.

Aalto was, to use Quantrill's terms, both "a carver and a modeller;" and this is most apparent in structures such as the Vuoksenniska church (1959) outside Imatra in eastern Finland. Here light is the reason for the form, and the interplay between clerestories, skylights, and rhythmically articulated windows fashions a vocabulary of illumination that can rivet attention on the altar or enliven the entire space. But as a whole, the light level is high and the tonality is white and bright. "Where one might have expected to find the intimate, reflective warmth we associate with the National Romantic spirit, or even the rough-hewn materiality of Karelian autonomous architecture," Quantrill notes, "we find instead that Aalto's predilection for whiteness prevails." He prefers the "mystery" of the play between the exterior and interior walls of Vuoksenniska or the metaphorical engagement of the internal pillars of the Villa Mairea to the surrounding pine forest.

The special Alvar Aalto issue of Architecture + Urbanism shares none of the pretensions of the books presented above. It is a picture book, with a series of color images, a few sketches, and the requisite—and mercifully brief—essays. Here, at least, one finds new images, probably because the issue was to appear in color and those tired black-and-white pictures just would not do. But by current Japanese standards—set by the talented perfection of Yukio Futagawa—this is amateur work. Judging from the selection of images and the repeated appearance of the same photographers' names, this issue seems the product of an Aalto grand tour. The weather conditions, no doubt, had to be dealt with as they were found; and in many cases they were far from ideal. Be that as it may, a certain freshness is gained by showing many of the classic Aalto structures not only as they are today, but under normal, everyday conditions, without additional illumination or garnish.

Six articles by Japanese authors appear in Japanese only. Of the English essays—which are for the most part less than a single page—only Reima Pietilä's offers any information beyond the anecdotal. Alfred Roth tells of his early encounter with Aalto via the CIAM meeting in 1930, his great respect for the Finnish architect, and his belief in the phrase "creative realism" as an apt description for that architecture which tries to wed function with myth. Gunnar Birketts, in his essay "Aalto's Design Methodology," reveals little but his preference for the Vuoksenniska church, and why. Pietilä, on the other hand, terms the same building Gestalt—displaying a comprehensive unity and synthesis from the overall to the parts. ("There is a good deal of architecture which never gets beyond the analysis level," Aalto once said, "though synthesis is what is actually needed.") On a two-page spread a family tree of Aalto plan types is traced, perhaps the most interesting part of the entire issue. But, although the A+U Aalto issue may contain some new images, it offers no new insights.

William Miller's Alvar Aalto: An Annotated Bibliography provides a valuable reference tool for the scholar and the professional. After the requisite brief introduction, outlining the architect's biography and stylistic development, the book is divided into: 1) "The Published Essays, Lectures and Conversations of Alvar Aalto;" 2) "Books, Monographs, and Catalogues on Alvar Aalto and His Architecture;" 3) "Material on Aalto Found in Collected Works on Finland, and on Finnish and Scandinavian Architecture and Art;" 4) "Material on Aalto Found in Collected Works and General Reference Sources on Architecture;" and 5) "Periodical Issues and Articles on Aalto and His Architecture." The book concludes with an author index, a title index, and a building and project listing. The inserted portfolio of photographs is of such low quality that it detracts from rather than adds to the value of the book.
In total, the bibliography appears exhaustive and accurate, give or take a few misspellings. These seem minor in relation to the complexity of the bookkeeping task and the multinational purview of the publications included. Miller’s brief synopsis of Aalto’s own writing will be invaluable to those without a working knowledge of Finnish or Swedish, which is, needless to say, almost the entire known world. Some of the English titles, the reader should be warned, do not appear to be direct translations of the original titles, but provide greater clues to the content of the publications than would that offered by pedantic rigor.

Not having attempted to use the bibliography, I cannot attest to its ultimate accuracy, though I do sense one serious shortcoming. The organization of each of the bibliographies is chronological, which makes any thematic employment of the listings difficult, if not impossible. A second version of each list ordered by building or location or theme (for example, the use of lighting) would have been far more useful than a title listing ordered alphabetically. A reader seeking all the published material on the Viipuri Library—or any other building for that matter—must peruse the entire bibliography in order to derive a personal comprehensive listing. Certainly in a day of computerized cross-indexing this would not have been too much to ask, particularly since the book is not typeset.

What can one say about these books in particular and the state of Aalto scholarship in general? Miller’s stands as the sole bibliography and precludes comparison. The May 1983 A + U is probably less available than the 1979 Architectural Monograph on Aalto published by Rizzoli. Though the selection of structures differs to some degree, essays in the Rizzoli book by Raija-Liisa Heinonen and Stephen Grook swing the balance in its favor. Malcolm Quantrill’s recent contribution appears complete, but is undermined by repetition, and duplicates much of the material that David Pearson cogently presented and interpreted in his Alvar Aalto and the International Style (Whitney Library of Design, 1978)—to my mind, still the standard work. Quantrill’s book will also be frustrating for those without a set of the complete works, Alvar Aalto I, II, & III, edited by Karl Fleig (Verlag für Architektur, Zurich, 1963, 1971, and 1978). Demetri Porphyrios’s Sources of Modern Eclecticism, although hardly a fun way to spend an evening, is the most adventurous excursion into an analysis of both Aalto’s architecture and the cultural and architectural milieu in which it was created. And in spite of the garbled jargon it is far more lucid than the same author’s almost incomprehensible essay in the Rizzoli monograph.

Where possible, it is good to let the architect speak for himself. The 1978 MIT Press edition of Sketches: Alvar Aalto, edited by Göran Schildt and translated by Stuart Wrede, presents a concise collection of the architect’s sketches and a suitable selection of his talks and writings. Two publications from Finland also offer valuable material. The first, Alvar Aalto 1898–1976, published by the Museum of Finnish Architecture, is the catalogue that accompanied the memorial exhibition that began circulation in 1978, and includes articles by Schildt, J. M. Richards, Nils Erik Wickberg, and Carlo Ragghianti, supplemented by a selection of Aalto’s writings and works. Edited by Aarno Ruusuvuori and designed by Juhan Pallasmaa, this compact and handsome volume is the best single introduction for the money. A second book, Alvar Aalto vs. the Modern Movement, records the proceedings from the first International Alvar Aalto Symposium (“The State of Modernism”) held in Jyväskylä in 1979. Edited by Kimo Mik-
Aaron Betsky: 
BEGINNINGS
ALEXANDRA TYNG

Few formmakers have been less well served by their adoring acolytes than Louis I. Kahn. Unquestioning collections of the mythic architect's sayings continue to mount up, while in Philadelphia his designs, sketches, and scribbles attract more dust than critical attention. Beginnings: Louis I. Kahn's Architectural Philosophy does little to improve the record, while adding to the aura of mystical obfuscation and isolated formal manipulation that has clung to Kahn since his death only 12 years ago.

The author is Alexandra Tyng, Kahn's daughter by his sometime collaborator Anne Tyng. Though she admits she did not communicate well with her famous father, she claims to have shared with him a mute spiritual understanding because "he seemed awed by the fact that my small person contained such great intensity of spirit." One could only wish that the great intensity had been disciplined by an adequate knowledge of architectural history, an ability to put the works of her father in their functional, social, and physical context, and visual skills that might merit the grant she received to photograph the already well-documented Kahn structures. A great deal of print, grant money, and time on the part of those close to Kahn is wasted on yet another collection of utterances never meant to be enshrined, and brief, unsatisfying paragraphs on his buildings. Tyng's only thesis seems to be that Kahn was working in terms of the archetypes and models worked out by Jung, though her father admitted to never having read the equally vague Viennese doctor. Once again "spiritual affinity" stands in for causality and scholarly investigation.

Tyng does organize with some chronological coherency, the relation of Kahn's thoughts to his practice. At times she manages to clarify his method of scrutinizing both the society he lived in and his own tools for the investigation. Discussing his proposals for the redevelopment of Philadelphia, for instance, she points out that his transformation of this large-scale, visionery project into the concrete, yet dissociated and highly romantic imagery of a giant waterworks controlling the flow of traffic into the metropolis coincided with his realization that what he wanted to talk about in his theory was not the opposition between "spirit" and "function." He was concerned rather with form as man's instrument for transforming the unconscious and abstract relationships of nature into the institutions by which he defines himself. Modern man is reflected in his schools, homes, and parking garages just as the cathedral builders were in their creations. Philadelphia becomes like a cathedral, and architecture a desperate attempt to assert that a meaningful society exists, represented by its institutions, at a time (the sixties)

Sources of Modern Eclecticism: Studies on Alvar Aalto, Demetri Porphyrios, St. Martin's, 1982, 138 pp., illus., $8.95 pb.


Alvar Aalto: An Annotated Bibliography, William C. Miller, Garland Publishing, 1984, 244 pp., illus., $65.00.

Architecture + Urbanism, Special Alvar Aalto Issue, Tokyo, May 1983, 200 pp., illus., $35.00 pb.
when almost everyone seemed to be rejecting them.

Many of Kahn's forms read as heroically in their failure to address issues of scale, texture, and context as the words of John Kennedy or the works of David Smith. The capitol at Dacca remains a ruin, the embodiment not of the achievements of human culture, but of its failure. The Richards Medical Towers were a functional failure despite the sophisticated overlays of rationalization given for the forms in terms of structure, the reception of light, and correct architectural syntax. The question, then and now, is whether architecture could (or should) dedicate itself to such sophisticated structuring of our experience and physical resources, or instead integrate itself with our culture and its culture industry. Must architecture mean, or should it decorate boxes? It is interesting to note that both Venturi and Rossi, heirs to Kahn's typological approach, rejected his emphatic answer to this question. To Venturi architecture is an ad hoc assemblage of cultural signs representing themselves; the structure remains invisible, only intimated by the disjunctions in the scale and material of the assemblage. To Rossi architecture is the actualization of personal and social memories, in its very nature transitory, mute, and mysterious. Despite the very real achievements of both architects, it is disturbing to note how Venturi's participation in the design of the dining hall for Exeter weakened the integrity of the complex. Whereas the main library building is constructed of a series of closely integrated concentric envelopes which simultaneously structure progression, context, function, scale, material, and signification, the dining hall can only muster references to old-fashioned baronial halls and Shingle Style roofs in an overscaled institutional setting.

Nobody else has been able to achieve the both/and of Kahn's architecture, his ability to build all definitions of how you might or could function and think in a man-made structure into the physical and perceptual reality of the building. Exeter's complex building is a library, says library, and works as a library, from the careful vertical articulation of the brick and wood façade to the idealistic statement about the perfection of knowledge framing its central "room" or courtyard in a giant, Piranesi-like gesture which happens to work in terms of structure, circulation, and light modulation, and also allows you to understand the scale and nature of the building from one viewpoint.

Yet such achievements remained isolated, sequestered in the ivory towers in which our society has chosen to think and talk about itself, or at least educate others to do so. That may be why Kahn's gestures suffer so from megalomania: they want to change the world, to imbue it with meaning, but only offer to those already in power another tool for understanding and so controlling the world. Kahn had moved beyond any belief in the morality of architecture, and thus eschewed both the classicist ideology of his Beaux-Arts training and the functional utopias of Modernism. He defeated Modernism with bravura and a willingness to integrate his architecture into the reality of materials and site. He did think of his bricks as talking to him, and of his sites and programs as generating the actual forms which would make up his composition. The Dominican Convent, for instance, is, for all its willful idiosyncrasy, a Modernist composition of functional building blocks arranged according to a version of a liturgical procession. The projects on the Subcontinent are perhaps the greatest "projets" built in this century. Kahn uses to perfection what Guadet would call the "elements" of architecture; it is only that his syntax, both architectural and linguistic, is nonlogical. It is not incoherent, merely willful, abstract, and visual—a desperate attempt to create a system, and a hu-
manistic system at that. The attempt has its historical roots in the Beaux Arts and, beyond that, in the invention of architecture in the 17th century. In Kahn's time it was expressed in the work of “the best and the brightest”: post-Existentialist philosophy and poetry, advances in the higher physics. Kahn's work was not the isolated and timeless achievement of a genius; it was the artifact of a culture, and a faithful mirror of that culture's beliefs, hopes, and realities.

Yet Alexandra Tyng, having given the abstract outline of the architectural experimentation that made possible Kahn's powerful achievements of the 1960s, declines to draw any conclusion limited to such a temporal and relative framework. She claims that Kahn was merely evolving archetypes and yin-yang principles, which, since they come from undefined sources, will endure for an undefined eternity. Specific forms, such as the Dacca capitol, the Dominican Monastery, or the Salk Institute, are passed over in favor of vague expositions on the nature of order.

From Kahn's collected sayings one can fairly easily distill concrete methods of analysis and procedure. One can read the melding of such diffuse influences as Le Corbusier, Guadet, and Giedion, and see Aldo Rossi and Robert Venturi as the direct or indirect products of such systems. These are possibilities Tyng refuses to explore. Kahn's final two terms of architectural description, silence and light, may sound forbidding, but the juxtaposition is clearly worked out both in his buildings and his theory. In the 1950s he began to realize that architecture was indeed, as Le Corbusier had noted in 1925, the creation of pure relationships of forms revealed, structuring abstract physical or social relationships and making them concrete. The attempt to identify the actual construction of the spaces with the act of making such relationships visible, to embody the very act of revealing a new, man-made reality, becomes the mainspring of his buildings. From this attempt, as Tyng indicates, evolved the elaborate sunscreens, the identification between perceptual and physical structuring, and the search for a scaleless, formally independent set of architectural forms. Tyng sets the stage for this formal journey in chapters which are all too brief introductions to her father's sayings, but she does assume Kahn's words need no gloss.

Perhaps they do not. Perhaps architecture as “the treasury of shadows,” and a piece of architecture as an offering to that treasury make sense to practitioners. I believe a comparison between Kahn's words and his sanctuaries to learning at Exeter, the arts in New Haven, or assembly-line production in Harrisburg, Pennsylvania, does make sense. Yet the sense it makes needs a full visual and verbal exposition.

Tyng's bibliography contains no secondary material written after 1974, and, as far as I know, there is very little. All three major printed collections of visual documentation remain virtually unattainable; one must be content with this meager collection of inferior photographs, inconclusive analyses, and highly edited sermons from the Kahnian mount.

One of the last pieces of text in Kahn's observation that what architects draw is “where light is not.” Taking into account his built work, his society, and his sayings, I interpret this to mean that only in critically delineating and defining what the human act reveals can one experience oneself reflected as part of society; only then can structures be built and understood in common. Tyng does not engage in such analysis, and her book remains willfully dark, never emerging into the rhythm of dark and light, man-made and natural, measured and unmeasured, being and becoming, which Kahn saw as the columns of the Parthenon, the true beginning of architecture, the treasury of shadows, and the absurdly abstract and banally commonplace foundation of a humanist architecture.

Beginnings: Louis I. Kahn's Architectural Philosophy, Alexandra Tyng, Wiley, 1984, 198 pp., illus., $29.95.
John P. Conron:
JOHN GAW MEEM
BAINBRIDGE BUNTING

This book details the long and prolific career of Santa Fe’s most prominent architect. It is hard to fault, but then it was researched by Bainbridge Bunting, and written in his competent and always readable prose.

Like so many other citizens of New Mexico, the young John Meem was brought by tuberculosis to the Sunmount Sanatorium, where he fell under the spell of old Santa Fe. Trained at Virginia Military Institute as a civil engineer, his interest, during the long months of recovery, turned toward architecture. Encouraged by his doctor, Frank Mera, he began his career in architecture while still a resident at Sunmount, producing the designs for the renovation and enlargement of a small Santa Fe house for fellow-patient Hubert Galt. By 1959, when he retired from the firm of Meem, Holien and Buckley, some 650 projects had been listed in the office files.

The revival of the Spanish/Pueblo and the Territorial styles began at the University of New Mexico in 1905-1906, and was spurred by the so-called restoration of the Palace of the Governors in Santa Fe (1909-1914). John Meem became the most eminent practitioner and defender of the revival, and only rarely in his long career did he step outside its vocabulary. One of those rare instances is the Colorado Springs Fine Arts Center (completed in 1936), which, Bunting and I agree, is Meem’s most outstanding building. The exposed concrete-walled structure is certainly Meem’s boldest and most modern-styled building. As Bunting says, it is “an expression of technical expertise and functionalism.” Bunting also points out that the building, in its massing and in “its sense of tranquility and equilibrium,” has roots in classical forms. The interior “is also one of restrained Classicism, though the ornamental vocabulary is clearly Art Deco.” One wonders what would have happened to John Meem as a designer, if he had grown from this work instead of returning to the battered walled romance of New Mexico’s past. Even as late as 1951 and 1953, when new ecclesiastical forms were being explored and dramatic new churches built, Meem chose historic styles for churches in Albuquerque and Gallup—Gothic for Albuquerque, a simplified Lombard Romanesque for Gallup.

Meem was well aware of the Modern Movement in the 1920s and 1930s, and felt that functionalism, combined with the traditional forms of the Southwest, would produce architecture compatible with the times. In the favorable economic conditions before World War II, these traditional forms could be achieved by modulated façades and massive battered walls. As construction became increasingly expensive after the war, Meem relied upon the application of Indian and Spanish symbols to his buildings to evoke the past.

Bunting emphasizes Meem’s work as a preservationist. To be sure, John Meem was a leading force on the Committee for the Preservation and Renovation of New Mexico Mission Churches in the 1920s and 1930s, before preservation was popular. The committee was responsible for repairs on ancient and significant New Mexico churches, and for the purchase (for donation to the archdiocese of Santa Fe) of the historic Santuario de Nuestro Señor de Esquipula near Chimayo in northern New Mexico. (Although popularly called the Santuario at Chimayo, even by Bunting, the Santuario is actually located in El Postrero, one mile south of Chimayo.) In later years John Meem and his wife, Faith, made possible the saving of important Territorial period buildings in Santa Fe, which are now owned by the Historic Santa Fe Foundation. However, Meem’s preservation efforts focused on the Spanish/Pueblo and Territorial-style historic build-

COLORADO SPRINGS FINE ARTS CENTER, WEST FACADE, LOUNGE PORTAL
ings. Other styles of the late Victorian era and early 20th century he happily destroyed by covering them in Santa Fe-style stucco, and adding fake vigas or corbels.

I find a few petty flaws in the book, which Bunting might have corrected if he had lived to review the galley proofs. Paul Horgan in his foreword lists “brick copings of roof lines” and “the importance of ample fenestration” as details of the Spanish Colonial style. They are not, of course. Brick coping is an Anglo and therefore Territorial style detail, while “ample fenestration was unheard of in Colonial days. Latias are defined in the book as “small beams”; that does not sound like Bunting. Latias are wood saplings which are laid atop the roof beams to support the roof covering—dirt in the early days, insulation and rolled roofing today. A bit misleading are Bunting’s occasional references to Meem’s work on the La Fonda Hotel in Santa Fe, which suggest that Meem designed the hotel. For example, Bunting describes him as “planning an even more splendid tourist attraction for the same railroad [the AT & SF] in the form of La Fonda Hotel.” Not until much later does the reader discover that Meem planned only the first major addition; the hotel itself had been built in 1920 from designs by Rapp, Rapp and Hendrickson.

I take issue with such statements as the one on the dust jacket (fortunately not attributed to Bunting) that Meem “is unquestionably the most important architect ever to have worked in New Mexico.” Meem entered the New Mexico architectural scene not to innovate, but to continue forces already in motion. Archaeologists such as Edgar Lee Hewett, architects such as Rapp and Rapp, and the many artists working in Santa Fe in the first decades of the 20th century gave him the vocabulary he used so fluently. Certainly his designs are generally graceful and friendly, while in the hands of others the revival styles could become coarse, even dull.

I was surprised to learn that the elaborate mill work used in residential and public buildings, particularly in the early work, was not done by New Mexico craftsmen. Rather it was executed by Colorado firms and shipped to the New Mexico building site. Bunting tells us of one occasion when New Mexico Indians happened, by coincidence, to be in the employ of the Pueblo, Colorado, firm producing the mill work for the Zimmerman Library at the University of New Mexico.

When one reads of the length of time taken for the design of the Colorado Fine Arts Center, or of the completion of the Zimmerman Library being delayed for three months to await the delivery of specially sized, adzed boards to conceal concrete beams, it is apparent that John Meem lived in a state of architectural luxury enjoyed, even then, by few other architects.

The book is profusely illustrated with sketches, plans, and photographs—many taken shortly after completion of the buildings by such prominent photographers as Tyler Dingee, Laura Gilpin, and Ansel Adams. However, the quality of the photographic reproduction is poor, which is truly unfortunate in so important a book.

Bunting takes the reader on a detailed tour of many of Meem’s outstanding buildings, public and private; he catalogs a significant career, and reminds us of the generosity and humanity of this architect.

John Gaw Meem, Southwestern Architect, Bainbridge Bunting, foreword by Paul Horgan, University of New Mexico Press (A School of American Research Book), 1983, 178 pp., illus., $29.95.

Harold N. Cooledge, Jr.: More Taste Than Prudence
HENRY W. LEWIS

This study of John Evans Johnson, “an amateur with patrons,” is cast, appropriately enough, in the framework of a missing persons investigation. When almost nothing is known of the professional life of an architect-builder except his rumored association with a limited number of buildings, it becomes imperative to establish who he was before considering what he may have done—who, not only in a genealogical sense (although that is a major clue to his associations and cultural background), but in the social context of his time and place. Otherwise, attributions of work for which minimal or no primary documentation exists become little more than hopeful expressions of the investigator’s opinion.

Mr. Lewis has soundly established the family and “connections” of John Johnson, together with their interests, education, and accomplishments. For this he had at his disposal an unusual wealth of archival material, from the family papers of the Bruce, Johnson, McIntosh, and Cabell families to the records of the United States Military Academy, to the land and probate records of all the counties in which Johnson or his “patrons” had interests. From it he constructs a believable portrait of John E. Johnson, a Southern gentleman of elegant taste and the plunging, speculative nature characteristic of many U.S. citizens between the years 1815 and 1857.

After early and brief flirtations with military and, possibly, professional life, Johnson came to think of himself as a Virginia planter, a gentleman for whom architecture was, in the tradition of Thomas Jefferson, more an accomplishment than a vocation. Like Jefferson’s, his work was that of an inventive eclectic, but Johnson’s inventiveness was by
comparison very limited. He had one idea for the plan of a residence, which idea he reused with only slight variation in every commission that can be attributed to him, regardless of visual style. His understanding of style seems to have been determined by a close association with Philadelphia, begun in 1836 when he married Mary Magdalene Swift, his second wife, and daughter of the mayor of that city.

In the late 1830s, Philadelphia had reached the climax of its Classic Revival period; Thomas U. Walter was building such lush examples as the Newkirk mansion, Girard College, and the riverfront portico of Nicholas Biddle’s manor, Andalusia. John Johnson’s first and most important client, James Coles Bruce, was impressed with the “magnificence” of the style, and Johnson was impressed with its adoption by such magnificent speculators as Biddle. Thereafter, Philadelphia taste and the publications of Philadelphia architects seem to have been a principal source upon which Johnson drew, although the visual style of the two residences which Lewis, on the basis of “persistent tradition,” attributes to Johnson may have been adapted from a design published by A. J. Downing.

Mr. Lewis establishes—beyond any doubt, in my opinion—that two great houses (Berry Hill, Halifax County, Virginia, for James Coles Bruce, and Staunton Hill, Charlotte County, Virginia, for Bruce’s son Charles) were erected from the designs of John E. Johnson. For this he is due the thanks of architectural historians; over the past twenty years I have heard Berry Hill attributed to five different designers, and Staunton Hill to three. Berry Hill is, in its approach, main façade, and interior details, one of the most impressively “classical” plantation houses in the South; while Staunton Hill is one of the few examples surviving in the region of the grand, castellated mansion. In both cases, a large part of the total complex—outhouses, dependencies, and so forth—either survives, or the original form is well known.

Mr. Lewis illustrates both buildings lavishly with interior and exterior photographs and floor plans. His documentation of Berry Hill and Staunton Hill rests as much upon secondary inference as upon direct statement; however, it is sound and conclusive, in my opinion.

The same cannot be said for the remaining attributions. Although some are stylistically convincing, or logical because of family connections, none are sufficiently documented even in a secondary inferential sense. Luckily these are not essential to the value of the book. Mr. Lewis has traced the conception and realization of Berry Hill and Staunton Hill, and delineated the life of their designer, a cultured opportunist of some talent and no fiscal ability, a gentleman architect who was lucky in his friends, a euphoric speculator, a good husband and father but a very poor provider. The title, More Taste Than Prudence, is most apt.

Joan E. Draper:
THE USES OF GOTHIC
JEAN F. BLOCK

The college campus is a uniquely American type of place. Its architecture and planning have been the subject of a number of studies in recent years as architectural historians on campuses have begun to pay more attention to their immediate surroundings. Like most of the new monographs about individual campuses, Jean Block’s book on the University of Chicago appeared in conjunction with an exhibition documenting the university’s architectural development. But, unlike the books about Stanford, Berkeley, the University of Texas, and Washington University in St. Louis, hers is a large-format, hardbound volume. Printed on high quality paper and illustrated with excellent reproductions of more than 200 drawings, maps, documents, and period photographs, Block’s book amply and attractively portrays the first forty years of campus building for one of America’s leading universities. The title, *The Uses of Gothic*, alludes to another aim: the discussion of style in relation to the character and image of the institution. The author’s purpose, as stated in the introduction, was to look at the university’s Gothic revival architecture “in terms of its meaning to its creators and users and to place it in the context of its own time.”

Block, by profession a research specialist at the university library, and author of an earlier book on houses in Hyde Park (the former Chicago suburb in which the university is located), made thorough use of the institution’s archives and publications. A dominant theme of the text is to show how decisions about architectural design were determined by the consistent vision of administrators and especially of the Trustees’ Committee on Buildings and Grounds. Henry Ives Cobb, the university’s first architect, initially sketched Romanesque buildings in 1891, but was persuaded by committee members to redesign the quadrangular scheme in “the very latest English Gothic.” Over the ensuing forty years the style and pattern of organization remained basically constant even as the campus expanded, the scale of new buildings increased, and the complexity and modernity of their functions tested the appropriateness of medieval forms and materials. Architectural unity was insured by trustees and presidents who involved themselves intimately in the building and furnishing of the campus, as Block demonstrates. Her narrative gives a clear picture of the interplay between donors, architects, and building users, and the university officials who provided organizational and aesthetic continuity over four decades.

For these men, the choice of an architectural style was predicated on their concept of the university. Gothic symbolized timeless spiritual values, whereas classicism, the style of the 1893 Chicago World’s Columbian Exposition, denoted worldly materialism. The quadrangular plan, gray stone façades, buttresses, steep gabled roofs, turrets, pointed arches, and other medievalizing motifs identified the new American university with the greatest European academic institutions, especially those of England. Furthermore, the Gothic style was perceived as adaptable to various needs, while at the same time providing a consis-

HUTCHINSON COURT. DEDICATION OF THE ALICE FREEMAN PALMER CHIMES, 1908. (REPRODUCED WITH THE PERMISSION OF THE UNIVERSITY OF CHICAGO LIBRARY)
tent image of "beauty, simplicity, and stability," to use the words of trustee Martin Ryerson.

The author analyzes the evolution of collegiate Gothic on the University of Chicago campus from the early ornate buildings modeled intentionally on Oxford sources to later designs, such as that for the Field House by Holabird and Root (1924-1932), which demonstrated the growing conflict between function and conformity to architectural tradition. Two chapters, devoted specifically to the development of symbolic decorative programs, emphasize the attempt by architects and faculty iconographers to create sculptural ornament that would be traditional in form but still reflect the character and purpose of an American university. In a final epilogue chapter, Block neatly relates the futuristic theme of the 1933 Century of Progress Exposition in Chicago—for which campus architects Holabird and Root designed several buildings—to the concurrent reorganization of the university under Robert Maynard Hutchins and the reevaluation of the role of its architecture. A 1933 report concluded that the institution could no longer afford to erect permanent monuments symbolic of enduring values, and still maintain the excellence of its instructional and research programs. "The day of Historicism had passed,... and Gothic could no longer fulfill the needs and aspirations of the University."

The Uses of Gothic has the same strength as its subject—thematic consistency. While acknowledging such related issues as campus landscaping, methods of construction, changing policies regarding research and teaching, and attitudes toward amenities for students, the author never strays from the topic and has resisted the temptation to pack the book with confusing detail. The text is concise and clear without being simplistic. However, it seldom ventures beyond the confines of the Hyde Park campus. With the exception of Oxford University and the two Chicago fairs, no comparable architectural works are discussed. One brief reference to the development of "Collegiate Gothic" as an American architectural genre of its own could have been expanded, without sacrificing brevity or focus, to include comparisons to contemporary buildings at Northwestern, Princeton, Yale, Duke, and elsewhere. The title leads one to expect more than the history of one campus's architecture.

Neil Harris's brief foreword remedies this deficiency somewhat, deftly sketching the architectural context within which University of Chicago architects and officials worked. Harris also addresses another issue that Block, concentrating on official statements, has virtually ignored: the incongruity between the university's introverted, otherworldly, archaic architectural image and the faculty's active involvement in extension teaching, community affairs, and the development of new academic disciplines such as sociology. Harris explains that by building boundaries the university was creating its own landscape and setting a stage for academic traditions where none existed. The pervasive Gothic unity, he says, not only emphasized the priestly function of the university in society, but imposed some order on an aggressive institution of bewildering diversity, serving to remind each department of its subordinate place within the larger whole.

Reviewers always wish the author of a good book had done a little more. Jean Block's study is excellent, given the self-imposed limitations. The reader is advised, however, to read it in conjunction with Paul Venable Turner's Campus, An American Planning Tradition (MIT, 1984).

Pamela H. Simpson:
AN ARCHITECTURAL HISTORY OF CARBONDALE
SUSAN E. MAYCOCK

The current proliferation of books detailing the architectural histories of ordinary American towns can probably be traced to the 1966 Preservation Act, the state preservation offices it set up, and the ensuing architectural surveys. The people doing the surveying have, quite rightly, felt the need to get their fieldwork into print. Their most immediate concern was to raise local consciousness about a fast-disappearing architectural heritage, but a side effect has been a new national interest in non-architect-designed building.

Like many Midwestern towns, Carbondale, Illinois, was a creation of the railroad. In a piece of political chicanery not unknown to 19th-century officeholders, Daniel Brush, as clerk of the Jackson County Court, learned of the proposed route for the newly chartered Illinois Central Railroad in 1852, well before the information was made public. He promptly claimed a heavily wooded 360-acre tract that was midway between two other proposed station sites. With a group of investors, he obtained the railroad's promise of a station and laid out his town in a rectangular grid bisected by the tracks.

Carbondale, unlike other railroad towns, had a central focus. Brush gave his town what he called a "public square" of nearly ten acres. Other town squares contained public buildings and parks; Carbondale's, however, was divided by the crossing of the railroad tracks and the main road into four sections. Far from being "public," the entire area was deeded to the Illinois Central for "railroad purposes only."

Thus Carbondale began, and for the next century its development,
growth, and prosperity were directly linked to the fortunes of the railroad. The other major event in the life of the town occurred in 1868, when its citizens organized to bid for the location of a new state normal school. The cornerstone of the first building of what would ultimately become Southern Illinois University was laid in 1870. The university and the railroad together shaped the community, determined the direction of its growth, and caused some of its major preservation problems.

Maycock’s architectural history of Carbondale tells the story of the town’s development, and traces the appearance and disappearance of its buildings. So many are gone that she must have been tempted to call her book Lost Carbondale; picture after picture lists destruction dates in the caption. Part of the reason, of course, was the town’s prosperity; growth means change. But, as Maycock points out in her final chapter, the expansion of the university and the development of an automobile-related society contributed to the decline “in both function and appearance” of Carbondale’s historic core. She effectively contrasts 19th-century views of street-oriented commercial blocks with modern views of parking lots and fast-food restaurants. The story is familiar; one can only applaud Maycock’s efforts to inspire the community to preserve what is left.

This is the first modern history of Carbondale, and its only architectural history. As local history and as a preservation alert, it is a success; no doubt Carbondale’s citizens and the many alumni of SIU will benefit from reading it. As a contribution to our understanding of vernacular architecture, it falls short. Architectural discussion is limited to construction dates and stylistic description, with little explanation of the national or the local context for the various styles, and no discussion at all of the buildings, beyond stylistic details. There are no floor plans, few interiors, and even fewer people.

The photographs are also marred by empty foregrounds of weedy yards, litter that could have been removed, and uncorrected parallax. Fortunately, the majority are old views of the town, but even these are presented in such washed-out black-and-white contrast that most detail is lost. A skillful layout and better printing might have helped. Nevertheless, books of this type are important, not only for their communities but for the broader study of American architectural history.


Richard Longstreth:
AMERICA BUILDS
LELAND M. ROTH

The value of a good anthology on any subject is obvious—as a stock tool of the trade for survey courses, a useful reference work, and even an introduction for those with a general interest. Leland Roth correctly points out in the introduction to America Builds that a nonpolemical collection of period essays covering the full spectrum of American architecture has never been published before, and the closest thing to such a compendium, Don Gifford’s The Literature of Architecture (1966), has long been out of print. America Builds seeks to fill that void with eighty-two pieces written between 1624 and 1980. About half the entries are by architects, the remainder mostly by critics, professional or otherwise. As might be expected, the selection emphasizes theory and formal design issues; nevertheless, several entries address technical and professional matters, and a number are devoted to urbanism. The book is structured to serve as a companion volume to Roth’s Concise History of American Architecture (1979) yet it stands equally well on its own.

It would be difficult to challenge the overall merit of the material Roth has selected. Many of the writings are significant works by leading figures—from Thomas Jefferson to Robert Venturi, Montgomery Schuyler to Ada Louise Huxtable—but the overlap with Gifford’s anthology or Lewis Mumford’s Roots of Contemporary American Architecture is not extensive. Roth also presents some welcome departures from the familiar repertoire, including Sidney Fisher’s description of Philadelphia’s then-nascent suburbs (1859) and John Ildler’s assessment of the impact of the automobile on the city (1914). Each passage is supplemented by a brief introduction tailored to the novice, but
often of interest to the more knowledgeable reader as well.

America Builds is not a strongly revisionist collection; the choices can in fact be considered rather conservative, given the myriad changes that have occurred in the study of American architecture since Gifford's book was published almost two decades ago. There is little on academic design and almost nothing on the Arts and Crafts Movement. Modernism in the 1920s and 1930s gets scant coverage; the postwar years fare better but not so the divergent views on the composition and future of the Modern Movement during this period. A number of thematic areas are unexplained—for example, the development of building types, a central but still poorly documented aspect of architecture since the Industrial Revolution.

Citing omissions does not mean that the book has serious flaws. On the contrary, America Builds serves its intended purpose well and should do so for some time to come. It also underscores how much additional material in the literature of American architecture deserves our attention.

R. Windsor Liscombe:
UNBUILT OXFORD
HOWARD COLVIN

"Might-have-beens," Professor Colvin argues, are a legitimate field of study for architectural historians, especially in the case of a hermetic and venerable society like Oxford. Architecture, after all, exists first on the flat surface of paper or board. In a wider context, the publication of Unbuilt Oxford in such an attractive format reflects the rise of architectural history as both a respectable academic discipline, and an essential aspect of the popular fascination with cultural history. And there is a certain piquancy in comparing the imagined with the real, as demonstrated in Barker and Hyde's London: As It Might Have Been (Murray England, 1982).

Eschewing the legendary beginnings of the university (said to have originated in the priory founded by Frideswide on the site of a pigsty where she had hidden from an overardent suitor), Colvin begins this series of aptly titled essays by directing his readers to the jambs in the Divinity School. In 1440 the university authorities decreed that they be much simplified, for aesthetic as well as financial reasons. A more dramatic cause prevented the completion of Cardinal College (later Christ Church), potentially the grandest medieval collegiate complex. Before his downfall Cardinal Wolsey intended the chapel to rival Henry VI's at King's College, Cambridge. Its abandonment marked the architectural supremacy of Cambridge—despite such notable exceptions as Wren's structurally advanced and classically inspired Sheldonian Theatre (1664-1669). Here, too, the architect had to accept significant alterations imposed by that constant foe of the art of building, the "limits of a private purse." Another leitmotiv of architectural history, the pattern of taste, courses through the next chapters, which track the rejection of the "rabies Gothorum" conducted by two amateurs, Dean Aldrich and Dr. George Clarke, and a great and inventive designer Nicholas Hawksmoor (always excepting his quasi-Gothic All Souls' College). Their achievements assume new importance against the background of rejected schemes, particularly in the instance of Hawksmoor's part-classical, part-baroque plan for the academic core, and his austere mausoleum design for the Radcliffe Library.

Apart from illuminating the taste of architect and patron, the unexecuted proposals provide a fuller commentary on the evolution of architectural thought. In 1720 Magdalene received one of the earliest crescent plans, conceived to replace the medieval buildings which were by then inadequate to accommodate the increasing numbers and higher living standards of the undergraduates. Thereafter, more than twenty architects submitted solutions, the more attractive clothed in the picturesquely conceived but essentially superficial and repetitive Gothic of the Regency. Among other entries was an unashamedly Attic temple-like lodging for the college president, as American as it was British in its uncompromising but novel archaism. And it was at
Magdalen that the adversary of all things Greek, A. W. N. Pugin, erected his only work at Oxford, a gate. His persuasive neo-medieval illustrated specification for the rebuilding of Balliol, though it had the support of the High Churchmen, failed to set the fellows “half mad for true Christian rooms.” Such enthusiasm was reserved for Keble and Exeter colleges, and the churches of St. Philip and St. James, and of St. Barnabas.

The Victorian synthesis of historical style and advanced purpose was manifested triumphantly in the Oxford Museum (1855-1860). Deane and Woodward alluded to the current association between Gothic and the natural sciences—a field in which many felt Oxford was deficient—whereas E. M. Barry’s neo-Renaissance proposal recalled the sterile classicism of conservative varsity education. Almost inevitably, relief from the aesthetic sleights-of-hand demanded by historicism came in the “judicious eclecticism” of men like T. G. Jackson, whose inclusion in this book belies the tremendous success he enjoyed at his alma mater.

In the period between the two world wars (wars which undermined the society that had produced Oxford and Cambridge) Oxford virtually ceased to articulate the contemporary architectural “language.” In his entertaining history of Oxford, Christopher Howhouse went so far as to describe the era, architecturally speaking, as a “tale that is quickly told, and the quicker the better.” Ellis Waterhouse excepted, most dons preferred to perpetuate conservative British design. It is hence not surprising that Valentine Harding and Godfrey Samuel (of Tecton) were not commissioned by Balliol to realize the incisive forms of their design for a new hall, any more than Maxwell Fry (briefly partner of Gropius) could persuade the Fellows of All Souls to espouse Abstract Functionalism for their proposed addition in 1937. Within a year, Lord Nuffield, the motor manufacturer, in founding a college to perpetuate his name, required the acceptance of a late medieval mode, asserting that the true Oxford style was Cotswold vernacular.

Not until the 1950s, when the baby boom threatened to swamp higher educational facilities, did Modernism in its various phases become securely entrenched. Many schemes were finished, among them Arne Jacobsen’s delicately scaled St. Catherine’s, but several interesting projects languished. So Chamberlin, Powell and Boon’s Zoology Towers (1982)—reminiscent of, if inferior to, F. L. Wright’s Price Tower in Bartlesville, Oklahoma (1953-1955)—and the Pitt Rivers Museum (1967), by P. L. Nervi, with the advice of the director, Bernard Fagg, remained unbuilt for want of a larger public, or private, purse.

In the last episode of architectural imagining at Oxford, the complexities of each commission are related lucidly, and its qualities justly appraised. Thus the brilliant design Samuel and Harding submitted for Balliol is, refreshingly in this era of Post-Modern prejudice, described as “crisp and elegant.” Equally Colvin acknowledges the competence of the (currently more acceptable) historicist tenor and formal Beaux-Arts plan of A. S. Harrison’s first rendering for Nuffield College. Indeed, one of the pleasures of these essays is their blend of objective analysis with criticism that responds to, but is not confined by, the successive phases of taste. There are many such happy phrases as the description of Sir Giles Scott’s classically inspired, but Cotswold stone faced New Bodleian Library (1937-1940), as “a dinner jacket made of Harris Tweed.”

Although obviously directed to an informed audience, the chapters are sufficiently concise and well illustrated (even if the arrangement of plates in the text does not always correspond to the text) to entice a much wider readership. Those who wish to pursue further specific commissions or historical issues will find here a useful bibliography, the one omission being E. Blau’s Ruskinian Gothic: The Architecture of Deane and Woodward 1845-1861 (Princeton, 1982). Conversely, the professional practitioner or architectural historian will encounter new insights, epitomized by the reconstructions of the designs Wren and Hawksmoor aspired to create for the Sheldonian or Radcliffe. The plates, indeed, provide a remarkable picture of the development of post-Renaissance architectural drawing, from Deane and Woodward’s lush perspective for the Examination Schools (1873) to Samuel and Harding’s terse elevation for Balliol new hall. Because of the greater variation in their quality, the illustrations are more representative than such carefully selected studies as Gebhard and Nevins’s Two Hundred Years of American Architectural Drawings (Whitney, 1977). At the conclusion of Unbuilt Oxford one may share the regret expressed by Elizabeth I upon leaving the university, “Farewell, farewell, dear Oxford.”

Unbuilt Oxford, Howard Colvin, Yale, 1963, 208 pp., illus., $40.00 cloth; $14.95 paper.
Phillips Talbot:
STONES OF EMPIRE
JAN MORRIS with SIMON WINCHESTER

A generation after the end of Empire, Britain remains engagingly nostalgic about its extraordinary 300-year experience in India, brightest of the jewels of the imperial crown. The resulting flow of historical studies, memoirs, photo books, and novels has told us much about the lately departed world of the Anglo-Indians—by which is meant not Eurasians but the Britons who, from the 17th century down to 1947, committed their lives to military or administrative control, trade and commerce, religious proselytism or other pursuits in India.

Like the imperial Romans before them, the British were builders; and it is what the British built in India, the visible part of their legacy, that is delightfully explored in the text and photographs of Stones of Empire: The Buildings of the Raj. The book is intended for a general audience, including readers who still enjoy poking about the cities and towns that the Raj produced or expanded. However, for the professional it also documents the architectural and urban design influences—whether neoclassical, Gothic, Indo-Saracen, or hybrid—that stimulated succeeding waves of civil and military engineers, architects, and others who created the great works. This is a summary of a completed mission:

Nobody ever built, or ever will, another Victoria Terminus, a second Viceroy’s House, a High Court like Henry Irwin’s at Madras, or an esplanade like Darjeeling’s Mall. Almost all the buildings described in this book went up within 150 years: the British had come, the British went, and architecturally there was an end to it.

But while they were at it, they built with assurance. Whether in simple constructions for upcountry district towns or the magnificent palaces of the pro-consuls, designs evolved to fit the functions of an alien ruling caste. Among domestic buildings, for example, the bungalow gets full recognition, since “it is a curious truth that the British, having chosen the form of their housing in India in the 17th century, never devised a better one during the 300 subsequent years of their residence.” Yet we are led also into the mansions of the early merchants and East India Company officials—which spread to huge proportions, often reminiscent of an English squire’s country house—and the villas in the hill stations, so characteristic of Anglo-India, with their decidedly European overtones (Tudor, perhaps?). Because buildings reflect social custom, this survey treats with respect one of the characteristic features of Anglo-Indian life: the club. It could be, in a remote upcountry station, simple to the point of ennui, or, like the Old Madras at the end of the 19th century, of princely proportions, “one of the most magnificent clubs in the world.” Though seldom distinguished, the volume records, “the architectural symbolism of the grander clubs was at least frank—Come In! it cried to the suitable sort of Briton, Keep Out, it hissed to everyone else.”

On and on the story goes: the great forts and cantonments (boasting, in Calcutta, the largest barracks building in the world), the secretariat “writers’ buildings,” the cathedrals and churches at all levels of grandeur, the imposing High Courts, the schools and colleges, redolent of the old school tie, the universities in the Presidency towns (“deliberately set out to transfer British ideas
and values to the Indian middle classes, if only to create a useful client caste”) and the “wonder house” museums, capped by the Victoria Memorial in Calcutta, which was commissioned by the Viceroy Lord Curzon to be “his Taj Mahal—the grand symbol of love and devotion by which both Queen and Viceroy would always be remembered” —a doubtful proposition today.

The authors tell also of the “pretty white building which stands to this day upon the waterfront at Madras ... built in two stories [with a] gracefully rounded front on the seaside, rather like an apse, an elegant veranda, classical details, and a small shady garden all around”—an ice house, constructed during the clipper ship era to store blocks of ice shipped in from Boston.

Nor are the arteries and veins of British India neglected: the Grand Trunk Road from Calcutta to the Khyber Pass and the other metalled roads, bridges, tunnels, and canals that, with the astonishing national railway net and its baronial passenger stations in major cities, opened up the country to the rulers. Finally, we are taken back to those cities—the Presidency towns of Madras, Calcutta and Bombay, and New Delhi—that came up from nothing in British times; or were added, without intermingling, to the piles of earlier history.

Other books have treated individual Indian towns of the British period or particular classes of buildings; this one brings together the diverse elements of British construction in India. Jan Morris writes with delicacy and sensitivity, making the book a joy to read. Simon Winchester’s selection of 174 photographs and sketches, drawn mainly from official and museum collections and spread across one-third of the pages of the book, evoke even more graphically the British past in India.

Deborah King Robbins:

**CHARTRES**

EMILE MALE

Emile Mâle’s *Chartres*, recently published for the first time in English, is a classic, beautifully illustrated monograph on one of France’s best-known and most admired cathedrals. Professor Mâle, a major figure in the field of medieval art history, wrote several volumes on the iconography of religious art of the 12th and 13th centuries in Europe. As an iconographer he concentrates in *Chartres* on the Romanesque and Gothic sculptural programs of the cathedral’s main and porch façades. The architectural description is concise, yet makes clear the seminal nature of the experiments at Chartres. For both the sculpture and the architecture Mâle provides a lively historical background as well as a broad artistic context for the building’s design and construction. Pierre Devinoy’s images add immeasurably to the text; the photographs alone are a superb visual monograph of the building, capturing nuances of light and texture, and the drama of form and space.

Since this translation of Mâle’s *Chartres* gives only a 1983 copyright date, and has no editorial note or scholarly preface to place the book in its true context, it would appear the most recent account of the building’s history in English—unless one knew that the author had died in 1952, and that the original edition first appeared in French in 1948. Despite a second French edition published in 1963, it was not revised during Mâle’s lifetime nor, apparently, since. The black-and-white photographs in the 1983 edition, although they show the higher contrast

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**Stones of Empire: The Buildings of the Raj, Jan Morris with Simon Winchester, Oxford, 1983, 234 pp., illus., $25.00.**

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**NAVE VIEWED FROM THE CHOIR**
and finer detail of more recent printing techniques, are clearly the same ones used in 1948, reduced in number and occasionally cropped. Only the color photographs of the stained glass are new.

The reader unschooled in medieval art history will take the book to be, as Mâle originally intended it, a summary of "the most recent architectural discoveries." This is no longer the case. Mâle was certainly one of this century's most important historians of Gothic art, but his field has undergone much change and reevaluation in the last few decades. The dating and analysis of artistic and architectural monuments, and the search for their sources of inspiration and their subsequent influence constantly reveal new information and suggest further interpretations. This is especially true of a monument like Chartres Cathedral, long acknowledged as one of the turning points in French Gothic architecture and sculpture. A number of Mâle's assertions and interpretations, based on his own studies and those of the most reliable scholars of his day, have been superseded. For example, Mâle maintains that the portal of the west façade was originally recessed between the two steeples, and only later brought forward in alignment with the towers. While it may have initially been planned for the recessed position, scholars now generally assume that the mid-twelfth-century façade was first built as it stands today. Mâle also states that the new cathedral built after the fire of 1194 was constructed from east to west; most recent scholarship has concluded that the process moved from west to east, to take advantage of the surviving Romanesque vestibule as the new edifice rose behind. In addition, John James's new and controversial theories on construction methods and dating in the cathedral are not included.*

And although Mâle's iconographic description of the portal sculptures is still a classic in the field, some of his interpretations and attributions have been challenged in A. Katzenellenbogen's more comprehensive study, The Sculptural Programs of Chartres Cathedral (Johns Hopkins, 1959).

While the publisher's decision to reissue Mâle's book in an unrevised edition without making clear its position in the history of Chartres scholarship was unfortunate, Chartres is nevertheless a valuable and eminently readable description of the cathedral. The translation, while sometimes lacking the grace of Mâle's French, is good. Aided by the superb illustrations, the author's feeling for the poetry and history of Gothic art brings the Cathedral alive:

Poussin . . . imagined women transformed into columns—here we see columns metamorphosed into women. The Greeks did the same for the Cnidian treasury at Delphi and the Erechtheion at Athens, more imposingly, but with less magic. Here one is no longer in the world of goddesses, but the kingdom of fairyland. These vaguely smiling courtly ladies emanate a strange poetry, the poetry of Breton lays, soon to become the romances of the Round Table.

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Katharine K. Peterson:

TULA: THE TOLTEC CAPITAL OF ANCIENT MEXICO

RICHARD A. DIEHL

Tula. It lies at the junction of the Tula and Rosas rivers in the central Mexican plateau, north of the Basin of Mexico. To the Aztecs it was Tollan, a city of legendary importance, the home of a people of extraordinary accomplishment, power, and wealth. In fact, it was the capital of the Toltecs, the group who migrated into this area during the eighth century A.D. and built a short-lived but powerful civilization whose sphere of influence quickly reached far south, well into the Maya region.

In A.D. 1156, weakened by periods of internal conflict and wars with neighboring groups, and probably further stressed by climatic changes which made the Toltec heartland too arid for agriculture, the Toltecs prepared to leave Tula and move south. Unfortunately, before they left they all but destroyed their capital city. Their cultural cohesion and identity waned soon after, and in a short period of time the Toltec civilization completely collapsed.

The information we have about Tula and the Toltecs has come to us from archaeological investigation, ethnohistorical accounts collected by the Spanish, and numerous legends. The

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Chartres, Emile Male, translated by Sarah Wilson, Harper & Row, 1983, 190 pp., illus., $24.95.
first investigations were conducted by the Aztecs, and since that time a number of projects have been undertaken, but for the most part they have focused on the main ceremonial center with its elaborate art and architecture.

The most recent addition to our knowledge of these people has come from two concurrent archaeological projects in the Tula region. One of Diehl's purposes in writing this book was to present some of the findings of these two projects, the Tula Archaeological Project of the University of Missouri-Columbia, and the Proyecto Tula of the Instituto Nacional de Antropología e Historia in Mexico. Both of these recent investigations have been directed away from the famous buildings of the ceremonial center and toward the residential zones within the larger urban area. Further, they mapped the extent of the urban center and found it to be greater than had been estimated.

Diehl's team, which went to Tula to investigate and define Toltec life for the average Tula citizen, discovered large numbers of undisturbed artifacts. This new evidence enabled them to assign more accurate dates to the phases of the Toltec occupation of the area and to substantiate that the Tula economy was based on agriculture, craft production, and trade. The team was able to identify workshops in Tula which produced ceramics, items sought by the elite of many Mesoamerican cultural groups, and prepared obsidian blade cores from which blades could be struck. The complex trading network which distributed these goods throughout Mesoamerica returned other items needed by the Toltecs.

In examining the residential compounds, the team discovered that the Toltecs resided in relatively secluded, multi-roomed separate houses. Unlike Teotihuacan apartment blocks with their mazes of interconnected rooms, the compounds at Tula, composed of houses grouped around a courtyard, were separated from other compounds by walls and alleys.

In the introduction, Diehl states that his intention was to write a book which would present the Toltecs and Tula to a general audience as well as offer new information to his colleagues. These goals are largely incompatible. For the general reader, the book is fairly successful. It provides a broad outline of the history of Tula, of the Toltecs, and of how they fit into the larger picture of pre-Columbian Mesoamerican history. For the same reader, however, discussions of pottery phases and archaeological data will bog down the story.

For Diehl's colleagues, the archaeological data from the recent investigations is tucked into an oversimplified history of the area. The book is most frustrating for those primarily interested in the built environment, as discussions of the architectural features are particularly scanty. Diehl and his crew have done important work in the residential areas, yet the hoped-for discussion of the use of space, form, and light is missing, as is a discussion of the broad relationships of building to building, building to compound, compound to compound, and residential area to ceremonial core. In addition, the evidence supporting Diehl's conclusions about the purposes and functions of the structures and complexes is not fully presented. He extrapolates from the enclosed courtyard plan to a complex social organization of kin-based, hierarchical groups of families living and worshipping within the residential compound. Further still, he proposes this structure as a microcosm of the entire society.

While I cannot dispute Diehl's conclusions, the evidence necessary to substantiate them for me is not provided in this work. The problem with the analysis is revealed by two statements which bracket it. As he begins to present his conclusions, Diehl says that the success of housing systems "depends in part on one's culturally conditioned expectations," and he closes his opinions by saying: "What more could a Toltec or even a 20th-century university professor ask of a home?" Clearly Diehl enjoyed his stay at Tula and, although I don't discount the possibility that his conclusions will prove to be correct, nevertheless the analysis of compounds such as these is always liable to be affected by the analyst's expectations and empathy with the builders. With this in mind, I will wait for the evidence before coming to a conclusion.

Diehl's writing style is very readable, and, although I feel he made a mistake trying to write for two different audiences, the book flows well along a shifting line between them.

Andrew Rabeneck:

JEAN PROUVE
DOMINIQUE CLAYSSEN
RENZO PIANO
MASSIMO DINI
CEDRIC PRICE

ARCHITECTURAL ASSOCIATION

Architecture remains a practical art, despite recent attempts by historians and theorists to subordinate the technical to the artistic, as might be appropriate in fine art. The current dominance of art over technology may be a simple reaction to the optimism of the 1960s, when social problems were expected to yield to the logic of technical imagination. It may also represent the resignation of architects before the remorseless hegemony of today’s ordinary construction technology.

After all, the tradition of sneering at the disarray and “fragmentation” of the construction industry (especially as compared to such paragons as the auto industry) suffered much when architect-led efforts to improve its behavior in the 1960s were either rebuffed or painlessly absorbed.

In truth, most architects are ill-equipped to challenge the construction-industrial complex. Inspiration and comfort are today found more readily in the aesthetics, design, and authorship of the product—the building—than in the processes that bring it about. Most prefer to take technology for granted, rather than challenge it to achieve no longer fashionable social goals.

But the best theorists, and some architects, have always sought inspiration in the potentials of the productive force or in the social dynamics of the construction industry. In the U.S.A. their ranks include Buckminster Fuller, of course, but also Charles Eames and Ezra Ehrenkrantz, Carl Koch and Albert Kahn. The three books under review detail the endeavors of three of their European counterparts, Jean Prouvé, Renzo Piano, and Cedric Price.

Jean Prouvé, who died in 1984 at the age of 83, was a literal child of the Ecole de Nancy. His father Victor, artist and doyen of that vigorous enclave of Art Nouveau, was an intimate of Emile Gallé, Louis Majorelle, and the Daum brothers. In fact, Jean Prouvé always credited his interest in technical and production problems to his contact with these artists, who pushed the technical frontiers of glass and metalwork as far as they pushed the artistic. It was his own technical apprenticeship in architectural metalwork that lent conviction to his later inventions in the same medium. He was indissolubly both architect and engineer, as Le Corbusier acknowledged.

Dominique Clayssen’s monograph captures successfully the unique quality of truth that characterizes almost all of Prouvé’s work. His metal inventions exemplify with great clarity the canons of Modernism: response to function, economy of means, and elegance of execution. Although not an architect—and perhaps for that reason unjustly ignored by Giedion and Benevelo—Prouvé as a craftsman and producer inspired and collaborated with many architects, including Le Corbusier and Mallet-Stevens. His prewar masterpiece remains the Maison du Peuple at Clichy near Paris, done in 1938 with Beaudoin and Lods. This project prefigures by 35 years the Centre Pompidou of Piano and Rogers, and in some ways still surpasses it. For example, in addition to metal stressed skin movable walls, it boasts movable floors to create double height volumes at
will, a concept abandoned early in the Pompidou Center as impractical. Prouvé, incidentally, was chairman of the jury that selected Piano and Rogers’s design.

His postwar masterpiece, for this reviewer, is the exhibition hall at Grenoble with its interchangeable frameless glass or solid panels pulled back onto neoprene-faced millions by spring-loaded friction fastenings. Between major projects Prouvé continued to run his metal fabrication works at Maxéville, producing an endless series of radical lightweight structures destined for houses, schools, and other applications.

In 1952 Prouvé’s investors sent professional managers into his 150-man plant; in two years it was bankrupt. Prouvé complained, bitterly and prophetically, that these managers understood nothing beyond general principles of management. The soul of the factory, its creativity, and the empirical approach to production engineering that set it apart from other fabricators, escaped them. The very source of Maxéville’s viability was thrown out in the reorganization. Thus Prouvé became an unwilling pioneer in the homogenization of product manufacture that continues today, with MBAs at the helm.

After losing his plant, Prouvé turned to consulting, primarily on advanced curtain walling, including Berlin Free University. In 1980 he turned down honorary membership of the Ordre des Architectes, aptly expressing his disappointment with (in particular) French architects’ aesthetic misappropriation of his vocabulary of ideas.

Often held up as a champion of industrialization, Prouvé actually remained a steadfast opponent of the large-scale closed systems that exemplify French postwar housing. Instead he argued for volume production of key components to be used within an open system adapted to each site situation. His designs and prototypical contributions in the areas of heart units, doors, window walls, and stairs made substantial impact on the general industry.

Clayssen’s book is amply illustrated in line and halftone, and her text strongly laced with quotes from her interviews with Prouvé and from his collaborators. She is particularly sympathetic about Prouvé’s difficulty in winning professional or bureaucratic acceptance; for him it was a genuine frustration, not something to boast about as Corb liked to do. Even while his ideas were being used and abused on a large scale, his preference for artisanal hands-on work estranged him from architects and engineers alike. The creative workshop legacy of the École de Nancy marked him finally and unfortunately as an anachronism.

Renzo Piano is, unlike Prouvé, a trained architect, but he shares Prouvé’s faith in the mastery of tools. He ties the social utility of architects to their command of the materials and techniques of construction. He seeks to reinstate the importance of “making”—the craft mentality, but now combined with manipulation of the most sophisticated technology. Architects’ current preoccupation with art he sees as a refuge from reality, masking a shrinking field of competence, and leading to meaningless and irrelevant formalism. But aren’t those the accusations typically leveled by Anglos at Italians? How did a Genovese born in 1937 become a prophet of technical imagination admired in Britain and the U.S., as well as France where he now works, and celebrated in this substantial monograph in Rizzoli’s architectural documents series?

In 1966—following two decades of Anglo distrust of Italians, fueled by critics like Reyner Banham—Renzo Piano finally broke the ice with his stunningly elegant IPE factory, two years after graduating from Milan Polytechnic. The translucent GRP roof panels, propped aloft by minimalist three-dimensional Fink trusses, became a touchstone for England’s young post-Fullerians (including Norman Foster, Richard Rogers, Nick Grimshaw, and Terry Farrell) then struggling to break free from the social pieties of brutalism.

Although Piano’s heroes were Franco Albini and Marco Zanuso, both unpopular at the time with British critics, his work bore evidence of fresh analysis, of empirical testing and an apparently objective process of design. Not only was this project technically virtuous, it was also beautiful. Piano’s interest in structure and process, born of work with his contractor father, drove him in 1965 to Z. S. Makowsky’s workshop at London’s Battersea College of Technology, where important analytical work was being done on the properties of reinforced polyesters formed into space frame components. Piano’s love of experimentation and of mock-up empiricism endeared him to his British admirers. The culmination was his successful collaboration
with Richard Rogers on the Centre Georges Pompidou, which, he rightly comments, “far from being a triumph of technology, ... is not even an industrial building. If anything it is a gigantic piece of craftsmanship, made by hand, bit by bit, a great prototype.”

In fact most of Piano’s projects share this air of bricolage, of heralding a more general application of the principles they embody. In contrast to Prouvé’s direct control of production machinery, which allowed highly finished and integrated products, Piano’s technical solutions bear more the stamp of the construction process, the visible articulation of piece parts made elsewhere and bolted together at site. The exception is his 1973-80 collaboration with engineer Peter Rice to design a lightweight car, the Fiat VSS, with a plastic body on a metal frame. This project, in a field where total integration of design and production concerns is mandatory, stimulated Piano and provided a challenge to his tenet of total involvement. The result is a modest-looking little car which outwardly betrays no radical technical innovation—in contrast to his buildings with their exoskeletons, ducts, and swooping tents.

More recent projects involve renovation and adaptation of existing buildings, blocks, quarters, and even islands. The approach is thoughtful and unsentimental, stressing continued viability of older structures, with modern technology the enabling medium.

Piano’s first major American project will be the Menil Collection in Houston, now under construction. Here also he turns his back on the visual expression of technical innovation. He describes the project as the antithesis of Beaubourg, bringing to suburban Houston the ritual of the museum and the mystery of contemplation—qualities negated all too successfully in Paris, where, Piano feels, the Centre Pompidou, abetted by its administration, trivializes the public’s artistic experience.

In Houston natural light is the medium chosen to enhance the public’s enjoyment of the art in a quiet and unobtrusive way. Light enters the glazed roof, to be diffused below by elegant and carefully studied ferrocement louvers, which also serve as the bottom chord of equally elegant lattice beams assembled with cast steel nodes à la Beaubourg. Other aspects of the building are a severe diagrammatic plan, and elevations which claim homage to the balloon frame, “a system characterized by extreme simplification of assembly and minimal use of tools.”

In this project I sense Piano is putting to work a fresh sensibility, one of context, probably inspired by his planning work in Genoa and Turin, and notably by his conversion of the 20-acre Schlumberger works at Montrouge, near Paris. Massimo Dini’s excellent text to the monograph makes clear that Piano has learned valuable lessons from some of his less successful projects, like the technically aggressive expandable housing project in Perugia.

The technical innovator is not mellowing. He is simply refining his tools, and becoming confident enough in their application to allow technical tricks to take their place within a broader aesthetic vocabulary.

Cedric Price shares with Prouvé and Piano an understanding of and love for technology—not as a means of construction only, but in its potential to stimulate, interact with, and respond to people. Price, born in 1937 and a product of Cambridge, was the subject of a recent exhibition at the Architectural Association, an event celebrated by the present monograph. He has been the most profound shaker of the status quo in British architecture for the last
twenty years. The popular image of Cedric, says Royston Landau in a contribution to the book, is “an uneasy architectural modernist with a strong disposition towards flexibility, impermanence and anything new in technology, but also one with a near Voltaireian capacity for making the complacent sit up and the over-confident sit down.”

Landau characterizes Price’s approach to architecture as a philosophy of enabling. A cruder contrast with convention could be drawn by saying that while for most postwar architects social and resource problems created excuses for architecture, for Price it has been the other way about. Architecture for him is a field of inquiry and endeavor as broad as it needs to be to confront the absurdities and wasted opportunities of conventional problem definition. Thus his Fun Palace of 1961, for Joan Littlewood of the Theatre Workshop, was a literal serviced scaffold of gantries, pods, and enclosures tuned to the huge repertory of cultural events she imagined—a “laboratory of fun,” a “university of the streets,” in her phrases. Though unbuilt, the project greatly influenced a generation of students for whom the architectural theology of postwar modernism seemed out of gear with the social and cultural realities of a country coming back from the brink.

In the context of this review, it is worth noting that Cedric has been a longtime admirer of Jean Prouvé’s Maison du Peuple at Clichy, because the ways in which the building is used always transcend the technology that makes it work. It is, like Cedric’s few built buildings, architecturally neutral. Feeding forward in time, the Fun Palace is the other inspiration for Piano and Roger’s Pompidou Center, which is anything but neutral. Therein lies, perhaps, the essence of Cedric’s architecture. He never elaborates the technical solution to serve an a priori notion of architectural style. “Fun” or “looking like a machine” may well be serious criteria for Cedric in his approach to a particular design problem, but they will receive the same rigorous scrutiny as other criteria. Cedric understands why Russian spacecraft look different from American ones—because what they look like is functionally important—but he can never be accused of gratuitous solutions to problems created expressly in order to be brilliantly solved.

Perhaps his greatest talent is to broaden the definition of any problem to a point where the conventional or self-serving mind is thrown off guard. The way to improve Oxford Street is to make it easier and more pleasant to shop in Hendon. . . . Instead of building a grand new house a client might get a divorce . . . , and so on. This flair, allied to a highly inquisitive mind, assures his position as a burr under the saddle of the professional high horse, his ability to thrill students and appall committees. But it would not work unless he were also generous of spirit; he’ll pick you up after he’s knocked you down. It’s the mark of a great pedagogue, more concerned to convey his insight to his audience than to profit by that insight. Indeed his built work is scant, the mark of his preventive (as opposed to curative) planning invisible. His drawings and writings remain the best access to his form of consciousness-expanding, for those unable to share a cognac with him at the Architectural Association bar.

The book contains all the major projects, including Potteryes Thinkbelt and Generator, the Aviaries and South Bank, and a good selection of writings. Essays and memoirs are contributed by eight friends and admirers. If you know Cedric Price’s work, buy this book; it’s the best collection of Priceana to date. If you don’t know his work buy this book; you may never see things in the same way.

Jean Prouvé: L’idée Constructive, Dominique Clayssen, Dunod (text in French), Paris, 1983, 189 pp., illus., $25.00 pb.


Cedric Price Works II, Architectural Association, 1984, 116 pp., illus., $25.00 pb.

MARIO BOMA, FAMILY HOUSE IN ORIGLIO, SWITZERLAND, 1981. FROM NICOLIN, MARIO BOMA
Doug Suisman:
MARIO BOTTA

Many American architects who speak no Italian and have never traveled to Switzerland have recently found themselves studying with unusual care the work of a Swiss architect who speaks no English and has never built anything outside his native country. This interest in Helvetian design is not the product of a clandestine Alpine Revival, but of the singular career of Mario Botta. Based in the Italian Swiss canton of Ticino, the forty-one year old architect has completed nearly twenty buildings to date, including houses, schools, and office blocks. Almost all of them are located in the Ticino, and many of them are in the environs of Lugano, the lakeside city where Botta practices. On the basis of these buildings, and an equal number of unbuilt projects, Botta’s reputation in Europe (and, incidentally, in Japan) has been steadily rising for almost fifteen years. But in this country, Botta received almost no attention until five years ago.

When the attention finally did come, it came quickly, giving the impression that the American architectural milieu had made a “discovery,” despite Botta’s many published projects in foreign journals. With our characteristic attraction to novelty and stardom, this new design celebrity was widely and enthusiastically accepted, with little discussion or debate. The publication this year of Mario Botta: Buildings and Projects 1961-1982 provides the American architectural audience with a comprehensive if acritical survey of Botta’s career; a determined reader, removed from the crowded lecture halls and the glamor of the design magazines, can now study Botta’s work with some degree of detachment, which in the current professional climate is not a bad state of mind.

The catalyst for Botta’s advent in this country was Kenneth Frampton, whose essay “Mario Botta and the School of the Ticino” appeared in Oppositions in 1979. Frampton is himself an international figure, and has often served as a pipeline for ideas and information between Europe and the United States. In the buildings of Botta and his Ticinese colleagues, who were recognized as an important group as early as 1975, Frampton saw examples of an emerging ideological posture and architectural sensibility that he was later to characterize as Critical Regionalism. Against the American backdrop of consumer culture and Post-Modernism, the rigorously conceived, well-built, and high-principled buildings of Botta and other Ticinese architects invigorated Frampton “like a breath of fresh air.” Many in this country agreed with him.

Despite the ideological aspects of Frampton’s introduction, and the explicit sociopolitical values that Botta attaches to his designs, the buildings are studied in American studios and drafting rooms primarily for their formal and constructional rigor. This winnowing of the unwelcome ideological content from an attractive cultural product is a notably American practice (one Botta himself
may have bowed to, at least on his more recent American tours: his early lectures, charged with ideology, have given way to a softer, more pragmatic tone. Botta’s American audience, in other words, has proved to be more interested in who he is and what he builds than what he has to say.

The curiosity about Botta’s background and personality, a natural outcome of his celebrity status, has been heightened by his extraordinary professional pedigree. Few architects anywhere can claim to have studied with Scarpa, worked in the atelier of Le Corbusier, and collaborated with Kahn. To some, Botta incarnates the hope of a one-man synthesis of Italian, French, and American traditions, and a single-handed restitution of major strands of Modernism: Corbusier’s clarity and invention, Scarpa’s passion for detail and materials, Kahn’s spatial layering and humanism. For those seeking a sign, the fact that all three masters died in tragic circumstances offers the subtlest suggestion that Botta’s accession was preordained.

One can only guess at Botta’s attitudes toward his background and renown. His friends and supporters have attested to an unusual modesty, but the editors of the “official” Botta books have not shied away from his prestigious associations. The biographies in all the books make prominent reference to Scarpa, Corbusier, and Kahn. And the publication of Mario Botta: La Casa Rotonda breaks new ground, I believe, in the field of professional promotion: this all-star testimonial to the architect is based on a single house, richly celebrated in poetry, cartoons, sketches, construction drawings, and essays with titles like “The Tamed Circle” and “M. B. Transfigurer of Geometry.”

One result of all this—the formidable promotional literature, the impressive pedigree, the celebrity allure, and the geographical isolation of the built work—is a relative dearth of critical commentary. Even those American observers one might have expected to be unfazed by such things have, in many cases, muted their criticism because of Botta’s tremendous value in their battle against Post-Modernism. His work is seen as responding to many of the now familiar criticisms of Modernism without resorting to the now equally familiar tactics of American Post-Modernism. These responses include:

1) The realization of architectural ideas based on the inspired execution of traditional construction methods, as opposed to impermanent building techniques in the service of imagery and ornament.

2) A sensitivity to place and history unvitated by literal vernacular or historicist solutions.

3) The reintegration of traditional urban domains with boldly scaled interventions, rather than delicate “fragments” or submissive “contextual” methods.

In the light of much current American architectural production, it is no wonder that Botta’s work should be held, in certain camps, to be above criticism.

Botta’s accomplishments, nevertheless, do not need this kind of protection. His early buildings and projects have been widely and deservedly praised. My hope is to establish a few connections between the form and content of Botta’s work that might explain how and why his most recent buildings have disappointed earlier expectations.

To American architects, who must grapple with the decline of craftsmanship, one of the most attractive aspects of Botta’s buildings is that they are not only well built, they embody an almost palpable passion for materials and construction. In the words of one admiring student, “Those buildings are built.” The quality of construction remains high in the most recent Botta projects; indeed, recent visitors to the Ticino report that the work looks even better in reality than in photographs, a rare quality in an era when buildings are designed as much for magazines as for clients. It should be noted, however, that Botta is simply the best known exemplar of a phenomenon ubiquitous in the Ticino, where an enduring tradition of craftsmanship and some unusually progressive government patronage have produced a large number of exceptionally well-constructed (and well-designed) buildings.

Another current theme on the national scene—the “sense of place”—has been a long-standing interest of Botta’s, who has devoted much attention to the topological qualities of a site and its accumulated changes over time. At the root of this interest, however, is a concern not merely with place, but with the ordering of places. The explanatory notes of his 1970 competition entry for a school in Lucarno give some insight into the thinking of the then twenty-seven year old designer. The school, located on the outskirts of the city, was conceived as a “primary structure” or “finished form” whose purpose was to “contrapporre al disordine edilizio dell’intorno.” The editors have translated this as “to counter the untidy building all around,” but the literal translation may be more to the point: “to counter the built disorder all around.” In this way, Botta began to develop his language of finished primary forms whose purpose was not merely to stand alone, but to establish built order in the midst of built disorder.

The built order of a Botta project occurs not only in relation to the scale of the local context, but at all scales, ranging from the domestic to the territorial. One of the unfailingly inspired aspects of Botta’s vision is his ability to capture—in tiny diagrams with the appeal of Persian miniatures—the underlying spatial order of a street, a city, or a region. Armed with this insight, he has frequently been able to endow his buildings, by means of strategic siting and massing, with the powerful physical presence of much larger structures: houses become lookout towers (Riva San Vitale) or granaries
(Stabio), schools become ramparts (Morbio Inferiore), transit stations become triumphal arches (Lyons), train station annexes become bridges (Zurich), government buildings become citadels (Perugia), universities become entire new towns (Lausanne).

The magnified physical presence of these buildings increases their capacity to order their domains, which is precisely what Botta is after. In most cases this involves the reinforcement of the boundaries of those domains—of a street, a city block, a river, a lakefront, a town, a city center. Its boundaries thus confirmed, the nature of the bounded space, quarter, or city is revealed, and the tendency toward disintegration checked.

Certain Botta buildings conceived in response to their larger setting are nonetheless at odds with their immediate environment. The interior space of the 1970 Cadenazzo house, for example, is exclusively related along a central axis to a distant range of mountains; in other words, the only direct connection is between the domestic scale of the interior and the regional scale of the landscape. The intermediate scale of the neighborhood is closed off by virtually windowless side elevations; as the project description proudly confirms: “the construction to the east and west is completely closed, with no visual or spatial relationship to the buildings around.”

This is a far cry from “contextualism” as it is understood in this country, where a contextual building is expected to be responsive to its neighbors. Botta, whose early buildings were often praised as “contextual,” explains the closed side elevations in this way: “this ‘depository’ of houses, with all the bad taste and petty ambitions that have motivated them, is scattered, episodic, and unconnected with the qualities and peculiarities of the site.” The houses are “the expression of an opulent society in a crisis of values, a society that has renounced the standards of the artisan’s constructional wisdom, obliterated by economic development and the ‘progress’ of industrialization.” Botta’s contextualism, we see, is a selective one, including the distant context (revered mountains and sky) and ignoring the local (detested suburban houses).

This ideological distaste for weak planning regulations, disorderly suburban development, and other environmental creations of late capitalist society eventually led Botta to transform an ancient urban prototype—the courtyard house—into a kind of suburban hybrid, which Frampton has characterized as halfway between bunker and belvedere. The party walls of the urban prototype become the windowless elevations of the freestanding house, defensively closing out the neighbors like a bunker; the roofless courtyard of the city type becomes the covered open space around which the main rooms are organized, and through which the long-distance views are captured, in the open manner of a belvedere.

The struggle to resolve conflicts that were at the same time formal and ideological gave the early houses their presence. To the casual observer, they seem to be powerfully connected to their surroundings; but the exact nature of the connection is veiled, which imparts a sense of mystery. In the more recent houses, Botta has reused the bunker/belvedere type for settings not marked by the same conflict between distant and local contexts. As a result, many of the houses, rather than emerging from the site and its particular qualities, appear to have been willfully imposed. The scent of the mysterious has turned into the odor of the bizarre.

The dynamic spatial organization of the early houses, which provided necessary and brilliant counterpoint to the singularity of the exterior shell, has also given way to spatial and formal devices which are less and less appropriate, and more and more rigidly applied. These include the increasing insistence on symmetry in plan and elevation; the reflexive use along the central axis of a triangular or semicircular skylight, which has been reduced to a stylistic cliché; the use in plan of awkward diagonal, stepped, or curved elements in order to resolve conflicts created by the symmetrical organization; and the resort to literally defensive forms, such as the crenellated turrets in the 1981 Origlio house. One is left to speculate, with some disappointment, whether the success of the houses of the seventies may have induced this rigidity in the houses of the eighties.

Botta’s distinction between the near and distant context of his houses is echoed in his distinction between near and distant nature. In his early houses, he persuasively demonstrated that a structure could establish harmonious connections to its site and landscape by standing freely, without having to bury itself in a thicket of ornamental vegetation. The bunker/belvedere qualities of the houses marked them as safe havens from which to view the magnificent Swiss landscape—at a distance. Their hard masonry surfaces hit flat planes of grass without any intermediary landscaping. Nature, in other words, was to be seen but not touched.

This attitude toward nature has been codified and applied to all the recent houses in such a systematic way that what began as the thoughtful reappraisal of a problem has deteriorated into a polemic. The slogan of many of the Ticino architects, “a house in the landscape is like a fist on the table,” seems now to be taken almost literally. The shrill tone of the polemic can be detected in Robert Trevisiol’s essay in La Casa Rotonda.

Trevisiol asserts that nature and architecture are necessarily contradictory, and that on this point Botta is “categorical,” so much so that “one wonders how any doubts could possibly arise and how it is possible to follow false paths.” The doubters and followers of false paths—those who seek the engagement or integration of
natural and architectural forms—are involved in "an unfailingly vain attempt" marked by "pretense" and "hypocrisy"; their posture really betrays "a fear and distrust of all fresh expression" at the expense of an appropriate "sensitivity and attention to existing values." The implicit branding of all gardeners, landscape architects, Wright disciples and other "natural" types as hypocrites, pretenders, and aesthetic cowards does not merit rebuttal.

Botta's attitude toward nature, while less extreme, manifests itself in the tendency to box trees. The deracinated, boxed, and movable tree is a common Botta motif that underscores his determination to bring order even to the disorderly realm of vegetation. He apparently sees boxed trees as the appropriate solution for most urban projects: in a courtyard above a parking garage, on the ground in the water of a lakefront park, at the rooftop corner of an office block, and along every roof of a many-roofed science center in Berlin. In this last project, in particular, the extremely regimented character of the rows of boxed trees suggests an antipathy, even in the midst of the city, to the refreshing qualities of plant life. Instead, trees are used as conscripts in the battle against urban and architectural disorder.

The boxed tree wheeled out at will from an orangerie was also a favorite device of a particularly authoritarian monarchy in pre-Revolutionary France, and one cannot help but notice that in that instance the disposition to direct the orderly movement of trees was accompanied by a ferocious desire to compel the actions of people. Botta has spoken out against the failure of planning regulations to "control the tendency toward spontaneous building"; certainly many environments stand to benefit from the imposition of some kind of order, particularly an order that reflects the character of the place, rather than the whims of developers. At the same time, there are many highly ordered environments that could stand a little spontaneity. An inflexible insistence on order can be the operational arm of an authoritarian impulse, and some of Botta's larger projects have a touch of that impulse.

One wonders, for example, whether the imagery of a military barracks is appropriate for a science center in Berlin; whether the overpowering institutional quality of a Swiss clinic— with compulsory triangular windows for all—is appropriate when the inhabitants may not be there by choice; or whether the splendidly firm response to the landscape of a school in Morbio Inferiore might not, on the inside, have been softened to include elements more in scale with a child's landscape.

The cover of Mario Botta is a color photo of the interior of the Capuchin monastery library, and the choice is apt. The rigorously symmetrical plan, the hard simplicity of the materials, and the spiritual quality of the light seem the perfect physical correspondents to the disciplined and ordered life of a monastery. But there is a disturbing similarity between this monastic interior and the interiors of many of Botta's schools, houses, and work places. Just as the early Modernist houses created worlds purified of Vie-
torian excess, the world of a Botta building (at least as presented for publication) is cleansed of the detritus of consumer culture: no visible televisions or antennas, no computer games, no bric-a-brac, no space-age furniture or appliances. In their stead we find clean, hard planes of brick, stone, or concrete; freestanding furniture of great simplicity; the severe lines of industrial windows; and the pure pleasures of space and light.

The effect of these austere environments is double-edged: they can impart a sense of refreshment and relief if they are freely chosen, but a sense of coldness and deprivation if they are imposed. To impose such an ambience is therefore a serious matter: Botta’s adoption of a monastic asceticism has very different consequences for public environments such as schools and clinics than for monasteries and private homes. His failure to distinguish between buildings of different occupancy is a negative aspect of his concern with order.

Botta’s greatest skills can also be his greatest weaknesses. His affinity for austere elegance in one setting can emerge as excessive severity in another; his early success in creating houses of compelling simplicity may have led in his later houses to a contrived and overbearing purity; and his passion for restoring order to beloved cities and landscapes can overflow into an obsession with order itself. Both Botta and his colleagues in the Ticino have situated their flourishing careers on the high plane of international cultural criticism; as a result his struggle—and theirs—with these difficult issues will be watched carefully by audiences far beyond the rugged boundaries of southern Switzerland.

**Michael Mostoller:**

**A TOWER FOR LOUISVILLE SOUTHWEST CENTER**

PETER ARNELL and TED BICKFORD, editors

These offerings chronicle two recent competitions—for the Humana headquarters in Louisville and Southwest Center in Houston. The lavishness of the presentations reflects the eagerness of the entrants to win; both volumes capture this spirit of enterprise with a handsome format and crisp graphic style. Peter Arnell and Ted Bickford have unified the efforts of corporations, architects, and publishers into excellent documents with complete and detailed presentations, dramatic illustrations, and extensive use of color. Aside from the projects, they have included program statements, brief descriptions of each city and sponsor, and commentary by Paul Goldberger and Vincent Scully. These publications also convey the concern for a prestigious image that the sponsoring corporations hope to achieve through architecture. They have pulled out all the stops to create the impression of inspirational civic spirit and institutional grandeur.

Two major themes emerge from these pages: first, the plea of all the protagonists to rescue the skyscraper from a tired, stale, functional “modernism,” and restore it to its own past and to the history of architecture, of which it is a part; second, the need to alter the tower from its self-centered assertion as a powerful individual presence to that of a willing partner in the urban texture.

Among the entries, one group attempts to keep modern architecture marketable by dressing it up for a night on the town. Ulrich Franzen’s Humana project and Skidmore, Owings and Merrill’s Southwest Center project represent the worst of this genre; Cesar Pelli’s Humana proposal is the middle standard, and Kohn, Pedersen, Fox’s Southwest Center entry sets the pace. Pedersen’s perceptive and erudite statement of intent notwithstanding, the KPF design fails—I think because its crown-like top and the lanterns at the base detract from the strength of the rest of the design, making it look overdone and frivoulous. Pedersen’s introduction is nonetheless a clear and cogent argument for a strong interaction between the tower and the city and is “must” reading.

The major compositional theme of all eight buildings is the Base-Middle-Top formula. SOM in Houston goes for a sci-fi top, a Modern middle, and a Post-Modern base, ending up as stodgy surrealism. Pelli combines the Base-Middle-Top approach with the tower rising out of tower theme, one so common in his recent work that it seems stale. The octagonal tower indeed sits very uncomfortably on its rectangular base, which awkwardly meets the street with a solid mass on one corner, an atrium on another, and a mini-plaza on a third. The slick skin of the tower fails to hide its stunted proportions. In contrast, the KPF project has a square base that conforms to the street grid, an octagonal and rotated shaft, and a top that returns to the orientation of the grid with a focalizing flourish. It is a more successful resolution of the internal and external compositional relationships. Pedersen’s urban sensibility led him to address the city at the top and bottom of the structure, while allowing the shaft an independent role. Neither Pelli nor Franzen are able to say anything new about the relationship of the tower to the city. SOM follows the general theory of KPF but with less success.

The issues of symbolic representation, technology, and the relationship of the tower and the city are more powerfully explored in the remaining entries, Jahn’s in Louisville and Houston, Graves’s and Foster’s in Louisville.
Helmut Jahn's two submittals strike quite a contrast. His Louisville design is a smooth, glazed octagon rising dramatically out of a larger octagon with an articulated exposed steel structure. An ascending geometric effect is achieved by the spiral-like unfolding of one form into the other. Here Jahn pushes the high Modern devices of abstract geometry and structural imagery to new extremes, creating a luminous memory of Breughel's Tower of Babel, Boulée, and Tatlin's Tower. It is much less successful urbanistically, as the American city was laid out in a rectangular grid, not logarithmic spirals.

Jahn's winning entry for Houston represents a sea-change in his idea of the role of structure and geometry in design. Ornament is introduced at every scale to replace geometry and structure as the signifying elements. He overtly attempts to recall the volumetric and compositional strategies of the skyscrapers of the 1920s and 1930s. Like the Louisville design, the tower is octagonal, but in this case more a chamfered square than a true octagon. Glass is once again used extensively, but the patterns created by alternating opaque panels are unmistakably derived from William Van Allen's Chrysler Building of 1930. The top makes similar allusions, but has a sinister quality compared to the effervescent quality of the original. Jahn's genius for geometry seems to have been sacrificed to a sentimental evocation of the earlier buildings. Here the ghosts of the twenties and thirties emerge in bright greasepaint. The renderings of this building, particularly those of the base, have a brash and bold look (the essence of the Jahn style), but they are also ostentatious and vulgar, over-rendered and insensitive. I call this the Disco-Deco Style—not inappropriate, I might add, to Houston.

Michael Graves's winning scheme for Louisville is another attempt to give history a voice—not the more recent history of the skyscraper, but that of ancient Greece and Renais-
sance Rome. His design is firmly rooted in the concerns for urban architecture, defining the street as a room that will communicate with the large public rooms of the building. His vocabulary is based on the classical heritage of architecture: the portico, the column, the loggia, the piano nobile, the window, the aedicule, the arcade. These elements are applied to the Base-Middle-Top formula, which in Graves's hands is changed into the architectural language of ground floor with mezzanine, piano nobile, and attic with roof. His composition makes the three divisions equal, completely eliminating Sullivan's original concept of the rising shaft from the base to a crown.

Graves, in fact, seems intent on forgetting the skyscraper formula. The base and top are more critical to him than the rising shaft, and both completely dominate the design with the extent of their volumes and their complex articulation. The scale of the windows in each is used to signify human presence in space, a quite different mode of conveying corporate presence than pyrotechnic confabulations of the top so common to tower imagery. And of course, Graves's work is clever, so that each of the B-M-T divisions has its own B-M-T subdivisions—de rigueur for serious B-M-T-ers.

Graves's other device for defusing the skyscraper image is a surface of either stone or painted concrete in the colors of central Italy—returning the 20th-century product to its pre-industrial roots. The large rotunda at the base further speaks of the great classical spaces of the past; and the fountains, alluding to the nearby river, add a special historical grandeur to this public room.

In contrast to Graves, who believes that Modern architecture went too far, Norman Foster, in his Louisville entry, demonstrates that it has not gone far enough. He is intent on creating a new, universal language (as the Greeks once did) out of the particulars of today. Foster's dramatic design proves that there is a lot of bite left in the belief that structural display, geometric purity, and technological imagery are capable of solving the problems of context while providing a recognizable symbolic presence. His line drawings, showing the project in the context of the Ohio River Bridge, are a particularly sensitive interpretation of Louisville. His atrium and garden could be as successful as the public room planned by Graves. He makes the use of metal and glass exciting again, and, though I may be old-fashioned, I prefer them to materials that seem intent on imitating stucco. I believe Foster's entry to be the most mature and confident of all the proposals. Its use of contemporary technology without Jahn's veneer of garish sentimentality or the deep nostalgia of Graves gives it a power they both lack. There is one problem, however. The use of the conventional elements of architecture makes Graves's work inherently architectural, a quality interpreted by the sponsors as providing a proper civic sense. Foster's design, on the other hand, relies on an abstracted vocabulary and is often merely architectural. While a powerful symbol results, it lacks the overtones of public architecture that are more obvious in a building relying on a classical vocabulary.

In sum, these two excellent projects maintain a dialogue between the presence of the past and the possibilities of the future: Graves with great style and wit, Foster with gusto.

Esther McCoy:
REAL ESTATE AS ART
JOSEPH GIOVANNINI

Titled and packaged as punk, this book is nonetheless a serious study of current Post-Modern building in a section of Los Angeles—Venice—that was once a sociologist's dream of mixed use. So mixed indeed that during the psychedelic sixties a strobe-lighted poetry reading hall could be found next to the dwelling of a Jewish patriarche so orthodox that during Passover he changed not only his cooking vessels but his false teeth.

The text, by Joseph Giovannini, former architecture critic on the Los Angeles Herald Examiner and now on the New York Times, acknowledges punk in his opening paragraphs, crediting the title to a young realtor: "I'm into real estate as an art form." Giovannini expands: "Venice has long had artists who needed studios, and an artistic climate that encouraged experiment. The result is real estate as architecture as an art form."

In the seventies, while gang life flourished, the artists began remodeling store fronts, car barns, abandoned depots; in the case of one garage remodel the oil change pit was tiled and turned into a plunge.

In this accommodating spirit many of the experimental houses of the eighties took shape. "As is" materials (unpainted construction-grade fir plywood) combined with accidental forms which seemed to take their dimensions from the "Free Firewood" box at the corner lumber yard. They accommodate to ecology (Milica Dedič's survival greenhouse which lights the space and feeds the family), to the machine (David Ming-Li Lowe's kit of warehouse parts for his studio), to the garage (Morphosis's exquisite compositions of alley cat materials above alley garages), and to Fred Fisher's rendering of a theme from the Steiner
house and Sea Ranch. The designs have in common tight security at the ground level, and a reaching up from the always narrow site to trap the sun.

A formgiver no one before Giovannini ever thought to credit hovers over all the buildings, a certain Gordon Hom of the Westside Department of Building and Safety. "Inspector Hom walks through the climate of thought that generates these houses, apparently unaffected and unimpressed. He does not share the values."

The experimental building is too carefully designed to be "called accidental. The principle of the design probably came from that master of illusion, Frank Gehry, whose 1972 house for the painter Ron Davis (not in Venice) fortified substance with illusionism, while his own house turned substance to illusion. Both sprang from Gehry's polemic on the state of the economy and craftsmanship, a polemic which had certainly informed Cesar Pelli's decisions on the design of high- and low-rise Los Angeles buildings. The principle is: Good craftsmanship is dying. The life support measures are too costly for times of high interest rates. The answer: Pull the plug. Design out good craftsmanship. Result: Venice architecture of the eighties.

Real Estate as Art, a dense record of past and present Venice, is filled with vivid and tender images of a beloved community always in flux. "A place of wit," Giovannini calls it, "a life of complementary layers . . . architecturally pluralist." Unlike the outsiders who have written previous studies of L.A. Post-Modern, Giovannini surveys it as a native at home with the patois.

Real Estate as Art: New Architecture in Venice, California, Joseph Giovannini, Sewell Archives (236 Main St., Venice, CA 90291), 1984, 60 pp., illus., $9.95 pb.

Anne Vernez Moudon: THE SCOPE OF SOCIAL ARCHITECTURE C. RICHARD HATCH, editor

"Relationships between people in space that suits them, that is architecture," claims Lucien Kroll in the exposé of his Maison Médicale project, summarizing the design philosophy that prevails in The Scope of Social Architecture. The book is an anthology of the experiences of architects and residents who together have designed and built better environments for working and living. Twenty-six projects built during the last decade have been selected from the U.S., Europe, Mexico, and Cuba. The range is rich and varied, from the preservation of the historic center of Bologna to lesser-known housing projects in Cuba and self-help programs in New York's Harlem. Most have received limited press; Hatch's book spares one the search through obscure sources in French, Spanish, and (most forbidding) Dutch.

I am familiar with many of these projects, and consider them a core of empirical knowledge essential to the design of residential architecture, but I am curious about the selection. Significant projects are excluded—for instance, De Carlo's Terni project, Kroll's new "village" in Cergy-Pontoise, and his public housing rehabilitation of Perseigne, in Alençon, France. To fully support the title, the editor should have provided a long list of projects in the category of "social architecture," as well as a rationale for the choice of projects treated in detail. The roster of professionals—which amounts to a social calendar of the field—should have been supplemented by some mention of their background and writings.

There is an inherent difficulty in compiling a book of case studies whose value will go beyond the cases themselves. It requires a selection that covers the gamut of ideas, and coordination
of the specifics of each example and their relevance to the general understanding of the subject. Although important concepts are brought up in the short introduction, conclusion, and in the scattered commentaries, the book lacks a strong conceptual framework. The message is clear, but in the absence of a solid theoretical base the lessons are hard to perceive.

A handful of basic issues can be gleaned from the book. First, the origins of the need for such an architecture can be traced to the forgotten influence of Bernard Rudofsky's *Architecture Without Architects* (Doubleday, 1964), which has only recently regained its prestige in building and city design. In the introduction, Hatch reminds us that interactive processes between designers and residents were the rule until the Industrial Revolution. He refers to the "traditional city... [which] had the... quality of social and economic transparency," but notes that this desirable quality, this "fusion of urban form and urban life was under pressure almost from the beginning." After the Industrial Revolution:

the sum of the changes in every day life... [has amounted to] an epidemic alienation... Steadily, the scope of involvement in housing, in work, and in city life has been narrowed. The final consequence is not only the loss of autonomy, of competence, of the city itself, but the loss of even the need for these things. The alienated user accepts these limitations as inevitable. Social architecture does not.

Under the rubric "social architecture," architects can assume different roles, as discussed by Geoffrey Broadbent in an exchange with Yona Friedman. There are corresponding roles to be played by residents. The case studies illustrate several possible models: from Hertzberger's "back seat driving posture," to Kroll's role as an educator helping residents select the appropriate architecture, to SAR's definition of limits to architects' responsibilities, to John Sharrat's organizing and facilitating approach. In several cases (Tucson and New York City, among others) the community itself is organized to control design and development. John F. C. Turner proposes his definition of role models following the experiences he related in *Housing by People* (Pantheon, 1977).

Second, "social architecture" as practiced today still draws from Modernist theories of architecture. Tzonis and Lefaivre place the case studies as "the genuine inheritors of the movement of modern architecture in its original efforts." An obvious reference to this legacy is in the book's title, which, I assume, refers to The Scope of Total Architecture, published by Walter Gropius in 1943. Indeed, the causes championed by the Modern Movement were the same in principle as the ones projected by social architects: social change via architecture. Yet these new protagonists strongly oppose the Moderns in the means they borrow and the processes they follow.

A third question emerges as to the role of "social architecture" in the arena of housing, particularly mass-housing. Does it respond to Martin Pawley's conjectures in *Architecture Versus Housing* (1971)? The Cuban example provides an interesting model: mass-housing systems are designed by professionals operating at the national level, while micro-brigades take over the production and management of housing at the local level. It would have been useful to contrast the Cuban case with contemporary housing approaches in the Third World (for example the widespread Site and Services programs advocated early on by John Turner), since they encompass impressively large numbers of participants. In addition they often involve extremely sophisticated methods of land distribution and land improvement. And what about the U. S.? Is there social architecture in the mar-
ket-oriented production of housing to the extent that it provides choice for the consumer/residents?

In the fourth place, the book highlights the need for architectural theories of space design "with people in mind." The only principles discussed in any detail are those of John Habraken's SAR. While SAR's philosophy of design can be seen as representative of most "social architecture," its design methods and procedures remain distinctive: they have only been thoroughly understood in the Netherlands, where a highly organized and bureaucratized society demands a level of technical sophistication that has proved prohibitive (or culturally incompatible) elsewhere. It would thus be important to compare SAR's approach with others.

Theories of space design vary considerably, especially with respect to dwellings. SAR advocates design flexibility whereby each set of residents designs (or redesigns) the layout of their dwellings. Kroll encourages as much architectural variety as possible to impress residents with the reality of a wide range of choices. Others, like Hertzberger, propose spatial "frameworks" that can accommodate a variety of users and uses with minimal modifications. The early work of John Turner, as well as that of Amos Rapoport, suggests what has been called "open-ended space design." Several studies have been done showing the open-endedness of traditional house forms. Chester Sprague's analysis of Boston's triple deckers comes to mind: in what he calls "tractable space," residents may appropriate space in several ways without modifying the physical plant or requiring the intervention of designers or builders.

In effect these theories and practices cast doubt on the value of residents' control of the design and construction phases. They begin to suggest that "social architecture" need not be entirely participatory. Perhaps in this context work by Post-Modernists could have been evaluated; instead they are portrayed in a single block as "anti-social" architects. All architecture has by definition social consequences, but only architects can elect to ignore them. It would be futile to try to convince the Post-Modernists that architecture must serve people first, yet it is a shame to bypass their work for the sake of ideology. The typological approach of Aldo Rossi, for example, deserves consideration. The use of traditional forms to which people can relate intrinsically, plus the inherent tractability of these forms, promises an interesting alternative route for "social architecture."

Another important issue is building form and aesthetics. Hatch warns us that "those who criticize on aesthetic grounds ignore either the necessity of social change or its difficulty," yet one cannot help wanting to understand the origins of the striking differences between the blocks of Cuban housing and the small houses of Cabrillo Village developed by and for Mexican immigrants in Saticoy, California. Participatory aspects of architecture need not be visible, but the environments do inevitably reflect issues of architectural "localism," personalization, and taste (both the architect's and the residents'). As signs of the special relationship between user and space, they merit special attention.

Finally, "social architecture" does not escape the influence of building economics. Evidence of overriding concerns for economics can be found in most, if not all, U.S. projects—much of the residents' and designers' efforts seem to be spent manipulating the system to increase subsidies. In vivid contrast, the comfortable European housing budgets may support a predilection for overly sophisticated design and building systems.

C. Richard Hatch has done an excellent job of recording many valiant efforts to integrate home design and building with the daily life of people. In particular, the detailed descriptions of the interactions between designers and residents make his book a useful reference. Unfortunately he does not help the reader much in sorting out the concepts entailed in "social architecture." The material here deserves to be fully explained in the larger context of architectural history and theory, a task I hope Hatch will pursue in a more general work on the subject.

The Scope of Social Architecture, C. Richard Hatch, Van Nostrand Reinhold, 1984, 362 pp., illus., $42.50.
Aaron Betsky:
MITCHELL/GIURGOLA

"The ageless task of architecture has always been to produce an appropriate response to people's aspirations for a better life." With such honorable but vague platitudes the work of the Philadelphia firm of Mitchell/Giurgola is presented in the collection of project photographs Rizzoli has published by way of a monograph on their work. Not even a short, insightful essay by Kenneth Frampton can transform this shallow archival effort into a useful addition to the documentation of current architectural work.

So unsatisfactory a volume seems especially gratuitous because the firm has, as Frampton points out, "alone among the large production offices on the American scene... succeeded in creating a large body of public work which is sensitive, appropriate, economic and beautifully built." One would imagine that such a firm would have more generous resources with which to present itself. Instead, we get the firm's projects grouped, in the manner of their mentor, Louis Kahn, under such self-aggrandizing headings as "Places for Work" and "Meeting Places" (when what is meant is suburban and urban office buildings and cultural institutions) with representative, often bland photographs.

As a result one sometimes wonders about the true quality of the work. Too often, the grey photographs and thin line drawings make the architecture look like polite, anemic versions of Louis Kahn's work by way of his most brilliant protégé, Robert Venturi. Someday a scholar will write about the "Philadelphia School" and its commercial apotheosis, or nemesis, the firm of Mitchell/Giurgola. The geometries, plan rotations, and lightwells of the sixty-six projects become repetitive paeans to the creation of unbothersome, civilly modern, and abstractly uplifting functioning monuments. To Giurgola, they represent continual recombinations of "constants" which produce interesting places to "be," or, if one believes Ehrman Mitchell's essay, buildings "of consequence."

Frampton tries to go beyond such suburban variations on Roarkian rhetoric—the unfortunate legacy, no doubt, of Kahn's deliberate self-obfuscation—by analyzing the firm's successful integration of several of the more popular architectural techniques of the last quarter-century. Starting from a Modernist and brutalist belief in the power of pure forms to organize our experience of the man-made environment, Frampton shows how the firm assimilated the work of James Stirling, Charles Moore, and The Five into a mélange of Modernist sensitivity to site, material, and function—disciplined by Kahn's insistence on the sublimation of such influences into an abstracted and absolutized environment. The most original contribution of the firm, though, was to turn such geometric orders into "an internal narrative landscape." Such a "picturesque sensibility," which sees architecture as a fragmentary assemblage of anecdotes and dicta by which we may know the structure of the place we are inhabiting, is, as Frampton points out, at its best when applied to such naturally picturesque and didactic environments as exhibits and educational facilities. The richness of the designs for such places as Bryn Mawr, the American Insurance College, and Swarthmore cannot be denied.

Yet the most successful of all the firm's work is undoubtedly the most recent, in which this picturesque sensibility has been pulled back into a tightly drawn architectural framework to produce a composed picture, an architectonic assemblage whose narrative attributes are reduced to sceno-
graphic signs. The skin of the Singer Headquarters in Stamford, drawn out into a triumphal arch for the commuters on I-95; the administrative arc of the Lukens Steel Company building, held in place by the counterpoint of solar-paneled pavilions; and the Kahnian flow of water which unites the disparate elements of the Government Center in St. Louis all fall into this category.

Frampton sees this latest strategy as the unification of the “picturesque, typological and decorative” in the firm’s approach: the fragmentary narrative ordered by an emphasis on the underlying structure—derived from the function and character of the institution served—and the subsequent explication of this strategy in representations drawn both on the scale of the clarity of the use of material and on the scale of the forceful organization of building masses. Certainly the result is an architecture that resolves much of the confusion about the nature of and need for architecture in the public realm. These buildings are clear enough to please the immediate sensations and abstractly ordered enough to allow for more permanent pleasure.

The design most clearly explained and left for the climax of the book, the new home for the government of Australia in Canberra, is undoubtedly their greatest achievement in this realm. The splendidly serene courtyards and meeting places; the willful arcs of glass which create dramatic backdrops, and at the same time unify the program elements into a series of discrete yet coherently composed elements; the Pop Art flag struck up over the heart of the building; and the way all these layers of experience and organization are compacted into a dense mound in the earth is probably a quintessential a statement of government physically embodied as Kahn’s design for Dacca.

The work of Mitchell/Giurgola is so sophisticated that this grand project seems to grow naturally out of all the buildings collected in this volume. It is a compliment to the achievements of this firm that they can be so large, so experienced, and yet so complexly sensitive to all the different physical, psychological, social, and economic structures organized and made evident by an architectural project. Unfortunately, there seems to be one adjectival missing, in the structure of much of their architecture as well as in the composition of this book: critical. Just as the architecture of Mitchell/Giurgola never asks why a place should be “pleasant,” or what such a word might mean; why one man’s “constant” is another man’s—or culture’s—hopelessly subjective variable; why “a building of consequence” may support repressive, uncommunicative or merely repetitive conditions, so this volume never questions, explains, or selects from among the projects shown. All of this architecture is presented in a perfectly perfunctory manner as the paradigm of professionally responsible design. One is tempted to ask this book, and this architecture, what it really wants to be, for whom, and why.

Mitchell/Giurgola Architects, introduction by Kenneth Frampton, essays by Romaldo Giurgola and Ehrman Mitchell, Rizzoli, 1984, 272 pp., illus., $29.95 pb.

Raymond Lifchez:
SHARING ARCHITECTURE
ROBERT L. VICKERY, JR.

Sharing Architecture is a summation of a course, “Concepts of Architecture,” taught by the author since 1970 at the University of Virginia. It represents his effort to meet one of academe’s most challenging tasks: introducing students to their chosen field of study—their profession—while at the same time meeting their highest expectations for a classroom experience.

Vickery mentions in his introduction that as a student, he was genuinely inspired by his teachers, becoming one himself in order to continue a relationship with others that he found not only affecting, but professionally rewarding. These are admirable motivations, but the book itself has serious shortcomings, among them an exhortative style rather more inspirational than didactic, and a tendency toward oversimplification and generality that often gives the illusion of substance rather than the reality. The results are not intellectually challenging, and in a book aimed at the novice, this is a serious failing—a shortchanging.
Vickery has also chosen to omit any reference to the evolution of his course, about which one wants to know not only what was taught, but how; not only what he said, but what his students said in return (and how their responses have shaped his own ideas). In a book which is as much about teaching as about architecture, this is also a shortcoming.

Conceptually, the book is divided into three parts. The first stresses the necessity of establishing ground rules—an agreed-upon terminology, for example—as a prerequisite to gaining a common understanding of architecture. This seems like a good idea, but it is not developed into any applications that might reveal more precisely what Vickery has in mind.

The second part drops this theme and turns instead to that phenomenon first described in the fifties by Sibyl Moholy-Nagy, Ernst Egli, and others as “human settlement” (all man-environment interactions). Their work set the stage for the introduction, in the sixties, of academic social science into architectural curricula. Vickery might have put forward a review of the literature of that now largely (and conveniently?) forgotten subject. As it stands, his text is a hodge-podge of borrowings, recapitulated without added insight, though with much sophomoric courage.

The third and most interesting part of the book deals, successively, with Wright, Le Corbusier, the Modern Movement, and architectural education. Here, Vickery is on surer ground, and—in the case of architectural education—has something important to say. This last chapter, in particular, stirs the imagination about the possibilities of the genre.

In this chapter Vickery takes stock of the architectural profession and is horrified by its loss of social direction. Unfortunately, he chooses Post-Modernism as his whipping boy, arguing that its practitioners by definition abjure the social contract of the Modern architect. Celebrated statements against Post-Modernism (by Von Eckhardt, Huxtable, and others) are invoked, but characteristically Vickery fails to develop his own point of view, or to bridge what must be a substantial gap between these critics and his own students, to whom—if one can judge from what is happening in the “real world”—these critics must appear off-the-wall.

Yet this last chapter, taken together with Vickery’s quite personal introduction and his exhortative tone, conveys how deeply he cares about teaching, and how much he wants to empower his students. This places Sharing Architecture within the tradition of the primer, an elementary book which serves as a first means of instruction, and more importantly as the means by which the young or uninitiated are intellectually awakened. Elegant in design, unassuming in format (and thus disarming), the good primer seeks to achieve the most effect with the least effort, informing the reader in concise and persuasive terms while holding out the promise that mastering the material is the most valuable investment to be made in terms of becoming one’s own person. Read at the most important moment in one’s career—the beginning—the primer triggers the intuition, so that from then forward, as Richard Shaul has put it (in Paolo Freire’s Pedagogy of the Oppressed [Herder & Herder, 1970]), the “world to which one relates is not a static and closed order, a given reality which man must accept and to which he must adjust, [but] a problem to be worked on and solved.”

Two classic architectural primers are Steen Eller Rasmussen’s Experiencing Architecture (MIT, 1959), and Alison Smithson’s Team Ten Primer (1968). Rasmussen begins by suggesting the intriguing idea that one’s five senses are the most important tools one will ever possess. In a series of wonderfully composed chapters, he shows how these gifts and the ability to use them purposefully develop reciprocally in practice. In the Team Ten Primer, especially in the elegant prose of Aldo van Eyck, one discovers a generation of socially committed architects for whom a personal humanity is a powerful asset in the creative practice of their profession.

Sharing Architecture falls somewhere in the vast distance between these august works and two other books conceived for students: Francis D. K. Ching’s Architecture: Form, Space and Order (Van Nostrand Reinhold, 1979), and Sir Banister Fletcher’s famous History of Architecture on the Comparative Method (18th edition, Scribner, 1975).

Fletcher and Ching are uncompromisingly pragmatic authors, single-minded in their similar approaches to laying out the awesome complexities of their subjects. Both use as their model the old Larousse-type illustrated dictionary, in which text and images are tightly configured into informational units. These are really handbooks, rather than primers: there is little more here than meets the eye.

Vickery makes copious but confusing use of illustrations, flashing plans, sections, and other depictions of famous buildings at the reader without connecting them very clearly to the text. The knowledgeable reader may see the connection, but the novice is not likely to. Those illustrations drawn by Vickery himself are more effective. He has a concise and witty drawing style, and one can well imagine his students’ delight as his sketches materialize freehand on the board to illustrate a point.

Each generation of students needs its own primer. Such a book is useful, too, in lifting architecture from its lethargy and giving it insights that stimulate new, more socially relevant goals, and empower people to act boldly. Sharing Architecture, while it conveys the personal dedication of its author, does not do for this generation what Experiencing Architecture or the Team Ten Primer did for theirs.

Sharing Architecture, Robert L. Vickery, Jr., Virginia, 1983, 187 pp., illus., $12.95 pb.
Constantine Michaelides:
ARCHITECTURE IN GREECE
DESIGN AND ART IN GREECE

Architecture in Greece and Design and Art in Greece are annual reviews issued in Athens by Orestis B. Doumanis. Each has a publication history of about fifteen years.

Handsomely put together, with obvious attention to the quality of page composition, drawing, and photographic reproduction, and—compared to the U.S. magazine experience—a remarkably low number of advertising pages, both annuals give a persuasive account of current issues, concerns, commitments, and accomplishments in the world of architecture and the visual arts in Greece.

The text is mostly in Greek. However, recognizing that Greek, in the past five hundred years at least, has ceased to be the international language of culture, most of the articles are supplemented by a summary in English. Given the richly illustrated pages and the well-organized captions, both publications are easily accessible to the non-Greek-speaking reader, and will serve those interested in these subjects well.

The contents of both books reinforce the suspicion that we live in an ever-shrinking world. The work of Mario Botta in Ticino, of Martorell Bohigas and Mackay in Barcelona, of Frank O. Gehry in California, and of Panos Koulermos in California and Italy, among others, is illustrated and discussed in parallel with the work of Greek architects less well known, but of comparable attitude and quality.

Particular projects, such as the “Development of Public Spaces and Facilities from Theseum to Ceramicos,” focus on such major issues of our time as how to build within the context of a well-established physical environment, particularly when this environment is directly under the shadow of the Acropolis. This question has burdened generations of Greek architects, and will apparently do so for years to come.

Since the Parthenon is not the only legacy of the Hellenic landscape, two other published projects bear mentioning, an “Archaeological Museum on the Island of Andros” and a “Modern Art Museum on the Island of Andros,” which sensitively and respectfully implant 20th-century functions in the context of the precious and fragile vernacular architecture of an Aegean island.

Student work from the National Technical University of Athens is also included, and it is encouraging to see a good number of projects on urban rehabilitation and restoration done with gentleness, respect, and understanding of contextual issues.

All this of course is occurring within the broader spectrum of current Greek political life, a period of great change and retrospection. Membership in the Common Market and the election of the first socialist government in more than forty-five years have brought to the surface with new intensity the perennial questions of Hellenic identity. Very pertinent to these issues is the article on “Needs and Expectations of the Greek Visual Artists” in Design and Art in Greece.

Impressive as both publications are in their intellectual and visual content, they deal by necessity only with the “formal” aspects of architecture and the visual arts. In the process of catching up with the rest of the Western world in the last thirty years, much has occurred to damage the visual character of the Hellenic landscape and pollute and reduce the quality of urban life.

In the absence of any hint or commentary on these issues in either publication one cannot easily find fault. But those whose only preparation for a visit to Greece consists of reading these reviews may encounter an unpleasant surprise or two.

Architecture in Greece, Volume 17, edited and published by Orestis B. Doumanis (5 Kleomenous Street, Athens, 139, P.O. Box 545, Greece), 1983, 208 pp., illus., $25.00.

Design and Art in Greece, Volume 14, edited and published by Orestis B. Doumanis, 1983, 139 pp., illus., $25.00.
The scholarship of vernacular architecture in Great Britain is no older than that in the United States; the first studies in both countries date from the late 19th century. But since the 1920s British scholarship has been much more copious in its output than American, as well as more focused. British scholars tend to agree not only on their subject matter—vernacular architecture is for them strictly the building of preindustrial agrarian society—but on the important questions and major ways to answer them as well. The result is a body of literature that is architecturally sophisticated but at the same time intensely ingrown, as the works under review demonstrate.

English vernacular architecture studies have two primary sources. One strain stems ultimately from the antiquarian virtuosi of the 17th and 18th centuries, from whom it inherits a deep belief in the importance of the local and the ancient. It incorporates in addition the nationalism, the eye for the picturesque, and the concentration on precise recording of detail that characterized the early 19th-century Gothicists—along with an element of their faith that true Englishness was achieved in the Middle Ages. This school tends to define vernacular building as the architecture of what was called in the 19th century "old roast beef days." A thing of the past, it died with the coming of the first architectural handbooks, or the Industrial Revolution, or at the latest the railroad. Scholars of this sort tend nowadays to be trained as archaeologists, architects, or historians, with a strong leavening of skilled amateurs remaining among them, and they tend to study the architecture of England and Wales—England and its medieval dominions.

A second strain derives from the Continental folklife movement initiated in the late 19th century, in particular from the Scandinavian studies of peasant ethnology. Some of the earliest folklife studies of vernacular architecture in the British Isles were undertaken in the 1920s and 1930s by Scandinavians working in Ireland. The peasant ethnographers concentrate on the cultural traits thought to derive from the Celts and their successors; they work, as a result, on the fringes of Britain, in Wales, Ireland, the smaller islands, and, to a lesser extent, Scotland. The earliest of them believed that they were witnessing the twilight of peasant society in their own time, unlike their archaeological colleagues whose subjects were safely buried two centuries and more in the past. Ironically, the students of peasant folklife—which is by definition life in a highly constricted local community—take a broader view of their work than the archaeologists and historians. While the historians focus resolutely on what is local and particular, peasant ethnographers search for the broad, transnational architectural patterns revealed in the distribution of simple forms like thatching styles, wood frame or stone building materials, and roof shapes, and they attribute those distributions to prehistoric patterns of cultural diffusion. Both groups share the assumption that vernacular architecture, whether long dead or now dying, is the product of a different way of life from our own, a fragile thing that crumbles before modernity.

The works under review illustrate the strengths and weaknesses of the two traditions. Barry Harrison and Barbara Hutton’s Vernacular Houses in North Yorkshire and Cleveland is firmly in the mainstream of archaeological studies of English vernacular architecture, concentrating on the evolution of plan forms and structural systems in a section of the old northern county of Yorkshire between the late Middle Ages and the 18th century. The book is divided into four sections. The first discusses medieval housing, of which little survives in England, virtually none at the "vernacular level" (the housing of farmers and agricultural laborers). Harrison and Hutton call on the evidence of archaeology (the most important ongoing archaeological excavation of a medieval village, at Wharram Percy, lies within their area), documents, and some standing houses belonging to people of higher social status than those who
originally lived in vernacular buildings. The second section treats four groups of post-medieval vernacular plan forms. A third catalogs building materials, structural systems, and interior and exterior decoration. The fourth summarizes the preceding three, recasting the broad typological and technological patterns according to local and chronological distribution.

Harrison and Hutton’s book is at once tremendously valuable and quite limited. The heart of the work confirms the long-standing images of Yorkshire vernacular architecture—of houses with ailed timber construction, king-post roofs, wooden firehoods, three-room-long plans, entrances into a small vestibule in front of the fire. As elsewhere, these houses were modified in the 17th and 18th centuries, with kitchens and other service areas pushed to the back, and sleeping accommodations transferred from their traditional ground-floor locations to upstairs rooms. But the authors have revelations for us concerning the beginning and end of their time period. Their close analysis of the evidence for medieval peasant housing challenges the old assumption that peasants lived in flimsy houses that had to be replaced frequently. While they recognize a range of peasant living conditions, the authors suggest that at least some peasants lived in quite well-made houses, with plans perhaps little different from standing early post-medieval houses. The drastic break in size and quality of peasant housing, called the “Great Rebuilding” since first being identified in W.G. Hoskins’s 1953 article of that name, becomes more blurred, its implications more complex and less certain. At the other end of their chronological survey, the authors explore the 17th- and 18th-century introduction of central passages, two-room-deep plans, and symmetrical façades. This is a great service to students of 17th- and 18th-century American vernacular architecture, for houses with those features are the earliest American survivors. Until now few English writers have thought British examples of these forms worth studying, and Americans have had to rely on ill-informed guesswork about European precedents. Hutton and Harrison offer the first of what one hopes will be a long series of excursions by English scholars into the 17th and 18th centuries—comparatively unknown territory for them. Already Harrison and Hutton’s findings will be cause for some reassessment. Many will be surprised to learn, for example, that, in Northern Yorkshire, houses where one stepped directly into the main room from outside superseded those where a vestibule intercepted the visitor. We have assumed the opposite progression, usually, on the grounds of a supposed growing interest in privacy on both sides of the Atlantic. What can this mean?

Unfortunately, the authors give us little help in answering this question or many others. Like most English vernacular architecture studies, the text of *Vernacular Houses in North Yorkshire and Cleveland* is circular and ingrown.

It is addressed to initiates, and drops references to long-houses, to lobby-entry and hearth-passage plans, to crucks with A and C apexes and other obscure but important concepts in a way that assumes not only that the reader knows what they are, but that he or she is familiar with forty years of detailed scholarly argument, contained mostly in British local historical and archaeological journals, and understands the importance of the revelations made here. This fundamental unwillingness to discuss the context and significance of one’s discoveries is universal in English vernacular architecture studies.

Moreover, Hutton and Harrison, like many English scholars, tend to become lost in the minutiae of structural description and development. The fourth section is tantalizingly entitled “Rural Housing and Society,” and in it the authors claim to have “endeavoured to assess the factors that are most likely to have affected the way that vernacular houses were built.” In fact, except for some discussion of geology and building materials, they have not. Instead, they have broadly outlined the economic history of agriculture in the region in a way that explains the general patterns of house size and quality but says nothing about patterns of spatial use, social relations, and the movement of architectural ideas. We are left with a formal and antiquarian study that could have been much more.

Gwyn Meirion-Jones’s book on Brittany makes an interesting contrast with Harrison and Hutton’s on Yorkshire. Where Harrison and Hutton survey a small locality intensely, Meirion-Jones covers an entire region of France by close examination of systematically selected sample areas. Yorkshire was a relatively prosperous agricultural area with large and impressive peasant houses. Brittany was a humbler place. A center of prehistoric and early Christian colonization in France, it settled into a long cultural
slumber in the early Middle Ages. Its humble vernacular architecture was characterized by walling in stone and earth, cruck-based roof structures, and small houses, often built in rows or rangées and usually containing only one room plus accommodations for farm animals within the dwelling.

Meirion-Jones's book is structured like Harrison and Hutton's, with two initial chapters on the physical and cultural characteristics of Brittany, followed by others treating building materials, construction (the term as Meirion-Jones uses it includes structural systems, building processes, and traditional beliefs about house construction), small, primitive buildings, furnishings and the interior arrangement of houses, and—the heart of the book—five chapters on the development of house plans. Oddly, the footnotes and bibliography are designated as chapters 17 and 18, respectively.

The Vernacular Architecture of Brittany is both a better and a worse book than Vernacular Houses in North Yorkshire and Cleveland. It is more ambitious in its attempt to describe overall patterns and in the variety of buildings it surveys, but more timid in its presentation of the data and less successful on the antiquarian descriptive level than Harrison and Hutton's effort.

Meirion-Jones, as a geographer studying a Celtic region, is in the tradition of the peasant ethnographers, but he also has strong ties with the archaeological school of English vernacular architecture studies. Like the peasant ethnographers, Meirion-Jones, while examining a limited area intensively, points to a wider distribution for the architectural forms and patterns that British scholars have identified in their countries, and suggests that the time has come to reconsider tracing larger patterns, as the Scandinavians did in the early 20th-century.

He owes his greatest allegiance, however, to the historical-archaeological tradition. His working definition of vernacular architecture as the traditional rural architecture of a restricted locality is the standard English archaeological one, as are the questions he addresses, the field methods he uses, and the organization of the book itself. At times both author and reader forget that, whatever Brittany's origins in Celtic England, it has been a part of France for many centuries. Historical questions arising from the province's own history are often overwhelmed by the English orientation. As with Harrison and Hutton's book, moreover, much of Meirion-Jones's text cannot be appreciated without a grasp of the English literature.

The Vernacular Architecture of Brittany demands very different assessments as a work of scholarship and as a book. As a piece of fieldwork, it is superb. Not only is it the first systematic study of French vernacular architecture to be published in French or English, it is one that strives mightily to achieve a comprehensive understanding of vernacular landscape. Meirion-Jones has recorded smaller, simpler, later buildings as well as the large and striking houses and barns that attract most English and American vernacular architecture scholars. Well houses, bake ovens, and evanescent primitive shelters do not escape his eye; the reader has confidence that the range of vernacular architecture in Brittany has been adequately depicted. Furthermore, while documentary research in most English studies is confined largely to quantifiable data like tax rolls and probate inventories, Meirion-Jones supplements these with travelers' accounts, folklore collections, and pictorial sources, to supply the qualitative dimension that rounds out the purely quantitative.

It is regrettable, therefore, that the finished work shows so little of the care that went into the research. The bulk of the text of 366 double-columned pages consists of serial descriptions of buildings rendered in minute detail. One wishes that the descriptions had been relegated to a catalogue, so that the chapters could have been reserved for analysis, of which there is far too little in a book that proposes to illuminate in microcosm the origins of European vernacular architecture. The reader's task is made no easier by the out-of-sequence illustrations, the bad drawings, and the failure to translate the lengthy primary source quotations from the French, which renders whole columns of valuable information inaccessible to many readers.

Other problems are more fundamental because they have to do with the interpretation of the data. Meirion-Jones's fascination with Brittany's conservative qualities and his desire to see the Bretons as (to borrow the words of an American scholar of Appalachia)"our contemporary ancestors" erase much of the sense of historical change and development here, in contrast to Harrison and Hutton's book, which chronicles change in great detail. Such a static and time-less view of vernacular architectural history sacrifices the opportunity to relate the extensive Breton evidence to the questions about the history of the peasant family—the most interesting and significant findings from the field to date—which have been investigated by J. T. Smith, Eric Mercer, and (in the United States) Cary Carson.

The historical interpretation that Meirion-Jones does essay relies heavily on modernization theory, which has been taken up by many historians in recent years, although it was originated by sociologists. It implies that a normative course of social development, from agrarian to capitalist-industrial, exists for most societies, and that the history of Euroamerican societies, with their increasingly rationalistic and individualistic bent, describes that normative course. Although modernization theorists qualify their arguments and deny that they are prescriptive, the implication is that one can locate past and present societies along a single-strand continuum from traditional to modern. This leads Meirion-Jones to make two assumptions: first, that we can get a glimpse of life in other parts of Europe during
the Middle Ages by looking at 19th- and 20th-century Brittany. That is, he thinks of Bretons’ predilection for one-room houses and for sheltering animals and humans under one roof as survivals of medieval practice rather than as architectural habits corresponding to the contemporary social and economic facts of Brittany. Second, and corollary to this, he assumes that subsequent developments in other areas of Europe—toward the privatization of family life, with concomitant separation of household functions into several rooms, and toward the housing of animals and people in separate buildings—are inevitable ones which Bretons in their “protohistorical” state “failed” to undertake until very recently. He thus conceives of the Breton house as one in transition from an older, quasi-medieval way of life to a more modern and normative one, and, in the peasant-ethnographic tradition, makes some ritual laments about the passing of rural life. In sum, by looking so intensively at Brittany alone and by using Brittany to reflect on English architectural historical problems, he devorces it from the historical context of early modern France and presents Brittany instead as the architectural version of the land that time forgot.

Despite these serious problems in the structure and argument of the book, there is much to admire in addition to the splendid fieldwork. Meirion-Jones establishes a convincing picture of an extraordinarily plain Breton way of life that existed until World War II, with most people living in sparsely furnished, single-room houses, and some still sharing dwellings with their animals. We needn’t accept a single-strain modernizationist viewpoint to acknowledge that Meirion-Jones has constructed for his region a detailed physical description of the spartan rural life that students of other times and places have glimpsed in their own research, but have not been able to document so precisely.

I am probably being too hard on both these books because they fail to support their intensive and high-quality fieldwork with worthy analyses. Harrison and Hutton’s book is probably more successful on its own terms—those of a careful, limited report of the survey of a small piece of England, thoroughly traditional in its questions and methods, yet new enough in its foray into the 18th century and in some of its incidental observations to merit attention. While they acknowledge the work of scholars of national vision like M. W. Barley, Eric Mercer, and J. T. Smith, it is usually to dispute points of architectural detail rather than to confront and refine the larger questions that those scholars have tried to address. The vast body of scholarship of medieval and post-medieval English social history finds no place here. While Meirion-Jones has some feeling for the large questions, he is ultimately unable to bridge the gap between the too-specific enumeration of data and the too-general level of analysis. His book is, nevertheless, a major work of scholarship for both English and French vernacular architecture studies and potentially for the study of rural life in general.

The problems that serious scholars of English vernacular architecture have in mastering their work are mirrored on a small scale in John Woodforde’s little book, Farm Buildings in England and Wales. Like the two works discussed above, Woodforde’s book falls into two parts. The first treats, in a general way, the economic history of agriculture in the two countries from the late Middle Ages to the present. It concerns itself mostly with changes of crops and of economic fortunes, with some comment on the ideas of 18th- and 19th-century agricultural writers. The second part consists of a series of drawings of farm buildings of different types and dates, with a short description of each example. Neither part is a thorough survey, and the joining of the two sections is extremely loose. Woodforde’s book is not intended as an academic study, and cannot fairly be criticized in the same manner as the previous two works. Presumably it could pique the interest of the amateur and provide a very broad idea of what had happened in the English countryside, but anyone with more than a Sunday-drive interest would quickly have to move on to other sources of information.

Vernacular Houses in North Yorkshire and Cleveland, Barry Harrison and Barbara Hutton, John Donald Publishers, Edinburgh, distributed by Humanities Press, 1984, viii + 254 pp., illus., $47.50.

The Vernacular Architecture of Brittany: An Essay in Historical Geography, Gwyn I. Meirion-Jones, John Donald Publishers, Edinburgh, distributed by Humanities Press, 1982, viii + 407 pp., illus., $57.00.

Farm Buildings in England and Wales, John Woodforde, Routledge & Kegan Paul, 1983, 150 pp., illus., $15.95.
Alan Hess:
THE WELL BUILT ELEPHANT
J. C. ANDREWS

How do you put a window in a teepee? Where do you put a bathroom in a whale? The Well Built Elephant provides the answers that Graphic Standards neglects.

The Charlie Brown Hamburger stand in Dallas instructs architects in how to engineer a giant hamburger. The buns are fashioned of plywood and plastic vinyl, and—mixing media—filled with bronzed glass windows to simulate meat. A light green awning plays the role of lettuce, and red and white lights recessed under the top bun perform as tomatoes and onions.

Once the scale of a hamburger has been multiplied a thousandfold, conventional rules of architectural detailing and planning are less a burden. The liberties taken by Giant Object architecture shift our viewpoint like a magnifying glass that reveals an unsuspected terrain. These scale jumps make architecture both clearer and more richly suggestive for designers: the Big Duck's conceptual clarity served Venturi, Scott Brown, and Izenour in Learning From Las Vegas as the archetype for all buildings subordinating program, structure, and space to symbolic form; an array of giant hamburgers, hats, clothespins, and donuts gave Pop artists their formal vocabulary.

In addition to inspiring high art with their breathtaking disregard for the rules of acceptable architecture, Giant Object buildings also confirmed for a popular audience the wondrous possibilities of American space, which everyone always suspected were just over the next ridge.

New experiences lured the first coast-to-coast tourists in the teens and twenties. "Eat In The Hat," shouted one roadside attraction; "Sleep In a Wigwam," cried another. When the family was getting away from it all, these adventurous, unexpected treasures were exactly what they hoped to find along the way. The subjects reveal the inspiration of everything from local history to hucksterism. Encountered unexpectedly, in rural or urban settings, the buildings' poetry is often astonishing. A restaurant in the shape of a ship was built high on a mountain road in Central City, Pennsylvania, because the plains below reminded its designer of a sea; now we can all see his metaphoric oceanscape. A Tonawanda, New York, car wash in the form of a whale transforms an ordinary roadside into a sea of asphalt grass. The whale's paved wake, whether intended by the designer or not, shows the power of these designs to create their own fantastic domains.

They can strike elegiac notes, too. Giant oranges, once celebrations of legendary lands of sunshine and plenty, today poignantly recall long-vanished groves.

Giant Objects also reflect cultural history. In New England, an early chain of stands was built in the form of giant milk cans, giving way after 1930 to giant milk bottles. As milk bottles have been replaced on market shelves by plastic and cardboard containers, a giant milk carton may one day appear on the roadside.
The aesthetic qualities of Giant Object buildings seem to vary, like their subject matter, from region to region. Los Angeles derbies and hot dogs seem both bolder and more abstract than those elsewhere, perhaps in order to be noticed in the stripscapes. In some cities the suggestion of entire districts of these buildings is tantalizing. Milk bottles, teepees, jugs, mushrooms, and a watermelon once lined a stretch of Sandy Boulevard in Portland, Oregon. The century of Dada and Surrealism should be open to the possibilities of Giant Objects in urban planning, just as the City Beautiful movement incorporated classical symmetries.

The designers of Giant Object architecture used widely varying techniques to achieve their results, from superrealism to abstraction. This abstraction often more the result of the designer's inexperience than his intent. Some are more convincing than others, but even where little more than a coat of paint indicates that a shed is supposed to be a whale, the economy of means lures the observer into a willing conspiracy to suspend disbelief. More often than not, the buildings transcend any limitations in technique to convey a sense of wonder and of place.

A realistic 140-foot muskie in Hayward, Wisconsin in the National Fishing Hall of Fame, is structurally sophisticated, using a cantilever design by a bridge engineer to convincingly simulate the fish's twisting leap from the water, scales glinting; clearly, advanced engineering can be as effective in the service of fantasy as of structural expression. At the other end of the scale, the formal abstraction of giant oranges would have delighted Ledoux.

A growing literature documents Giant Object buildings around the country. Most, appropriately, are picture books; none is exhaustive, but en masse they suggest the potential value of a thorough study of sites, histories, and regional variations. Claes Oldenburg, SITE, Venturi, and others have already demonstrated the fruitfulness of such attention. And though a giant shell gas station is on the National Register of Historic Places, many other sites are threatened unless attention is drawn to them. The Brown Derby was almost lost, and the Tail O' The Pup is endangered.

Jim Heimann and Rip George's California Crazy (Chronicle, 1980) documents the original appearance of some of the same buildings as The Well Built Elephant, and does it more thoroughly; David Gehbard's introduction to California Crazy (he provides another for The Well Built Elephant) remains the best discussion of the architecture and culture of these buildings.

John Margolies's photographs in The End of the Road (Penguin, 1981) are superior. Margolies captures the beautifully gritty presence of weathering metal and fading fantasies, and the wonderful incongruity in the play of scale and ideas. The Well Built Elephant's examples receive three or four illustrations each, but the details often echo the overall view, and do not help explain the building.

J. J. C. Andrews's book does, however, reveal the advantages of approaching the subject as an enthusiastic layman. While repeating several examples from the earlier books, Andrews shows the national scope of this phenomenon and goes further in documenting the designers, history, and construction. Though he is not consistent in his interviews with owners and designers, and lets many intriguing questions go unanswered, he uncovers some fascinating facts. For example, it was streamline Moderne architect Milton Black who designed the Tail O' The Pup in Los Angeles; and Claude Bell, designer of the Cabazon Dinosaur, grew up in the shadow of Lucy the Margate Elephant. This information is as important as the photos, giving a glimpse of the mental processes that produce this idiosyncratic vernacular. Andrews also provides simple plans and elevations of most of the buildings, which help describe the interior spaces and structures.

The lack of addresses is a glaring omission for potential pilgrims; it may be easy enough to arrive in Green River, Utah, and ask for directions to the giant watermelon, but what about Dallas or Los Angeles?

Andrews also shows that the interest in building Giant Objects is almost as great today as in the thirties, the golden age of the style. The tradition continues in a Native American Center in Niagara Falls: a three-story turtle, a symbol in Native American cosmology, and state-of-the-art Giant Object architecture. The back is a geodesic dome, and skylights form a thunderbird over the major space of the building. A balance of abstraction and contemporary commercial building materials, the center successfully evokes in a modern building the ancient tradition of Giant Object buildings.

The turtle suggests that there is a future for this type of building, if architects care to exploit it. Giant Objects can combine popularity with high art—an idea that recurs to designers and critics from time to time. Norman Bel Geddes, noting a giant cream can selling ice cream in California, wrote (in his 1932 book Horizons): "Unquestionably, a new liveliness is coming into architecture and we may yet hear of it as one of the Seven Lively Arts. It can certainly be made as vivacious as the tabloids, the talkies, or vaudeville."

Modernism's seriousness (or rather, the seriousness of Modernists) abdicated that role to the commercial realm and memorable buildings from Grauman’s Chinese Theatre to Disneyland, from the Wigwam Villages to the Cabazon Dinosaur. Giant Object architecture is one way to lead Delight back to Firmness and Commodity.

John Pastier:

PEERLESS PRINCESS OF THE PLAINS
JACK ROSS, HAL STEWART, and HAL N. OTTAWAY

THE VANISHED SPLENDOR
JIM L. EDWARDS and HAL N. OTTAWAY

Quite by chance, the introduction and development of the picture postcard in this country paralleled the great expansion and solidification of American cities in the first third of our century. Postcard publishers had a broader and more popular outlook on the subject than architectural and urban historians, and they were able to sell as many as a billion cards a year by 1910. Many of these old, artificially colored cards still exist, a rich but diffuse documentation of urban growth and change in the form of 3 1/2 by 5 1/2-inch pasteboard rectangles, residing in private and institutional collections, antique stores, flea markets and thrift shops.

In these privately published volumes of postcard views of Wichita and Oklahoma City that diffusion is concentrated to create an unusual form of visual history. There is no conventional text, but extensive and informative captions of 100 words or more for each of the roughly 200 well-chosen illustrations in each book. (The Oklahoma City set is also indexed, in volume 2.) The authors are book dealers and postcard collectors rather than professional urbanists, but they have organized their subject nicely by era, building type, and land use, so that the result is both evocative and useful to anyone wishing to understand the nature of these two Great Plains cities. We see views of meat packing plants, car dealerships, and drugstore interiors, as well as the expected institutional and commercial landmarks. We witness rapid growth as downtown buildings become successively larger and one style supplants another, to be eclipsed in its turn. Equally strong is the sense of pride and optimism that permeates the postcard genre: each subject is on center stage and almost by definition important, streets are bustling (even if only through an artist’s addition of a few cars and people), and the sun shines dependably. As one astute observer has put it, the old cards “are always full of hope.”

In retrospect, that hope becomes especially poignant, for many of the scenes and buildings depicted no longer exist. Downtown Oklahoma City in particular has been devastated by a megalomaniacal redevelopment scheme which, among other things, managed to demolish a splendid Art Deco skyscraper hotel without finding a use for the vacant site. The Vanished Splendor gives a taste of what has been lost, and suggests a link between a revived interest in postcard collecting and “the great surge in urban renewal programs.” Wichita, a less rapidly growing city, has been spared such sweeping, publicly instigated destruction, but normal urban forces have still considerably changed its countenance.

The prose in these books has enough detail (including addresses, dates, names of owners or occupants, architectural credits, and the site’s current status) to recommend it to a professional audience, but also a sufficient sprinkling of errors—obvious even to someone not well versed in the cities’ history—to warrant caution in using them as sources. The Allis Hotel is described as the tallest building in Kansas at the time of its opening, when the state capitol was certainly a hundred feet higher; and the claim that the Oklahoma City Biltmore had 33 stories and that it, too, was the state’s tallest building is contradicted by the image of a 24-story structure and subsequent illustrations showing two considerably taller office towers already in town.

Visually, these books are on the staid side: invariably three cards to a page, each reduced about ten percent from the original. This uniformity is preferable, however, to the alternative—found in some recent, more graphically ambitious postcard books—of a
wide range of reductions and enlargements that belie the classic standard size of the subject. Nor is there any arbitrary mixture of black-and-white and color printing here; each card appears in its original tones, whether full color, sepia, or black and white. Judging from a dozen comparisons with actual cards, the reproduced images, while quite acceptable, are usually a bit less vivid and focused than the originals.

If these are not luxuriously produced art books or rigorous scholarly essays, they are still exemplary for their genre. By using postcards, the authors show vernacular environments and activities through a vernacular medium. Their main audience is one of laypeople with nostalgic interest or experience in either city, a public they serve with far greater professionalism than one would expect given the size and sophistication of the places involved. Postcard collectors are another natural audience; a third constituency, of course, includes people interested in building and cities. In the absence of standard urban histories and architectural guidebooks, these volumes become indispensable for anyone concerned with the architecture and urban form of these overlooked provincial centers. Two more books, one on Santa Fe and Taos and the other on Tulsa, are due to appear later this year. A regional series is quietly taking form, without the support of any university, arts foundation, historical society, AIA chapter, or commercial publisher, but with commendable individual initiative.

**Bernard Herman:**

**THE NEW JERSEY HOUSE**

**HELEN SCHWARTZ**

When New Jersey is the topic the question you are likely to hear is "Which exit are you from?" In the 1984 Democratic presidential primary, candidates campaigning in the Garden State made sure to have the requisite press conference in front of a toxic chemical landfill. New Jersey, however, is an extremely interesting place, its long architectural traditions among the most diverse and intriguing in the eastern United States.

In her introduction to *The New Jersey House*, Helen Schwartz comments on the surprising number of houses from the first decades of colonization still standing in New Jersey, and the even larger number from America's first 150 years—despite the burial of much of the state's material past under highways, shopping centers, and major subdivisions. From this point her book begins a chronologically ordered catalogue of New Jersey housing. Although she states that her effort is not intended as a guide book, both the format and the capsule architectural histories around which the volume is organized function best as a basic introduction to the types of buildings the casual architectural observer is likely to encounter in New Jersey.

The book begins with "Settlement Patterns," and ranges over recognized style periods in chapters with titles like "Romantic Victorians" and "High Victorian Variety." Each begins with an extended photographic essay and concludes with a short historical overview. The photography of Margaret Morgan Fisher stands out in terms of clarity and composition; the text, however, is a bit uneven. Ms. Schwartz's commentary on architectural periods from the early 19th century on is insightful, concise, and a pleasure to read. The data on colonial and late 18th-century materials is more difficult, however. The diverse ethnic and settlement histories of New Jersey are far from being understood, and the architectural heritage of those early experiences has hardly been surveyed, much less interpreted. Ms. Schwartz as a result starts out at a disadvantage. Still, despite questionable attributions for vernacular origins of house form and fabric, she offers a good deal of information.

**Peerless Princess of the Plains:** Postcard Views of Early Wichita. Jack Stewart, Hal Ross, and Hal N. Ottaway. Two Rivers Publishing Co. (P.O. Box 18211, Wichita, Kansas 67218), 1976, 72 pp., illus., $13.95 cloth; $9.95 paper.

**The Vanished Splendor:** Jim L. Edwards and Hal N. Ottaway (Abalache Book Shop Publishing Co., 311 S. Klein, Oklahoma City, Oklahoma 73108), 1982, Volume I (Postcard Views of Early Oklahoma City): 64 pp., illus., $17.95; Volume II (A Postcard Album of Oklahoma City): 88 pp., illus., $19.95.

**HIGHTSTOWN, NEW JERSEY. (COURTESY OF RUTGERS UNIVERSITY PRESS. PHOTOGRAPH: MARGARET MORGAN FISHER)**

The New Jersey House, Helen Schwartz, photographs by Margaret Morgan Fisher, Rutgers University Press, 1983, 179 pp., illus., $25.00.
The delicious snobbery implicit in the English country house look—the aristocratic actuality or effect of furnishings and bibelots acquired over centuries of Grand Tours and from every corner of the Empire—helps explain the phenomenon of its present-day appeal.

In its various manifestations, the English country house is certainly the blue-chip look of the day in decor, and has been exploited with extraordinary finesse and a good deal of taste by Laura Ashley and her British firm. They have successfully promoted their machine-printed traditional fabric and wallcovering patterns by proselytizing for the country house ambience—in effect, by making it their own.

Like her compatriot Terence Conran with his contemporary design accoutrements, Ashley has pursued a game plan of direct public access that involves guide books to her sort of decor, engaging catalogues, and smartly merchandised shops. Ashley has some 100 shops on four continents and mail-order departments in 10 countries.

The Laura Ashley country house concept is based, as her books say, on “inexpensive materials and careful work.” The retail client, it is assumed, will undertake her own decor, and in The Laura Ashley Book of Home Decorating (which concludes with a most efficient how-to section), the homemaker is inspired with atmospheric photographs of pleasant period rooms—the range spans 17th-century to Edwardian—in which Ashley patterns are integrated. There are even modern kitchens and outdoor areas where Laura Ashley yard goods are introduced, but the main seduction is accomplished with interiors in which Ashley reproduction fabrics and papers are set off by the real thing.

Indeed, Ashley assures us in her signed introduction, many of the settings we see are the real thing—taken in the various Ashley “family homes,” including what appears to be one of the pricier spreads in the Loire valley. This is dream merchandising of a high order.

The more modest House in the Cotswolds documents an actual 17th-century three-story stone house in Tetbury which the Laura Ashley Company bought, rehabilitated, and decorated as a case study. Each room is furnished in a different period, with Laura Ashley mass-produced fabrics and papers.
deftly mingled with authentic rugs and other textiles.

If only Ashley would call it all ironic she might be the toast of the Post-Modernist trendy as well as the smashing success she is on her own terms.

The Laura Ashley Book of Home Decorating, Elizabeth Dickson and Margaret Colvin, Harmony Books, 1983, 160 pp., illus., $14.95 pb.

A House in the Cotswolds: The History and Decor of a 17th-Century English Home, Jane Clifford, Harmony Books, 1983, 52 pp., illus., $4.50 pb.

Lois Wagner Green:
DESIGNERS’ WORKPLACES
BEVERLY RUSSELL

“Thirty-three offices by Designers for Designers,” the dust jacket proclaims, and it certainly sounds promising. Designers are so often at their courageous and creative best in the design of their own offices—budget, image definition, and ego being marvelous stimuli to invention. One might think Designers’ Workplaces would provide a splendid opportunity for inspiration, plagiarism, and invidious comparison.

One would be wrong. Here is another recycling job—this time from the 1979-1982 pages of Interiors magazine—which invites us to compare not just apples and oranges, but kumquats and pears as well. These installations include, as the title suggests, offices designed by architects, interior designers, and graphic designers for themselves; but also a self-designed fashion designer’s office (in a single atmospheric, albeit dimly perceived photo); four fashion showrooms by architects and interior designers; and eight set-ups: six in a section titled “Prototype,” plus two showhouse model rooms. One of these model rooms is from a group of eight one-person office/residence combos—with the emphasis on residence—in flats, lofts, and conventional apartments. Almost a third of the projects are either not actual work places or not intended “for designers.”

The 33 entries are presented in some 110 pages of the 140-page book, so most are skimmed in two- and four-page layouts. Two of the more extended presentations are devoted not to offices at all but to the Chaus and Perry Ellis apparel showrooms, by John Saladino and Hambrecht Terrell, respectively.

The heaviest coverage in the office category occurs in the “Prototype” section, where the gamut includes a conventionally tasteful executive office, a rats’ maze of a systems proposal, and an embarrassingly heavy-handed exercise by Stanley Tigerman in office “landscape” as al fresco landscape (predictably called a “witty pun”). These all might be more appropriately called model offices; as prototypes they are after the fact. Innumerable superior examples of all these species have been executed and published over the past decade.

What a waste.

Designers’ Workplaces: Thirty-three Offices by Designers for Designers, Beverly Russell, Watson Guptill, 1983, 144 pp., illus., $27.50.
Dennis P. Doordan:
ART DECO STYLE
YVONNE BRUNHAMMER
AT HOME IN MANHATTAN
KAREN DAVIES

The decorative arts of the late 1920s and early 1930s are identified collectively by a variety of terms ranging from such prosaic labels as the 1920s Style and the 1925 Style to such evocative names as the Zig Zag Style, the Jazz Style and, most often, Art Deco. While each refers to a different aspect of design in this period, more than anything else this babel of names reflects the difficulty historians and critics have had defining the essential character of the era—as suggested by the different approaches of two new books on the decorative arts after 1925.

Yvonne Brunhammer is a recognized authority on continental design in the 1920s and 1930s. Her recent book Art Deco Style is an illustrated survey of the architecture, furniture, floor and wall decorations, and applied arts conceived and executed during the 1920s, focusing primarily, although not exclusively, on French examples. Brunhammer devotes the bulk of the coverage to furniture and the applied arts, with relatively brief sections on architecture and floor and wall decorations. Although the author provides a discussion of the origins and development of the phenomenon she calls Art Deco, the book is chiefly valuable as a profusely illustrated compendium of varied examples of 1920s French design arranged by medium. The quality of the reproductions is in general good to excellent, but the book suffers from a lack of attention to detail. For example, a full-page color illustration of an interior furnished with the 1926 Neoplastic designs of Félix de Marle is marred by a modern tape deck located prominently in the room. The same sort of carelessness is evident in the unevenness of the captions.

Brunhammer begins her discussion with the Paris Exposition Internationale des Arts Décoratifs et Industriels Modernes of 1925—clearly for her the key to understanding Art Deco. Brunhammer does admit that the origins of the style predate the 1925 fair, attributing its rise to a widespread reaction against the sinuous curvilinearity of Art Nouveau forms. She also admits that Art Deco continued to develop after the fair. But for her the 1925 Paris exhibition marked the crystallization of the style, for it was in Paris in 1925 that the sources, materials, motifs, designers, the press, and the public came together in a way that made an indelible impression on the decade. Brunhammer makes this clear from the very beginning:

In the twentieth century, world exhibitions play the role which had previously belonged exclusively to monarchs whose name or date would become associated with the style of the period. It is this which gave Art Nouveau, which represented the rupture with the Greco-Latin world in the last quarter of the nineteenth century, a name based on the Paris
Exposition Universelle of 1910—the 1900 style. And hence 25 years later, the year of the Exposition Internationale des Arts Décoratifs et Industriels Modernes, once more in Paris, became the symbol of all those tendencies which between 1909 and 1930 combined to define the style of the period.

In discussing the development of the Art Deco style in Europe the author treats the Wiener Werkstätte, the Deutscher Werkbund, the Bauhaus, the De Stijl movement, Russian Constructivism, the Italian and Scandinavian design movements all as manifestations of the reaction against Art Nouveau forms and attitudes. While much of 20th-century design is predicated on the rejection of what preceded it, this generalization does little to explain the varied forms this reaction assumed. At times Brunhammer attempts to confront this problem:

In its diversity and its contradictions, the 1925 Exhibition of the Decorative Arts was therefore a precise mirror image of the prodigious creativity of a period which was hesitating between two cultures: one inherited from the nineteenth century, linked to the bourgeois, to those aspects of tradition which make it restrictive technically and stylistically limited and not those aspects which are dynamic and exemplary, and the other turned toward the future and deeply involved with the second Industrial Revolution.

The material the author includes in her treatment of certain topics is, however, more than diverse and contradictory; some of the selections are frankly antagonistic. The section on furniture concludes with an illustrated “comparative survey” of works by Emil Jacques Ruhlmann, Paul Iribe, Ludwig Mies van der Rohe, Gerrit Rietveld, and Marcel Breuer, among others. The radical tubular metal furniture designed by modernists such as Breuer can in no way be reconciled with the fine materials and suave forms of pieces by Ruhlmann; to include in the same discussion chairs by these two designers stretches the concept of style to the breaking point—and beyond.

The book’s title suggests that the author is concerned with articulating a serviceable definition of something called the Art Deco style. Yet the mixture of examples of the International Style (the Villa Stein at Garches by Le Corbusier) and French Moderne (furniture by Clement Mere) confuses rather than clarifies the particular character of Art Deco. Ultimately, Brunhammer is willing to include almost anything within the rubric of Art Deco as long as it can be interpreted as a rejection, not of the past as a whole, but of the previous chapter in the history of styles, namely, Art Nouveau.

Karen Davies’s At Home in Manhattan: Modern Decorative Arts, 1925 to the Depression, the catalogue of a recent exhibition of the same title at the Yale University Art Gallery, treats the work of major American designers active in New York City during the late 1920s. Short essays introduce the various sets of objects. Each object is illustrated, mostly in isolation, although Davies does include references to period illustrations of entire ensembles. The separate catalogue entries for each object vary in length, none longer than 350 words. Despite their brevity, the entries are packed with information: an analysis and complete description of the object (dimensions, materials, signature marks), a brief biography of the designer (omitted in subsequent entries), and bibliographic references—helping to make the catalogue an important contribution to the literature on American decorative arts in the 1920s.

In At Home in Manhattan Davies offers a much less encyclopedic survey than Brunhammer in Art Deco Style. Missing, for example, is the work of such designers as Waylande Gregory, Walter Kantack, Frederick Kiesler, William Lescaze, Raymond Loewy, and Marguerite Zorach. Davies acknowledges their absence, explaining that appropriate examples of their work could not be located in time for inclusion in the exhibition. These omissions, however, are less destructive than they might have been, due to the author’s approach.

In contrast to Brunhammer’s arrangement by medium, Davies orders her material thematically:

Instead of coining new labels for the varied aspects of the 1920s decorative arts, this publication presents the objects in five thematic categories based on the diversity of American design during the era. “Using the Past” explores the ways in which designers incorporated tradition into modern decorative arts. “Modern Art” discusses the influence of twentieth century painting, sculpture, and architecture on decorative design during the period. “Urban Life” presents examples of the appropriation of city imagery into objects produced for domestic use. “Promoting Modern Design” deals with the exhibitions, organizations, and publications that introduced the public to new developments in the decorative arts. “Design for Industry” focuses on the beginnings of the industrial design profession and objects that relate to major aesthetic changes of the 1930s.

The work of a single artist or designer might appear in more than one category and each category embraces a variety of objects. The result is a critical framework flexible enough to accommodate a wide range of forms, media, and designers, yet precise enough to allow the design historian to distinguish between various responses to specific cultural issues.

Unlike Brunhammer, Davies makes a distinction between the modern design of the Bauhaus school and contemporary but more eclectic design orientations. She notes that during the 1920s American designers and critics used
the term modern to refer to a variety of progressive developments in design, while in the 1930s, due largely to the efforts of Henry-Russell Hitchcock, Philip Johnson, and the Museum of Modern Art, the term was identified more narrowly with the International Style. As a result, historians and critics have tended to dismiss a great deal of American design in the twenties and thirties as unworthy of the designation modern. Davies credits such architectural historians and critics as Rosemarie Bletter, David Gebhard, Cervin Robinson, Vincent Scully, and Robert Venturi with leading the way in taking a fresh and scholarly look at American attitudes toward modern architecture in the 1920s and 1930s. She apparently sees herself extending the work into the area of design history.

The section on “Promoting Modern Design” is an excellent brief account of the role played by both commercial and cultural institutions in New York. Department stores like Saks Fifth Avenue, Lord and Taylor, and Macy’s staged exhibitions that showcased the latest in modern American and European design. Similar efforts to educate public taste through exhibitions of contemporary design at the Metropolitan Museum of Art, the Brooklyn Museum, and the Newark Museum testify to the widespread interest in finding creative alternatives to the prevailing conservative taste in the decorative arts and to the energized forms of the Arts and Crafts Movement.

In her examination of the relationship between European modern art and American decorative arts, Davies documents the American designers’ often first-hand knowledge of contemporary trends in art. More important, she discusses the transformation of the intellectual concerns of European modernists into commercially viable forms in America, without attaching to this process the usual pejorative connotations. A table lamp by Donald Deskey (catalogue item number 30), for example, clearly reflects a familiarity with the work of De Stijl artists and designers—a familiarity carefully documented in the catalogue text. Deskey transformed the De Stijl interest in the decomposition of form and its subsequent recomposition as planar elements in a universal spatial matrix into a theoretically rigorous, more generalized image of modernity. The fluted base of Deskey’s lamp adds a neoclassical touch which, at first glance, seems strangely at odds with the rest of the design; however, the combination of fluted base and diagonal pattern gives the lamp a versatility lacking in a more narrowly defined modern design. The polemical intent of a lamp by a De Stijl designer such as Rietveld, for example, demands an uncompromising commitment to a particular conception of modernity. Deskey’s lamp, on the other hand, would work as a coherent element in a far greater range of interior ensembles. Since an American designer of furniture and furnishings, almost by definition, exists in a commercial milieu, the accommodating quality of much of the work included in At Home in Manhattan must be recognized as the product of intent rather than provincial naiveté.

Anyone interested in European design between the world wars will find Yvonne Brunhammer’s Art Deco Style valuable as a visual reference, but frustrating as an interpretive study of the material illustrated. Those interested in American design of the period will find Karen Davies’s At Home in Manhattan frustrating as a survey due to the absence of work by some designers, but extremely valuable for the critical framework she developed for looking at this material. It is a solid, scholarly work, and a model for future studies on the decorative arts of the 1920s.

Laurie Haycock:
GRAPHIC DESIGN AS NOT ART

The material product of graphic design is, by its nature, disposable, and therefore not highly valued. This fine point separating graphic design from the other design professions also drives Everyman to Aaron Brothers for a portable drafting table and a how-to book.

If all the how-to books reviewed here had their way, everyone would soon create equally, beginning with small business logos which could turn into big business logos. Or little agency forms which could turn into big agency forms, or even government forms. Stylishly educated graphic designers have the same attitude toward government forms as toward synthetic clothes, and something about how-to books—the emphasis on efficiency and economy, the “crease here” attitude—puts them in the same category.

TECHNIQUE

Mastering Graphics is not the first time Jan White has made a whole bunch of cracker sandwiches to fill up those who don’t eat very often. As designer of “over 125 U.S. and South American magazines and newsletters,” does he write his Boy Scout books for ex-clients who he has suggested might do it themselves? Most designers are grateful just to wake up before the desperate conclusions of their client/designer nightmares, but White goes the extra mile and writes the book.

This is not to say that Mastering Graphics is irresponsible. In fact, the instruction is limited, quite logically, to areas that bosses like to add to already crowded job descriptions: the company newsletter, for example. Though he judiciously advises the reader to hire a professional graphic designer when it comes to a logo, this
useful advice is buried in the middle of a chapter about publication name plates with subheads like “How to Make Your Own Special Logo.”

If White is the kind of designer/author we might allow to go free on bail, Gregg (“hand-lettering is personal and is intended to help remove some of the ‘mystery’ of design”) Berrymen belongs in solitary. His Notes on Graphic Design and Visual Communication might better read Cliff’s Notes on its purple and orange Kromekote cover. Diagrams differentiating tiny ideas like linear process, cyclic process, feedback process, branching process, and priority process are lethal moments by magic markers. The introduction clarifies the intent of the layout: “to keep related notes together in spreads.” What else could one do?

To discuss Berrymen, or John Laing of Do-It-Yourself Graphic Design at length would be as misguided as giving media time to John Hinekley, Jr.’s dry cleaner. John Laing must moonlight as a ghostwriter for Saturday Night Live when he is not, incredibly, Director of the Graphic Design Department at the Central School of Art and Design in London:

The secret of graphic design is not to be afraid of cheating. Trace off designs that you like in books and use them to draw illustrations . . . copy or adapt ideas wherever you see them . . . use all the tricks and devices we describe in this book—they are the “trade secrets” of every professional designer.

Tom Porter and Sue Goodman, the real Eagle Scouts of how-to books on design, offer their third in a series, Manual of Graphic Techniques 3. The choice of subjects is sensable (model making, lettering), but the pastiche of the contents and layout make it about as useful as the odd numbers of a set of encyclopedias. Unlike White’s book, this is a cookbook with no recipes, which makes it at least more realistic and less plaintive than most.

1934, and Dean Lem’s severely functional Graphics Master are physically less awkward than Handbook.

TEDIUM

Between graduation and their first job, most graphic designers need a book about “bridging the gap.” Russell Blanchard has created such a useful bridge but doesn’t realize it. If he did he wouldn’t have included the chapter on line and shape, or the 24 pages of type samples. I think even Blanchard might agree that better books are available on visual form in professional application (Dondis’s Primer of Visual Literacy (MIT, 1973), Schmittel’s Process Visual, (Hastings, 1973) or Diethelm’s form + communication) but to inform a student about professional (aka “bridge”) options, I would recommend the section on the design profession in Blanchard’s book. It needs a less decorated cover and a less generic title—Graphic Design considerably understates the complexity of the content.

When pulpish publishers make repeated attempts to compress a whole profession into a single volume, usually paperback, the profession should take notice. The triangle was Fuller’s soundest shape but this generation of designers uses them like candy jimmies on a cake. No wonder so much of the material product of graphic design gets thrown away.

TECHNOLOGY

Alastair Campbell, author of The Graphic Designer’s Handbook and possessor of a Leviathan Project mentality, wanted to put it all together: a 23-pica line length on a 27-pica page. The same person who needs to be told, “Make sure you know exactly who [the client] is—and get the spelling of their name right!” is not going anywhere with tidbits like:

The European point is 0.0148in and 12 of these form a unit measuring 0.1776in. This 12 point unit is called a cicer in France and Germany, a riga tipografica (riga) in Italy, and an augustijn (aug) in the Netherlands.


Mastering Graphics, Jan V. White, R. R. Bowker, 1983, 180 pp., illus., $24.95 pb.

Notes on Graphic Design and Visual Communication, Gregg Berryman, William Kaufmann, 1979, 46 pp., illus., $4.95.

Do-It-Yourself Graphic Design, John Laing, Facts on File, 1984, 156 pp., illus., $13.95.


Graphic Design, Russell W. Blanchard, Prentice-Hall, 1984, 165 pp., illus., $19.95 pb.
Cynthia Zaitzevsky:
THE POLITICS OF PARK DESIGN
GALEN CRANZ

The renaissance of interest in the historic landscape, and urban parks in particular, has spawned a rapidly growing literature, to which Galen Cranz’s book is a useful and stimulating addition. The first section of The Politics of Park Design is a historical overview of park usage and the second, of equal length, an account of the politics of their design. The material in both sections is drawn almost exclusively from the park systems of New York, Chicago, and San Francisco.

In her historical overview, Cranz discusses what she considers to be the four phases of American park history: the pleasure ground, 1850-1900; the reform park, 1900-1930; the recreational facility, 1930-1965; the open-space system, 1965 and after. During the pleasure ground era, the predominant park form was a large scenic ground of the type designed by Frederick Law Olmsted and his contemporaries, planned primarily for unstructured activities. By contrast, activities in the parks of the reform era were highly structured and nearly always supervised by professional recreation leaders. During the period of the recreation facility, emphasis was on the provision of the most up-to-date rinks, pools, stadiums, and so forth, but there was little or no instruction or supervision. From 1965 to the present, we have seen a shift to a new appreciation of open spaces of all types and sizes, and a new flexibility in the types of activity appropriate for parks. Since land in the city has become both scarce and prohibitively expensive, there has been increased utilization of small spaces such as vacant lots.

For the most part, Cranz’s four park eras are logically defined, although the first two are poorly named. “Pleasure ground” is infinitely preferable to “pleasure garden”—a term Cranz used in a 1978 article in Landscape—but it is still inaccurate. If “pleasure ground” sounds too frivolous, “reform park” could easily be misinterpreted as the outdoor equivalent of “reform school.” “Playground” was the term of the period, but today it describes parks used exclusively by children. Perhaps “neighborhood park” best conveys the flavor of the small parks built by the hundreds in the first years of the 20th century, where recreation of many kinds was available to all.

Nomenclature aside, the first two chapters are flawed by oversimplifica-

GIRLS PLAY AREA, CIRCA 1908
tion. In the preface, Cranz describes herself as a sociologist rather than a historian, seeking “general trends, often at the expense of the full particulars leading to and stemming from specific events.” Possibly because of this approach, several important aspects of the first two park eras have been misinterpreted. On the other hand, the recreational facility and open-space eras, more recent in time, seem to have been less subject to distortion and are much more accurately presented.

Cranz rightly describes the characteristic park form of 1850-1900 as a scenic park, several hundred acres in size, associated primarily but not exclusively with Olmsted. Her description of the physical characteristics and uses of these parks is also largely correct. However, she leaves the reader with the inaccurate impression that such large parks were the only kind designed in the last half of the 19th century. In fact, most major American cities laid out numerous squares, parade grounds, parkways, seaside parks, playgrounds, and other specialized public spaces, in addition to at least one large scenic park.

Some of the most interesting material in The Politics of Park Design is found in the chapter on the reform park, but unfortunately oversimplification is a particular problem here. Small neighborhood parks with structured and supervised activities did not spring into existence at the turn of the century, although they certainly proliferated then. Olmsted’s Charlesbank, designed in 1839, was the first such park, and became the prototype for the whole genre. Located in Boston’s West End tenement district, this ten-acre site, with its outdoor gymnasiums, kindergarten classes, and other amenities, attracted visitors from all over the country and abroad. The Boston Park Commission had an exhibit at the World’s Columbian Exposition of 1893 in Chicago that included models of Charlesbank’s gymnastic apparatus. This was surely one factor in the rapid dissemination of this park form, in Chicago and elsewhere.

The failure to recognize Charlesbank’s role as prototype accounts for several inaccuracies. For example, Cranz maintains that day care was never provided at these small parks, that park documents of the period never mention the race and ethnicity of users, and that racial segregation was practiced. None of these was true of Charlesbank. Finally, this chapter stresses the reform park as the only or at least the most important park form of the 1900-1930 period, neglecting the fact that, beginning in the 1890s, vast metropolitan and regional park systems were established in many American cities.

Cranz’s discussion of the recreation facility era and, particularly, her treatment of the age of the open-space system (still in progress) are perceptive and illuminating. The recreational facility is especially associated with the long tenure of Robert Moses as Park Commissioner of New York City. During this period, the actual acreage of many park systems, including New York’s, increased dramatically, but park programing was gradually phased out. Both new and redesigned older parks became aesthetically barren, as scrubbery disappeared, roads were black-topped, and standardized playground equipment and wire fencing were installed. More positive results of this period were the World War II Victory gardens, some of which are still in active use today.

The open-space era was formally inaugurated with New York mayoral candidate John Lindsay’s 1965 White Paper on Parks and Recreation, and with the designation of Central and Prospect Parks as National Historic Landmarks. Cranz maintains that the term “open space” made its debut in 1960 in Chicago park documents. While this expression has certainly been in common use only since the 1960s, the journalist Sylvester Baxter may claim to have invented it. In 1893, as secretary of the provisional Boston Metropolitan Park Commission, he titled the very first section of his report for that year, “Need of an Ample Provision of Open Spaces.” He used the term repeatedly, not only in this pioneering document, but also in the reports of the park commission for Malden, Massachusetts, written when
Despite its many flaws, this book is valuable; its chief problem arises from the relative dearth of thorough historical studies of individual parks and park systems. Insufficient groundwork exists for the type of synthesis Cranz attempts. Nevertheless, *The Politics of Park Design* has done much to make a comprehensive history of American parks eventually possible.

Trust, a position he has only just relinquished.

Thomas’s story gives us fascinating insight into the world of English gardening, and the book includes a “who’s who” of personalities of the last 50 years who touched the author’s life. The connections between Thomas and the great gardeners of his age are the unifying thread. He learned from them all, the learned directors of Wisely and Kew, the great Gertrude Jekyll, whom he visited the year before she died, the head kitchen gardener at St. John’s College, Cambridge.

The book, however, goes beyond the story of the development of this master horticulturist and designer to become a sourcebook of ideas on how to garden better. The great garden books are always those that reveal, as Thomas’s does, the subtle differences between varieties of a plant, or the little tricks of horticulture to fool plants into thinking they are in their natural habitat. We learn which roses Graham Stuart Thomas grows in his own home — and assume, without question, that these are the best — and what are the merits of various kinds of snowdrops.

The reader who is not an experienced gardener will not be able to visualize many of the plants discussed; still, the book is a fascinating professional autobiography and a unique record of a brilliant man’s approach to the problems of design. If you know your plants, the book will only add to your sophistication. The appendix is wonderful: all plants mentioned in the book are listed not only with growing requirements and height but also — most unusual for lists of this kind — their width. Garden writers and even nursery catalogues often fail to provide this essential information. Finally, most helpful from the design point of view, each plant is referenced to the page on which it is discussed, so that we can quickly learn how Thomas himself used it.

In The Art of Planting Thomas’s title gives away his point of view. He discusses landscape and garden design in the same terms one would discuss the problems in painting — composition, creation of spatial depth, color and form. In the tradition of the English landscape movement and those who came under its influence in the 19th century, of William Robinson and Gertrude Jekyll, Thomas champions an aesthetic which seeks to reflect the character of compositions in nature. The best flowers are those in which the natural form of the plant has not been changed by hybridization (e.g., double tulips), and the best landscapes and gardens are those that respect the natural terrain and conditions of a site as well as the functional uses of a garden.

The Art of Planting opens with a brief but incisive overview of the history of gardens and landscape design in Britain — a very good introduction to the subject for the novice. The short chapters include discussions of color, perspective, boundaries, water in gardens, fragrance, with detailed examples and comparisons. The book calls for many rereadings, so that what you need at a particular moment will stand out. After a recent reading, when I was thinking about town gardens, two observations remained with me: glossy, shiny-leaved plants are good for small gardens because they reflect light; and one very large over-scaled shrub in a tiny garden will give a sense of depth and perspective and mystery by preventing the eye from seeing the entire garden at once.

Two-thirds of the book is a list of plants, which makes Graham Stuart Thomas the king of lists. His are organized by color, texture, and form: if, for example, you wanted to create a garden of only grey and glaucous foliage, you would have 24 pages of plants and trees to choose from. Among other chapter-lists are: the horizontal line; plants of feathery effect; sword-like leaves; grassy leaves; white or cream variegated foliage. The last one alone, which is unique, makes the book invaluable for the designer.

Trees in the Landscape does not have so many lists — though it has some fascinating ones — but it is his most easily accessible book to the amateur, and the best one in decades on the issues of design with trees. The subject is making landscapes, not gardens. Thomas’s rule is that all landscape designs on the large scale should harmonize with native plantings and established mature groupings of trees and shrubs. The garden is for exotics. He constantly refers to the work of Humphry Repton, and his entire approach is related to Repton’s ideas.

Thomas first teaches how to look at trees in the landscape, then how to apply these lessons to the making of new landscapes. In “Practical Points in Regard to Planting” he observes how, in native woodlands of at least 100 years growth, species do not grow in separate areas, but overlap; i.e., an acre of oaks might thin out and move into a stand of beeches on one side or into ash on another. All trees would be unevenly spaced, and it is this randomness we should imitate. Under each photo is a discussion of what is wrong or right with the picture, and these captions, even more than the text, should be reread to catch the ideas in the mind.

Thomas’s books are unequal in the field and are real teaching tools. Studying first the book on trees and then the landscape in the light of Thomas’s ideas might inspire one to become intimate with the landscape as Gertrude Jekyll, who claimed she could identify the tree she was standing under by the sound of the wind or rain coming through its leaves.

The Art of Planting, Graham Stuart Thomas, Godine, 1984, 323 pp., illus., $24.95.

Trees in the Landscape, Graham Stuart Thomas, Jonathan Cape (dist. Merrimack Publishers Circle), 1984, 208 pp., illus., $22.95.

Three Gardens, Graham Stuart Thomas, Collingridge (dist. Capability’s Books, Highway 46, Box 115, Dear Park, WI 54067, 1983, 189 pp., illus., $29.95.
William Lake Douglas: 
A SOUTHERN GARDEN
ELIZABETH LAWRENCE

A Southern Garden was written for the community of plant lovers and garden enthusiasts. Like others of its genre—Katherine White’s Onward and Upward in the Garden, William Lanier Hunt’s Southern Gardens, Southern Gardening, and Gertrude Jekyll’s works—this book is easy to read and entertaining as well. Because of its style and geographic setting (the author is writing for climatic zone 8, from her experiences with gardens in Raleigh and Charlotte, North Carolina), reading it is like sitting on the verandah, sipping iced tea, and “visiting” about gardens with a Southern relative.

A colleague and I have been informally collecting “grandmother plants” for several years now, making lists of plants that have, for whatever reason, fallen into obscurity and disuse. This book could be a companion to our list, not only because it first appeared in 1942, but also because it catalogs and discusses many plants known to gardeners of past generations. Its style is reminiscent of the genteel way our grandmothers gardened and exchanged information and experience.

This book will be of help to those refurbishing an old garden, or creating a new one, in zone 8. It will appeal to the growing general interest in locating and reusing older varieties of plants before they are all bred into “perfection.” Yet it is not a compendium of historic horticultural information like Ann Leighton’s works, Early American Gardens (1970), and American Gardens in the Eighteenth Century (1976).

It is organized by season: “The Garden in Winter;” “Spring Comes in February;” “An Introduction to Summer;” and “The Climax of Fall.” In each chapter are essays on specific plants—“The Amaryllis Family,” “Daffodils in Old Gardens”—many rivaling the lyrical and unaffected style of Southern writers (Eudora Welty comes to mind). Writing about spring bulbs, for instance, the author gives the flavor of Southern gardening in a few sentences:

The best way to get a stock of Silver Bells is to watch the farm markets in February when they appear among the cut flowers brought in to add a little to the butter money. The farmers’ wives are reluctant to part with the bulbs, for they are slow to increase, but they can be coaxed to sell you a few later on when the tops die down. I bought some from the butter woman this year. She said she had them from her grandmother. The fact that I was eager to buy, and she was not eager to sell,
did not raise the price. In fact, she said that they would be thirty cents a dozen, and when she brought them told me that she had made a mistake, that they were only a quarter.

Also included is a table of blooming dates for annuals, bulbs, perennials and biennials, shrubs and vines. A concluding essay, "Further Notes, 1967," was added when A Southern Garden was reissued that year. The preface to the paperback edition, written in 1983, really adds nothing to the book, since, as the author says, "to bring A Southern Garden up to date ... can't be done. I could no more rewrite the book than I could remake that garden that it was written about ... that garden is gone, and so are many of the friends who helped to make it."

Books like this get little attention from landscape architects. Few are written by landscape architects; and, in an effort to establish professional credibility, many of us have tried to distance ourselves from the work they suggest, small-scale residential garden design. It is unfortunate, because these books have something to teach us about plants and planting design.

Beyond that, as Katherine White observed, "books that deal with horticulture and plants ... give pleasure not only to gardeners but to any other reader." Older gardeners will enjoy this book because they will remember the plants, and how they were used; for younger gardeners the pleasure will be in its association with the plants and traditions of another time and place.

E. Lynn Miller:
BASIC ELEMENTS OF LANDSCAPE ARCHITECTURAL DESIGN
NORMAN BOOTH

When I was asked to review Basic Elements of Landscape Architectural Design, my initial reaction was, "Another do-it-yourself book on landscape design in nine easy lessons and one hard one." Fortunately, the book does not fit that description, and will satisfy the craving of landscape architecture students, who are on a constant search for resource material.

Booth achieves his objective, "to present the vocabulary, significance, characteristics, potential uses, and design guidelines for, landform, plant material, buildings, pavements, site structures, and water." Each of these elements receives a chapter, with detailed information on material long neglected by publications of a similar nature. The discussion of the tread/riser relationship in outdoor steps succinctly explains the problem, providing solutions to one of the most common mistakes made by designers, who have always had difficulty understanding the ambience of outdoor space. Metric equivalents are given for all measurements, making the book extremely useful to foreign professionals who have limited access to this type of resource material.

The final chapter, on the design process, is heartwarming because it puts the methodology of the process in understandable terms. Now the student will be able to proceed without worrying whether he or she is still "ideating." The use of the single-family residence to illustrate the design process is probably unfortunate; those who do not understand the general nature of the example may come to associate landscape architects with single-family homes and nurserymen.

The book is profusely illustrated with "gutsy" graphics by the author—one of its stronger aspects, but they overwhelm the small, poor quality, untitled, and uncredited photographs. The plant material described in chapter 2 is limited to plants of the Midwest and Northeast. One laments the absence of the "most sought after" element of the urban scene, lawn or turf. But these shortcomings, together with the lack of a bibliography, are minor and do not detract from the book's overall quality.

Since Booth intended the book not only for students of landscape architecture, but for building architects and civil engineers, it should bear a warning: "Hazardous to your professional health if purchased as a panacea for all site planning and landscape design problems."

It would be easy to find semantic fault with some of Booth's nomenclature and historic examples, but his intent was to provide a compendium of information too often taken for granted in schools, and the book systematically presents and analyzes an enormous quantity of material. The author is to be congratulated for creating a first-rate book out of class handouts. It will most likely evoke critical sneers from older professionals pressured by the productive acumen of the younger generation—no doubt the most prolific writers since the advent of our profession.

Basic Elements of Landscape Architectural Design, Norman Booth, Elsevier, 1983, 315 pp., illus., $42.00.

A Southern Garden: A Handbook for the Middle South, Elizabeth Lawrence, University of North Carolina Press, Chapel Hill, 1984, 257 pp., illus., $8.95 pb.

‡ In reprint from the Antique Collectors' Club, or selected titles from the Ayer Company, Salem, New Hampshire.
Toward the end is a rainbow listing of philosophical epigrams and formulations from which, the author suggests, one may select relevant gems. The philosophic overlay does not work on the stringent notebook format; the connections between physical and metaphysical remain in the mind of the author.

Architectural Common Sense: Sun, Site and Self, Rad Dike, Van Nostrand Reinhold, 1983, 181 pp., illus., $15.45 pb.
Maren Stange:
SILVER CITIES
PETER BACON HALE

In the 19th century, Peter Hales tells us in this attractive and impressive book, photography had a power and influence difficult for us to comprehend today; it was a “miracle of clarity and fact,” and photographers who took the city for their subject “transformed [a] new and unsettling world into acceptable and comprehensive patterns” for their viewers. In his study of the urban photographic tradition from the invention of daguerreotypy in 1839 up to World War I, Hales promises to recount not only the “story of photography’s interaction with American urban culture,” but also the “revolution of American attitudes toward the city as revealed in an evolving medium.”

Silver Cities shows the fruit of much thorough research in archives large and small, and Hales’s well-written analyses of individual images testify to a rare kind of careful looking. Temple University Press has provided lavish illustrations. The images we find here sometimes show their age but are more often still resplendent with the care and craftsmanship put into them a hundred-odd years ago.

Arguing that, even as photographers strove for “complex statements” of their city subject, their work became a tool of the civic boosterism that took root especially in the “instant cities” of the West, Hales considers the early daguerreotypes of New York, Boston, and Philadelphia, and then moves west to Chicago and San Francisco. Photography offered a “potent symbolic device” to enclose and order the apparently planless, growing city, he contends. As architecture and landscape design also became crucial “ordering” professions in the 19th-century city, they annexed a sophisticated but predictable photographic iconography which developed its own conventions to stress the grandeur of Beaux-Arts monuments and the picturesque details of urban parks.

A particularly engaging central chapter on the Chicago World’s Fair describes the scandal provoked by the fair planning commission’s attempt to control the public image of this architect’s dream. Granting a single photographic concession to C. D. Arnold, an obscure but amenable Buffalo photographer, the commission required all publications to use photographs made or approved by him, prohibited large cameras and tripods on the fairgrounds, and permitted Arnold to charge other photographers $3 per photograph for work on the grounds. The ensuing outrage among both amateur and professional photographers showed up in revealing ways the economic and social interests represented by city photography, which was clearly no longer a mere art or hobby. Among the protesters was Alfred Stieglitz, whose attack in 1893 was actually the opening round in a fiercely conducted battle on behalf of the interests of artistic amateurs—in which, as we know, Stieglitz prevailed.

The story resumed with the publication of Jacob Riis’s reform tract, How the Other Half Lives (1892); Hales devotes the second half of his book to a comprehensive survey of reform photography in the prewar years. Glorifying Riis as “a revolutionary on many levels,” whose camera work “served to topple structures of thought and behavior which had been stagnant for years,” Hales’s discussion is rich with fascinating photographic examples but lacks a firm grasp on the notoriously slippery intellectual and social content of middle-class progressive reform. Though he suggests that professionalism and bureaucracy within the reform movement, as well as the public’s increasing familiarity with reform imagery, discouraged and constricted imaginative photographic work, Hales has little to say about the crucial exception of Lewis Hine. Hales’s occasional tendency to substitute for real analysis the now tired jargon of cultural history becomes particularly marked here, and we hear a little too much of Victorianism, laissez-faire,
cultural programing, utopianism and modernization.

Hales's method steadily addresses key questions in the history of photography, and his evidence speaks for itself. Yet the aspect of his topic that makes his work so promising—the city itself—remains irritatingly out of focus throughout the book. Short shrift is given to the geographic, economic, and industrial factors that distinguish one city from another, that set the metropolis over the regional center, and that determine relations between the city and the hinterland providing its labor and its markets. City politics is virtually ignored—not only labor unrest but also the fact that the very rag-pickers, coal heavers, and cave dwellers startled by Riis's flashpowder could, and did, vote.

Such subjects should not be omitted. Although the city was and is preeminently a place of looking, what could be seen became, as the 19th century wore on, more mystery than enlightenment to its inhabitants. As the economic demands of corporate capitalism dominated ever more completely not only workplace, but also home and leisure, city forms and symbols—including the reform movement itself—promoted consumption and vicarious experience in place of more autonomous, less "modern" human enterprises and aspirations. Mediations—including architecture, design, journalism, and advertising—solicited tirelessly for what became the quintessential transaction in the corporate city; unceasingly, worker-consumers were persuaded to "consume the products of their labor returned to them in advertised commodities as something mysteriously without origin." in the words of historian Alan Trachtenberg. Because it does in fact take these solicitations and transactions for its subject, urban photography is in some sense a representation of representations—and as such yet more social, ironic, and complex than we may have thought.

Without an analysis that penetrates the city mystery, Hales misses an understanding of urban photography which grants it the full measure of its social and aesthetic significance. Though he does not, in the end, accomplish the cultural history his introduction promises, he lays out a field, and indicates its complexity, in a way that cannot help but stimulate the kind of thinking that his important subject deserves.

Jim Morgan:

HOLDOUTS!

ANDREW ALPERN and SEYMOUR DURST

Holdouts! is definitely a New York book. Not only are 55 of the 57 sites profiled located in Manhattan (plus one each in the Bronx and Queens), but the exceptionally dense real estate development of Manhattan gives the book's thesis its poignancy.

In an introductory chapter, authors Alpern and Durst offer a compendium of holdout incidents from Denver to Israel. They also recount the plot of a 1965 Broadway musical comedy, Skyscraper, which revolved around a romance between a real estate developer and the owner of a brownstone who wouldn't sell.

But the book's remarkable appeal lies in the stories of actual Manhattan building developments that were frustrated or modified by the intransigence of individual holdouts. Not only is each tale charmingly told, but the antique photographs and drawings that accompany most of them are a feast for the eye. When combined with informative plans of sites as developed around the unavailable properties, and excellent photographs of the results as they appear today, the book is a satisfying blend of nostalgia and appreciation for architectural ménages that New Yorkers pass everyday. May I say that anyone who is fascinated by Manhattan, not just those of us who live here, will enjoy perusing these pages.

Neither Alpern the architect, Durst the developer, nor Lindsay the former mayor (who wrote the foreword) approves of holdouts, to be sure. Lindsay sees them as a serious government problem. Alpern occasionally speaks ill of those who have destroyed or sullied a grand architectural composition. Alpern and Durst sometimes express satisfaction when they write of a holdout who managed to lose

THE MACY'S STORE IN QUEEN'S AND THE HOLDOUT

Silver Cities: The Photography of American Urbanization, 1839-1915, Peter Bacon Hales, Temple University Press, 1984, 315 pp., illus. $47.95.
everything by being impossibly venal. Such people they call "foolish holdouts," the other categories being "frightened," "greedy," and "professional."

Though Durst has struggled with holdouts in the past on his own real estate developments, the tone of the book is gentle and, in a few cases, even sympathetic to the plight of the holdout. One such strong-willed person was Mrs. Mary Sendak of Queens. In 1963, R. H. Macy and Company asked Skidmore, Owings and Merrill to design a new department store for a Queens Boulevard site adjacent to Mrs. Sendak's little plot. When she ultimately refused to sell out, SOM had to design a notch into the 426-foot diameter concrete structure so that it would not overhang her garden.

As an architect active in New York City community politics, my feelings toward holdouts are very positive. In a city dominated by real estate development (much as Houston is dominated by oil interests), individuals who won't buckle under to commercial forces provide a healthy counterbalance. Furthermore, the resulting "aberrations" in the cityscape add variety and scale that no planner of grand urban compositions is ever likely to supply by design. Finally, these "leftover" buildings become vestiges of a vanished architectural past. They provide historical clues which, when explained by perceptive observers like Alpern and Durst, greatly enrich our understanding of the city around us.

Reuben Rainey:
THE GRANITE GARDEN
ANNE WHISTON SPIRN

Anne Spirn's elegantly written study fills a conspicuous void in the literature of urbanism by addressing the subject of "nature in cities and what the city could be like if designed in concert with natural processes, rather than in ignorance of them or in outright opposition." Its point of departure is Claude Lévi-Strauss's observation that the city "stands at the point where nature and artifice meet." For the author, "nature" in the city comprises far more than the embellishment of street trees or the green connecting tissues of parks and plazas. It includes the city's air, topography, geology, water, and living organisms—all of which decisively influence the "health, safety, and welfare" of every inhabitant. The city, she claims, has often been understood as "an entity apart from nature and even antithetical to it," a fallacy that perpetuates many urban environmental problems. A city should instead be understood as an integral part of nature, and, with the suburbs and surrounding countryside, viewed as "a single evolving system within nature, as must every individual part and building within the larger whole."

Spirn's study is part prophecy, part compendium. It is prophetic in the Biblical sense, forecasting future scenarios while proclaiming essential values to cope with a present situation of crisis. The crisis in this case has been caused by our unconscionable failure to manage nature prudently in the urban realm, resulting in "increased mortality of the elderly, the sick, and the very young, permanent brain damage among children, overall degraded health of city residents and workers; increased magnitude of natural hazards, dwindling water supplies," and a host of other problems. The book is preachy, which may grate on some readers, but its message is meticulously documented and cogently argued.

It is also a valuable compendium of case studies and applied technology for planners, architects, landscape architects, city officials, and citizens. As Spirn correctly perceives, we have developed the means to deal with the problems of nature in the city, especially over the last twenty years; we have simply not applied them. Much of the information is in relatively inaccessible technical journals and conference proceedings. To redress the balance, she summarizes portions of this literature and brings it to bear on specific urban problems. Spirn is quite aware of the equally pressing political, social, and economic concerns in the design of cities, but such considerations are beyond the scope of her work. She has deliberately chosen to write as a landscape architect and environmental planner concerned with the "look and shape of the city, especially the open space in which buildings are set."

Spirn's organization of a vast array of technical material is outstanding. The prologue and part I discuss the perspective of the book and introduce general issues of nature in the city. Parts 2 through 5 discuss, respectively, "Air" (pollution, microclimate, wind problems), "Earth" (unstable ground, wasted resources, contaminated and compacted land), "Water" (floods, droughts, and poisoned water), and "Life" (urban plants, parks, forests, pets, pests, and wildlife habitats). Each of these parts is broken down into two chapters, the first discussing the problem, the second offering solutions, documented with case studies of successful responses, drawn predominantly from the United States and Europe. Each part concludes with a special section, "Plan for Every City," setting forth specific initiatives to deal with the problems discussed. Each part can be read as a self-sufficient entity and contains a comprehensive annotated bibliography of case studies and technical works.

Holdouts! Andrew Alpern, AIA, and Seymour Durst, with a foreword by John V. Lindsay, McGraw-Hill, 1984, 174 pp., $29.95.
Part 6 argues for design of cities modeled on responsible ecosystem management. The “vision of the future” in the epilogue is a rather Augustinian view of “the Infernal City” versus the “Celestial City”; the latter, of course, being the humane environment that will result from proper management of nature in the city. Spirn claims her vision is no fanciful utopia but an “achievable reality,” many elements of which have already been realized in disparate circumstances.

Readers specifically interested in the design of urban sites will find much valuable information as well as trenchant challenges to familiar prejudices. The lawn and pastoral park fixation of many American designers comes under heavy criticism in regions where water is too precious to “waste”; Dutch “wild parks” are suggested as a possible low maintenance alternative. Low cost parks of hardy weed trees and shrubs like Ailanthus altissima (the proverbial tree that grows in Brooklyn) are recommended for miniscule budgets. Skyscrapers are almost completely eliminated from the “Celestial City” because of the problems of air pollution and wind danger for pedestrians that they cause. Spirn insists that each site be designed in relation to the whole urban ecosystem and fulfill more than one function. For example, a small park in a central business district can serve not only as a quiet oasis for mid-town workers, but also as a purifier of air, a buffer for noise, or perhaps even a retention basin for flood control. The author thus challenges designers to contemplate new dimensions of contextualism.

The book is not without flaws, the most glaring being in the realm of graphics and layout. The graphics themselves are well chosen and in most cases elucidate the argument, but in many instances they are rather poorly reproduced. The layout is also prosaic at best. A book of this importance deserves a more elegant presentation.

One also wishes that Spirn had developed her concept of nature in more detail. A close reading, especially of part 4 (“Water”), where Spirn’s prose resonates at its finest, reveals that her concern with nature in the city is not limited to such practical dimensions as hygiene and economy—in this instance, cleaning up the water and conserving it. She writes: “Like a primordial magnet, water pulls at a primitive and deeply rooted part of human nature. More than any other single element besides trees and gardens, water has the greatest potential to forge an emotional link between man and nature in the city.” One perceives transcendental overtones in this statement which suggest the experience of some kind of deep “emotional link” with “nature” is desirable for the well-being of city-dwellers. The carefully conceived use of plant materials and water in the design of cities will apparently serve to awaken and nourish this “primitive” and “deeply rooted” human capacity for relationship with nature. In all probability this is why Spirn envisions “every citizen” in her projected “Celestial City” possessing a private garden (a notion I find quaintly implausible). In any case, these nascent ideas merit further development, as they are an integral part of the concept of “nature,” so crucial to the book.

These are minor blemishes, however, on an otherwise masterful work, imbued with a profound sense of environmental stewardship, a faith in human rationality, and a vision of the “humane” city as the indispensable setting for the good life. Its appearance in the wake of the withdrawal of government funding from many essential urban environmental programs by the Reagan administration could not be more timely.

The Granite Garden, Anne Whiston Spirn, Basic Books, 1984, 334 pp., illus., $29.95.

Thomas R. Fisher:
MACRO
FRANK P. DAVIDSON with JOHN STUART COX

Take away the anecdotes and Macro, by MIT professor Davidson and writer Cox, would be more an essay than a book. Not only is the argument essay-like in its simplicity—a call for more large-scale engineering projects and more people trained to manage them—it meanders like an essay. Rather than build chapter by chapter to a unifying conclusion, the authors sprinkle their conclusions throughout the book. That might work in a ten-page essay, but over the course of 403 pages it tries the reader’s patience.

Why promote large-scale engineering projects? Authors Davidson and Cox name their target on the first page: the “small is beautiful” economics of E. F. Schumacher, with its advocacy of “intermediate” technologies, less wasteful of resources and more attuned to cultural and climatic differences than most advanced Western technologies.

Schumacher’s economics questions not advanced technology itself, but the inappropriate use of it; Davidson and Cox are correct in asserting that Schumacher “never claimed that large-scale engineering is always and inevitably inappropriate.” The large-scale reclamation of farmland from the North Sea by Holland, or the proposed cross-country bikeway in the United States are projects that few people, not even Schumacher, would oppose. But most of the examples Davidson and Cox use to bolster their position are of dubious benefit—a rail tunnel connecting North America, Asia, and Europe (in an age of supersonic air travel and satellite communications); cities built on the ocean. Despite the authors’ disclaimers, this is engineering for engineering’s sake, the belief that, because we can do something, we should.
To convert us, Davidson and Cox prey upon our insecurities, referring constantly to our declining infrastructure, the decreasing quality of some American technology, and the increasing technological prowess of countries like Japan. They also invoke the image of utopias: through "large-scale projects and programs . . . we can preserve and enhance individual liberty, the public health, and the amenities of social and environmental well-being." Just how large-scale engineering projects will improve our competitiveness with Japan or enhance our liberty and well-being is not made clear. Even a cursory reading of the problems of the American automobile industry indicates that it lost its competitiveness by becoming too large and self-assured to respond quickly enough to changing markets. The dilemma facing many American industries now is not how to operate at a larger scale, but how to scale down their operation and diversify their product lines to compete in many fragmented markets.

The relationship between individual liberty and large-scale engineering projects is also murky. Davidson and Cox barely conceal their impatience with the democratic process, scolding us at different times for emphasizing debate over cooperation, for being individualists rather than team players, and for writing laws in response to crises instead of according to established plans. They call, throughout the book, for more and better leadership. But they seek that leadership not from elected laypeople but from "patient study groups, drawn from the best talent in all relevant fields to shape the guidelines within which our various macro-engineering initiatives can emerge." The government best suited to macro-engineering, it would seem, is a government of technocrats.

The ideal is not new. As Langdon Winner has pointed out, Bacon, Saint-Simon, Veblen, and Spengler, among others, have all said—with much misgiving—that "rule by technically-trained experts is the only kind of government appropriate to a social system based on advanced science and technology." Davidson and Cox never make the claim directly. Indeed, they state that "once a major goal has been settled upon, there is still much room . . . for individual initiative and versatility in carrying it out." But the experts set the goal. Macro-engineering may preserve individual liberty, but it will be preservation in a jar on a shelf built by a technical elite.

The macro-engineering of large-scale projects is in itself a harmless idea. Some projects by their nature require large-scale solutions. As the authors state, such solutions need not be monolithic in character or inappropriate to people's needs. The political implications of macro-engineering, though, are anything but harmless, reviving the age-old idea that our freedom is better served by those who control our technology. We all might be best served by considering one of the book's illustrations, Brueghel's painting of the Tower of Babel. As that adventure taught us, building higher, traveling faster, or defying the limits of our resources does not necessarily bring us greater liberty or well-being, or bring us any closer to God.


Ben Clavan:
MONUMENTS AND MAIN STREETS
HARRIS STONE

Harris Stone introduces Monuments and Main Streets by suggesting that it follows a line of investigation touching on modern architecture in relation to art, work, nature, and the machine. If so, the line is irregular and disjointed, the attention given each subject inadequate, and the questions poorly put. At the same time, this work is not aimed at the scholar but at a larger public audience, and it points up problems in architecture that even many professionals refuse to admit exist.

Stone's credentials are credible enough. An architect and teacher at Kansas University, he spent many of his formative years as an environmental activist attempting to reëvoke New Haven, Connecticut for the people who live there. As a member of the city's Redevelopment Authority and other community action groups, Stone continually battled the corporate, institutional, and bureaucratic interests that dominated urban planning and decision making.

One outcome of these efforts was Workbook of an Unsuccessful Architect (Monthly Review Press, 1973), a series of essays describing Stone's experiences, interwoven with statements about architecture. He concludes—with a classic Marxist argument—that architects are prevented by the forces of the political economy from making social and artistic statements that relate a structure to both its social and physical setting. The format of the Workbook reflected Stone's pluralistic tendencies. Writing directly in longhand on pages ready for photographic reproduction, complete with his own line drawings, he developed a less costly alternative to traditional publishing techniques. The end prod-
Monuments and Main Streets is a continuation of the Workbook in aim, content, and style. In page after page of rather ordinary handwriting, and finely drawn but often curiously unemotional pen-and-ink sketches, Stone darts about, probing the soft underbelly of architecture in an attempt to find a point of entry for the changes he sees as necessary. The author contends that his second book "poses new questions that produce a refinement of my analytic technique into a series of verbal and visual tracings." He compares this methodology to the architect's use of a base drawing over which are laid a series of drawings that define and detail the ideas underneath.

If this methodology seems overly structured, the content is even more so. There are four major chapters in the book, or "messages" as Stone calls them. "From the Media and the Fields" first takes on the messages sent by such current architectural stylists as Kurokawa, Eisenman, Graves, and the rest of the Post-Modern bunch—finding them devoid of relevant content—and then relates Stone's attempt to create a utopian community on a farm in Massachusetts, dedicated to evolving new principles for a relationship between people and their building. "From the Past" deals with great architecture through history, which is somehow limited to a study of round buildings. "Of Belief!" discusses a passion that supersedes style—not necessarily successfully, in the work of Kahn, Mies, and Gropius, though Alvar Aalto comes off well. In "From Main Street" we move from an "ancient path" in Italy to New Haven, Connecticut, in what I presume Stone considers an unbroken line.

The framework for these messages is the dialectic between the sacred and profane in architecture, the "monuments and main streets," set against a panorama of forward-thrusting and backward-leaning tendencies in design. The overall result is an unusually complex statement, accomplished in a very broad sweep, that inexplicably denies the notion of a popular tract.

Passion is required for anything, including intellectual exploration, to succeed well. Stone has it, and his exuberance in trying to convey his innermost beliefs, as well as his willingness to admit his confusions is rather endearing. He makes you wish that the world were a simpler place, if only to make his task easier. Unfortunately, as Stone's own work reveals, a better world of architecture and building requires a carefully orchestrated scenario of a collective consciousness (and unconsciousness) bound to a vision of a delicate balance between unrelied order and uncontrollable disorder.

Stone, the old-line activist and socialist regular, would have the people determine the outcome of this ongoing dilemma in creating a humane environment. But even this requires a program. In the most engaging essay of this new book, Stone describes his Factory in the Field, a student seminar that tried to develop a new approach to architecture, using industrial technology, through the creation of a self-sufficient community of artisan/craftspeople. Like most utopian communities, the Factory in the Field was ill-fated. Stone concludes that, "Our efforts were doomed to endless trial and error, for we never formed a clear concept of our relationship as builders to the tools we were using and the structure we were working on." This is not surprising since few as yet have understood building as a process. Where this leaves the people is, indeed, difficult to imagine.

In the attempt to bring such themes to popular discussion, Stone overlaps the work done by others in three distinct areas: on the subject of the failures of modern architecture; on the relationship between technology and culture; and, on the precise demands of reasserting control over the built environment.

If Stone has not matched these previous efforts, it is not from a lack of trying, but rather a lack of focus. Significantly, none of the books that provide a background to Stone's discussion (with the exception of Tom Wolfe's From Bauhaus to Our House) have succeeded in reaching a wide audience. None have been able to break through the sacred doors shielding the secret society of architects. Stone's abortive efforts in this direction are to be commended. By writing a people's book, and one with plenty of pictures, Stone will possibly reach a different, larger, and potentially more receptive audience. And this is without a doubt the first step to a better architecture, although not an inexorable and irreproachable program for change.

1. Among these books Brent Brolin's Failure of Modern Architecture (Van Nostrand Reinhold, 1976) is probably the most thoughtful, Peter Blake's Form Follows Fiasco (Little & Brown, 1977) the most popular, and Tom Wolfe's From Bauhaus to Our House (Farrar, Straus & Giroux, 1981) the most infamous.

2. Lewis Mumford's monumental series on technology and culture is the primary sourcebook on the subject. Jacques Ellul's The Technological Society (Random House, 1967) is another probing study from a French Reformist viewpoint, while Leo Marx's Machine in the Garden (Oxford University Press, 1964), which Stone quotes, is a highly approachable literary attempt.

3. For example John Turner and Robert Fichter, Freedom to Build (Macmillan, 1972) and Housing By People (Pantheon, 1977), as well as the numerous books on the subject by Christopher Alexander and his associates.

Computer-based tools have established themselves in many disciplines as effective and cost-efficient adjuncts to professional practice. In the environmental design fields (architecture, interiors, landscape, urban design) we have already experienced a rapid growth in their application. Recent studies by professional organizations indicate that almost every design office will have some form of computer tool in common use within the next few years.

One computer application that has caught the imagination of many professionals is graphics, in particular the systems known today as computer-aided design and drafting (CADD) systems. The purpose of this review is to examine a recent development in the CADD market, the introduction of desktop, microcomputer-based drawing systems.

Since its inception in the mid-fifties—when it was the subject of futuristic articles in several magazines—computer-aided drafting has struggled into commercial viability. The industry as we know it has offered useful tools only within the last ten years. Several factors constrained the development of drafting systems, ranging from the difficulties of turning a labor-intensive profession into a capital intensive one to problems in applying the technology.

Underlying many of the problems are technological issues which have been brought to the fore by the developments reviewed here. Many of the successes of CADD to date have been in spite of the state of fundamental computer hardware technology. The field has been and is still to a large degree constrained by the lack of adequate machinery.

A BRIEF CADD PRIMER

Computer-aided drafting systems became commercially viable with the advent of the class of computers known as minicomputers. Minis were introduced in the fifties as alternatives to the enormous machines (mainframes) which had exclusively provided centralized computational resources. Minicomputers were designed to be installed in scientific laboratories, industrial plants, and at the departmental level in large organizations, to provide more distributed computing power than the centralized mainframes, and to act as problem-solving tools with a project orientation. Minis established themselves as reliable processors in the sixties, paving the way for the spread of powerful applications-specific systems on dedicated machines. Computer-aided drafting was one of the applications that was developed rapidly in this environment.

The trend toward miniaturization has continued unabated, and, just as minis liberated users from the domination of a centralized machine, so microcomputers have freed us from the need to share our computational resources. Computer-aided drafting has now become available on the small desktop systems that brought us individual word-processing capabilities and the ubiquitous spreadsheets. Before leaping into these uncharted waters, it behooves us to consider the proper role and capabilities of these new tools with a somewhat critical eye.

A few caveats before embarking on any technical discussion: this review is not an exhaustive technical checklist of microcomputer CADD systems, nor an unequivocal recommendation of particular systems. Exhaustive checklists of technical features can be found in technical magazines.*

The systems chosen for review all run on the most common of personal computers, the IBM PC. A multitude of other systems are available which run on other machines, but the IBM PC is the hardware which most readers are likely to know.

CADD systems are available in a wide range of capabilities, at a range of costs which normally (but not always) reflect the capabilities supplied. The standard term for these systems (CADD) does not fairly convey their real application. Design systems should assist the professional to investigate design alternatives and to develop solutions to a stated problem. Drafting systems should assist in creating a fully executed, drafted drawing. There should be only one criterion by which to evaluate a drafting system: does it allow the user to create with ease a finished product which can be presented as a completed, drafted image, requiring no additions outside the drafting system?

It is unfortunate but true that micro-based CADD systems are hampered by the technological constraints imposed by the personal computers. Screens are too small to display a drawing of any density without losing all comprehension. The 16-bit processors are too slow for many of the more complex geometric functions commonly encountered in the drafting process. Data storage devices are often incapable of storing drawings of any reasonable size. The finished plotted drawings of the majority of the systems are of a standard which most professionals would not accept from their most junior draftsman. Fully finished drawings from architectural and interior design offices typically contain a rich library of line weights, line styles, and hatch patterns with considerable annotation to represent the diversity of information implied by the drawn image. It is these graphic capabilities which place enormous burdens upon computer-aided drafting systems.

These constraints are not unique to systems based on the IBM PC. They are common in systems of all sizes and prices, although some have been overcome in the more
expensive systems. While the processing components of a system lend themselves to miniaturization, the ancillary devices (screens, keyboards, and so forth) often do not. Many of the solutions devised in larger systems have used software to work around the imposed constraints. This places even more load on the system, straining still further the limited capacities of a personal computer.

Having said so much, let me state that the systems reviewed here do have a use. Many practices apply them, typically to produce relatively uncluttered drawings of small projects, relying upon the machine to store and order the information rather than to speed up the drawing process itself.

These systems might be more realistically regarded as computer-aided diagraming, rather than drafting or design systems. As such, they should be able to create, store, and reproduce images of relatively low density and with a restricted set of graphic capabilities. A package like Energraphics, which can produce diagrams of charts, graphs, surfaces, and symbols, but does not attempt to go beyond the physical or computational limits of the machine, is a very powerful diagraming system, but unfortunately inadequate as an architectural drafting system.

The six systems reviewed here, AutoCAD, CADPLAN (including CADDRAFT), The Drawing Processor, Energraphics, MicroCAD,† and VersaCAD, represent the range of price and capabilities typical in this market. Software prices vary from $300 to approximately $2,000, and hardware configurations needed to support the systems from $2,000 to over $8,000. All the packages were tested at the Southern California Institute of Architecture on an IBM PC with 320 kilobytes of memory and an 8087 coprocessor. Peripherals included a 10-megabyte hard disk, dual screen, and a selection of digitizers or a mouse, as appropriate. Most systems either required or performed better with this or a similar configuration.

Reviews of CADD systems must be tempered by the anticipated application of the system. A purchaser who needs a production drafting program for interior design would apply one set of standards; for drawing circuit diagrams (the original purpose of many CADD systems), a very different set of criteria has to be met. This review is more a general overview of capabilities and potentials than a detailed critique of particular applications.

Basically, all the systems allow the operator to manipulate graphic images by handling individual lines. Each system provides for the user to draw lines and move, delete, and otherwise change them. Some allow the user to draw more complex geometries (circles most often, although some permit closed polygons of any number of sides). Every system allows the user to label drawings by adding text to drawn images. Beyond these rudimentary functions, each has particular strengths and weaknesses, especially from the point of view of one or another specific application.

A consistent weakness of all the systems is the difficulty of initial set-up. Larger (minicomputer-based) systems require trained personnel to carry this out, thus sparing the user. With smaller, cheaper systems, the user is left to match one item of hardware to another—no easy task, when the manufacturers have come to no consensus on standards. Potential purchasers are strongly advised to find a dealer who will undertake to assemble the necessary components and make them work together. A system which forces the end-user to configure the hardware is only for the very technical-minded and the very patient.

AutoCAD is perhaps the most widely available of all PC-based systems. AutoCAD (the company) has entered into distribution agreements with many dealers throughout the country, including the American Society of Interior Designers. Many of the dealers are adding additional features to the system before selling it to the end-users.

The user can configure the system with a variety of devices (single or double screens, various digitizers, plotters, and so forth). The software embodies many of the more desirable features of its larger competitors. For example, operations available to the user at any moment are displayed on the right-hand side of the screen. To execute a command, the user moves the cursor to the appropriate command and presses a key. Symbols can be stored and recalled by name (for instance a desk can be drawn and stored in the library for recall into any drawing the user
Dimensioning is available, as is user control of labeling. The user can enter text to be added to the drawing, specifying size, location, and orientation. AutoCAD has also established a user group. They are the only micro-based CADD system to have done so at the time of writing and are to be commended, since these groups can prove to be the most valuable aspect of a system. (Several other systems will shortly start user groups.)

CADPLAN/CADDRAF T is the most architecturally literate of the six systems reviewed. Two versions are available, CADDRAFT being essentially a subset of CADPLAN, and intended primarily as a teaching tool for computer-aided drafting.

CADPLAN includes many powerful features not found on any other microcomputer CADD system to date. One of these, the ability to draw a wall by indicating a centerline only, and having the system expand this to a pair of lines with all corners and junctions correctly drawn, is only now being added to many of the $100,000 systems. Another feature unique among micro-based systems is the ability to insert doors and windows in a continuous length of wall by merely indicating the position of the door and the direction of swing. The system automatically clips the lines of the wall, draws a return, the door, and the swing. Similarly, the placement of windows requires only a single command. Unfortunately, the graphic symbols used in these features and the resulting images are of a standard for which a draftsman might expect to lose his job. They are beyond the control of the user to alter, as they have been written in assembler language and are thus inaccessible. The three-dimensional capabilities reported to be under development were not available for review.

CADPLAN and AutoCAD appear to have several features in common. The use of menus in both systems is similar, as are their layouts. Graphic symbols and drawing functions are also often similarly constructed. CADPLAN appears to have implemented additional, specifically architectural, functions in their system (such as the door example above) and this makes CADPLAN somewhat more comprehensive.

A recent development in CADPLAN, issued after the initial reviews were conducted, has been the addition of automatic dimensioning and a database extraction capability. Reporting from the drawing database permits the generation of bills of material, etc. This reporting capability places CADPLAN yet further in advance of all other packages reviewed here. It does, however, place significant demands upon the computer. With the ordinary IBM PC performance is a concern but this will be alleviated as more powerful versions of the PC are released like the IBM PC/AT, announced in August 1984, which executes most operations at approximately four times the speed of the ordinary IBM PC. Unfortunately, computers are assemblies of discrete components, each with constraints that must be overcome. In this application, the bottleneck in the IBM PC/AT is the speed and size of the disk drives on which all the information is stored.

The Drawing Processor, as the name suggests, is conceived as the graphic equivalent of a word processor—that is, a program that structures graphic input and provides for its storage and reproduction. The system was only released in late 1983, and suffers somewhat from its youth. It is not as sophisticated as the more established programs, but several features set it apart. The most useful is the ability to manipulate text very powerfully, allowing the user to control size, slant, placement, and proportion. Its curve drawing features are well above those of other systems. As yet, it has no features (such as the double-line capacity of CADPLAN) that make it a special architectural tool. Its strength lies in its promise to deliver a versatile, flexible graphics processing system.

The drafting of line drawings is only one of the capabilities of Energographics, which is a cheap and versatile system. Besides producing drawings in two dimensions, it allows the user to define three-dimensional objects and three-dimensional surface images, and to produce a wide variety of business graphics (bar, pie, and line charts), using either data entered directly into the system or data initially created using one of the many spreadsheet programs available.

Basic two-dimensional drawings are created either by calling up symbols from libraries and placing them on a grid, or by drawing lines between points indicated by the cursor. These capabilities limit the potential drafting applications of this system, but make it a very powerful general drafting package. It is well suited to educational application and the production of simple constructed images. If the user is creating basic two- or three-dimensional drafted images, better quality drawings can be produced with other systems reviewed here.

MicroCAD, a system specifically designed for architectural and engineering applications, assists the user to create and display objects in both two and three dimensions. The operator can draw an image both in elevation and in plan, and hence compose a three-dimensional object. One drawback is the lack of a function to remove the lines hidden by planes at the front of the object; the image can only be displayed with all the lines showing, leading to some confusion. This renders a complex image effectively useless to all but the most patient viewer.

Since MicroCAD was designed primarily to assist in the manipulation and display of three-dimensional images, it lacks many of the basic graphic functions found in a drafting system. The system is presented as a design, not a drafting system, it is only fair to note. Still, it is useful to have a full range of drafting capabilities available in creating any drawn image.
Since the initial reviews were conducted, MicroCAD has released a new version (Version 3.3) of their system in which several of the problems identified here have been addressed, and several enhancements and extensions added. Most significantly, three-dimensional images can now have hidden lines removed (that is, lines which are graphically depicted as lying behind another face of the object will not be displayed).

There are significant restrictions in this system—only one object can be operated upon and, as the introduction to the system notes, "mental gymnastics" have to be performed in setting up the drafted image to be processed. Further gymnastics are required in switching back and forth between the drafting package and the hidden line removal package, in order to display the finished work. This juggling of systems is a characteristic of personal computer-based systems which must be overcome before the systems become useful to the average user.

T & W systems have probably been supplying drafting systems on microcomputers longer than anyone else. Their first was sold successfully as CADapple, for Apple computers. Upgraded to the IBM PC and substantially enhanced, the system is now known as VersaCAD.

This program offers the most extensive set of basic drafting functions. The user can create larger drawings than on most other systems because VersaCAD uses the disk extensively during operations. This does make it somewhat slower than other systems, however. While VersaCAD lacks several of the more specific architectural features of CADPLAN or AutoCAD, its drafting capabilities are in general more powerful.

SUMMARY

VersaCAD is by far the most competent drafting system of those reviewed here. MicroCAD is a "design" system, capable of the manipulation and display of three-dimensional images, but without many of the basic graphic functions desirable in a drafting system. Energraphies is a powerful general drawing program, suitable for educational purposes and the construction of simple images, but limited in its drafting applications. The Drawing Processor is a versatile graphics system, notable for its ability to manipulate text, but has no specific architectural capability. CADPLAN and AutoCAD have many powerful architectural features (although CADPLAN suffers from a low level of graphic quality in its symbols); AutoCAD has the additional advantage of the only user group in the industry. Several of these vendors should consider removing themselves from the unruly melee the CADD market is fast becoming and concentrating instead on producing responsive diagraming systems for designers. As machines like the Macintosh appear, offering very powerful sketch programs, the expectations of the average consumer are rising. The Macintosh has been popularly received in the design community because it allows the untrained user to create a relatively rough graphic image quickly. The density of the display fits the roughness of the image, just as a very soft pencil produces a rough diagram which correctly conveys its degree of accuracy.

Those vendors who remain in the micro CADD market should be prepared for the enormous changes that will be visited upon them by makers of hardware. Very substantial changes are already appearing, as small, cheap machines are offered with computational and display capabilities well beyond those of the current set of personal computers. Several of the vendors reviewed here are unfortunately tied very closely to the IBM PC, having written their programs in code used only on this machine. As 32-bit machines become available, with displays of resolutions greater than 1000 by 1000, at prices under $10,000, these vendors will find themselves competing against established manufacturers of drafting systems which today cost over $80,000 to purchase. From years of selling their systems at considerably higher prices, these vendors have managed to invest substantially in the development of competent drafting systems. When these are released on desktop machines, current vendors of IBM PC-based systems will be hard pressed to compete.

++"Computer Aided Design," Davis Straub, PC World, October 1983, and "Computer-Aided Design," Rik Jadnicek, BYTE, January 1984. Readers are cautioned that such checklists are subject to inaccuracies, especially since manufacturers frequently change features of their systems.

†A trademark for Computer Aided Design.

AutoCAD, Autodesk (150 Shoreline Highway, Bldg. B, Mill Valley, CA 94941), $2000.00 (basic module $1000.00; ADE 1 $500.00; ADE II $500.00).

CADPLAN/CADDRAFT, Personal CAD Systems (15425 Los Gatos Blvd., Los Gatos, CA 95030), CADPLAN $1600.00; CADDRAFT $495.00.

The Drawing Processor, BG Graphics Systems (824 Stetson Ave., Kent, WA 98031), $495.00; Drawing Processor II $995.00.

Energraphies, Enertronics Research (150 North Meramec, Suite 207, St. Louis, MI 63105), $300.00.

MicroCAD, Computer Aided Design (764 24th Ave., San Francisco, CA 94112), $500.00; with layering, $750.00; hidden line removal, $100.00; three-dimensional rotatable characters, $150.00; bill of material, $250.00; volume calculation, $250.00; SAP 86, $995.00.

VersaCAD, T & W System (7372 Prince Dr., Ste. 106, Huntington Beach, CA 92647), $1995.00.
Patricia Schilling:
COMPUTER-AIDED ARCHITECTURAL GRAPHICS
DANIEL L. RYAN

This book introduces the designer as programmer, an impractical notion that underlies most of its subsequent recommendations:

The designer must be able to write a computer program in a language such as FORTRAN or BASIC and must also know how to construct subroutines for the display of the standard drawing parts.

For this dubious enterprise, Ryan has written a set of basic graphic software routines which he attempts to place in the context of architectural practice. In his enthusiasm, he buries his few useful recommendations in a welter of unrelated material. He repeats unsubstantiated marketing hype about the value of CADD—"Dollar savings of from 3:1 to 6:1 ... time savings of from 20:1 to 50:1"—abandoned long ago by other computer writers. The book desperately needs editing, but it has even more immediate problems, as an analysis of one of the simpler programs shows.

The program on page 255 describes itself as "cutting an object to show the integral material," yet it contains no statements that could be interpreted as cutting. The statements are simple data declarations and subroutine calls for circle, arrowhead, and polygon construction, shading, and plotting. Moreover, dimensions are hard-coded into the program, making it inflexible. No external information can be put in by the operator. How would a user even pick an object to cut? Do any of the longer, not so readily decipherable programs do what they are supposed to do?

Even more perplexing is the set of drawings from the U.S. Corps of Engineers, Vicksburg, Mississippi, that the reader is meant to take as computer-generated. Occasionally the text refers to them as being assembled by the use of interactive graphics, but they appear to be either hand sketches or ink drafting with Leroy lettering. The inconsistencies in line weight, lettering, and stippling patterns are not compatible with computer work. The drawings are not beyond the capability of current computer work, they just are not computer work. Moreover, no reference is made to the system used to create them; we can only assume that the author is suggesting that the drawings could have been executed by a computer.

Of the few drawings which might be CADD work, one is too small to study, and another quite crude. Neither these nor the hand work does justice to the current state of computer-aided graphics.

The author's comments about architectural drafting, when relevant, are misleading. The programmer is described as "operating the hardware," which is unlikely, when programmers command $30,000-$40,000 a year, and equipment operators can be hired for $16,000-$18,000. A drawing response from a computer is described as taking "15 sec or less," which would in fact be unbearably slow. "Inexpensive squared paper" is recommended for sketching to the "required" scale; but the advantage of most systems is that the machine can rescale. At other times he rattles on about drafting, reminding readers what to include in their drawings, which has nothing to do with whether or not a computer is used.

The material in this book is needed, but the writer does not speak from any real experience of the impact of computers on architecture. He offers no new concepts or ideas to criticize. The comments on architecture are naive, and even the source code fails to reflect professional programming practice.

Computer-Aided Architectural Graphics, Daniel L. Ryan, Marcel Dekker, 1983, 448 pp., illus., $49.75.
Fred A. Stitt:
THE PROFESSIONAL PRACTICE OF ARCHITECTURAL WORKING DRAWINGS
OSAMU A. WAKITA and RICHARD M. LINDE

The Professional Practice of Architectural Working Drawings is the best book on the subject I've seen. It also contains some of the worst elements of regular drafting texts—bad drawing examples presented as acceptable, and obsolete practices presented as if they were current.

A few aspects of this book are hopelessly antique. A lesson on using triangles and T-squares, for example, is better suited to a book called Drafting with Grandpa. This will probably be the last drafting text ever published with such instructions. Most of the related pages on pencil pushing, hand lettering, and other traditional labor have value only as a stroll down memory lane. Unfortunately, most students who use this text won't know that many of the hand drafting skills they are forced to learn will soon have no value whatsoever. Skills they will need to do working drawings, such as typing and data base management, will have to be learned elsewhere.

Wakita and Linde also choose, as examples of how to do things, some of the worst architectural practices. For example, they show exterior elevations with every line of texture 1-11 and every brick course—empty hours of line work that give drafters an excuse for not drawing the information the contractors really need. There are elevations with door and window keys that should only be shown on frame schedules. There are overdrawn interior elevations that should be replaced by fixture height schedules, which take minutes instead of days to produce. There are sheets of door and window schedules that could be handled in a fraction of the time and space by using more rational, non-traditional formats.

A major omission: although paste-up and overlay drafting are given a few pages, there's not a computer terminal in sight. The one reference to computer-aided drafting is in the index, which directs the reader to page 29. Oddly, page 29 is just a blank sheet preceding chapter 2. Considering that virtually all designers and drafters will be spending most of their working lives on CADD systems, not at drafting boards, lack of data on the topic is more than odd, it borders on the irresponsible.

Problems and omissions aside, Wakita and Linde have produced a terrific working drawing book. It proceeds clearly and logically from the simple to the complex. It leaves no mysteries. It explains its topics in as many different ways as possible. Details, for example, are described in words, in good detail drawing examples, and with matching construction photographs to show what the details are actually for.

Although the drafting aspect is obsolete, most of the working drawing data and organization that is presented pertains to real practices in real offices. That is to say, if a student did work samples as closely based on real construction as this book shows and tried to get a job, he or she would show genuine potential value to a design office.

This book's greatest strength is that it shows the creation of complex working drawing sheets as they actually progress—in layers, or stages. Site plans, foundation plans, floor plans, roof plans, building sections, and elevations are all shown as starting in their most schematic form and then in progress, step by step, with each new layer of data added. This makes the content and the sequence of correct drawing production totally clear. It cuts through the confusion faced by any novice who is introduced to finished drawings that have hundreds of lines, notes, symbols, and numbers, with no hint of where all that data came from or what purpose it serves.

To really clarify matters, the plans and sections are interspersed with large-scope construction photos. The text and drawings clarify what happens on a job site, and the job site photos give meaning to the abstract words and drawings. All in all, it's a great combination of theory and practice.


Alan Williams:
DESIGN FOR SECURITY
RICHARD J. HEALY

Safety and a sense of security are fundamental to a well-designed environment; this piece of the design puzzle is as complicated as any other, but not well understood. The designer who equates security with floodlights, razor wire, and beefy guards does so at the expense of the client's well-being and sense of shelter. Design for Security—an enlarged version of a 1968 work—presents itself as "the only how-to book that deals exclusively with the methods, equipment, and design of physical security," but fails to earn that place on the bookshelf.

As a source of detailed information on alarms, locks, vaults, and security lights—each presented with full definitions and a degree of comparative analysis—it could be useful to the architect. But as a how-to guide it is neither comprehensive, reliable, nor balanced. There is no discussion of
the ways different types of people enter the site, nor how each is handled. Such basic planning issues as the organization of building elements to buffer or hide the location of sensitive areas are not addressed. Landscaping isn’t mentioned. There is no discussion of how to design gatehouses and lobbies to be secure without being prison-like; nothing about smoke bombs, pickets, or “man traps”; nor of liability for the use of dangerous techniques (e.g., razor wire). Client policy issues that directly affect physical design, such as criteria for natural disaster protection, and strategies for enlisting employee cooperation and defusing their resentment toward protection systems are not raised at all.

The book’s discussion of such common problems as multiple building access, parking lot lighting, and perimeter fencing is not only inadequate but does not go beyond a “cops and robbers” solution. Some guidance as to where to find the vital information missing from this book would be welcome, but it has no bibliography, and no information on the different types of consultants, and the circumstances in which they might be appropriate.

Fortunately there is a book which not only has the technical information Design for Security lacks, but goes far beyond it to become a true reference handbook for the client and the designer—the Handbook of Building Security Planning and Design, edited by Peter Hopf (McGraw-Hill, 1979). However, the extent of the problem both books grapple with becomes obvious when even the Hopf book recommends that campus parking lot lighting be “well illuminated by six 1000w . . . lamps mounted on a single mast 100 feet high.” Well-being and a sense of shelter require more than the absence of assault. The ideas and technology of protection systems must somehow be integrated with other aspects of people’s lives.

Michael Stanton:
MARKETING FOR THE SMALL DESIGN FIRM
JIM MORGAN
SMALL DESIGN FIRM MARKETING MANUAL
BIRNBERG AND ASSOCIATES

Over three-quarters of the firms in the design fields employ fewer than ten people; increased competition and reduced opportunities have made many of these small firms aware of the value of a systematic approach to finding new business. Designers to whom active marketing was anathema are now making salesmanship part of their business lives. Two books have recently been released to help them in this pursuit: Marketing For The Small Design Firm by Jim Morgan, and Small Design Firm Marketing Manual by Birnberg and Associates.

The two have superficial similarities. Both profess to focus on the needs of the small design firm, and treat cold calling, record keeping, interview techniques, and other traditional marketing topics. Both rely at least partially on case studies of successful marketing practices. However, the Morgan book, Marketing For The Small Design Firm, proves useful and informative, while the offering from Birnberg and Associates is of extremely limited value.

In his first three chapters, under the bracing heading of “Facing the Issue,” Morgan recommends that the small practitioner analyze his practice and set marketing goals. Trite and rather obvious suggestions, but Morgan is able to build a persuasive argument for these basic steps. The other sections (“Your Marketing Plan,” “Getting Started,” “Focusing Your Efforts,” and “Promoting Your Practice”) treat the standard aspects of marketing in a convincing manner. In each section the recommendations are clear and easy to follow. Morgan’s frequent use of lists to summarize important points, set off adjacent to the main text and highlighted in a contrasting color, contributes to this clarity.

The primary reason for his success, however, is his sources. He asked sixteen design firms (architects, landscape architects, acoustic consultants, interior designers, and graphic designers) to answer a series of questions on how they go about finding new work. Morgan draws on their responses in his text and summarizes the marketing techniques of each in individual “Firm Profiles” interspersed throughout the book.

His second source is his experience as the owner of a small architectural firm in Ohio. His own knowledge of the frequently frustrating business of marketing gives his book a pragmatism that makes it more readable and less professorial than many marketing manuals. He also has valuable insight into the unique problems of small firms. While most marketing books treat in detail the process of soliciting work from the federal government, including lengthy sections on filling out 254 and 255 standard forms, Morgan—rightly in my opinion—points out how expensive and often unrewarding the federal marketplace can be for a small firm. Likewise, he understands the difficulty of overcoming the small office stigma—a problem that faces many design professionals seeking new clients.

The Morgan book does have some faults. The index is spotty and inadequate for easy referral. While Morgan tries to address the whole range of small design firms, his basic message is for the architect. Specialized consultants who can rely largely on their personal reputations for work and designers who get a substantial amount of work by monitoring commissions received by others are left to extrapolate their marketing program from the presentation.

These minor objections aside, the Morgan book is quite good. It is informative and easy to use, builds a convincing argument for active marketing,
and has a cornucopia of useful suggestions and caveats on the business of getting new clients.

In contrast, the Birnberg book—a superficial treatment of the obvious aspects of marketing—offers few useful specifics. It begins with a somewhat self-serving introduction and ends with the message: we are available as marketing consultants. Call the number above. In between is a simplistic life-cycle analysis of the small design firm in which the firm that fails to market withers away, reinforced by chapters on such standard topics as telephone techniques, effective writing, marketing, and filing. The treatment of these areas is shallow and all are better covered in Morgan's book as well as in Marketing, Architectural and Engineering Services, by Weld Coxe (Van Nostrand Reinhold, 1983), and How to Market Professional Design Services, by Gerre Jones (McGraw-Hill, 1983).

Even more disappointing than the lack of detail is the absence of any real orientation to the needs of the small design firm. The chapter on the marketing budget, for example, includes a discussion of salaries for full-time marketing principals, marketing directors, and marketing coordinators that is completely inapplicable to the small design firm. (By the time a firm can pay a marketing principal the average $53,016 listed here, chances are strong it would no longer be "small.") Likewise, the outline of the potential marketing budget, while admirable in its detail, seems inappropriate for a small firm and neglects to explain why specific areas in the budget are important and what they might accomplish for the small firm. The sections on "Negotiating" and the portion of the appendix devoted to a complex overhead accounting system relate only obliquely to marketing, and hardly at all to the small firm. The sample long-range marketing plan, which, among other things, calls for a branch office, quarterly newsletters and six articles per year published on the firm, is beyond the range of most small practitioners. Even if its scale were appropriate, it would be of little help because it is primarily a grouping of goals without enough emphasis on the specific strategies necessary to achieve them.

The Birnberg publication is short—84 double-spaced pages of text in a spiral binder. The formatting and proofreading are poor, and the presentation unattractive. It looks as though someone tried to expand to full size the workbook normally given out as part of a marketing seminar.

Marketing for the Small Design Firm, Jim Morgan, Whitney Library of Design, 1984, 159 pp., illus., $27.50.


Johanna Drucker:
GETTING SOME PERSPECTIVE

Considering the influence of perspective on the entire history of representation, and its implications in a culture which places a high priority on the subjective point of view, structured according to its rules, it is remarkable that so little critical examination has been undertaken of the theoretical issues. William Ivins's Rationalization of Sight functions as a suggestive introduction, and the work of Madeleine Bunin on medieval painting, and John White on the development of spatial representation are solid examples of research in the field.
But Irwin Panofsky's fundamental essay, "Perspective as Symbolic Form," has never been translated into English; and such radical formulations as that of Pierre Francastel, who questioned the whole conceptualization of space itself, are not often used or appropriated for their phenomenological relevance to the design profession. Even more appalling, considering the nearly universal use of perspective in design and architectural drawing, is that a decent standard text demonstrating its principles has yet to be written.

Perspective suffers from the unjustified reputation of being one of the more arcane mysteries, into which the student must be initiated before he understands how the world may be created through a maze of dropping, angling, and intersecting lines. The strange pleasure of watching the tentative evolution of a constructed form from this process of calculations and mechanical manipulations seems a suitable, if meager, reward for the period of excruciating apprenticeship.

The concepts of perspective drawing are relatively simple: an object in space is recorded on a picture plane which slices at a perpendicular through the line between the viewer's eye and the object. The relative location of the picture plane between the viewer and the object, the distance of the viewer from the object, and the orientation of the viewer's cone of vision (the segment of visible space capable of being seen without moving the eye or turning the head) are the variables which determine the degree of angular distortion which the rules of perspective manage to keep in consistent relation to each other.

While most instruction books on perspective introduce these variables and attempt to demonstrate their relation to the construction of an image, this set of relations is rarely used to orient the student at the outset. It becomes apparent, after a certain amount of manipulation, that these are the variables in question, but the set of simple relations which determine the rules of perspective is initially elusive. This contributes to the undeserved reputation of perspective as a difficult and technical process. Divorced from its conceptual basis, perspective remains a set of rules with a somewhat arbitrary sequence, which can be relied upon to produce a reasonable facsimile of a building, person, or landscape seen from the point of view of the ordinary cyclops.

These fundamental principles for some reason seem more easily demonstrated with speech, in lecture situations, than with a sequence of pictures and text—partly because the effect of the change in relative positions is more easily grasped through observing movement than in a series of static images.

Of the books under review, the simplest and most elementary seems to be the most successful. Joseph D'Amelio's Perspective Drawing Handbook works so well because it is structured through the eyes of the dumb viewer. A cartoon figure with blunt features, bulging eyes, and an expressionless face aligns everything according to his own position and point of view. Seen through the eyes of this mini-minded man, the problems of semblance and resemblance, distortion and convention, become comprehensible. While the grail of the ideal perspective text seems unlikely to materialize, I have seen the success of D'Amelio's book as an introductory text. The drawings are ugly, the renderings which represent professional work even worse, but the gradual introduction to the process and the simple demonstration of the visual logic make the book effective. The viewer learns by degrees, through demonstration, how the components of a monocular version of our perception are systematized and structured into the rules of perspective.

Stephen W. Rich's Rendering Standards in Architecture and Design is a genuine textbook, with a solid, thorough approach to vocabulary and technical processes. It plunges immediately into technical language and various orthographic and perspective systems. What the book lacks in ease it compensates for in the rigor of its structure, and each chapter is complete with problem sets for which, no doubt, a teacher's copy with answer sheets lurks somewhere out of reach.

Symptomatic of Rich's approach is the formidable-looking chart which describes the compatibility of various materials with all the sangfroid of a printout from a computer dating service. Its drawbacks are also similar; that mysterious chemistry which makes for dynamic interactions can't be quantified, nor can the experience of, for instance, "smudgeability" or "erasability." Much of the experience of drawing is sensual and tactile, and different materials respond to the individual touch with some range of variation—which limits the usefulness of such a chart, and of all the highly systematized details of this approach.

Slightly less than half of this book is given over to the teaching of perspective; while it would be awkward, if not impossible, for a student to wend through the maze of diagrams and rules alone, this section would be functional as a classroom text. The rest of the book is devoted to developing the visual vocabulary of the designer, establishing the general tone of "design" drawings. The tone of design drawing in general is worth questioning—its flatness and evenness, its overall temper of soullessness, as though the repression of individual vitality was essential to "professionalism." The people in the line drawings stand out as voided blanks, contours isolating a bit of space from the lines which model the buildings projected with uniform regularity behind them. If the planet were gradually to be transformed to this shopping mall generic sensibility, we would quickly expire of a deadly uniformity.

While the text of this book is intelligent and conscientious, replete with commonsense pointers about drawing, explanation of the logic behind select-
ing points of view, angles, materials, and so forth, the tenor of the illustrations is too dull to engage the kind of imagination necessary to drive the design process. The book is, however, a well-made object, excellently bound and printed, which handles well and would last much longer than one would hope was necessary to absorb what it has to offer.

Felix Konig's *Perspective in Architectural Drawings* attempts to provide a basic vocabulary of perspective techniques for the architectural designer. The designs are immediately confusing—completed perspective drawings whose construction lines, perpendicular and vanishing lines create a veritable web of procedural clues to the ultimate construction of the image. The only way to avoid this confusion is through written step-by-step demonstrations, which consume a lot of space. A printed text with illustrations on acetate overlay, a sort of visual anatomy of the procedures for perspective, might be another solution. But Konig is uncom-

promising in the swiftness with which he snare the reader in this network of lines and angles. It's hard to imagine a novice with the determination to unravel the method from this initial tangle without a machete-armed guide leading the way.

The book limits itself to exercises in perspective, and treats many of the problems which plague beginning students: angled planes, curved archways, and circular staircases. As a reference book for such problems, which build on the fundamental rules of the game, it would be of use to a student already sufficiently familiar with the hierarchy of those lines to perceive the designs as legible.

Dik Vrooman's *Architecture: Perspective, Shadows, Reflections* tackles three related fields which all deal with the two-dimensional construction of the illusion of three-dimensional space. His focus is clearly defined, and he does not digress on peripheral topics like rendering or layout. Such merit as the book has is due to this un-

pretentious and well-defined scope. Like the books mentioned previously, it makes no connection with the student's experience of visual perception as the primary reference point for perspective drawing. The basic elements of this visual experience are demonstrated primarily through the use of cube forms, in well-labeled diagrams at the opening of the book. While manipulation of this omnipresent cube may serve as the basis for all such construction problems, the transition to comprehending visual distortion can be made more effectively by using familiar forms (houses, furniture, rooms) and points of view. The chief difficulty is not in elaborating the rules of illusion, but in getting the student to identify with the visual processes for which these constructions are a conventionalized surrogate. Chart by chart, page by page, this book has the format of a developmental workbook. As a classroom manual it would work well, but without the interactive support of a teacher, the occasional obstacles to understanding the sequence of steps might become insurmountable. On its own terms the book is successful and clear, and would be a useful resource to the advanced design student encountering such specialized problems as the perspective rendering of hyperbolic parabolas or reflections in three-point perspective. The question of whether such technically determined renderings provide a more substantial illusion than the intuitive, slightly fudged approach of most designers is an open one.

Perspective Drawing Handbook, Joseph D'Amelio, Van Nostrand Reinhold, 1984, 96 pp., illus., $11.50 pb.


Perspective in Architectural Drawings, Felix Konig, Van Nostrand Reinhold, 1984, 117 pp., illus., $15.50 pb.

Architecture: Perspective, Shadows, Reflections, Dik Vrooman, Van Nostrand Reinhold, 1983, 151 pp., illus., $20.43.
David R. Schwind

DETAILING FOR ACOUSTICS

PETER LORD and DUNCAN TEMPLETON

A number of reference books present the theory, concepts, methodology, and application of acoustical design. This one is well organized, and unique in its graphic presentation of conceptual design details and the corresponding acoustical ratings. It is definitely for those with a practicing knowledge of acoustics.

In format the book is a compilation of general details, showing acoustical building construction common in Europe, particularly England. Numerical ratings of acoustical performance are included, with diagrammatic details in some cases to demonstrate differences in the performance of alternative constructions. Graphs indicate acoustical performance as a function of frequency. Many of the details are not in general use in North America, due to the difference in building codes, materials, and sound rating schemes. For the same reason, the comparative ratings in the acoustical performance data are not much use in complying with regulations or criteria.

The sections on windows, doors, and building services (i.e., the mechanical system) are of particular interest. The window section is a good reference for window glazing data. The effect of improving the seal at the edge of the frame is indicated in tabular form; data for different thicknesses of glass, including laminated glass, and for the width of the airspace in double-glazed assemblies are presented graphically. The door details show novel approaches to the perpetual problem of sealing the door at the jamb. Useful general background information can be found in the area of mechanical system penetrations and the discussion of circular and rectangular ductwork.

A major flaw in this book is that it does not stress the importance of an airtight seal in sound isolating constructions. Normally, sound isolating details show and note full perimeter caulking to achieve this seal. The orientation of the open flange resilient wall channels, to which gypsum board is mounted, is also incorrect. The text indicates that the open flange should be oriented downward; in fact, it should always be up. The presentation of open plan acoustics and offices is not balanced in perspective; the source of the information is a manufacturer of open office furniture.

Although this book is not a tutorial, it is a useful source of practical and workable concepts, helpful in developing acoustical constructions for specific projects. It assumes a good knowledge on the part of the reader, since it never cautions against pitfalls to be avoided. The details would be greatly enhanced by an accompanying paragraph describing the utility and potential problems of each. The text's usefulness is therefore limited to practicing acoustical consultants, and architects seeking a source of information in addition to their consultant. Others may find it somewhat misleading and should probably refer to an expert.

Detailing for Acoustics, Peter Lord and Duncan Templeton, The Architectural Press, London, and Nichols, 1983, 192 pp., illus., $27.50.
Perry Winston:

RETROFIT RIGHT
SEDWAY COOKE with SOL-ARC
SOLARSPACES
DARRYL STRICKLER

Both these how-to manuals are second-generation efforts which follow closely on the heels of their predecessors. As sequels, they give a sense of the direction the authors are moving in as they refine their approach to energy-efficient home remodeling. If the MBA's "bottom line" cost-benefit analysis and the New Alchemist's harmonic relationship between man and nature are the two poles, these books pass each other traveling in opposite directions.

*Retrofit Right* is a companion to *Rehab Right*, also produced by the Planning Department of the City of Oakland. It carries on the theme of the earlier book, how to upgrade a house "in a manner which respects its architectural integrity and character," but adds the dimension of retrofitting—increasing energy efficiency—which is best done during a major rehab. While *Rehab Right* was produced primarily by staff members of the Planning Department (notably Helaine Kaplan Prentice and Blair Prentice), the sequel was prepared by Sedway Cooke Associates, a West Coast urban and environmental planning firm, and SOL-ARC, an architectural energy consulting firm. Aware that homeowners and tenants today are besieged by energy conservation tips from utility companies, insulation salesmen, and neighbors, Sedway Cooke's project manager Fred Etzel decided not only to discuss these measures but to provide a way to evaluate them. The first part of the book presents his "dial-a-retrofit" scheme, wherein the user punches in the relevant architectural style, household size, workforce skill level, and location within California (if not in Oakland). He is then directed to one of 18 retrofit strategies, each a table listing the results of an analysis of a menu of retrofit measures by an architecturally sensitive computer program ("CIRA," created at Lawrence Berkeley Laboratory). Each strategy has its own initial cost, first-year savings, life-cycle savings, and payback period, but its priority for the resident is determined by its net savings-to-cost ratio.

The retrofit tactics in the tables carry page numbers that refer to information in the second part of the book: "Weatherization" (including insulation, caulking, and weatherstripping), "Equipment and Appliance Retrofit," "Solar and Renewable Resource Strategies," and "Lifestyle Adjustments." Crisp architectural graphics are cross-referenced to tables describing how the particular architectural style affects a house's energy performance and retrofit potential. A short chapter on "Resources" presents financial means and incentives: federal and state energy conservation tax credits, utility company audits and rebates, advice on selecting contractors, and a listing of other sourcebooks on home retrofitting.

The book's tight format, ample economic information, and technical advice fulfill its stated goal, "to demystify the way a house consumes energy." The computer-generated strategy tables, by the Berkeley-based architectural firm SOL-ARC, are the most innovative feature. Some energy conservation myths are dispelled: "lowering the ceiling of first floor rooms does not reduce the overall size of the building's envelope and . . . does not reduce the load on the heating system." The tables and architectural details read clearly and will enliven debates on the best way to weatherstrip a door or insulate an attic.

The description of energy use
passive solar technology into the proportions, massing, and silhouette of an older house is the most visually appealing example of "right" retrofitting.

Does the book do no wrong? Technically speaking, very little, but there are errors of omission. The information included in the first chapter's strategy tables is based on the energy characteristics of single-family detached houses. These may represent a large portion of Oakland's housing stock, but it would not have been very difficult to include examples of the hundreds of older duplex, four-plex, and larger multi-family buildings in Oakland. Taken as a group, the energy consumption patterns of these structures and their tenants could benefit as much or more from the Planning Department's attention as the do-it-yourself homebuyers targeted by this book.

Another omission is a matter of style: in all the drawings there is not one human face or figure, only a pair of hands in chapter 2. Not that this detracts from the accuracy of the information, but it does reinforce an overall dryness in the approach. Despite the clever matrices, nicely drawn details, and sincere concern for architectural integrity, the relationship of people to their environment is presented in a rather mechanistic way. The use of specific residences to flesh out information on each generic type, with quotes from the residents expressing their own experiences, would have sufficed to correct the impression.

Overall, Retrofit Right is a valuable tool for the homeowner or tenant deciding how to invest in energy conservation—whether he is lucky enough to own a period piece, or merely interested in tightening a drafty door. It is commendable when a public agency decides to assemble important information for its constituents; it is remarkable when the result is of such high quality.

While Retrofit Right is designed as a reference manual, Darryl Strickler's Solarspaces is meant, like its predecessor Passive Solar Retrofit, to promote action. Appropriately, it employs a more flowing style and is more profusely illustrated with photographs of existing solar retrofits. Strickler, though he deals with only one of the many strategies mentioned in Retrofit Right, is targeting a much larger audience.

At first glance, the book appears less a sequel than a rewrite of the earlier effort. Both set out to capture the browser's attention with attractive examples of completed solarspaces (a term defined by Strickler as including attached solar greenhouses, solaria, and enclosed porches), and follow with discussions of how to check the "retrofitness" of a house. The new book improves on this discussion by underlining the three basic functions of a solarspace: supplementary heat, additional space, and space for plants.

Chapters on designing, arranging for financing, choosing a contractor, and construction also repeat the sequence of the first book, but the information is more concise and less fragmented. The audience is still the do-it-yourself homeowner, but the level of technical information has been upgraded. The construction details and photographs are much improved and complement each other well. Similarly, the final chapter, on using the new solarspace, expands into a lengthy discussion of various types of movable insulation and a full-fledged beginner's course on indoor gardening. Altogether, the format of the new book is tighter, the topic is dealt with in greater depth, and the illustrations are of higher quality.

Still, the book perpetuates some of the shortcomings of its predecessor. The examples are all single-family houses in low-density sites; Strickler, who has traveled all over the United States to assemble his case studies, could have shown some of the imaginative solarspaces added to rear porches, balconies, windows, and rooftops of multi-family buildings in urban set-
Anne Gumerlock: BUILDING SOLAR

KAREN MULLER WELLS

This well-illustrated volume distills the results of ten years of practical experience in solar construction by builders across the United States. With case studies of large developers as well as small builders, the emphasis is on energy-efficient construction techniques (a catch-all phrase, to be sure) and the hard-learned lessons of marketability.

Opening with a solar systems primer could have been a good idea but in this case misleads the reader as to the book's intent. He should instead have been directed to a primer on solar energy systems—Bruce Anderson's Solar Home Book (National Association of Homebuilders, 1976), or Edward Mazria's Passive Solar Energy Book (NAH, 1979). A summary history of the Department of Housing and Urban Development (HUD) grant program follows, outlining the five-phase program. The energy-efficient details of the program are not covered, but on the planning, financing, and marketability of speculative solar developments the book is thorough indeed.

The research and development phase, or how the solar construction trend started, is well reported, with examples of HUD grant projects (successes as well as failures), utility programs, and promotional construction by product manufacturers.

The examples, illustrated with plans and photos, date from the mid-1970s through early 1981, although with the technology moving so rapidly a book published in 1984 should have hot-off-the-press examples. The choices for the case studies are not necessarily award-winners or totally energy self-sufficient houses, but they were always built and invariably they cost less than $80,000.

A real shortcoming of the book is the neglect of climate variation. All places are treated the same, though economic paybacks of solar construction vary greatly with climate and utility rate structure. I would have liked to see more detail on the effect of new energy-efficient building codes, which require more wall and roof insulation, and on the financing and marketability of solar construction.

The book is meant for professional and merchant builders, but the examples are easily understood by the layperson, and the book gives a good overview of what is available in new solar housing. The case studies tell the tale of lessons learned, of the process of refining solar systems and integrating them more efficiently and economically into the mainstream of production housing. The author refers to the un-solar house as an outmoded product, like the gas guzzler of yesteryear. That may be stretching it, but solar has progressed from strictly custom, one-of-a-kind homes to encompass production housing from standard plans, and this book documents the fact.
Karl Guttmann:
RETROFITTING FOR ENERGY CONSERVATION
Milton Meckler

In recent years, publishing companies have flooded the market with books to teach the design professional, contractor, building owner/operator, and in some cases even the general public how to reduce the cost of energy required to operate their facilities without any real reduction in their lifestyle. The phenomenon is essentially American: all other developed countries have been painfully aware of the cost of energy ever since the Industrial Revolution. Retrofitting of Commercial, Institutional and Industrial Buildings for Energy Conservation joins the ranks in 1984.

The book is a collection of 26 short essays, covering most of the field as seen today, and arranged in 9 parts in a loose attempt at organization. Among the authors are some well known names in the energy field; the essays range in length from 5 to 83 pages and the writing styles vary from the highly technical to the journalistic. Comic relief (unintentional) is provided by an eight-page effort (“Utility Rates and Retrofit Economics”) by a gentleman who nostalgically reviews the days when utility rates were set to benefit the utility companies, and enlivens his presentation with quotations from Shakespeare, George Orwell, and the Bible.

For whom is this book written? To be sure, a few of the essays are of interest to building owner/operators, at least one to practicing consulting engineers, and some to members of the general public seeking to educate themselves in this field. It is difficult, however, to imagine any one of the above groups buying a 414-page book of which he will read only a small part.

The authors appear well qualified in their respective fields but some are more adept than others in conveying their message. Some essays assume a familiarity with basic engineering and economic concepts, others appeal to the reader’s common sense. Yet, after the reader has progressed halfway through the book, he is possessed by a sense of déjà vu — has he not been here before? Surely he has — virtually all the essays in this book were written in the mid-seventies. Considering the rapid development of energy retrofit technology, much of it is already out of date.

The best presentation and the one of most general interest is an essay by L. G. Spielvogel, entitled "Estimating Energy Consumption in New and Existing Buildings." Mr. Spielvogel is a prolific writer of books and articles on many aspects of mechanical engineering, and one who not only understands the problems thoroughly, but can communicate effectively. He reports the results of a schoolhouse energy conservation study (J. Rudy, “Saving Schoolhouse Energy: Final Report,” Lawrence Berkeley Laboratory LBL-9106, Berkeley, California, 1979), which predicted heating energy savings of 37 percent and electric energy savings of 18 percent and yet found only a 15 percent reduction in heating energy and a 1 percent reduction in electric energy after implementation of the recommendations. There is a message here for the authors in this book, and for those of us in the field.

Another significant contribution is the essay by Eugene E. Cooper, “Cogeneration and Retrofit Opportunities.” It provides plant owner/managers with an excellent overview of the subject, and will materially assist them in deciding whether an in-depth study of cogeneration for their facility is indicated.

Several of the essayists advise the reduction of outside air quantities to save energy. It will do that, to be sure, but we are today acutely aware of the consequences, as evidence about the so-called “tight building syndrome” mounts — occupant discomfort, reduction in efficiency, and increase in workman’s compensation claims. This is being recognized by ASHRAE in the revised Ventilation Standard (62-1981), as well as by the California Energy Commission, who are increasing the minimum ventilation for office buildings to 20 cfm/occupant for smoking areas, where the old code required only 15 cfm/occupant if fixed outside air was used, or five if an economizer cycle was incorporated.

Among this book’s notable shortcomings, its treatment of energy management systems is inadequate — perhaps because the essays were written in the mid-seventies. It is also deficient in the areas of high efficiency motors, heat recovery incinerators, and indirect evaporative coolers, and, while heat recovery from exhaust air is mentioned in several essays, there is no serious explanation on a technical level of the difference between economizer cycles, regenerative heat exchangers, heat pipes, or run-around cycles. Some of the technical data is questionable; the results of the case studies are unverified (How right you are, Mr. Spielvogel!) and there is also the possibly irreducible number of editing errors.

Retrofitting of Commercial, Institutional and Industrial Buildings for Energy Conservation, Milton Meckler, Van Nostrand Reinhold, 1984, 432 pp., illus., $42.50.
Hiroshi Watanabe:

LETTER FROM TOKYO

An architectural office I know is designing a building in Tokyo with the most vaguely defined objectives. From what I can gather, it's to be something between a gallery and a salon of intellectual and artistic distinction, annexed to a posh bar serving only imported liquor—the purpose being to boost the image of the client, a very successful manufacturer of women's underwear.

According to one scenario, I learned from a young member of the staff, a grand opening was envisioned, with the entire structure wrapped à la Christo, and dramatically unveiled on the appointed day. I had a dreadful premonition: was this wrapping to be silk with lacy frills? He acknowledged, somewhat sheepishly, that the idea had been tossed around.

That was nearly a year ago. Last week someone else at the office called to ask my opinion of a name concocted for the building by a copywriter. Since it was to be an athletic club where Japan's cultural luminaries would gather to engage in mental workouts—presumably over glasses of watered-down Glenfiddich—the copywriter's brainstorm had been to combine the English words “culture” and “stadium,” and call it a “cultium.” What could I say, except that it didn't mean much of anything to me?

All this is by way of introduction to some remarks about architectural publishing in Japan. The point is obvious, but visual ideas, like the rather juvenile joke in silk, are so much easier to communicate, and, in a commercial sense, to trade in across cultures, than ideas which depend on language. Excellence in photographic reproduction, while not to be dismissed, is a matter of mechanics; words are less easily managed. Perhaps for this reason, very few Japanese books on architecture aside from picture books are rendered into other languages. Only three Japanese publishers regularly produce books translated into English—Kodansha International, Weatherhill, and Tokyo University Press (which rarely touches works on art). Only a few architectural historians and critics have had their work made available to the non-Japanese audience. This is also a matter of numbers: the people translating Japanese into English are outnumbered by those translating English into Japanese, and a page of Japanese rendered into English will fetch three to four times the price of an English text rendered into Japanese.

Recently a computer that could translate Japanese into English made headlines in Japanese newspapers; the makers' claims for it were not modest: the machine would eliminate the linguistic isolation hitherto suffered by the Japanese, and facilitate the worldwide dissemination of Japanese ideas. The claims were, however, slightly undermined by the sample sentences, and by the statement that the machine's output would need “retouching” by qualified persons.

English is the second language in Japanese schools, and, while the standard in spoken English is still low, that for reading comprehension is fairly high. Many graduate students and young architects consequently moonlight as translators of English books into Japanese. The usual procedure, for a book of any length, is to hire an established professor or architect as editor in chief, who then farms out the work to a team of young persons. Given the huge output of Japanese translators, and the fact that most of them are amateurs, it is not surprising that the results are uneven. Embarrassing errors forced Kajima Shuppankai, the publishing arm of a giant construction company, to withdraw the first translation of Robert Venturi's Complexity and Contradiction; later a different translator produced a completely new version.

When I mentioned to Hiromi Fujii, an architect who teaches at a university in Tokyo, that I was writing about the publishing scene in Japan, he recounted the difficulties he and Masahiko Mineo had faced translating Tafuri's Architecture and Utopia (published in Japan in 1981 under the title Kenchiku shinwa no hokai, The Collapse of the Myths of Architecture). Among these difficulties was the Japanese publisher's reluctance to print anything that might be considered provocative, including such “volatile” words as “revolution” and “destruction.”

Translated books that are selling well in Japan, according to Nan'yodo, the premier Japanese-language architectural bookstore in Tokyo, include Space in Architecture, by Cornelis van de Ven, The Classical Language of Architecture, by John Summerson, The Hidden Dimension, by Edward T. Hall, and books by Reyner Banham, Sigfried Giedion, and Manfredo Tafuri. (Foreign language books are the province of another store, Tokodo.)

Among the current Japanese bestsellers, relatively speaking, is Kazukiyo Matsuba's Kindaishugi o koete: gendai kenchiku no doko (Beyond Modernism: Trends in Contemporary Architecture). (I say relatively speaking because the real bestsellers are books in an entirely different category: for example, how-to books on waterproofing details, or books that contain questions and answers from past architects' licensing examinations.) Matsuba is a newspaper reporter, and his book somewhat resembles Tom Wolfe's exposé. He sees postwar Japanese architectural history as a struggle between Kenzo Tange and his followers and Togo Murano and his protégés. The writing is vivid and jargon free. There is also a trio of books by Toyokazu Watanabe, the Osaka architect known for his infectious enthusiasm for wild theories, such as that Christ survived the crucifixion and lived out his life in Japan. Watanabe typically starts out with a statement like: "The borrowed notion is that ancient civilizations produced works like the Pyramids..."
as vainglorious monuments to rulers; such a view is the result of our own shallow, materialistic values; actually there is a hidden Purpose behind the pyramids”; then follows up with some very imaginative speculations—all crackpot, no doubt, but hard to put down.

Another interesting book is Ikaruga no takumi (Carpenter for Horyuji), an interview by Shigeru Aoyama of Tsune Kazu Nishioka (b. 1908), who was responsible for reconstructing the main halls of Horyuji and Yakushiji in Nara. Nishioka is one of the last of the miyadaiku, carpenters specializing in religious architecture. He reveals how difficult it is now to secure appropriate timbers of hinoki, a Japanese cypress vital to traditional buildings—bought, in the old days, not by the tree but by the mountain—and how his search has led him to Taiwan.

There is no authoritative complete history, or tsushi, of Japanese architecture in Japanese, a fact that was brought to my attention only the other day. Architectural historians have generally focused on details of the wood structure of temples and shrines to determine stylistic development, but no one has yet integrated all these studies into one work. The closest thing is Bunkazai koza: Nihon no kenchiku (Series on Cultural Properties: The Architecture of Japan), edited by Masaru Sekino, Hirotaro Ota, and Nobuo Ito. This five-volume work, however, is a collection of fragmentary studies by different authors. The two people in Japan most qualified to write a complete history, it is said, are Hirotaro Ota, now retired, and Eizo Inagaki, the professor of architectural history at Tokyo University. Professor Inagaki has done extensive studies of many different aspects of Japanese architecture, from Shinto shrines to modern architecture; what he apparently needs to complete his mastery of the subject is more work on what is, after all, the central topic in Japanese architecture: Buddhist temples. I, and many others, await his treatise with great expectations.

Another field still in need of translators is the study of Western architecture by Japanese historians. A number of interesting pieces have been published that deserve a wider audience—for instance, the papers of Katsuyoshi Arai on Le Corbusier (one of which traces in a most ingenious fashion the influence of Tessenow on the Domino house).

Before we become too depressed contemplating all that’s not being rendered into English, let’s look at what is available. A.D.A. Edita of course has an enormous output (though it rarely covers Japanese work); it has a successful formula and has generally stuck to it. While some of the monographs are of high quality, the text is nearly always an adornment for the photographs, many taken by the head of A.D.A., Yukio Futagawa. On my visit to Fujii’s office, I learned that Makoto Ueda, the editor for A.D.A. Edita who produced, among other things, the two books on contemporary Japanese houses that introduced the work of young Japanese architects to so many readers abroad, had just quit his job. Ueda is a respected figure—whose major in college, incidentally, was French literature, not architecture—but the feeling is that nothing much will change at A.D.A.

Occasionally, other firms put out books in English. Shufunotomo, whose list includes A Guide to the Gardens of Kyoto, by Marc Treib and Ron Herman, publishes a popular magazine, also called Shufunotomo, which translates as The Housewife’s Friend. The Kyoto guidebook was for them a notable exception.

Then there is Japan Architect. Recently, it has instituted a new policy: all contributions will now have to be submitted in English. Masayuki Fuchigami, an editor, explained to me that the point was to allow the readers to get a feel for what the authors are trying to say, without the mediation of a translator. It was more important, he argued, to communicate in a genuine manner than to be grammatically correct. Well, that’s all right for people like Yasumitsu Matsunaga, who can write English, but what about the great majority of Japanese architects? Shall we have to wade through pages of incoherent text and be grateful for the chance to hear the author’s “real” voice? Two architects have already asked me to translate their papers on the sly, having no confidence in their own skills. Is this what we’ve come to—bootleg translations? As it turns out, Japan Architect, like the manufacturer of the translating machine, is taking no chances. There is in fact a “qualified person” waiting at the end of the production line, a native English speaker who assiduously retouches the manuscripts. So much for authenticity, a goal established out of a mistaken idea of what the translator actually accomplishes. It’s precisely the artifice of the translator that effects a direct communication between the author and the reader.

Japanese architectural magazines such as Shinkenchiku, Kenchiku Bunka, and SD rarely offer opinion; every month they publish virtually the same group of buildings, with short explanatory essays by the designers. The magazines and the architectural offices enjoy a cozy relationship that neither side wants disturbed.

A number of new magazines have emerged in recent years to offer alternatives, if not in substance, at least in format. Gunkyo is a quarterly that started in April 1983, and provides a forum for the younger architects. Keyword is a potluck publication; every issue carries fifty short articles by as many authors. The September/October 1982 issue, for example, carried two-page articles on, among other things, Peter Eisenman, axonometrics, Italian rationalism, alternative technology, kitâchê, classicism, frontality, the color white, the beginning of ornament, taste, high-tech, and what were called “Meier shapes” (i.e., forms that Richard Meier likes to employ). The length of the essays precludes any discussion in depth, but they make enjoyable (and often informative) reading.

Finally, a word about architectural criticism in the gen-
eral media: there isn’t any. Once every month or so a newspaper will carry an article, and on television you can sometimes catch programs on Isozaki, Kurokawa, or Tange, but coverage is sporadic. Architecture is not a hot subject. Ads for whiskey, condominiums, and other consumer goods will employ shots of the Sagrada Familia, the Unité in Marseilles, or the Chrysler Building, and that’s about the level of public consciousness as far as architecture is concerned.

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Cynthia Zaitzevsky is a research associate at Harvard University. She is the author of Frederick Law Olmsted and the Boston Park System (Harvard University Press, 1982).

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TO THE EDITORS: I read with interest Robin Middleton's review of my book, *The Architecture of Death: The Transformation of the Cemetery in Eighteenth-Century Paris* in the Fall 1984 issue of your publication. That review, as well as others that my book has received, has given me insights into the review process. . . .

What strikes me most forcefully is that a book, such as my own, can elicit diametrically opposed responses. Some reviewers see so much and others find so little. Thus, Dr. James Stevens Curl (Progressive Architecture, August 1984) "salutes" my book as a "remarkable work," "nobly conceived," and "of impeccable scholarship." On the other hand, Sarah Williams, in the *St. Petersburg Times* (October 7, 1984), seems to have missed a 70-page and 45-illustration discussion about the attention to the cemetery by the French Revolutionary governments, because she chides me for neglecting to consider the French Revolution. . . .

One could establish a similar contrast between the reactions of William Gass and Robin Middleton. William Gass endorsed my book with the observation that "Etlin has followed the interwoven course of cultural attitudes and cemetery design and construction in 18th-century Paris with a care and clarity which makes his arguments both profound and convincing." Robin Middleton, though, finds the book "dull and lackluster" with a "failure to grasp the essential in his account, a lack of focus."

What is a reader to make of such discrepancies? It is not my place to suggest an answer.

I only wish to observe that when Mr. Middleton seeks to substantiate his negative assessments of the overall character of the book, he turns to "details" and cites two "fine connections" that I supposedly missed. Unfortunately for Mr. Middleton's argument, one of these fine connections—"Brongniart's earlier design for an Elysée on the estate at Maupertuis"—I do discuss in my book and not merely in one place but rather on two occasions (pp. 224, 316). I even illustrate it! (figure 164) Had Mr. Middleton had the courtesy to refresh his memory before publishing his review by consulting the index under "Brongniart, Maupertuis Park," he would have found a reference to both pages and to the illustration. So cavalier an attitude toward the contents of my study can only reflect on Mr. Middleton's other judgments as well.

In the end, with such reviews, perhaps one learns more about the reviewer than about the book in question.

Richard A. Etlin
Associate Professor
University of Maryland

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I am puzzled by Mr. Etlin's petulance. Does he want consensus or simply praise? Reviewers of books offer no more than their personal opinion and that, inevitably, is a reflection of their own knowledge, interests, obsessions and even prejudices—perhaps also their moods. As he suggests, criticism reveals the critic as much as the subject of his inspection. Happily, diversity of opinion is tolerated, indicating that individuality and independence of mind are valued still. An absolute value cannot be bestowed on a book, I would think, even by its author.

I suppose that Richard Etlin's irritation is aroused by what he considers unwarranted or unsubstantiated criticism. I shall deal with his specific complaint. I read his book, carefully, and had no need to turn to the index to know that he had made mention of the Elysée at Maupertuis. He cannot be said to have considered it. Nor does he seem to have grasped the point I was making. He has not thought it worthwhile to look up the references I gave. I suspect that he has not even visited the site.

His book, if I read him correctly, is concerned with the establishment—perhaps one should say re-establishment—of the pastoral setting as the proper background for death. His study is focussed on France, on Paris, and in particular on the change in burial practice and cemetery design that occurred between about 1765, when the Cimetière des Saints-Innocents was generally agreed to have become intolerable, and the laying out of the Père Lachaise cemetery on the outskirts of the city soon after the turn of the century. Though he deals at inordinate length with cemetery projects in the grand architectural manner made in the intervening years, it is evident that they were of little import. They were uncongenial to most contemporaries. It was Brongniart's landscaped setting that satisfied the new sensibility—and satisfied it perfectly, it appears. An analysis of Brongniart's particular image of the picturesque seems to me germane to an understanding of his achievement at the Père Lachaise. His myriad designs for landscaped gardens should, ideally, have been considered, though these are not easy of access. But one garden above all others should have been looked at carefully, the Elysée at Maupertuis—its name alone denotes the final resting place. More important, it was one of the first of the landscaped gardens with which Brongniart was concerned, the winding pathways and several of the buildings appearing on the estate map as early as 1776, and it is there that his picturesque sensibilities seem to have been nurtured. Brongniart's pyramid (still surviving) which Etlin illustrates (though his accompanying paragraph is devoted rather to Admiral Coligny's tomb alongside) served as a gateway, under the road behind it, from the formal garden surrounding the château to that section of the estate in which the Elysée was laid out—the Elysée itself, it is worth noting as Etlin is unaware of the fact, was some kilometers upstream. At Père Lachaise Brongniart intended a pyramid also as the main built feature. There are clearly connections. They might be no more than stylistic, but Etlin has not explored them, even cursorily, and shows no awareness that they might matter. Alexandre de Laborde suggests that Montesquiou, the owner of Maupertuis, was himself responsible for the layout of the Elysée; this might or might not be true, but a discussion of the issue would enhance our understanding of that hybrid image, both formal and picturesque, that evolved at the Père Lachaise and for which Brongniart was primarily responsible. It was a powerful and appealing image, the embodiment of the new sensibility that Etlin sets out to explore; it is the climax to his study, and it is surely not unreasonable to expect that it be analysed in full, sensitively and intelligently. I thought that I had already said as much in my review.

Robin Middleton

TO THE EDITORS: Jean-Paul Bourdier's DBR 4 review of our book Spectacular Vernacular bristles with indignation, misreadings, and a whopper of a misquote. We would like to bristle back.

First, Bourdier errs in chiding us for trying to "subvert the notion of vernacular architecture." Clearly, this is not our conscious aim. As delineated in Spectacular Vernacular's second sentence, our deliberate intent is to "document, discuss, and defend the vernacular mud architecture of the desert."

Nor is such a "subversion" an inefect of, as Bourdier says, "juxtaposing the spectacular and the vernacular." We juxtapose the terms; but we never claim they are equivalent. We even take pains to emphasize that in traditional desert architecture the exterior wall is "usually undecorated"

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and is even "impassive" and "monotonous." Some vernacular is spectacular. We make it clear the the vast majority is not. Bourdier observes that "the effort to raise the vernacular to the rank of the remarkably uncommon contains its own contradictions." Indeed it does. But who's trying?

Bourdier is horrified by what he terms our "romantic expressionism" and "theoretically sentimental interpretation." The "clenching" example he cites is, it is true, embarrassingly high-key gush. But the words are not ours. It is dishonest to state that they are. They are taken from the publisher's blurb on the book's back cover.

We regret that Bourdier wishes "to eat our hearts with garlic." His approach to vernacular architecture tends to be sociological and instrumental, ours to be aesthetic and exploratory. The intellectual "lenses" vary. But does this difference necessitate squabbling like schoolboys trying to break each other's glasses? Vernacular is a vast, complex field. It contains plenty of room for views which complement rather than invalidate each other.

Jean-Louis Bourgeois
Carollee Pelos

I am distressed to hear of both the degree to which the authors of Spectacular Vernacular took my critique personally and the level at which they read it. Obviously, a critique to them is not a site of discussion, but only a personal attack, an attempt at invalidating/excluding another's work, or a declaration of war. A review of their work, in other words, can only praise, not evaluate.

I plead guilty for having given the title of the book a depth of insight and a critical potential that it does not have and that the authors themselves disclaim. It is sad, however, to learn that in choosing such a title they did not even question its implications (conscious or unconscious). If only "some vernacular is spectacular" and "the vast majority is not," then why such a title? How does it relate to the work and how is it supposed to be read in the market?

It is true, on the other hand, that one (the last one) of the three passages quoted as examples of their aesthetic descriptions is taken from the back cover and that it does happen authors are not responsible for the publisher's note on their book. I did not, however, imply the question of approach in my review, and do not wish to make any further comment on the setting up of self-congratulatory categorie-

ies such as the "aesthetic and exploratory" versus the "sociological and instrumental." The sureness with which the authors reconfirm the intent of their book ("to document, discuss and defend the vernacular mud architecture")—my own italics—as if the claim to defend does not somehow connote the dominant position of the defender clearly indicates how far apart we are in our level of discussion. There are indeed infinite ways of conveying the vernacular reality and it is evident through my critique that what stands out as highly criticizable in Spectacular Vernacular is not its approach nor so much the poverty of its discussion and drawn documentation, but its pretensions.

Jean-Paul Bourdier

REPAIRS

The captions to Richard Guy Wilson's review in DBR 4 of Richard Oliver's Bertram Grosvenor Goodhue should have credited Richard Hufnagle for the photograph of the north façade of the Nebraska State Building (in the collection of the Nebraska State Historical Society) and Marvin Rand for the photograph of the west façade of the Los Angeles Library. Our apologies to the Architectural History Foundation.

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