Reviewed by Daniel Naegele

The Mathematics of the Ideal Villa and Other Essays

by Colin Rowe

London and Cambridge: MIT Press, 1976

1. "BUT JUST ONE THING: aesthetic nerve or aesthetic verve? But very different implications. And don't you just turn a letter upside down to make the point?" Unmistakably Colin Rowe, regarding "exactly what happened in the Mumford article way back," his explanation by interrogative continues: "My text, which said nerve, was sent for my correction as verve; and I wrote a special letter back to insist on n rather than v. However, no matter, it still came out as v. And, in this as in much else, I feel entitled to perceive the manipulations of P.R, B. Because verve is a bit cissy isn't it? And nerve is strong. Oh Iago, oh Iago; but, Othello apart, doncha grab the pic?"[1]

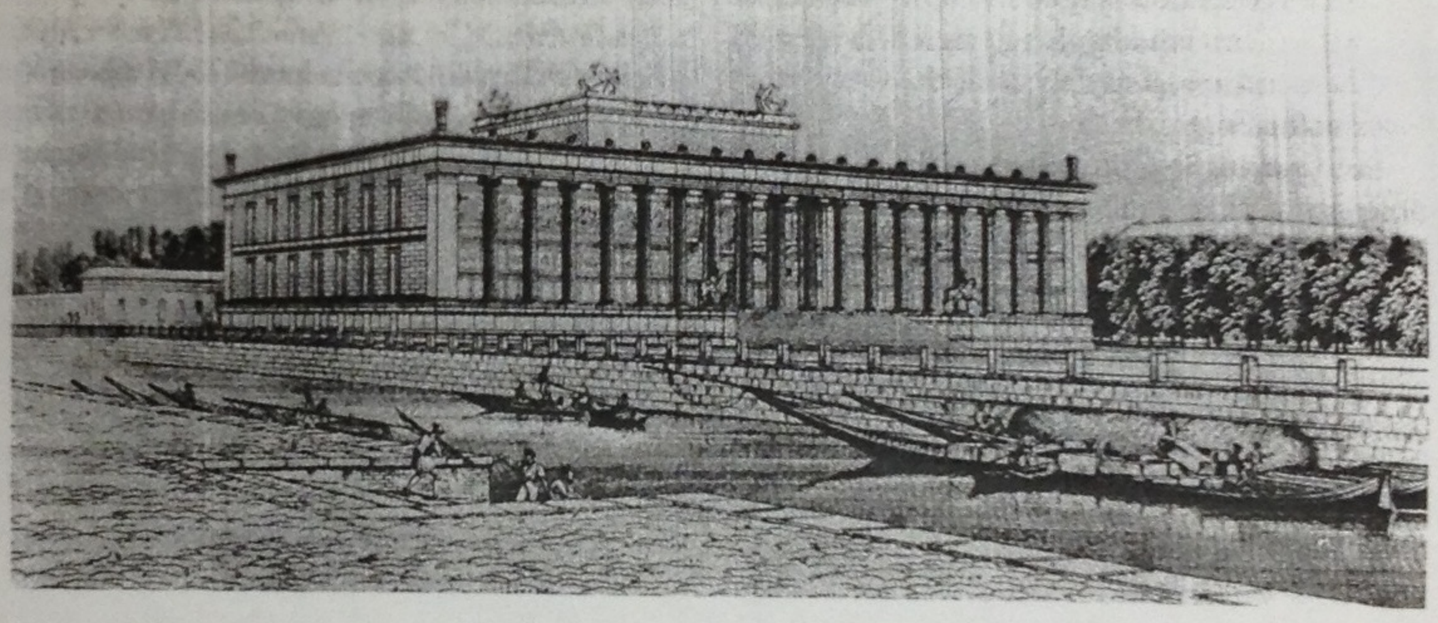
And though here the "pic" *is* the point, it should be said that in this scene the antagonist is none other than "Peter Reyner Banham, that populist (I think card carrying) Marxist" who believed Rowe "erudite, sans gene, presumably rich," a curiosity who "wrote like someone escaped from a late Henry James novel" and as such the "ideal target for [the] pseudo proletarian" that "P.R, B.presumably was."[2] And if in this brief description, politics, literature, and position in the British pecking order are combined with a most fanatical attention to detail—for why else, after thirty-seven years, retrieve an injustice of this sort?—in the writing of Colin Rowe, this is not so unusual. On the contrary, it presents a condition, perhaps more mental than material, under which so many of his now well-known essays seem to have been written, writings that in many ways formed a critical foundation for late 20th-century architecture, writings that comprise *The Mathematics of the Ideal Villa and Other Essays*.

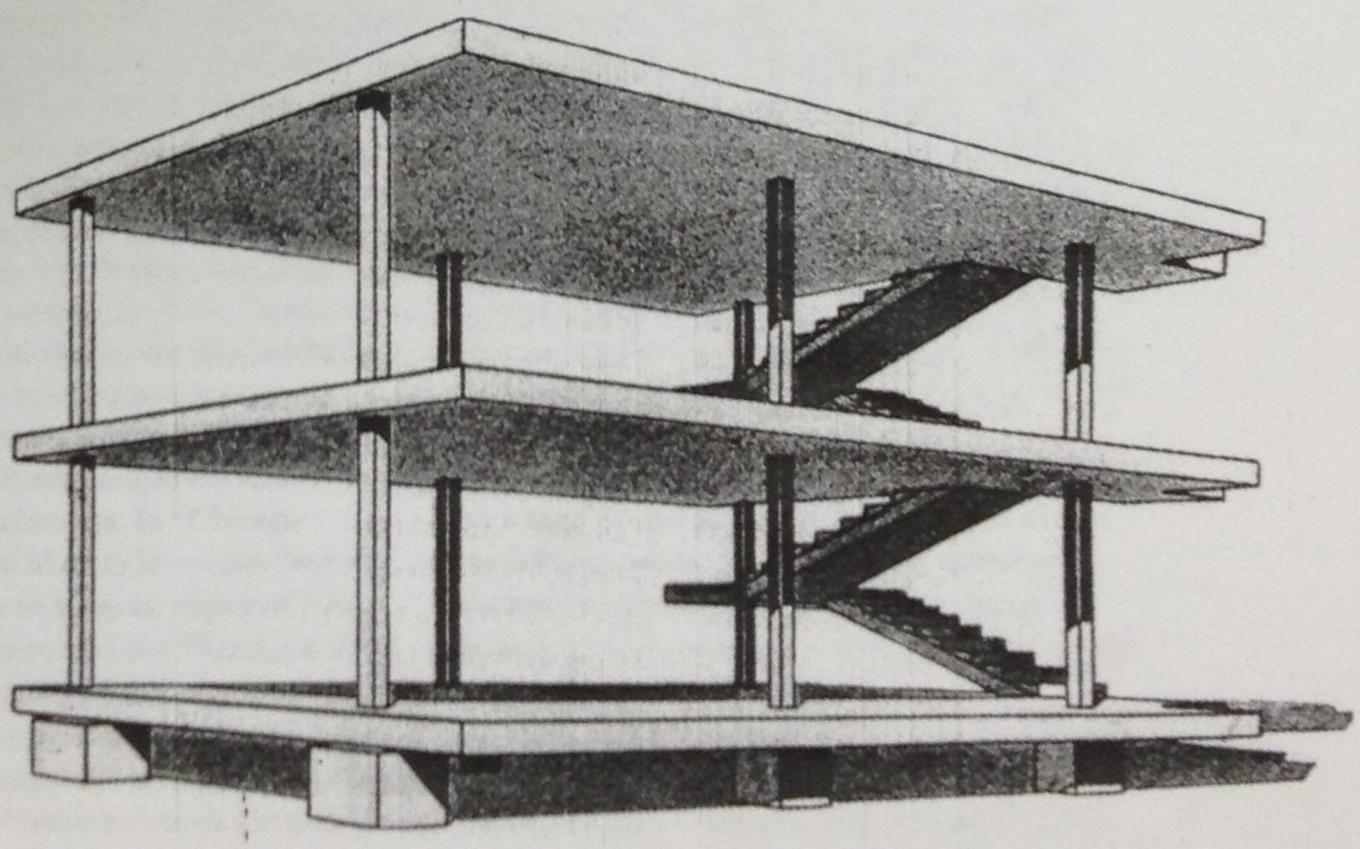
The 1954 "Mumford article" is not a part of this 1976 collection, but it clearly conveys Rowe's understanding of the many opportunities for interpretation available in the repackaging of previously published writings. As such, it suggests that *The Mathematics of the Ideal Villa and Other Essays* is a very consciously contrived creation far different than the ingenuous binding together of the "Best of Colin Rowe" that one might reasonably expect. And so in 1954, while a teacher in Austin, Texas, and after having established a reputation in the blue pages of *Architectural Review* with his 1947 "Mathematics of the Ideal Villa" and 1950 "Mannerism and Modern Architecture," the thirty-four-year-old, Bolton-on-Dearne-born Colin Rowe turned his attention away from what "P.R, B." later described as a "bridge-building technique between ancient and modern"[3] to focus instead on the nature and possibilities of architectural criticism in the mid-20th century. In reviewing Lewis Mumford's 1952 collection of 100 years of critical essays on architecture, Rowe noted that Mumford "has attempted to confine his role of interpretation to a minimum," and that "[i]n so doing one might doubt whether he has been strictly fair either to himself or to his reader, since, however much interpretation may be abjured, it is present by inference in the actual choice of material, and despite his professed editorial aloofness it is clear that Mr. Mumford's material is selected so as to illustrate a point of view."[4] Rowe then declares Mumford's analysis "too partisan." He highlights Mumford's habit of "eschewing conflicts" and notes Mumford's "practical empiricism" as "having no essential reference to a body of ideas." He calls for the reestablishment of "something of the *density* of history" and concludes his review by stating unequivocally: "[T]he real becomes no less so, and the ideal is not vitiated when they confront their opposites . . . for it is out of these antitheses that any valid historical criticism must emerge."[5]

A "not too partisan" interpretation, conflict, a *density* of history, the confrontation of opposites, the yoking of real and ideal: all such criteria found their way into the making of *The Mathematics of the Ideal Villa and Other Essays*. No mere thoughtless recycling, the collection is a carefully calculated, meticulously crafted, latter-day interpretation of profoundly intelligent and influential writings, a work unique in 20th-century annals of architectural criticism.

2. If such sounds less than credible, the making of *The Mathematics of the Ideal Villa and Other Essays* might alleviate doubt, for in building this book Rowe was both author and editor, and opportunities for interpretation were abundant: the selection and sequencing of essays, the choice and arrangement of illustrations, the creation and placement of new addenda, the titling of the collection, and most especially a careful editing and rewording of key passages that reveal clearly his evolved critical position. All efforts were directed, it seems, toward the erosion of the absolute in favor of the relative, toward the presentation not of definitive answers but of what Rowe once termed a "condition of permanent argument." Opposites are made obvious and paired so as to encourage conflict, density, and questioning. Ambiguity acts as positive provocation, while a very consciously selected and consistently employed set of words—words that simultaneously describe both architecture and a social and political world outside of architecture—assures the reader of the writer's greater purpose, enlarging all beyond the parameters of architectural criticism.

Thus, although Rowe wrote the book's nine essays between 1947 and 1961, all have been "adjusted," some to the extent of presenting new interpretations of the original works. Two essays





from The Mathematics of the Ideal Villa

Le Corbusier: Project, Maison Domino, 1914

received addenda in 1973, several others were reworked and republished during the intervening years, and three remained unpublished until 1973–1974. The two addenda—one found after the first essay, the other after the last—serve as bookends that contain the collection while simultaneously renewing it, suspending it, as it were, in quotation marks, and bringing to it a kind of double life (old and new, then and now) that removes it from the confine of "inert and accepted ideas." The addenda dissolve conclusiveness, provoking a sense of unending dialogue. The work is *both* closed *and* open, *both* being *and* becoming: a paradox that can be found at every scale of Rowe's writing, from words to sentence to essay to book.

Complementing and extending this strategy for increasing density through debate, Rowe replaces the tone of certainty in the original with one of speculation and conjecture. "Structures, of course, are entirely different" for example, becomes "Structures, of course, are not to be compared."

The back and front location of these addenda contributes to this paradox by accenting the introductory and closing essays, essays with similar themes. At the scale of the villa, the introductory essay presents the real and ideal in conflict; at the scale of the city, the closing essay renews this struggle. The closing addendum extends Rowe's architectonic concern into critical theory, sociology, and politics. The scope of the entire collection is broadened, for the bookend placement of addenda suggests that what is said here in ending applies to all the essays, not just the final one.

Such pairing is representative of a compositional strategy that reflects an intellectual conviction present throughout Rowe's writings. Simply described, this strategy is one that encourages conflict by juxtaposing carefully selected artifacts, qualities, or criteria. It can be found in Rowe's setting Palladio's Villa Malcontenta next to Le Corbusier's Villa Stein or in his placing of the 19th-century notion of "character" beside that century's notion of "composition." It is seen in epigrams that begin various essays. An excerpt from Wren's *Parentalia*, for instance, opens "The Mathematics of the Ideal Villa" by insisting "There are two causes of beauty—natural and customary" and goes on to assert both that "[g]eometrical figures are naturally more beautiful than irregular ones" and that "[t]here are only two beautiful positions of straight lines, perpendicular and horizontal. . . ."[6] Paired definitions of "transparency" serve as epigrams to "Transparency: Literal and Phenomenal" and underscore the distinct and possibly conflicting perceptions that suggest the essence of that essay. At smaller scales, Rowe's coupling is exemplified in symmetrical sentences in which syntax and alliteration implicitly link the letters, words, and phrases of the first half of a sentence with similar letters, words, and phrases in the second half: "Dom-Ino, *one might suggest*, is expan*sively* kind; but Citrohan, *one might believe*, is poten*tially* coercive."[7]

Deployed throughout *The Mathematics of the Ideal Villa and Other Essays*, this strategy effectively suspends the conclusiveness of the original essays, offering all for reconsideration. It serves as solvent for dissolving what Rowe terms "the tyranny of inert ideas."[8] Fresh combinations are essential, and a kind of unending dialogue is initiated—sometimes between opposites but often between things similarly construed. A symmetry is suggested, supported by a not-quite-chronological ordering of the essays. "The Architecture of Utopia," for instance, was published in 1959, yet it closes the book and follows "La Tourette," published in 1961. This arrangement of the essays, however, encourages one to pair the first essay with the last, the second with the second last, the third with the third last, and the fourth with the fifth and sixth (parts I and II of a two-part essay). Thus the second essay, "Mannerism and Modern Architecture" is linked to the second-to-last essay, "La Tourette," most obviously in the discussion of the blank panel and ambiguous planes of two of Le Corbusier's buildings (a coupling that continues far more directly in Rowe's 1987 "The Provocative Facade: Frontality and Contrapposto"[9]). "Character and Composition," the third essay, and "Transparency: Literal and Phenomenal," the third-to-last essay, take as their starting point an investigation into word usage. Finally, "Chicago Frame" and "Neo-Classicism and Modern Architecture I & II" are concerned with the significance of the structural frame as an essence of architecture, with the status of the frame as an icon, and with the place of the frame in Modern Movement theory. While the three middle essays address American work, the others are concerned with European. The first four essays elucidate and analyze problematic issues; the final five synthesize and begin to suggest paradigmatic solutions. It is as if in the first four essays, Rowe viewed Modern Movement architecture in the present tense and in the final five in the past tense. And although in these second-half essays Rowe expresses skepticism about Modern Movement theory, he nevertheless upholds certain of its monuments as models, as representations of the possibility of interaction of opposites leading to noncoercive assertions.

Throughout, Rowe places the work of Le Corbusier beside that of Palladio. Both architects appear in eight of the nine essays. The Villa Stein at Garches (or its structural icon, the Maison Dom-Ino) is the most frequently cited building, appearing as it does in six essays, always as a component of comparison. In "The Mathematics of the Ideal Villa," Rowe compares Garches to Palladio's Villa Malcontenta. In "Chicago Frame," he dubs the Maison Dom-Ino "not so much a structure as an icon, an object of faith . . . an outward sign of a new order,"[10] and contrasts its iconographic capacity with the structural frame's more instrumental application in 1890's Chicago. In "Transparency: Literal and Phenomenal," he contrasts Garches to both Gropius's Bauhaus building at Dessau and to Lèger's painting. With each pairing, Rowe advances issues raised in earlier essays, underscoring the sense of the writing as cumulative and the book as unified, while simultaneously exploring various aspects of a central concept—a "condition of permanent argument," that he believes the Villa Stein—with its 'pancakes on pins' structural *parti* supporting possibly conflicting free facades and free plan—is "formed" to represent.[11]

"Illustrative text" also offered Rowe opportunity for new interpretation. The book includes only two building sections—Wright's St. Mark's Tower and Boullèe's Cenotaph for Newton—and it presents few details, no interiors, and only an occasional axonometric. In general, Rowe represents architecture primarily in plans (the conceptual) and elevations (the perceptual). The format of *The Mathematics* is compact and ordered, and the illustrations are of uniform quality. For the most part collected at the end of each essay, illustrations serve as terminus, while their uniformity ensures the continuity of the whole, a continuity enhanced by neat alignment within designated borders. Though supplementary and subservient, the illustrative text is not lifeless. Occasional adjacencies and structural similarities conspire to implicitly suggest a comparison never explicitly taken up. Le Corbusier's Maison Dom-Ino, for instance, with its vertical columns, horizontal flat slabs, and punctuated footings, seems an abstraction and reordering of similar components evident in a similarly rendered image of Karl Friedrich Schinkel's Altes Museum. Both are compact boxes depicted in two-point perspective, and, when they are made to share the same page (the Altes, it might be noted, did not appear in the essay as originally published), their formal similarities emerge.

The book's illustrations are nearly identical to those accompanying the original publication of each article, the exception being those with "The Mathematics of the Ideal Villa."[12] Whereas in 1947 these were tailored to highlight similarities between the Villa Malcontenta and the Villa Stein, in the book they emphasize differences. The floor plans, for instance, which in 1947 were shown sketched in "sloppy modern" hand and drawn to exactly the same size, are in 1976 shown in the hand of the architect and seem drawn to scale. The Villa Stein is lightly and finely rendered. The Villa Malcontenta is shown as it might have appeared in Palladio's *Quattro Libri*, dimensioned in proportional numbers and including heavily rendered walls, the wings of which extend the building out into the landscape. (It was the absence of these wing walls that drew heavy criticism against Rudolf Wittkower's sketches of Palladian villa plans in his *Architecture in the Age of Humanism*.) The same can be said of the elevations of Stein and Malcontenta, each drawn fittingly for its date of execution and now no longer placed side by side but instead shown on different pages. In emphasizing differences, the revised illustrative text reveals a change in Rowe's critical position: "something of the *density* of history" is reestablished.

However, the most extensive and illuminating changes, and certainly those that most directly effect the construction of a revised critical position, involve the renovation of words and phrases, resulting in what Rowe, in reference to

Robert Venturi, has termed a "private vocabulary."[13] Again, "The Mathematics of the Ideal Villa" is the essay most thoroughly renovated, with alterations occurring incrementally in several publications between 1947 and 1976. Occasionally, entire paragraphs are added to redirect the essay, aligning it with later work. One such major change is the five-paragraph section beginning with the addition in the 1976 version of "But, if Le Corbusier's facades are for him the primary demonstrations of the virtues of a mathematical discipline, with Palladio it would seem that the ultimate proof of his theory lies in his plan" (9). As this new sentence states, and as the paragraphs that follow it go on to argue, a clear distinction is being drawn between Le Corbusier, who attempts to objectively determine the "perceptual" facade, and Palladio, who attempts to do the same with the "conceptual" plan. This major difference between the two architects, a difference articulating opposing camps, emerges clearly only in the later version; the original essay emphasizes similarities. Complementing and extending this strategy for increasing density through debate, Rowe replaces the tone of certainty in the original with one of speculation and conjecture. "Structures, of course, are entirely different" (101) for example, becomes "Structures, of course, are not to be compared" (4). Blunt conclusions are eroded or removed. "A diagrammatic comparison will reveal the fundamental relationships" (101) and "The diagonal of the staircase forms the balance" (102), for instance, are deleted, while qualifying phrases that did not appear in the original—"just possibly" or "here it might be better to introduce an *almost*"—are inserted. These changes evince a new speculativeness: the reader is receiving not an answer but a conjecture that may be accepted, rejected, or refuted.

Throughout, wording that competes with or undercuts Rowe's "private vocabulary" is removed, and the essay is groomed to conform to a select set of ambiguous words. For instance, in the 1947 "Mathematics," the word *diagonal* occurs often, yet in the book version it is scarcely found.[14] *Diagonal* relates *horizontal* to *vertical*, key words in Rowe's private vocabulary, each belonging to a distinct camp comprised of Rowe's "universal" words that oppose one another. In his later writings Rowe shows a marked preference for *oblique* over *diagonal* presumably because *oblique* has two applicable meanings, one physical and the other abstract. When used with consistency, such duality allows Rowe to convey two thoughts at the same time; they exist on separate planes and yet are resolved in a single word. Two (or more) layers of meaning "interpenetrate without . . . destruction of each other"[15]—a condition that Rowe championed in both art and architecture. He achieves a "density" not available in the one-dimensional *diagonal*. Hardly unique to Rowe, such renovation conforms to a tactic that literary critic I. A. Richards once described as the selection of "a wider word than fits our thought" in an attempt to hold possible meanings in suspension or permit more than one meaning to be conveyed simultaneously.[16] As in most restructuring, one modification affects another. *Floor*, like *oblique*, occurs again and again, and in the later essay "an asymmetrical cutting open of the floor"[17] is substituted for the less active "an asymmetrical well."[18] Like *horizontal* (and as detailed below), *floor* aligns itself with a particular camp and remains aligned with that camp throughout the book. Even in later essays such as the 1987 "Provocative Façade," *floor* takes as its opposite *wall*, a word that belongs to the *vertical* camp.

It is hardly difficult to discern Rowe's private vocabulary. Even a cursory review of his writings reveals the following paired opposites:

vertical	horizontal
exterior	interior
facade	structure
perceptual	conceptual
visual	abstract
facade (elevation)	plan
form	idea
contingent	absolute
concrete	abstract
realization	ideal
flesh	spirit
liberty	authority
facts	universals
reality	myth
what they are	what they signify

Though not exclusively taken from *The Mathematics of the Ideal Villa and Other Essays* (indeed, the first five pairs are found within a single paragraph of "The Provocative Façade"), these "opposites," deployed consistently, punctuate and give structure to Rowe's writing, establish it as cumulative, and reinforce its quality of becoming.

3. The form of Rowe's writing is like the form of the architecture that it describes. Text and object assume a similar structure; text takes on characteristics of the artifacts under consideration, and these buildings seem more "textured" as a result. Such construction provides definition to the author's idea of architecture, even as it describes metaphorically his nonassertionist critical position. It is therefore understandable that Le Corbusier's Villa Stein at Garches appears in six of the nine works that make up *The Mathematics of the Ideal Villa and Other Essays*. The Villa Stein is the plastic analogue of Rowe's critical understanding. Rowe's writing consciously cultivates a capacity for analogy. It operates on multiple levels of meaning and exhibits a special concern for words and syntax necessary to sustain that multiplicity.

Rowe's reshaping of words into the edifice that is *The Mathematics of the Ideal Villa and Other Essays* was only a beginning. By cultivating a highly ambiguous language, by employing a private vocabulary that permits the coexistence of the mundane and the metaphysical, Rowe convincingly united all of his efforts, cumulatively fabricating enlargements on a theme that otherwise might be understood as disjointed or fragmented. And so, in the "Addendum 1973" that follows "The Architecture of Utopia," and in closing *The Mathematics of the Ideal Villa and Other Essays*, Rowe echoes his critique of Mumford two decades earlier, implicitly comparing a legitimate critical position with utopian architecture. "So there are no criteria which cannot be faulted," he writes, "which are not in continuous fluctuation with their opposites. The flat becomes concave. It also becomes convex. The pursuit of an idea presumes its contradiction. The external works and the senses both equivocate; and criticism, however empirical it may sometimes profess to be, depends always upon an act of faith, upon an assumption . . . of impossible realities but plausible abstractions. . . . [T]he possible, the probable, and the plausibly abstract are always in a continuous condition of intersection. . . ." (216). And here it must be recognized that "continuous fluctuation" and "impossible realities but plausible abstractions" come close to describing the metaphor of an anti-utopian utopia that underlies Rowe's now renowned urbanism. For what is his remarkable *Collage City*—Rowe's self-proclaimed "proposal for constructive dis-illusion"—if not a pluralist scheme for an urban environment in which opposites coexist and ambiguity is everywhere in evidence? And regarding architectural education, what to make of Rowe's conviction that such is "a very simple matter," that the "task of the educator" is: "1. to encourage the student to believe in architecture and modern architecture; 2. to encourage the student to be skeptical about architecture and modern architecture; and 3. then to cause the student to manipulate, with passion and intelligence, the subjects or objects of his conviction and doubt."[19] This is to suggest that all of Rowe's later endeavors—writing, teaching, and theorizing an urban environment—seem to follow in one way or another criteria articulated in his "Mumford article" nearly half a century ago.

And again, to enlarge, the results of Rowe's writing and teaching are manifested in the built works of many of the more remarkable architects active in the second half of the last century. Most obvious, perhaps, was Rowe's influence on the neo-Corb New York Five and on both the Corbu-ish and then the decidedly Postmodern endeavors of his Liverpool student James Stirling. For isn't Stirling's Olivetti Training Center in Haslemere really just a '60s remake of Le Corbusier's unbuilt "Portable School" project of 1940?[20] And couldn't we consider his Staatsgalerie in Stuttgart merely a built elaboration of the protracted comparison between Schinkel's Altes Museum and Le Corbusier's Chandigarh Palace of Assembly suggested by Rowe in the "Addendum 1973" to his "Mathematics" essay? And then, too, there is the remarkable if somewhat remote resemblance between Robert Venturi's *Complexity and Contradiction* and Colin Rowe's much earlier "Mannerism and Modern Architecture."

Finally, and far less obvious but perhaps more important, there is Rowe's relationship to Louis Kahn. In 1956 Rowe sent Wittkower's *Architectural Principles in the Age of Humanism* as a gift to the then Beaux-Arts Brutalist, Louis Kahn. "For me, your cubes, your hexagonal cells, are objective data with a life of their own in which one can't intervene," Rowe writes to Kahn, commenting perhaps on his Trenton

Jewish Community Center. "They are independent, aggressively so, irreducible, intractable phenomena. This I like. At the same time, although they are independent, they are in fact the acts of your volition. Once born you can't violate their mode of being. But you are in a position (since they are independent) to argue with them."[21] Rowe's insight suggests that condition which he would later call "permanent argument"—an ideal for both architecture and criticism. Rowe goes on to advise Kahn: "[Y]our cubes are a very powerful system of ordinance which I would like nothing better to do than to attempt to bring into some sort of dialectical relationship with parti." He encloses with the letter "a tracing of a Palladio plan . . . for an ideal building," noting that the "transparency and the variety of reading of the forms is what engrosses me about it. It all holds together, . . . being the curious, equivocal abstraction that it is. . . ."[22] And in colored pencil, Rowe marks the many "readings" that arise from such ambiguity, clearly expressing his preference for pluralism of this sort and perhaps directing Kahn toward his greatest discovery: he revised the Trenton Bath House accordingly, complete with poche space, a servant and served disposition, and a highly ambiguous parti. A new architecture of dialectical relationship was born. *The Mathematics of the Ideal Villa and Other Essays* is like this architecture. It is "book-building" at its best, and *who*, who but Colin Rowe could have accomplished this?

Notes

1. Colin Rowe, writing from "19 RENWICK PLACE, ITHACA, NEW YORK 14850," in a letter to Daniel Naegele dated November 9, 1991. All enhancements—underscoring, the comma in "P.R, B.," idiomatic spellings—are Rowe's.
2. Ibid., 2–3. Typewritten on brilliant pink paper, this letter is without certain diacritical marks.
3. This favorable description, quoted on the dust jacket of the original edition of *The Mathematics of the Ideal Villa and Other Essays*, is from a later (1966) edition of Banham's *Theory and Design in the First Machine Age*. The original edition (London: The Architectural Press, 1960) mentions Rowe only in a rather derogatory sentence (p. 19), contradicting his 1953 assertion that Julien Guadet "envisaged an architecture of pure form."
4. Colin Rowe, "Roots of American Architecture: An Answer to Mumford's Analysis," *Architectural Review*, August 1954, 76. Here Rowe reviews Lewis Mumford's *Roots of Contemporary American Architecture* (New York: Reinhold Publishing Corporation, 1952), subtitled "a series of 37 essays dating from the mid-nineteenth century to the present." It is perhaps worth noting that in this collection much of what concerns Rowe in his "Chicago Frame" can be found in various essays by Montgomery Schuyler, Louis Sullivan, Frank Lloyd Wright, and Sigfried Giedion.
5. Ibid., 78.
6. As quoted in *The Mathematics of the Ideal Villa and Other Essays*, 2.
7. Colin Rowe, "The Provocative Façade: Frontality and Contrapposto," in *Le Corbusier Architect of the Century* (London: Arts Council of Great Britain, 1987), 28.
8. Colin Rowe, "Architectural Education in the USA" (a speech delivered at the 1971 MoMA conference of this name), *Lotus* 27, 1980, 46.
9. "The Provocative Façade," 24–28.
10. *The Mathematics of the Ideal Villa and Other Essays*, 107.
11. In addition to Le Corbusier and Palladio, the book's standard cast includes: Picasso as representative of Synthetic Cubism; Mies and Gropius, the former more prevalent than the latter; and Giedion, the only character to be portrayed unsympathetically and whose history Rowe takes delight in correcting. For a "condition of permanent argument," see "The Provocative Façade," 27.
12. Colin Rowe, *Architectural Review*, March 1947, 101–104. Rowe wrote this article (perhaps the most renowned essay on architecture written in English in the 20th-century) while a twenty-six-year-old graduate student at the Warburg Institute in London studying under Rudolph Wittkower, who had published essays on Alberti and Palladio during the war (Rudolf Wittkower, *Journal of the Warburg and Courtauld Institutes*, vol. 7, 1944, and vol. 8, 1945) and was to publish his famous *Architectural Principles in the Age of Humanism* in 1949. Should the very brief discussion above of Rowe's illustrative text construction seem less than likely, the topic of Colin Frederick Rowe's thesis as submitted to the University of London in 1947 for the degree of MA in the History of Art might suggest otherwise. A comprehensive and detailed study, "Theoretical Drawings of Inigo Jones: Their Sources and Scope" persuasively argues that Inigo had specially prepared certain illustrations for a book to be modeled on Palladio's *Quattro Libri*. Rowe assembles the drawings accordingly and in so doing exhibits a thorough understanding of the role of illustration in the Renaissance treatise.
13. Colin Rowe, "Robert Venturi and the Yale Mathematics Building," *Oppositions 6*, Fall 1976, 1–23. One might note a possible discrepancy between the opinion expressed in this article and that expressed in Rowe's "Waiting for Utopia," a 1967 *New York Times Book Review* in which the "illustrative material" of *Complexity and Contradiction in Architecture* is deemed "inadequately reproduced."
14. See, for example, "The Mathematics of the Ideal Villa," 1947, 102. "The diagonal of the staircase forms the balance" and "Displacement and breaking up of the feature once again compensated by diagonal relationships. . . ." But for the sake of brevity, other examples could be cited, for instance, Rowe's deletion of the phrase "void and solid"—key terms in his later *Collage City*—and the attention that he gives in the book version to a consistent use of the word.
15. *The Mathematics of the Ideal Villa and Other Essays*, 168.
16. I. A. Richards, *Principles of Literary Criticism* (London: K. Paul, Trench, Trubner, & Co., 1924).
17. *The Mathematics of the Ideal Villa and Other Essays*, 6.
18. "The Mathematics of the Ideal Villa," 102. Rowe's restatement of the difference between Palladio's and Le Corbusier's "interpretation of the roof" might suffice as another example of his rewording. Thus in the book version of the essay: "At the Malcontenta this forms a pyramidal superstructure which amplifies the volume of the house; while at Garches it is constituted as a flat surface, serving as the floor of an enclosure. . . ." What was conceived of as a "flat roof" in 1947 is here described as "the floor."
19. Rowe, "Architectural Education in the USA," 43.
20. For Le Corbusier's Portable School project, see Le Corbusier and Pierre Jeanneret, *Œuvre complète*, Volume 4, 1938–46, ed. Willi Boesiger (Zurich: Les Éditions d'Architecture Artemis, 1991), 100-102.
21. Colin Rowe, unpaginated letter to Louis Kahn written from the School of Architecture, the University of Texas, Austin, February 7, 1956 (Kahn Archives: the University of Pennsylvania, Philadelphia).
22. Ibid.

***Daniel Naegele** is an architect and assistant professor of architecture at Iowa State University.*

Reviewed by Thomas Bender

The City in History

Its Origins, Its Transformations, and Its Prospects

by Lewis Mumford

New York: Harcourt, Brace & World, 1961

Is *THE CITY IN HISTORY* actually a history? The question is worth asking. The carefully phrased title does not announce a history *of* the city; rather, it proposes reflections on the city *in* history. The distinction is important for understanding Lewis Mumford and his most successful book. (*The City in History* sold 31,000 copies in hardcover and more than 100,000 in paperback.)

We rightly remember Lewis Mumford as perhaps the century's most important American student of cities, architecture, and technology. He has contributed vastly to our knowledge in these fields. But Mumford was above all a public moralist. He identified himself as a writer, and as such he was determined to speak in public on issues that mattered. The fields with which he is identified are those he knew best, his intellectual capital, most of it banked early in his career. But they were the means rather than the end of his work. Moral reform—the renewal of human values—was his vocation.

Hence *The City in History* is both more and less than a history of cities and urban design. In its pages Mumford observes the human condition in its most important theater. Exploring the multiple and contradictory experiences of humanity, of civilization, which he identified with the city, Mumford offers moral lessons. Along the way, he reveals a vast, eclectic, fascinating, though sometimes tendentious and thin knowledge of cities and civilization.

Few if any historians could match his knowledge of historical and contemporary cities. Perhaps only Fernand Braudel, his French contemporary, could. Comparison here is illuminating. The two are radically different, yet they share a great deal. Both, for instance, learned much from French geographers, particularly about the importance of regions. Both understood the environment as a part of history and as the terrain of both possibility and constraint. Both rejected the preoccupations of professional historians with nations, politics, and events. And, of course, both encompassed vast topics in their work.

The differences, however, are substantial. Mumford was contemptuous of academic scholarship, while Braudel was the consummate academic historian, ensconced at the head of a dominant academic institution. While Mumford was a loner who trained no successors and bequeathed no "method," Braudel created a distinctive school of history and historical methods that profoundly affected the writing of history on both sides of the Atlantic. But in the end, the most striking difference is simply that one is a historian and the other is not.

The difference leaps out at the reader. There is in Braudel a rigor of thought and documentation absent in Mumford. But I would rather stress their different purposes. To say that Braudel was a historian is not to deny his role as a moralist. But the foreground of his