

1995

A behavioral language for motion planning in building construction

Rudi Stouffs
Carnegie Mellon University

Ramesh Krishnamurti
Carnegie Mellon University

Irving J. Oppenheim
Carnegie Mellon University

Follow this and additional works at: <http://repository.cmu.edu/architecture>

 Part of the [Architecture Commons](#)

This Article is brought to you for free and open access by the College of Fine Arts at Research Showcase @ CMU. It has been accepted for inclusion in School of Architecture by an authorized administrator of Research Showcase @ CMU. For more information, please contact research-showcase@andrew.cmu.edu.

JSAH

JOURNAL *of the* SOCIETY *of* ARCHITECTURAL HISTORIANS



can readily understand how the Depression, the acute political crises of the 1930s, and the increasing social engagement and populism of intellectuals during this period would reinforce the spiritual and emotional currents sparked by his South American travels.

A few comments about the translation and certain editorial decisions are in order. Translating Le Corbusier is an extremely difficult task, and like most of the translations to date, this one leaves something to be desired. Frederick Etchells, the translator of *Vers une architecture* and *Urbanisme*, captured much of the tone of Le Corbusier—or perhaps we have just become used to him as the architect's English voice; however, he made frequent errors and felt no compunction about omitting major passages. The *Precisions* translation, done by Edith Schreiber Aujame, an American by birth who once worked for Le Corbusier, sticks closely to the text, but such literal faithfulness to the original French syntax tends to flatten Le Corbusier's passionate, aphoristic prose. More significantly, this edition raises questions about the publisher's decision to issue a book of this nature without a scholarly introduction or supplemental notes. Today, many of the book's references and allusions are obscure. It would be helpful to identify, for instance, the Redressement Français, Taylorism, the Green City competition, the Commission of Planners, *L'Ami du Peuple*, and such people as Nénot, Mongermon, de Monzie, Bonnier, Mr. A.R., and Mr. B. An introduction by an architectural historian familiar with this period of Le Corbusier's career, such as Tim Benton, Jean-Louis Cohen, or Christiane Collins, might have helped scholars and general readers alike. Additional visual material could also have enriched the publication. Another regrettable decision is the elimination of color in this supposed facsimile edition, given Le Corbusier's own statement in *Precisions*, "With color you characterize, you classify, you read, you see clearly, you manage" (225).

These criticisms, however, are meant primarily as a plea for a more careful, scholarly approach to future translations of Le Corbusier books. For whatever its shortcomings, this edition gives English-speaking architects and students an entrée into a period of Le Corbusier's work that is usually

overlooked in twentieth-century surveys. *Precisions* not only gives us insight into a critical moment of transition in Le Corbusier's work but also reveals a dimension of this complex yet very human architect—his interest in nature and vernacular culture—that has been largely neglected in the functionalist polemics of the early Modern Movement and in the recent critiques of those same polemics.

—Mary McLeod
Columbia University

*Vittorio Magnago Lampugnani and
Romana Schneider, editors*

**MODERNE ARCHITEKTUR IN
DEUTSCHLAND 1900 BIS 1950:
EXPRESSIONISMUS UND NEUE
SACHLICHKEIT**

Stuttgart: Verlag Gerd Hatje, 1994,
351 pp., numerous b & w and color illus.
DM 65 (paper). ISBN 3-7757-0452-3.

"History is not merely a scrivener's painstaking reiteration of supposedly objective facts. . . . It is invariably subjective, a product of its time, vulnerable to attack, open to contradiction, and liable to change. It can and must be rewritten—time and time again—from the ineluctable viewpoint of the present" (9). Nowhere do these words from Vittorio Lampugnani's introduction ring more true than in Germany today, where the post-Wall building boom, in search of direction, is being accompanied by a renewed examination of the country's recent architectural history from the full span of the political spectrum. The exhibition series "Modern Architecture in Germany 1900 to 1950," instigated by Lampugnani, until recently the director of the Deutsches Architektur Museum in Frankfurt, seeks to reexamine a well-studied period of German architectural history, applying a better-balanced, more even-handed approach than traditional Modernist historiography has done to date.

The first exhibition, of 1992, subtitled *Reform and Tradition* (catalogue reviewed in *JSAH* 52 [1993]:347–9), examined the frequently ignored progressive traditionalism that reigned over much of German architecture throughout the first half of this century, and sparked a controversy over its dominant message that many of the "moderate Modernists" (figures such as Heinrich

Tessenow, Fritz Schumacher, and Paul Schmitthener) were every bit as *modern* (defined as "that which is of our day, now") as their better-known avant-garde colleagues. Critics charged that Lampugnani, and the group of scholars around Hartmut Frank and Wolfgang Voigt who contributed to the first catalogue, were overly apologetic toward architects who later became key figures in the Nazi architectural machine.¹ The debate expanded to architectural design circles when Lampugnani advocated a conservative "return to a New Simplicity" in contemporary building, and endorsed a more reductive, well-crafted architecture that would continue the heroic traditions of Prussian classicism and of the Berlin School, the followers of Schinkel. German critics reacted vehemently to his calls for "islands of order in currents of confusion," but Lampugnani, who wields a great deal of power through the museum and in the press, continues his crusade.²

The second exhibition, *Expressionism and the New Objectivity*, examines more familiar ground, that of the radical avant-garde, the other half of a dichotomy that split the architectural community before World War II. Here the extant literature is voluminous and still growing. Lampugnani himself provides a somewhat pedantic chronological summary of the earliest histories (from Behne and Platz through Hitchcock, Pevsner, and Giedion) and demonstrates how "prejudiced, single-minded and partisan" (273) they were in supporting rationalist high Modernism (290). Giedion, for example, completely dismissed Expressionism, declaring it a "transitory element" that "had no influence on architecture." More recently, an array of reprints and anthologies have been published that may make possible more objective evaluation by providing a broad range of hard-to-find source materials for the period (although unfortunately none of these compendia offer much in terms of critical commentaries on the writings or their contexts). So why was yet another exhibition and book needed on these exhaustively researched fields?

Lampugnani answers his own rhetorical question by reiterating the need to "rewrite history from the viewpoint of the present" and argues that Expressionism and *neue Sachlichkeit*, usually regarded independently and too often seen as opposites, cannot be studied separately. Both are products of an

epoch marked by dramatic social upheavals, political instability, and a high degree of idealism, and both hoped to create a totally new architecture for a new, more vital generation which would emerge from the devastation and chaos that followed World War I. The colorful crystals of Expressionism and the white cubes of the New Objectivity [ed. note: the usual translation of *neue Sachlichkeit* although perhaps "functionalism" would be a more accurate rendering], Lampugnani writes, are "two sides of the same coin" (9).

This thesis is not new; scholars like Barbara Miller Lane, Wolfgang Pehnt, and Rosemarie Haag Bletter have recognized the cross-fertilization between the utopian dreams of the immediate postwar years and the pragmatic rationalism of Weimar housing schemes. Fortunately, most of the fourteen excellent contributions to the volume go beyond showing the correspondences between the two movements—although, somewhat surprisingly, the catalogue is rather apolitical in its discussions.

Each of the first six essays pursues a single, physical leitmotif of modern architecture through the turbulent decades around World War I: the predominance of the grid (Wilfried Wang), the tower and the cave, which hark back to Nietzsche's *Zarathustra* (Pehnt), the development of a "light architecture" (Oechslin), and the use of color, even in the "white boxes" of the New Objectivity (Herrel). Fritz Neumeier follows the changing conception of the ideal body from the free-spirited nude at the turn of the century, to the strong, mechanized athlete in the late 1920s, and relates it convincingly to the development of different building styles, from optimistic Jugendstil works to the transparent, highly structured buildings of Hannes Meyer. Regine Prange defines the changing image of the crystal from colored symbol to rational cube as evidence of a larger paradigm shift from historicism to Modernism. While none of these topics is totally new, assembling them in one catalogue allows the reader to draw interesting connections.

Stanislaus von Moos's essay on the love-hate relationship between Germany and Le Corbusier, from the Swiss master's first trip to Germany in 1910 until his work for the Vichy government in 1941, is one of two cross-cultural investigations of the interna-

tional influences which helped shape avant-garde German architecture. More provocatively, Simone Hain, trained in the former East Germany, looks at Germany's relationship with "the East," a domain that encompasses the physical territories from Silesia and East Prussia to Czechoslovakia and Russia, and the spiritual influences of the Far East. Following the work of the self-proclaimed functionalist—or what we today would term "organicist"—architects such as Hugo Häring, Hans Scharoun, and Erich Mendelsohn, she notes how "the East" shaped their optimistic, individualistic, dynamic view of utopia as a social enterprise and how these ideas clashed with the rational, western, American-influenced New Objectivity. At the end of her essay she enters the contemporary design debate as she argues for a kinder, more socially oriented (read socialist, or Eastern) architecture, of the kind designed by Scharoun on the Kulturforum, to replace the rationalist projects that are springing up all over Berlin, most notably at the Potsdamer and Alexander squares, centers of the former East Berlin.

The most interesting essays are the more synthetic, theoretical, and broad-based studies which come at the end of the catalogue. Lane provides the broadest account of Weimar architecture, tracing the eternal hope that architects of the period placed in the transcendent, transformative power of architecture, but her essay would have been strengthened had she dealt more with the politics mentioned in her title: "Modernism and Politics in Germany between 1919 and 1945." Alan Colquhoun's essay, parts of which have also appeared in English (*AA Files* 28 (Aug. 1994): 26–33; *Domus* 757 (Feb. 1994): 46–48), draws interesting philosophical parallels between Expressionism and the New Objectivity. He demonstrates how Modernist critics such as Adolf Behne and Sigfried Krakauer balanced and oscillated between the dominant dichotomies of the day, including *Kultur* versus *Zivilisation*, *Gemeinschaft* versus *Gesellschaft*, art versus craft, and even conservative versus progressive. These critics fought both the rationalization of capitalism and the aestheticization of the New Objectivity. They maintained a trust both in technology and in the opinions and spontaneity of the masses. It seems that nothing about the Modern Movement in Germany is as or-

dered or uniform as historians have often made it out to be.

The final essay, by Werner Durth, the author of the provocative *Deutsche Architekten, Biographische Verflechtungen* (Braunschweig, 1986), points out intriguing continuities that run through German architecture from 1900 to 1950. He highlights some obvious though troubling connections between Weimar Modernism, the Nazi industrial architecture of Herbert Rimpl and Ernst Neufert, and postwar reconstruction efforts. He thus sets the tone for the third and final exhibit in the series, subtitled "Power and Monumentality," which will study modern state architecture of the period, especially the classicism of National Socialism. Despite Lampugnani's intentions to undertake a new, even-handed look at the Modern Movement in Germany, the essays in the first two catalogues of the trilogy, with few exceptions, continue to promote the standard dichotomy of tradition versus modernity that has dominated the historiography since the 1920s. Even in this well-researched field there is room for more synthetic views, both synchronic and diachronic, which would attempt to shed the rigid antitheses and contradictions that have been forced by politics and partisan writings. Perhaps the third exhibition, which will provide ample opportunities to study the complexity and diversity that existed throughout the modernizing Germany, will be another forum for historians to deal with the difficult political questions associated with the materials.

— Kai K. Gutschow
Columbia University

Notes

¹ The most important critiques include Franz Dröge and Michael Müller, "Die Revision der Moderne: Ein Skandal," *Arch+* 122 (June 1994), and the series of essays under the heading "Moderne und Gegenmoderne" in *Centrum. Jahrbuch architektur und Stadt* (1994).

² See, for example, Lampugnani, "Die neue Einfachheit. Mutmaßungen über die Architektur der Jahrhundertwende," *Architektur Jahrbuch—DAM* (1993); "Die Provokation des Alltäglichen. Für eine neue Konvention des Bauens," *Der Spiegel* 51 (1993); and "Das Naheliegende ist die größte Provokation," *Frankfurter Rundschau*, 30, Oct. 1993.

