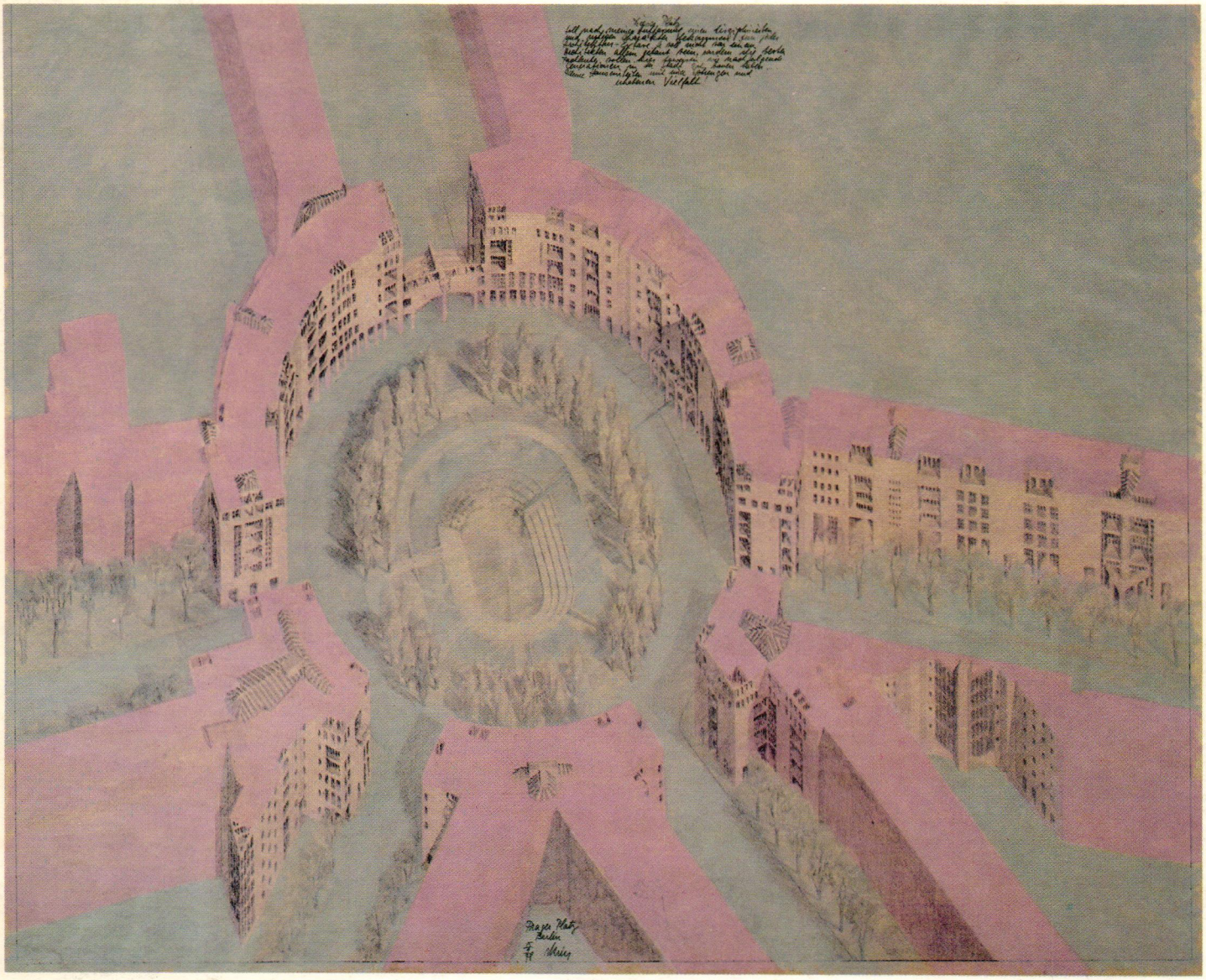
City Segments



(cover)
Rob Krier
Axonometric drawing of proposal
for Prague Square, Berlin, 1977

This issue of *Design Quarterly*
was published with the assistance
of grants from the National
Endowment for the Arts and
the Graham Foundation
for Advanced Studies in the
Fine Arts.

Published by:
Walker Art Center
Vineland Place
Minneapolis, Minnesota 55403

Editor: Mildred S. Friedman
Graphic Design: Robert Jensen
Circulation: Linda Krenzin

ISSN 0011-9415

Design Quarterly is listed in
Art Index
Change of Address: To insure
receiving all copies, give old
address as well as the new one
and allow five weeks for change
to become effective.

Subscription Rates:
4 issues $9
8 issues $16
12 issues $21

Exhibition Travel Schedule

Walker Art Center
19 April–15 June 1980

The Chicago Public Library Cultural Center
29 June–10 August 1980

Fort Worth Art Museum
31 August–12 October 1980

Blaffer Gallery, University of Houston
9 November–21 December 1980

Neuberger Museum, College at Purchase
State University of New York
18 January–15 March 1981

Ft. Worth
27 Sept 1980

City Segments

Design Quarterly 113 . 114

Editor's Notes

Urban design and architectural depiction are the subjects of *City Segments.* The exhibition and this issue of *Design Quarterly* which accompanies it include the current work of a broad range of architects who are expressing ideas and concerns about the city through the means of drawing.

Of the 30 architects represented here, the majority deal directly with the built environment, about one-fourth have produced "paper" or so-called "visionary" proposals and a small number are expressing their ideas in essentially non-architectural terms. This last category of expressionistic works is mythological or perhaps literary, poetic or narrative; it employs none of the accepted modes of architectural depiction but instead uses traditional painting forms and techniques not usually associated with architecture.

Various ways to express architectural ideas on paper are briefly described in this issue and an example of each of the dominant modes is illustrated. Each drawing type—plan, elevation, section, perspective, axonometric—has a specific function in that it depicts a particular surface aspect of the architecture proposed. Application of the various drawing methods to the depiction of urban projects and the related development of urban planning are discussed by Diana Agrest and Garth Rockcastle. Both suggest in different ways that urbanistic drawings have played more than an academic role in the evolution of the contemporary city. Often the speculative images of such visionaries as Camillo Sitte, Frank Lloyd Wright and Le Corbusier have stimulated change and in a number of cases have clearly prefigured reality.

The architects included in this issue represent a cross-section of views towards urban questions and the role of the designer in finding ways to confront current architectural issues. This can be traced in part to the diversity of their backgrounds for they are American, European, Canadian and Japanese, a point that only underlines the fact that a worldwide reassessment of modernist planning and architecture characterizes recent architectural polemics. Inevitably a surfeit of historicism will permit a new inventive spirit to evolve out of the complex collage of past glories and a civilized union of old and new will emerge.

We are grateful to the 30 architects and their associates who have provided the provocative works for this collection of urban images; each is accompanied by the architect's description and assessment of the project's impact on its specific site and city. Particular thanks are due Diana Agrest, fellow at The Institute for Architecture and Urban Studies, New York, and Garth Rockcastle, Assistant Professor, University of Minnesota School of Architecture, who have written articles for this issue in addition to providing important projects for it. We are also indebted to other faculty and students of the University of Minnesota School of Architecture who have cooperated with us on the development of the exhibition and this issue of *Design Quarterly:* Professor Gunter Dittmar with Frederick Rogers and Emmanuel Ginis carried out much of the research for the section on historical depiction, and Bill Tabberson compiled the architects' biographies.

Our thanks also to Fran Nelson of the Max Protetch gallery, New York, for her assistance in securing the works of Aldo Rossi.

Though in architecture, drawing is often thought of as simply the means to an end, the character and quality of the works in *City Segments* support a growing belief that drawings can, in addition to their more practical applications, express philosophical and aesthetic ideas. In doing so, they often open our eyes to space and form previously unseen. MSF

Contents

Gunter Dittmar, Kenneth Rogers, Emmanuel Ginis

Architecture and Depiction

As a tool, architectural drawing is primarily a translator or mediator at the interface of a mental vision and that vision's physical manifestation. It is within drawing that an image finds its first rough expression and where vast amounts of information and complex interrelationships can be comprehended, manipulated and synthesized. This process is best exemplified by the use of tracing paper for quick multiple overlays, one of the most important innovations in architectural depiction.

Throughout architectural history, a variety of drawing types has evolved, primarily since the Renaissance, when paper became plentiful. Today's architect has techniques at his command that permit the representation and manipulation of both highly intangible philosophical issues and complex physical objects. It is a spectrum that ranges from diagram and notation systems to plans and three-dimensional projections, from rough sketches to highly refined finished drawings and to machine-made images such as those generated by means of the computer.

For any symbol set, either written or drawn, to become an efficient tool of communication, it must go through a process of conventionalization. Despite the great variety of drawing techniques in architecture, it is, perhaps, surprising that they fall into only three major types: the orthographic projection, the perspective and the axonometric drawing. Characteristic to all is the representation of three-dimensional space and form on a two-dimensional plane.

The orthographic projection, more commonly known as plan, section, or elevation, is probably the oldest of all the conventions. It describes an architectural object by projecting its surfaces (and the surfaces generated by an arbitrary cutting of the object) onto a series of imaginary planes which are perpendicular to each other; each plane represents an independent viewpoint of the object.

Of all the drawing types, the orthographic projection is the most "truthful" and objective representation of architectural form, since all its measurements, though scaled down, appear in true size and relation to each other. Though the orthographic projection is the easiest to draw, it is the most difficult to comprehend. It demands that the viewer mentally reassemble all its parts. One must decode and interpret its symbolic information in order to understand the depicted entity as a whole. This perceptual process is complicated by the fact that none of the information, neither plan nor elevation, is represented as it would be perceived in reality. As the human eye sees everything in perspective, eliminating the vanishing point takes an additional mental transformation.

The perspective drawing, invented in the Renaissance when its optical principles were initially understood, triggered a revolution not only in art but also in architecture. Unlike the orthographic projection, the perspective is difficult to construct but easy to comprehend, since it represents form and space as they are actually seen. Because it is drawn from a particular fixed vantage point, and the eye of the viewer is the point of reference, the perspective involves the viewer more directly than the other drawing types. The viewer is made to be an integral part of the environment represented. This is most obvious in single point or central perspectives, where one seems to be pulled into the space.