

VOLUME FOUR

JACQUES HERZOG RECENT WORK OF HERZOG & DE MEURON

> STEVEN HOLL PRE-THEORETICAL GROUND

ARCHITECTURE CULTURE 1943-1968:
A ROUND-TABLE DISCUSSION

JOAN OCKMAN, ALAN COLQUHOUN, Jacques Gubler, Jean-Louis Cohen

KENNETH FRAMPTON Toward an urban landscape

MAND AN UNDAM CAMBOOK!

ARATA ISOZAKI PROJECTS: 1983—1990

HANS HOLLEIN PROJECTS: 1960-1991

ANDREW BENJAMIN

EVENT, TIME, REPETITION

ELLIOT FEINGOLD

SEMINAR ON TECHNOLOGY, HUMANISM AND SPACE

cha D.A.P.

SUBSCRIPTION SERVICE

All orders, inquiries, address changes, etc., should be addressed to:

Graduate School of Architecture, Planning and Preservation Publications Office 403 Avery Hall Columbia University New York, NY 10027

Each issue: \$15

Subscription prices in U.S.A.: \$30 Individual; \$50 Institution; \$25 Student (with valid ID)

Subscriptions outside the U.S.A.; add \$14 for postage and handling

PERMISSIONS AND REPRINTS

For information on permission to quote, reprint or translate *Columbia Documents* material, please write:

D: Columbia Documents of Architecture and Theory
Permissions Department
403 Avery Hall
Columbia University
New York NY 10027

REPRODUCTION

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission from the Trustees of Columbia University.

MANUSCRIPTS

Please address all manuscripts and editorial correspondence to:

The Editor
D: Columbia Documents of Architecture and Theory
403 Avery Hall
Columbia University
New York, NY 10027
Telephone: (212) 854-5885
Fax: (212) 864-0410

Unsolicited manuscripts will be returned only if accompanied by a self-addressed, stamped envelope.

POSTMASTER

Please send address changes to:

Graduate School of Architecture, Planning and Preservation Publications Office 403 Avery Hall Columbia University New York, NY 10027

Cover: Arakawa and Madeline Gins: Reversible Destiny House II, 1990. Aerial perspective.

Columbia Documents of Architecture and Theory (D) is published two times a year at Columbia University Graduate School of Architecture, Planning and Preservation.

D: Columbia Documents of Architecture and Theory, Volume Four, 1995.

Copyright © 1995 by the Trustees of Columbia University in the City of New York.

ISBN 1-883584-01-9 ISSN 1065-304X

First published in the United States of America in 1995 by Columbia University Graduate School of Architecture, Planning and Preservation.

Distribution: Distributed Art Publishers

Printed in the United States

Bernard Tschumi: General Editor
Stephen Perrella: Managing Editor/Designer
Anthony Wong and
Louise Rosa: Assistant Editors
Lois E. Nesbitt and
Stephanie Salomon: Copy Editors
Keena Suh: Assistant to the Editors

EDITORIAL BOARD
Stanley Allen
Rosalyn Deutsche
Arata Isozaki
Kunio Kudo
Catherine Ingraham
Joan Ockman
Stephen Perrella
John Rajchman
Bernard Tschumi

The publication of D is sponsored by TOTO Ltd.

CONTENTS

VOL. FOUR

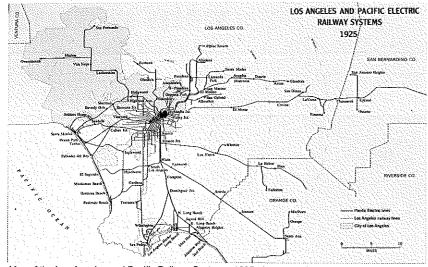
	V U IN I I I I V I I V U II
5	JACQUES HERZOGRECENT WORK OF HERZOG & DE MEURON
27	STEVEN HOLL—PRE-THEORETICAL GROUND
59	ARCHITECTURE CULTURE 1943—1968: A ROUND-TABLE DISCUSSION Joan Ockman, Alan Colquhoun, Jacques Gubler, Jean-Louis Cohen
83	KENNETH FRAMPTON— TOWARD AN URBAN LANDSCAPE
95	ARATA ISOZAKI—PROJECTS: 1983—1990
113	HANS HOLLEIN—PROJECTS: 1960—1991
139	ANDREW BENJAMIN—EVENT, TIME, REPETITION
149	ELLIOT FEINGOLD—SEMINAR ON TECHNOLOGY, HUMANISM AND SPACE

KENNETH FRAMPTON: TOWARD AN URBAN LANDSCAPE



Illustration showing how two thirds of the downtown ground surface of Los Angeles is devoted to freeways, streets and parking. (From Konstantinos Doxiades, *Ekistics: An Introduction to the Science of Human Settlements* [New York: Oxford University Press, 1968], 273)

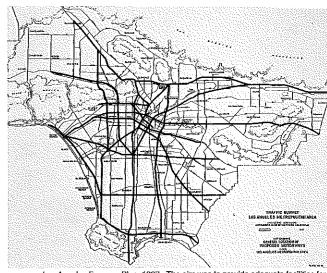
he split between the architecture and planning professions, already an established fact by the late fifties, has been sustained without any reconsideration over the last forty years. This separation of powers naturally entailed reducing the art of environmental planning to the value-free, applied science of land-use and transportation management. In this form, the dominant planning strategy became logistical and managerial. Symptomatic of this development is the fact that in 1974 the municipality of Rotterdam finally substituted a so-called "structure plan" for the "physical plan" that had hitherto guided the development of the city. Since 1945 the plan of the city had been maintained and regularly upgraded. Its replacement by the strategy of Melvin Webber's nonplace urban realm¹ was presumably to maximize the economic development of the



Map of the Los Angeles and Pacific Railway Systems, 1925, demonstrating how well the area was served by suburban rail transit in the 1920s. (From Robert M. Fogelson, *The Fragmented Metropolis: Los Angeles, 1850–1930* [Cambridge, Mass.: Harvard University Press, 1967], 173)

region, as previously unbuilt areas of reclaimed land were freed for speculation through the expansion of the national road system. In America as elsewhere, this infrastructure would be subsidized by the federal government, under the direct influence of the automobile and oil industry lobbies. In the United States the postwar GI Bill and the pro-suburban Federal Housing Administration mortgage regulations were directly integrated into this broad instrumental maneuver. This policy was furthered by consciously adopting a strategy of benign neglect toward the railroad infrastructure and by the general elimination of all existing forms of public transport. This policy was advanced to the point of encouraging the clandestine purchase of public transit lines for the express purpose of shutting them down. General Motors was directly involved in such an operation in Los Angeles, which up to the mid-fifties had an extensive and highly convenient system of suburban rail transit. This network was closed down and the rights-of-way previously employed by the rail lines appropriated for the freeway system.

The joint result of such policies was the seemingly unwitting destruction of the American provincial town and the concomitant proliferation of the caraccessed suburban supermarket, which led inevitably to the economic destruction of the traditional American main street. After forty years of attrition, this process continues unabated, as we may judge from the current expansion of mega-supermarket chains. None of these developments have come into being entirely by accident. In one way or another, this was and still is a global operation, contrived to further the interests of deregulated land speculation and to sustain larger units of corporate industrial production—above, of course, the symbiotic functioning of the oil and automobile industries. In all of this, we need to remember that 85 percent of this built production in the United States is realized without the intervention of the architectural profession, while planning, where effectively applied, usually does little more than facilitate the overall operation. This contrasts markedly with the Spanish situation, in which until recently the law required that every building be designed by an architect.



Los Angeles Freeway Plan, 1937. The aim was to provide adequate facilities for through traffic and still preserve suburban southern California as a pleasant place to live. (From David Brodsly, L. A. Freeway: An Appreciative Essay [Berkeley: University of California Press, 1981], 103)

vestige of critical resistance coming from the profession to the maximizing thrust of free-market development. Architects may still intervene today in 15 to 25 percent of significant public work, a percentage apparently more than most builder-developers are willing to tolerate. The tendency today to fund public works with private money patently favors the interests of the builder-developer over the critical acumen of the architect.

It is necessary to acknowledge these tendencies openly because we too easily deceive ourselves into thinking that the cultural and ecological predicament of the megalopolis is not a direct result of conscious political and ideological decisions made at the highest level of the power system. To this we must add the paradoxical and tragic fact that the popular, not to say populist, consumerist taste and world view is oriented away from any kind of more rational land settlement, largely on psycho-symbolic grounds. This seemingly spontaneous hostility is also largely engineered, in part by a lumpen homebuilding industry that does its best to make sure that what people want is what it

As markets become increasingly global and

capital increasingly fluid, the multinational

market system disseminates itself over the

face of the earth and with it, of course, the

architectural and planning professions are

attempting to reintegrate themselves into a

Current deregulation operations now being

government policy making in Europe and

is not further evidence of the interests of

maximizing multinational finance together

elsewhere point in the same direction, and

we are fooling ourselves if we think that this

been well known for some time, the

still faced with the unenviable task of

global building process that is only too

capable of proceeding without them.

considered at the highest level of

with the building industry's drive to

through the so-called package-deal

rationalize and monopolize its output

approach. We may thus establish a link

by the American antitrust laws and the

the title of architect. The aim of these

current attempt of the European building

industry to revoke the protected status of

moves is obvious, namely to dispose of any

between the undermining of the American

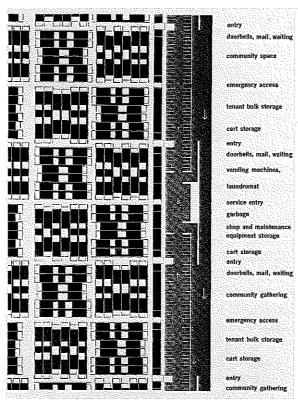
architectural profession in the late seventies

ubiquitous megalopolis. While all of this has

already provides, and in large and full measure by the banks, which are strongly inclined to disallow mortgages for any form of planned unit-development, especially where the dwelling units are contiguous. Proof resides in the fate of the mediatory land settlement model proposed by Serge Chermayeff and Christopher Alexander in the early sixties. I am referring, of course, to their largely forgotten joint study Community and Privacy 2 of 1963. The general prognosis of this study is that the city core as a civic center is becoming decentralized in terms of both administrative convenience and shopping. The authors remark that the main street as shopping street had already given way to more conveniently located suburban shopping centers linked to rapid-transit systems lying outside the city proper. As a consequence, Chermayeff and Alexander argued:

The suburb fails to be countryside . . . because it is not dense enough or organized enough.

Countless scattered houses dropped like stones on neat rows of development lots do not create an order, or generate community. Neighbor remains stranger and the real friends are most often far away. . . . The husband suffers the necessity of long-distance commuting . . . the [wife] finds herself either behind the wheel of a car, an unpaid chauffeur, or in front of the television set, a captive spectator.³



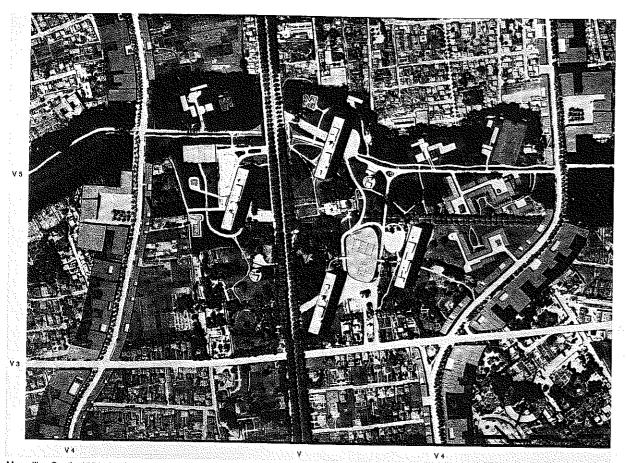
An alternative low-rise high-density, residential land settlement pattern for the United States, based on the mass ownership of the automobile, with grouped parking along the feeder road (from Serge Chermayeff and Christopher Alexander, *Community and Privacy: Toward a New Architecture of Humanism* [Garden City, N.Y.: Anchor Books/Doubleday, 1963], 206)

All of this is of course so familiar by now as to be unremarkable but was less familiar thirty years ago, as the Chermayeff and Alexander critical response to this condition remains unfamiliar today. Community and Privacy proposed a new standard for suburban land settlement based on low-rise, high-density courtyard houses. The attributes of this largely untried form of modern land settlement (which was compatible with automobile access and suburban development) are as follows: (1) the assurance of complete privacy inside and outside the unit; (2) the provision of efficient car and service access to every dwelling together with the provision of corresponding communal space; (3) the automatically economic organization of service infrastructure; and (4) an economically and ecologically sound pattern of development in terms of land use, thereby minimizing ground coverage, infrastructural investment and so on.

While this remains, in my view, a rational model for suburban development, it has in fact had little influence over the past thirty years. Thus while we are aware of viable alternative models for "motopian" development, these are largely ignored for economic, political and speculative reasons. We live in a time when the species seems to be incapable of devising an ecologically rational mode of land settlement. Community and Privacy can hardly be dismissed as an otherworldly, revolutionary

proposition. It was and still is a well-articulated response to changed technological and socioeconomic conditions. While I would be the first to concede that we cannot reduce the predicament of the urbanized region to a matter of simply finding and applying new forms of appropriate land settlement, it is important to recognize that the dysfunctional and wasteful dimensions of the everexpanding megalopolis cannot be adequately answered through inventing new aesthetic criteria or through the hypothetical application of revitalized avant-gardist stratagems in new guises and at new scales, such as we find say in Rem Koolhaas's recent proposal for the megalopolis of Lille.

What beyond this can one reasonably imagine or propose in terms of significant interventions in the supposedly spontaneous "motopian" city? Before responding to this complex, somewhat rhetorical question. I would like to posit the following provisional polemic and critique. Architects have been attempting to come to terms with the historic reality of the megalopolis for at least sixty years, so we can hardly claim that the crisis is new or that appropriate forms of response have hitherto remained unimagined. One thinks of Robert Moses's expansion of the parkway system into the urban region or the Le Corbusian seven-route strategy, particularly as this was proposed as a means of reordering the Marseilles hinterland and the area around

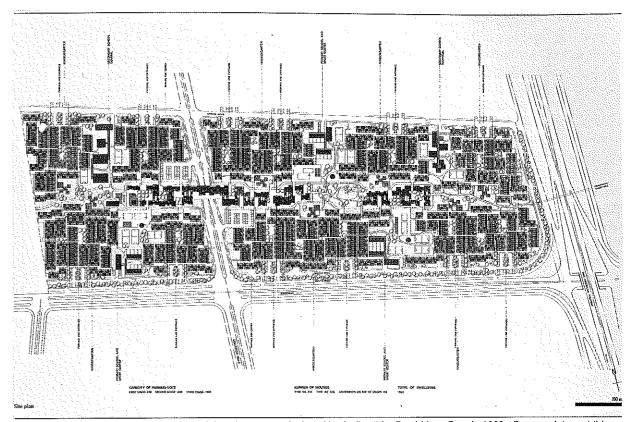


Marseilles-South, 1951. Le Corbusier's development plan for a neighborhood flanking the existing Unité at Marseilles, together with the central spine of the Boulevard Michelet, illustrates only too clearly how Le Corbusier had long since abandoned his tabula rasa approach in order to integrate the existing fabric and heterogeneous mix of different building types and services, cylindrical bachelor towers, schools, shops and two-story terrace houses. (From Le Corbusier, *Oeuvre Complète*, vol. 6 [1946–52], [Zurich: Editions Girsberger, 1955], 101)

his Marseilles Unité d'habitation of 1952: the rhizome avant la lettre.4 One thinks of Alison and Peter Smithson's London Roads Study⁵ of 1953 and of their "land-castle" and "mat-building" concepts6; of Peter Land's organization of the Previ experimental quarter outside Lima, Peru7; of the Aktion Schweiz movement on the occasion of the Swiss National Exhibition of 19638; of J. R. James's linear city proposal for the British Home Counties around London⁹; of John Turner's strategy for the so-called housing deficit of the Third World.¹⁰ One thinks of Doxiades's "Dynapolis" model of directional linear urban development¹¹ and of Shadrach Woods's pamphlet What U Can Do. Woods opens his short tract with a citation from a

text written ten years earlier: "Urbanism and architecture are parts of a continuous process. Planning [urbanism] is the correlating of human activities; architecture is the housing of these activities. . . . [Urbanism] remains abstract until it generates architecture." He ends in 1970 with an unequivocal appeal to the future promulgation of a rational welfare state:

For Urbanists and architects a saner future means that we can at last rid ourselves of all those nutty ideas about throw-away buildings, built-in obsolescence, high energy consuming schemes and walk-around cities on the one hand—but it also means that we must reconsider extreme low-density development, with its



A low-rise high-density residential, 1,500-unit housing quarter designed by Atelier 5 for Previ-Lima, Peru in 1969. One may interpret this as a much more subtle version of Chermayeff and Alexander's *Community and Privacy* model. Regrettably, only twenty-five prototype units were built in 1974. (From *Atelier 5: 26 Selected Works* [Zurich: Ammann Verlag, 1986], 174)

enormous waste potential and over-extended supply lines, on the other. We come at last to the useful end of the "waste produces wealth" period, having discovered that the wealth produced by waste is ill-gotten, a two-edged sword, a poisoned gift. Architects and urbanists will make their plans and develop them in light of economic, rather than merely financial considerations, for instance. Decisions will be made on the basis of reason, perhaps, and not merely in the light of political opportunism. Reason will dictate continuous renewal of the environment at every scale, not massive blight followed by massive reconstruction. 12

As with *Community and Privacy*, a quarter of a century has passed since these challenging words were set to paper, and we are no further along. By way of an equally tendentious anachronistic echo, let me respond to Woods's appeal with the following twelve-point assessment as to where we seem to stand as opposed to what we might do.

- 1. The dystopia of the megalopolis is already an irreversible historical fact: it has long since installed a new way of life, not to say a new nature.
- 2. The scale of this urbanizing explosion or implosion, depending on how one looks at it, is without precedent in human history. It

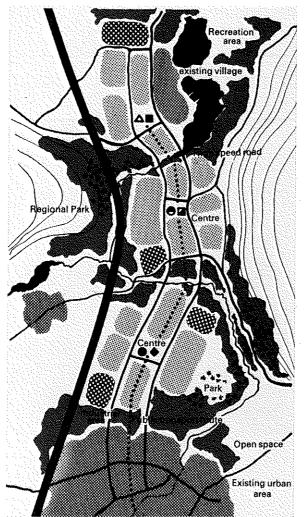
has nothing whatsoever to do with the traditional city.

- 3. Attempts to reconstruct the classical city as advanced by the Italian *tendenza* movement in the sixties, exemplified in Aldo Rossi's *The Architecture of the City*¹³ or Leon Krier's *Rationalist Architecture*,¹⁴ were and remain destined for rather limited application: witness the recent fate of Krier's Poundbury new town proposal as sponsored by the Prince of Wales, where the traffic turning circles required by modern automobile access inhibited Krier's wish to return to the enclosure and scale of an eighteenth-century street grid.
- 4. The classical center city, where it still exists as a living entity, is increasingly threatened by a subtle tendency to transform it into a kind of theme park. The pedestrianization of traditional city centers, a policy dating back to the early sixties, is the first symptom of this tendency.
- 5. From the aerial viewpoint the megalopolis appears to assume a quasi-orderly, biological character, yet this is invariably imperceptible from the ground.
- 6. Ordered or not, such a perspective heightens our awareness of the megalopolis as a new nature. This has led some critics to evoke a new kind of pastoralism as a mediatory force capable of transcending the impasse outlined above. At the same time they would like to recognize the architectonic potential of an emerging set of unprecedented megalopolitan forms. This seems to be the argument advanced by Peter Rowe in his book *Making a Middle Landscape*. 15 Rowe regards such ex-urban corporate establishments as Kevin Roche's General Foods or his Union
- what benefits such landscapes necessarily bestow upon society is left rather unclear.

 7. Two salient factors may be derived from Rowe's thesis however; first, that priority should now be accorded to landscape.

Carbide Headquarters as an occasion for

the creation of local parterres, although



J. R. James, Linear City Proposal. A "three-strand" linear city for linked townships in Central Lancashire proposed by J. R. James of the British Ministry of Housing and Local Government in 1967. The large dark Benday dots indicate industry, the intermediate size, existing fabric and the smaller dots, new residential areas. The middle band is reserved for new centers. (From RIBA Journal, vol. 74 [October 1967]: 428)

rather than to freestanding built form and second, that there is a pressing need to transform certain megalopolitan types such as shopping malls, parking lots and office parks into landscaped built forms.

8. These new types may well become the foci of future design interventions in the urbanized region, along with the pressing need to find new uses for abandoned

postindustrial "scar tissue" left behind by obsolete, abandoned nineteenth- and early twentieth-century factories. However, all such development or modification will obviously remain subject to stringent economic constraint.

- 9. The accepted process of amortization is likely to remain a constraint in almost all future urban development. This economic paradigm is closely linked to a global tendency toward total commodification. The Venturian model of the decorated shed remains the commodifying instrument par excellence, regardless of whether the decor veers toward historical pastiche or toward the deconstructive speculations of the neoavant-garde. We should also note that whereas a corporation may be prepared to invest large sums in the creation of a representational landscape, it is unlikely that the lower end of the speculative market will act in an equally responsible way.
- 10. Cities have always been constructed, in one way or another, out of fragments, and one cannot expect the megalopolis to be any different. Building invariably proceeds by fits and starts. A certain amount of capital is amassed, and when this has been expended, the one-off building process summarily ceases. As architects, we need to conceive of future urban interventions in such a way as they have a wide-ranging catalytic effect for a given amount of investment. Their "open" character in this regard should also be capable of being "closed" when necessary.
- 11. With what power is left to us, it is our ethical responsibility to use our ingenuity to engender an urban fabric aggregated out of topographic fragments within the metabolic interstices of the megalopolis.
- 12. We should not allow ourselves to be deceived by the free-market deregulatory impulses of late capitalist development. We should not underestimate the reductive aim of such provisions, which surely seeks to mask its maximizing thrust under the superficial

gloss of culture. At the same time we have no choice but to respond to opportunities that arise in order to create a critical counter form within the existing situation.

In a recent address on the theme of *atopy* or dystopia, given at a conference in Barcelona in 1992, the Italian architect Vittorio Gregotti reminded us that internationalism today is based on intangible financial transactions, the exchange of scientific and technical information and forms of mass communication having their own rules. In this situation, where everything is possible, subjectivity is weakened as a source of differentiation. This would seem to have negative consequences for architecture. Gregotti writes:

Even the relative diversity of the increasing number of interesting things produced in the field of art seems to be an obstacle to the establishment of an authentic differentiation, guided as they are by the very homogenization of the unified market of mass communications which demands the continuous invention of undifferentiated articles.¹⁶

After arguing that the increasing number of "interesting" things makes it increasingly difficult to establish an authentic differentiation, Gregotti makes the following point about the nature of *atopicity*:

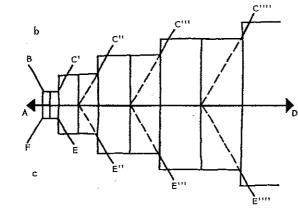
There is no doubt that atopicity could be interpreted as the sign of an inevitable mechanism of international interdependence which has a cultural, political and economic structure, a sign that has not yet found a meaningful spatial organization in the territory of architecture.

This is an interdependence which still seems to involve control and domination, thus opposing the attempt of the existing community to ensure in the process of unification the maximum

expression of their traditional values. This atopicity is still widely at the service of the brutal exploitation of the economic differences between social classes.

Could it move instead in the direction of solidarity, towards that "communicative public action" of which some philosophers speak? This is probably a naively optimistic interpretation, but one which is also dictated by an intimate necessity and, at least as a hypothesis, one which is perhaps able to transfer into the territory of architecture the destructive impetus of atopicity, transforming it into a dialogue of solidarity, even with regard to the context.¹⁷

This discreet call to action ought to be sufficient to make us rethink our rather unreflecting submission to arcane theories that have no discernible practical or ethical application in the field of architecture and urban design. There is no reason to assume that an obtuse theoretical discourse drawn more or less directly from either literature or philosophy is necessarily applicable in any cogent way to the design of the urban fabric. I would submit that instead we need to conceive of a remedial landscape that is capable of playing a critical and compensatory role in relation to the ongoing, destructive commodification of the man-made world. Architecture must assume an ecological stance in the broadest possible sense. Thus we should encourage the Taoist strategy of "acting by not acting," that is to say we should look toward the cultivation of a quiet but pertinent minimalism. This is surely of more consequence than "acting by overacting" in the name of art, media pressure or intraprofessional competition. By the same token we may assert that landscaped form as the fundamental material of a fragmentary urbanism is of greater consequence than the freestanding aestheticized object.



Ideal Dynapolis. In this diagram, line A/D represents the main highspeed spine, in which B and F are distributors linking at another scale into a territorial hexagonal landscape grid. The lines C and E are the mirror image of these routes, and as the city expands in one preferential direction, further generations of these distributors, C'/E' and so forth, will become necessary. (From Konstantinos Doxiades, Ekistics: An Introduction to the Science of Human Settlements [New York: Oxford University Press. 1968], 366)

NOTES

- 1. Melvin Webber et al., Explorations into Urban Structure (Philadelphia: University of Pennsylvania Press, 1964).
- 2. Serge Chermayeff and Christopher Alexander, Community and Privacy: Toward a New Architecture of Humanism (Garden City, N.Y.: Doubleday, 1965).
- 3, Ibid., 63.
- 4. Le Corbusier, *Oeuvre Complète*, vol. 5 1946–1952, vol. 6 1952–1957, vol. 7 1957–1965 (Zurich: Les Editions d'Architecture, 1967).
- 5. Alison Smithson, *Urban Structuring: Studies of Alison and Peter Smithson* (London: Studio Vista; New York: Reinhold, 1967).
- 6. Alison Smithson, "How to Recognize and Read Mat-Building," *Architectural Design*, vol. 44, no. 9 (1974): 573–90.
- 7. Atelier 5: 26 Selected Works (Zurich: Ammann Verlag, 1986), 174.
- 8. Achtung, die Schweiz: ein Gesprach über unsere Lage und ein Vorschlag zur Tat (Basel: F. Handschin, 1955).
- 9. J. R. James, "Planning for the 1970s," RIBA Journal, vol. 74 (October 1967): 419-28.
- 10. John Turner, Housing by People: Towards Autonomy in Building Environments (New York: Pantheon Books, 1977).
- 11. Konstantinos Doxiades, Ekistics: An Introduction to the Science of Human Settlements (New York: Oxford University Press, 1968).
- 12. Shadrach Woods, What U Can Do: Architecture at Rice 25 (Houston: Rice University School of Architecture, 1970), 33–35.
- 13. Aldo Rossi, The Architecture of the City (Cambridge, Mass.,: MIT Press, 1982).
- 14. Leon Krier, Rationalist Architecture (Milan: Franco Angeli, 1973).
- 15. Peter Rowe, Making a Middle Landscape (Cambridge, Mass.,: MIT Press, 1991).
- 16. Vittorio Gregotti, "On Atopy," *Urbanismo*Revista: Periphery as a Project, no. 9–10 (1992): 79.
 17. Ibid., 80.

The preceding text was a lecture originally delivered as part of a faculty symposium entitled "Cities at the Limit" on the occasion of the George Rupp's inauguration as president of Columbia University on October 4, 1993.

Kenneth Frampton is Ware Professor of Architecture at Columbia University. An architect and architectural historian, he was educated at the Architectural Association in London and has worked as an architect in England, Israel and the United States. He has made a number of contributions to the field of housing design in both London and New York, including 600 units of low-rise high-density housing for the Urban Development Corporation of New York State designed under the auspices of the Institute for Architecture and Urban Studies. The designs were implemented after being displayed at The Museum of Modern Art in 1972 in the exhibition "Another Choice for Housing: Low Rise Alternatives." Before emigrating to the United States in 1965, he served for three years as technical editor of the magazine Architectural Design.

Frampton also has been the recipient of numerous awards, including the AIA National Honors Award (1985), L'Académie d'Architecture Gold Medal (1987), the Phi Beta Kappa Award (1987), the AIA New York Chapter Award of Merit (1988), the ACSA Topaz Award (1990) and an honorary doctorate of technology from the Royal Institute of Technology, Sweden (1991).

He has written extensively and contributed to a range of journals internationally. His publications include Modern Architecture: A Critical History and Modern Architecture: 1851 to 1945. Forthcoming books include an anthology of essays, Studies in Tectonic Culture (MIT Press, 1995).