Places

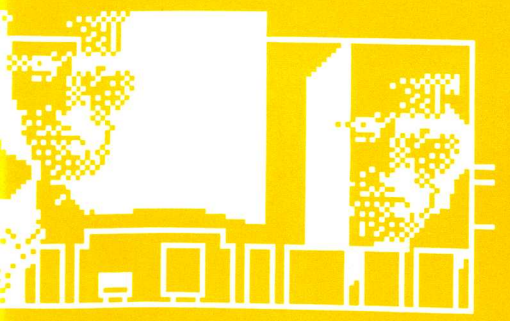
$7.50

A Quarterly Journal
of Environmental Design

Future Places

Guest editor:
Peter Droege

Contributors:
Dennis Adams
Peter Cook
Italo Calvino
Peter Droege
Jack Gantos
Holt Hinshaw Pfau Jones
Alex Krieger
Kazutoshi Ito
Réjean Legault
Lars Lerup
Martin Roy Mervel
Kikoh Mozuna
Pierluigi Nicolin
Anne D. Nissen
Shinichi Okuyama
Michael Piore
William F. Stern & Associates
Rives Taylor
Lebbeus Woods



Future Places

Form and Function I

Form and Function II

Beyond the Frontier I

Beyond the Frontier II

Information Scenography

Windows for the Trojan Horse

An Italian Voyage

Japan's Advanced Information Cities

International Concept Design Competition—Five Proposals for Kawasaki, Japan

An Information City: Boston

Buddha's Beacons

Cine-city

Late Modernism

El Dorado

Centricity

Two Towers

The City Within

Published by The MIT Press

for the College of
Environmental Design,
University of California,
Berkeley

and the

School of Architecture
and Planning,
Massachusetts Institute
of Technology

ISSN 0731–0455

Volume 5, Number 3

Places

A Quarterly Journal of Environmental Design

Editors
Donlyn Lyndon
William L. Porter

Founding Editor
Donald Appleyard

Sponsors
Richard Bender
John de Monchaux

Assistant Editor
Alice Wingwall

Editorial Assistant
Charlotte Sproul

Format Design
Marc Treib

Production
LeGwin Associates

Contributing Board
Stanford Anderson
Clare Cooper Marcus
Lois Craig
John Habraken
Gary Hack
Randolph Hester, Jr.
Allan Jacobs
Spiro Kostof
Ray Lifchez
Roger Montgomery
John R. Myer
Lisa Peattie
Marc Treib

Caring About Places: Future Places *2*
William L. Porter

Future Places *3*
Peter Droege

Form and Function I *6*
Walt Disney Corporation

Form and Function II *7*
Michael Piore

Beyond the Frontier I *8*
Anne D. Nissen

Beyond the Frontier II *15*
Rives T. Taylor
Martin Roy Mervel
Lars Lerup
Holt Hinshaw Pfau Jones Architecture
William F. Stern and Associates, Architects
Dennis Adams

Windows for the Trojan Horse: Information Technology and the European City *27*
Peter Droege
Réjean Legault

Information Scenography: Paris *30*
Réjean Legault

An Italian Voyage *32*
Peter Droege and Réjean Legault
based on material by Pierluigi Nicolin

Japan's Advanced Information Cities *39*
Peter Droege
International Concept Design Competition for an Advanced Information City—Five Proposals for Kawasaki, Japan
Kazutoshi Ito
Shinichi Okuyama
Peter Cook
Kikoh Mozuna
Peter Droege

An Information City: Boston *52*
Peter Droege

Past Futures *56*
Alex Krieger

Buddah's Beacons *72*
Peter Droege

Cine-city *76*
Peter Droege

Late Modernism *78*
Peter Droege

El Dorado *80*
Jack Gantos

Centricity *84*
Lebbeus Woods

Two Towers *92*
Peter Droege

The City Within *94*
Italo Calvino

Selected References *95*

Contributors *96*

Publication of Places *Volume 5 has been aided by a grant from the Design Arts Program of the National Endowment of the Arts.*

Volume 5, Number 3

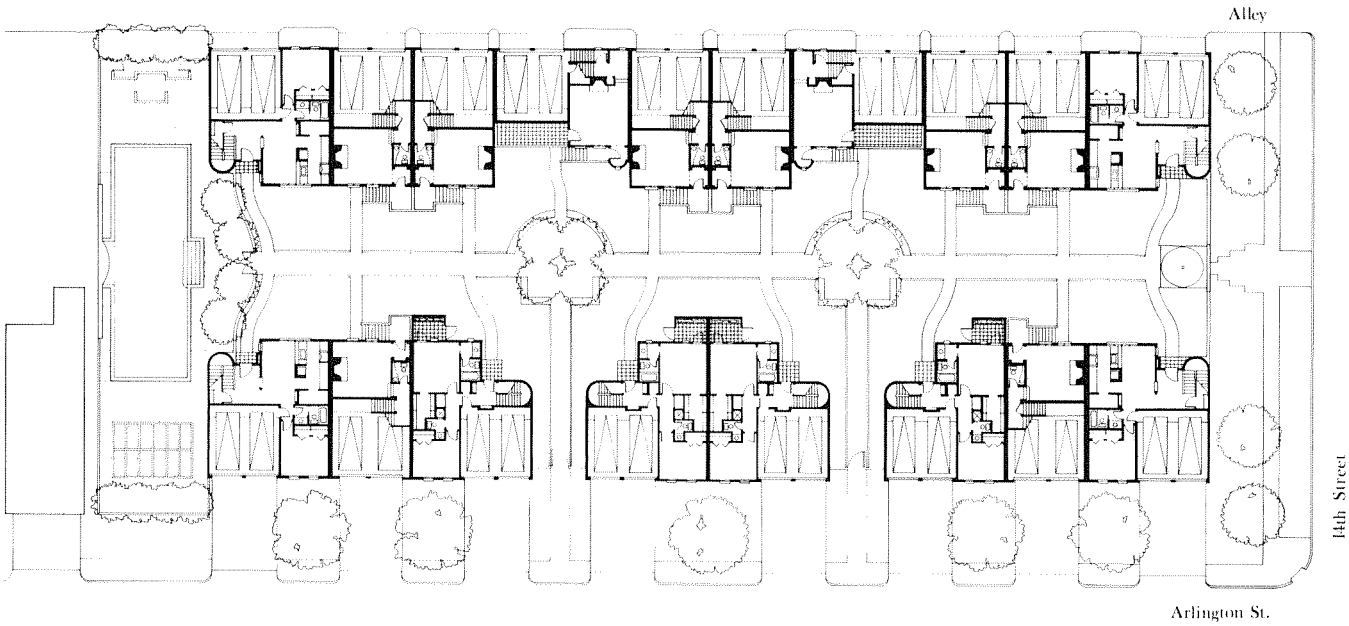
William F. Stern and Associates, Architects Houston

Arlington Court

In recent times, many suburban neighborhoods in close proximity to downtown Houston have been revitalized, becoming increasingly desirable for new housing. As the pressures on inner-city housing have increased with the cost of owning a home, multifamily housing in these neighborhoods has become a viable solution. Prior to the 1980s the pattern of housing in older suburban neighborhoods had been single-family homes and garden apartments. By the mid-1980s a number of infill townhouse projects were introduced to these neighborhoods. The designation "infill" refers to development that is literally filling in with housing of higher density between lots traditionally reserved for single-family dwellings. Usually between 1,500 and 2,200 square feet—one, two, or three bedrooms—the infill townhouse provides a less expensive alternative to the single-family house in the same neighborhood. The infill townhouse also provides an alternative to the trend of new suburban tract housing developments miles from the downtown.

It is a clear intent of the design to heighten the sense of space and individual character in what are essentially modest houses. The four different unit plans and the variety of interior spatial arrangements are direct responses to the differences in living patterns established by a community of single individuals, married couples, or retired "empty nester" couples. A sense of overall architectural cohesion is established

Photos by Paul Hester; plan by William F. Stern

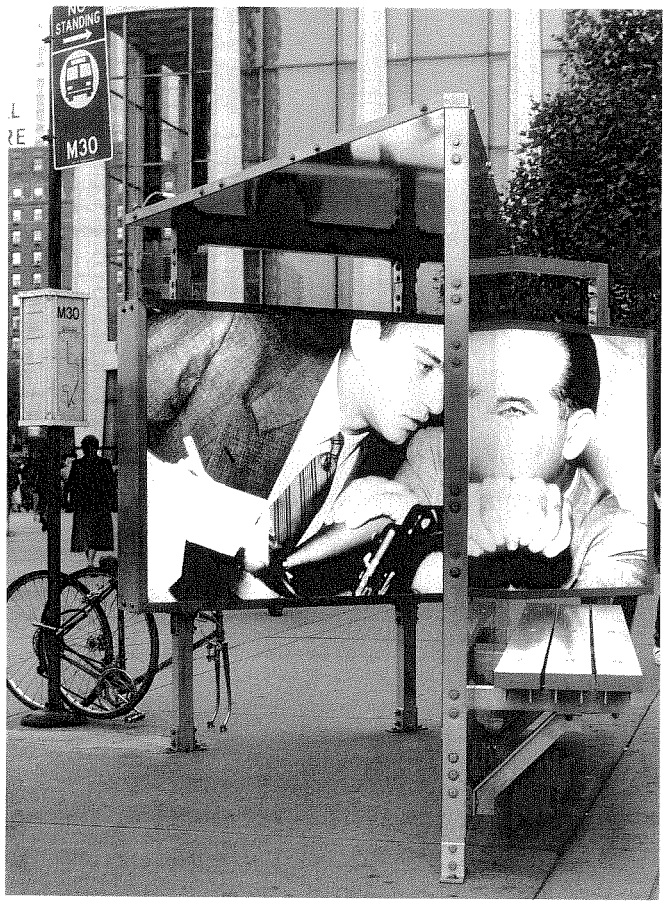


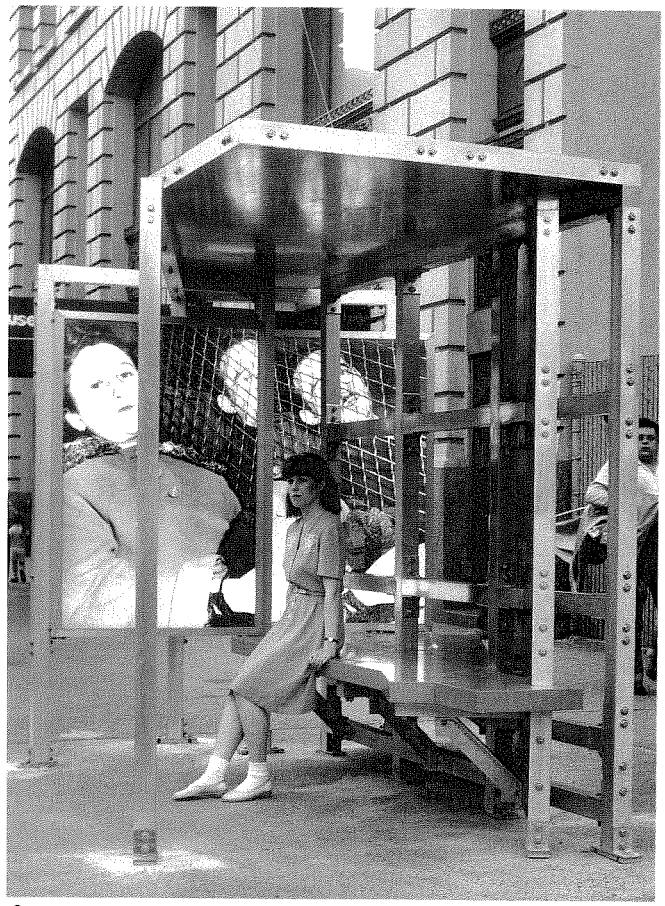
by a uniform material palette of stucco, wood windows, and wood trim, along with the compositional repetition of architectural elements. Still the variety inherent in the different unit plans is expressed to both the adjoining streets and the park-like courtyard.

The site has been planned so that the individual townhouse unit is oriented toward a pedestrian courtyard which occupies 40 percent of the site. The automobile is accessed directly to each unit from Arlington Street on the east side and an alley to the west. Thus, the front door to Arlington Court is a gatehouse through which a visitor or resident enters, proceeding through the courtyard to the residences. The handling of 36 off-street parking spaces, while reserving a sizable portion of the property as green space, was one of the considerable challenges of this project. The integration of parking into the unit makes the modern townhouse quite different from traditional eighteenth- and nineteenth-century townhouses.

Arlington Court expands the vocabulary of housing in established neighborhoods, increasing the density without disturbing the scale. It provides an affordable house for middle and upper-middle income groups close to the business and cultural centers of the city. The project was intended to set a pattern for future housing developments as the pressure for good urban housing increases.

Dennis Adams
New York





2

I am interested in the context of the urban street as a hyper-communication network, a border zone where public and private languages collide. My production takes the form of urban street kiosks that dislocate conventional relationships between architecture, photography, and texts. I think of these small pavilions as architectural short sessions—ruptures at the very limit of their proposed agendas. They are anti-architectural to the degree that they stage an excavation, open a site, a social space around the images and texts they house. They are ultra-architectural, paranoid if you will, to the degree that they exceed their function as vehicles of display, encroaching on these same images and texts.

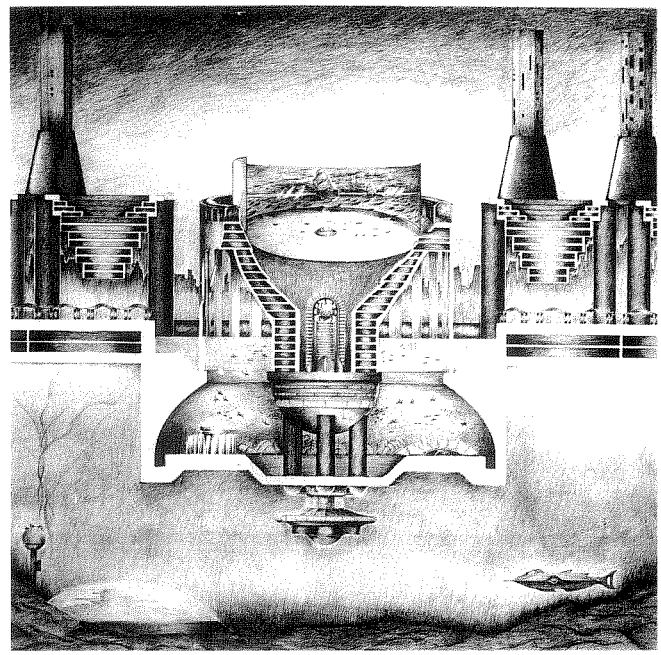
1 **Bus Shelter I,** Dennis Adams, 1983
Broadway and 66th Street, New York. Sponsored by the Public Art Fund, Inc., New York. 86 × 142 × 103 inches. Aluminum, Plexiglas, wood, enamel, fluorescent light, Duratrans.

2 **Bus Shelter II,** Dennis Adams, 1986
Third Avenue and 14th Street, New York. Sponsored by the Public Art Fund, Inc., New York. 96 × 138 × 98 inches. Aluminum, Plexiglas, wood, enamel, fluorescent light, Duratrans.

Eightfold Discovery of Kawasaki

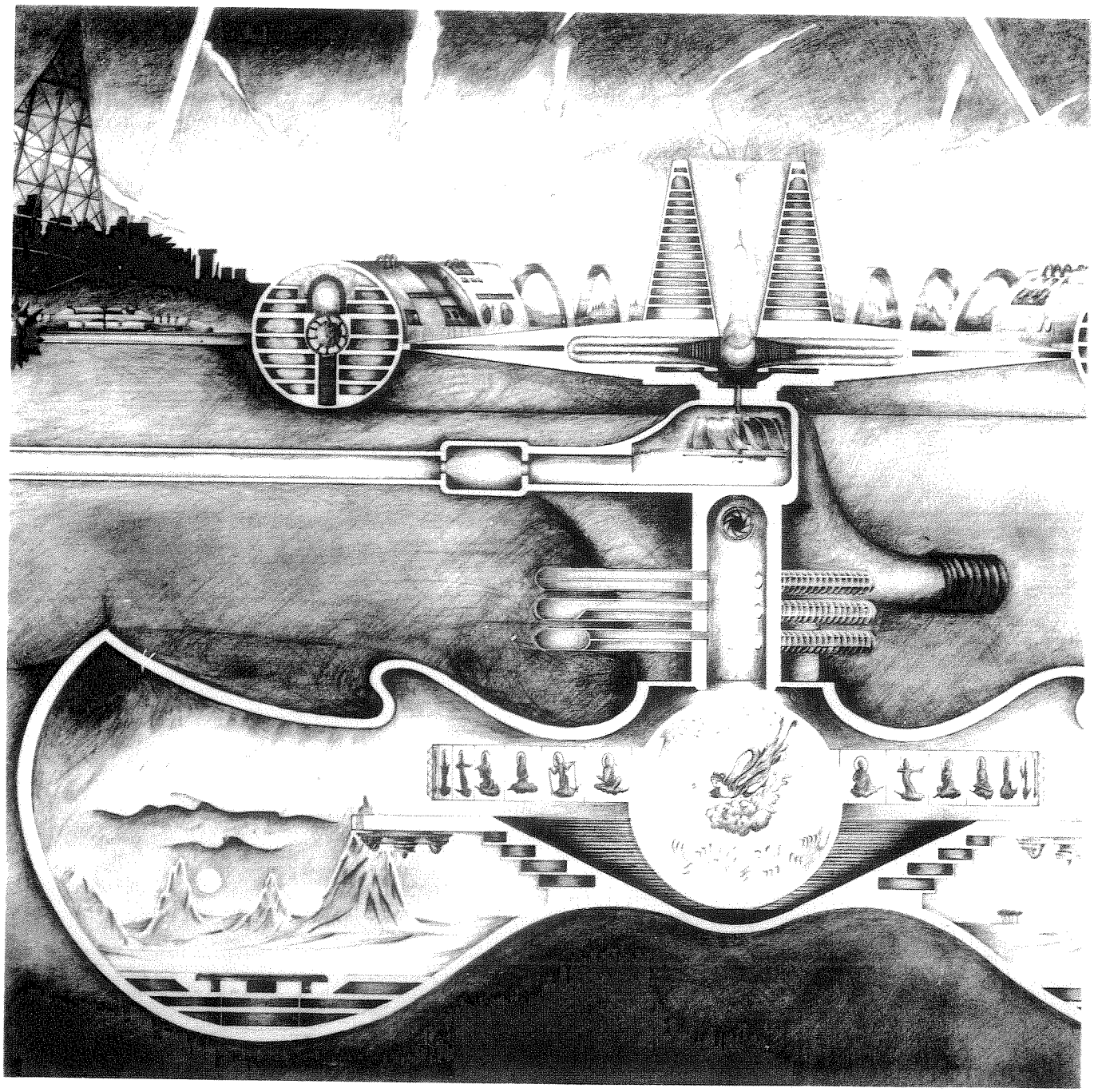
Entry by: Kikoh Mozuna
Collaborators: Motoaki Terajima, Harusada Iwaki, and Fujio Mizutani

Award: First Runner-up and Kanagawa Prefecture Award



Kikoh Mozuna and his team provide an at once formal and visceral outlook on the future. In their view, the city of the twenty-first century can become a regional "information brain," solving anticipated problems of environmental destruction, food shortage, the decline of heavy industries, and increased unemployment. Mythologically inspired by eight Buddhist wisdoms, and armed with "universal" grammar of architectural significance, the group translates the Campus City themes into a serial metabolism. Organic ideas of applying brain hemispheric structures to symmetrical city concepts are based on the notion that good city form is archetypical and therefore "genetically" recognizable. Architectural themes are sampled from such urban archetypes, traceable through the millenia. His seven Intelligent Plazas therefore mirror the seven hills of Heavenly Jerusalem in the Book of Revelations. Kawasaki Daishi, the city's famous Shinto-Buddhist shrine, becomes the eighth, a spiritual node.

Three themes flow through his concepts. The first, the Urban Brain Hologram, interprets the city as an unconscious collective artifact, and therefore a three-dimensional projection of man's brain, memory, and mind. The second, Urban Recycling Technology, assigns symbolic deities the task of regenerating the city through new and sustainable production forms and energy sources. The third theme, Urban Wind and Water Structure, departs from ancient oriental healing techniques of man-nature coexistence and aims at the introduction of biotechnological purification systems to clean Kawasaki's water and atmosphere. Information services, transportation networks, and a series of civic fora are subjected to these three themes.



Lars Lerup
San Francisco

Houses Disguised for the Future

Denying temporal succession, denying the self, denying the astronomical universe, are apparent desperations and secret consolations. Our destiny . . . is not frightful by being unreal; it is frightful because it is irreversible and iron-clad. Time is the substance I am made of. Time is a river which sweeps me along, but I am the river; it is a tiger which destroys me, but I am the tiger; it is a fire which consumes me, but I am the fire. The world, unfortunately, is real; I, unfortunately, am Borges.[1]

Predictions about the future seem futile and almost comical when one looks at them in the light of the predictor's own "river of time." "Iron-clad," inevitable, that unknowable future as prediction is nothing more and nothing less than a projection of the future. The actual future, just beyond our nose, is dim and indistinguishable.

On the one hand, we are told by the *New York Times* with assurance that as baby-boomers we will require larger and more substantial homes in the future and " . . . developers who supplied this baby-boom market for most of the last decade will have to switch tactics if they are to survive,"[2] while on the other hand, an increasingly visible portion of society remains homeless. So, whose future are we predicting—ours, theirs, or just mine?

Adolf Loos said (and I paraphrase), "the art object is revolutionary and the house is conservative," suggesting that the *Times*' baby-boom extrapolation is inevitable; the single-family house—regardless of what happens—will still be the dominant dream. Alas, my three futures are then improbable.

House Without an Alibi

I have argued elsewhere that the typical single-family house is a disciplinary mechanism that promotes a rigid and simplistic view of family life.[3] In fact, the only reason to perpetuate the endless proliferation of two-bedroom houses, with living-dining rooms, kitchen, garage, back and front yards, is to secure them as investment objects for the institution that holds the mortgage.

More intriguing, the typical single-family house is a symbol of self and family; in fact, its *alibi* is that it represents us as a people. Thus, like a fetish, the home has become a token of our image of self. Le Corbusier sensed this (and rejected it) when he enthusiastically promoted "the machine for living" as a liberation from the ancient house. The House without an Alibi continues this struggle by employing a different strategy.

Severing the house from its umbilical connection to live human beings leaves it afloat in a world of inanimate things. As a mere product, the house, its parts, and its grammar must now spin their own narratives and dreams.

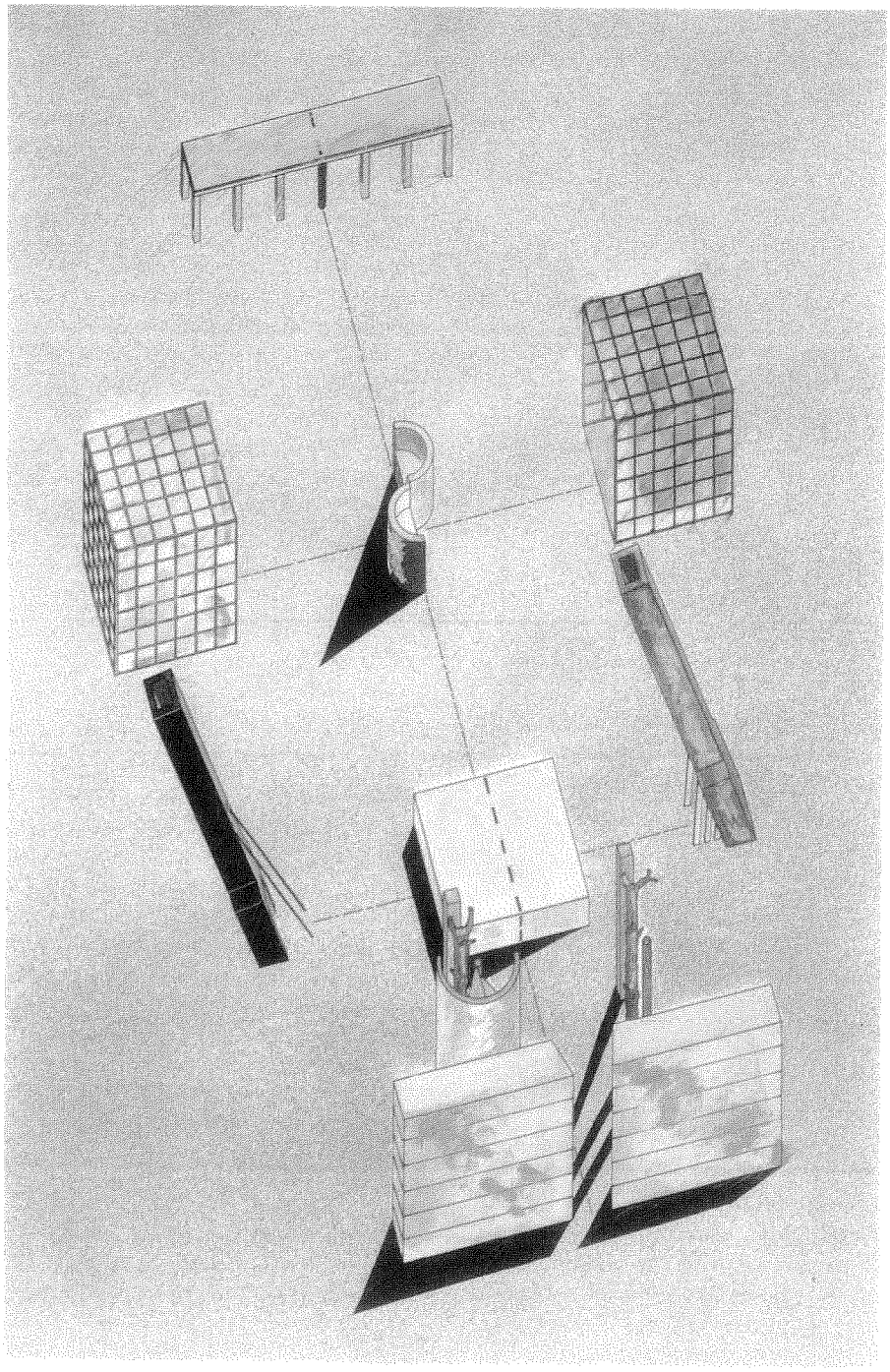
A first attempt to create such a neutral plane was the Texas Zero discussed in *Planned Assaults*.[3] The grammar of the archetypical home has been altered to create a plan degree zero in which the occupants must construct fresh links of significance with the built world. The familiar domestic elements are there, but in new relationships. Fireplaces, kitchen, bathroom, and so on have each been severed meticulously from the disciplinary grammar of the home. Each object is liberated from its referential position to restore its independence as a thing. The two leaning fireplaces, one in tension, the other in compression, separated by a sofabed, begin new sentences without the knowing subject of the user. In this instant they promote a knowledge almost without a known object.

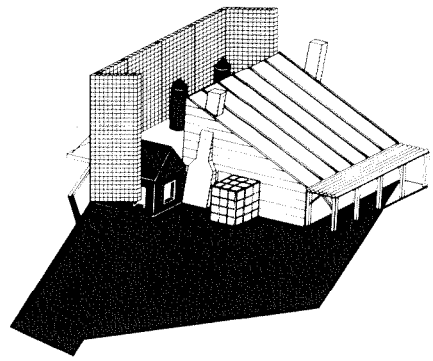
The neutral plan is different from the free plan in that its emphasis is not on functional flexibility and openness but on the flexibility and openness of meaning—Duchamps' coat rack is not only a coat rack but also a *trébuchet* (trap), the sofa is a bed as well, the fireplace is also an exercise in gravity.

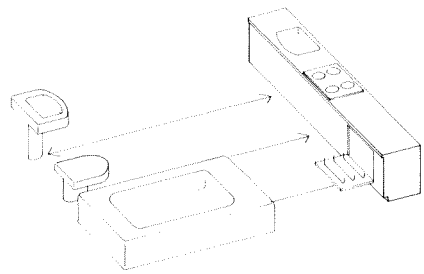
The exploration of the alibi-less house and the wilderness of the neutral plan has only just begun.

House as Many

Frank Gehry's work on the basic "dumb box" of Southern California suggests three rhetorical means of deviation from the set pattern of the box, the warped (Davis House), the wrapped (Gehry's own house), and the wrecked (Winton Guest House). The Winton Guest House begins to break the "plan" into its separate elements—each room becomes a







Texas Zero of 1981, axonometric, furniture, and equipment

house. The social implications of Gehry's wrecked plan point at continued compartmentalization and specialization of use as well as a tugging at the unity of the family, suggesting that its members may each soon require their own "house."

Twofold specialization of use and privatization may lead in two radically different directions, one in which the house is divided into minihouses for each of its members (this of course implies that we will still be able to afford single-family houses), another, where the house may need to become transformable to serve different uses and users, if not simultaneously, in sequence. Thus, much as in the traditional Japanese house, the equipment for each use such as sleeping and eating is stored away after it is used to accommodate the next use. Micro privacy devices and technologically light appliances may help in this process of rapid transformation—the house becomes a stage set or resembles a transformation toy. The key is lightness and appearance, light sources and sound barriers rather than cumbersome physical devices (e.g., movable walls). Likewise, ambiguous furniture, like sofabeds rather than single-use easy chairs, will furnish these chameleon-like rooms.

House as Ectoplasm

Both of the above strategies rely on the house itself and its inhabitants as their origin and assault, and transformation or mutation as the techniques for reshaping them. The final strategy has a different origin; in fact, until recently it has had virtually no manifestation in built form.

The machine analogy in architecture (via Le Corbusier and, later, Archigram and NASA) has brought the house closer to the human body—studies in ergonomics and space travel have completed the circle by making the ultimate house a spacesuit.

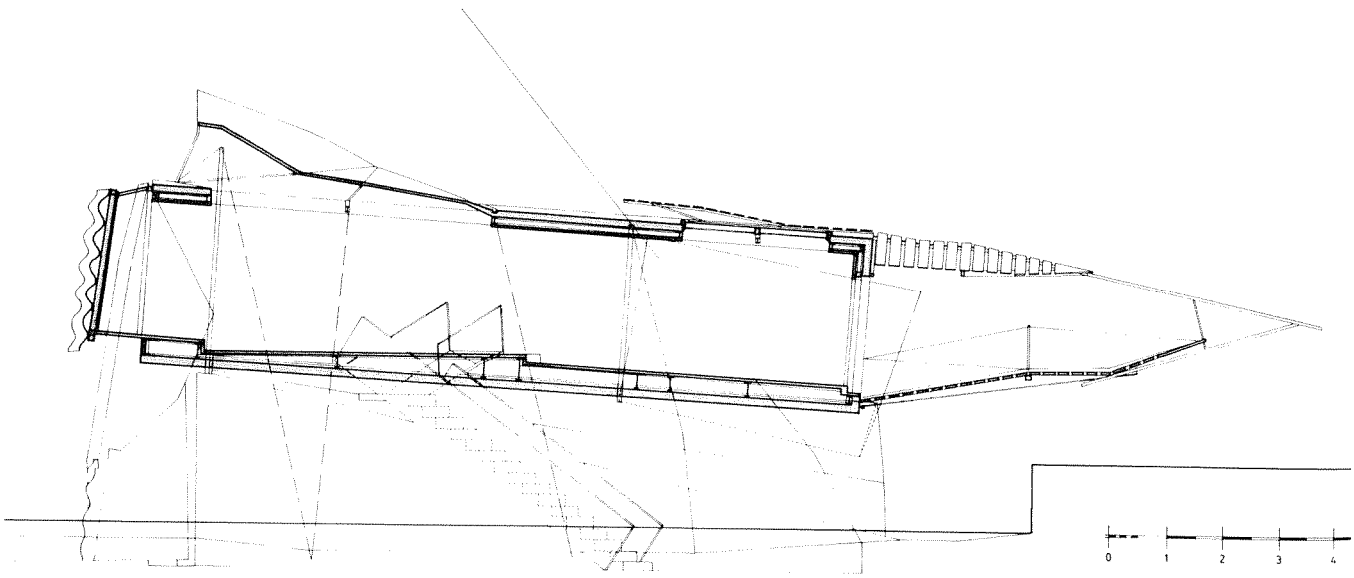
However, when Coop Himmelblau describes its work as manifestations of *kraftlinien*—lines of power—a new substance emerges that despite their earlier fascination with personalized space (Villa Rosa of 1968, Die Weisse Anzug of 1969, and Hertzstadt of 1969), is not a mere extension of the body. This new substance is freed from bondages to Palladio and the body. Its origins are the *linie occulte* of the Renaissance that remained on the drawing, the regulating lines underlying Le Corbusier's facades (maybe even his Modulor). In the hands of a new generation of architects trained in the turbulent 1960s these lines become manifested in a form that appears to be a fusion of house and inhabitant—here teasingly referred to as ectoplasm (the outer firm layer of an amoeba, or the like).

Ambiguous and free, The Open House of 1983 (soon to be built in Malibu, California) relies on virtually none of the established type-objects of the house. The locus for its origin will be found among tents, bugs, and gossamer-like plants rather than in the domesticity of the house. Yet the precariousness and vibrant instability of its stability-seeking rods and membranes are more like thoughts than the stringent rules of evolution that shaped a bug. The apparent purposelessness of the structure seems more akin to the visions of a poetic drunk than to a new and efficient earth-capsule for the gun-toting survivalist.

There is in this house, and in other work of the group, a cry for the expression of a substance—"a wall of nerves from which all the layers of urban skins have been peeled away"—that may have been dormant in architectural thinking for a very long time, but its time is now, at the dawn of the 21st century.

Finally

My cat V.J. sleeps. Wrapped in his all-enclosing coat of fur, his paw protecting his eyes from the bright light, his world of cat-dreams is distant from my own speculations about the holsters of our trajectories of the future. Yet the struggle for domestic space will continue, and we can rest assured that beyond the gables of the stolid single-family house, surrounded by its cloak of open space, will appear other shelters, and V.J.'s offspring will, with the help of their paws, all sleep well in either place. As for us, Borges' tiger will keep us awake.



Notes

1 Jorge Luis Borges, *Labyrinths: Selected Stories and Other Writings*, edited by D. A. Yates and J. E. Irby (New York: New Directions Publishing Corporation, 1962), pp. 233–234.

2 Anthony DePalma, "Baby Boomers Reshaping the Housing Market," *New York Times* (March 6, 1988), Real Estate section, p. RY1.

3 Lars Lerup, *Planned Assaults* (Montreal: Canadian Center for Architecture; Cambridge: MIT Press, 1987), p. 16.

The Open House, 1983

An Information City: Boston

Peter Droege

Cities are, to a large extent, organized around the control of information. All have their particular information profile, a characteristic feeling of how information is dealt with as a result of economical, cultural, and political conditions. How accessible is which information, who uses it, and for what end? How is it processed, what role do information markets play? What do inhabitants know and believe, and how?

Greater Boston's information world is particularly well developed. Its economic base is decidedly information technology and services biased. MIT and Route 128 are the central sections of one of the nation's most celebrated "technopolis." It is a college town, and there is a good chance that the person on the bus next to you goes to school or teaches somewhere. Boston is also the dominant cultural center of New England, where the region's unmistakable reality is produced and reproduced. There are networks of various scale, advocacy groups, social circles, community organizations, support services. Bostonians can be extraordinarily helpful in their guarded ways, and are usually proud if they can let you in on something they really know about. And there is relative institutional openness when it comes to sharing information, in the universities and elsewhere.

In terms of learning opportunities and concern for knowledge access, Boston is home to some of the nation's largest information-rich and information-deprived groups. Data segregation is a troubling phenomenon. It is not easily measurable quantitatively or geographically. Information poverty—that is, lack of access to useful knowledge—is likely to be found among those groups that are underprivileged in other ways as well, such as the poor and the old. And it is endemic, in the sense that the information most easily available publicly tends to be parochial, high in sugar content and low on fiber. Social conventions, opportunities and places for public discourse are elusive or appropriated as commercial devices. The local bars are usually dominated by one or several large television sets. The school system affordable to all happens also to be the one least capable of producing a solid education. There is a thin sprinkling of initiatives to provide the poor with access to the knowledge—and the knowledge of how to use it—required to transcend his and her condition.

Yet the Boston Area Yellow Pages list
540 schools,
90 facsimile communications equipment and systems suppliers,
880 printers,
107 detective agencies,
143 copying and duplicating services,
68 newspapers and advertising publications,
23 television stations and broadcasting companies,
60 radio stations and broadcasting companies,
138 telephone equipment and systems dealers,
670 computer dealers,
and over 100 publishing houses.

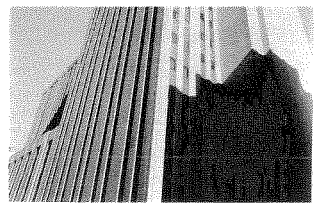
It's an information-intensive city, but public knowledge exchange is not now a civic development theme. Alex Krieger's research suggests that city expansion—the system of parks and public spaces, the waterfront, harbor, and river basin, the street system, and the more recent initiatives of rebuilding the inner city—is what drove Boston's physical evolution thematically over the past two centuries. A less visible but no less significant set of evolutions brought about the school system and network of public libraries, two elements of the information infrastructure which could benefit from profound change today. "Advanced information exchange" in the broadest sense is yet to surface as a true urban change paradigm. With the advent of the computer and breakthroughs in digital information exchange, we have begun to incorporate computer metaphors into our language and views of the world. Scientific disciplines such as

neurophysiology and molecular biology have adopted the "information" analogue. And machine intelligence researchers study human modes to find nonlinear shortcuts to the patterns of automated logic. So why not the city? After all, storage, gathering, access, processing of information is what urban centers are largely about.

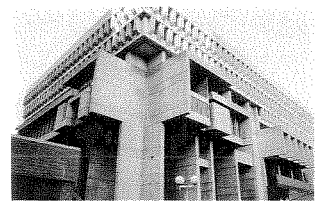
Fortunately, cities are too complex to be provided with the perfect nervous system in one fell swoop. As to the low level of activity around broad public learning systems, it is not immediately clear which potential sponsor group for a public knowledge infrastructure stands to reap immediate rewards, a *conditio sine qua non* for most current urban investment initiatives. Finally, the data-processing metaphor is in itself insufficient to bring about social change for the better without the willingness to investigate on a sustained basis the unique opportunities which may be presented by these new media. The 1960s and 1970s were the heady times of Lewis Mumford's city-as-big-museum analogue, the "wired city," Kevin Lynch's urban perceptual psychology, Doreen Nelson's City Building Educational Program, Richard Saul Wurman's drives toward "making the city observable," Stephen Carr's proposals of illuminating the city with "signs and lights," and of techniques of "environmental visual analysis." Underlying was a shared and deeply felt desire to understand and make transparent, to afford a look behind the scenes, and to make widely accessible demonstrable insights into the workings of society at large. But the advanced stages of this period were also the days of much broader discourse across the issues and the land.

Today the city struggles to keep its basic infrastructure intact, and planners are far from seriously exploring meaningful civic information networks. Besides, isn't this the domain of the market, the phone and computer companies, area networkers, telecommunication service providers, and cable companies? Ironically, public knowledge enhancement has lost attention as a theme for public investment, precisely when there emerge more accessible technologies and deeply troubling issues of widening knowledge gaps among the population. The American city of the 1980s is not about collective civic strategies. It is seemingly pragmatic, divided, competitive, and seeks to reduce its involvement in the provision of public services. Redevelopment authority officials debate visually tolerable levels of downtown speculation, attempting to compensate for slum build-up with development linkage schemes, whereby developers agree to sponsor a certain amount of subsidized housing in the neighborhoods for the privilege of investing downtown. Housing does continue to be a pressing issue, but so does access to quality knowledge, and knowledge about its use, to help spawn and support with skilled manpower the anticipated industries.

On the next page, see how Boston gathers, keeps, and manages its information. Look how it celebrates and categorizes functions, how it builds architectural barriers for data. We still design our schools and libraries as we did in the nineteenth century. And there is something charming about the unwitting Disneyland quality of the computer-linked neighborhood bank. What does a fortified City Hall or State Archives building tell us? The Museum of Fine Arts a classical palais, MIT's state-of-the-art Media Lab a corporate headquarter? And the new Roxbury Community College an Ivy League clone? If the distancing symbolism of the institutional information containers is so critical, what does this tell us about the likelihood for acceptance of a less visible, less assuming, but ubiquitous and possibly more cost-effective network of computer-aided learning stations? Or, vice versa, what does it tell us about the representational requirements for such access points, and the available "soft" material itself? Or will it be possible to detach structured learning and access to the best of cultural and social knowledge from its built packages?



1



2

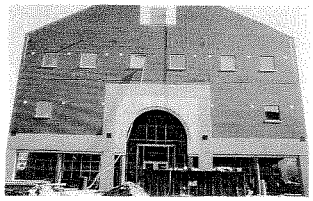
3

4

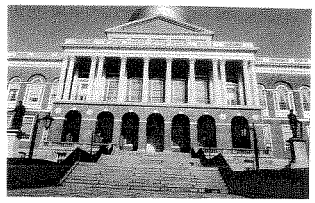
1 New England Telephone and Telegraph Company
2 Boston City Hall
3 Arts and Media Technology Building, MIT
4 Central Post Office, Boston
5 Hynes Auditorium: new convention center
6 Roxbury Community College
7 State House
8 State Archives
9 Museum of Fine Arts
10 Boston Public Library
11 Television Station: satellite dishes
12 The Boston Globe
13 Neighborhood Post Office
14 Polaroid Corporation
15 Boston College High School
16 Cambridge Police box
17 Movie house
18 University of Massachusetts, Boston campus
19 Faneuil Hall
20 Neighborhood church

Photos by Peter Droege

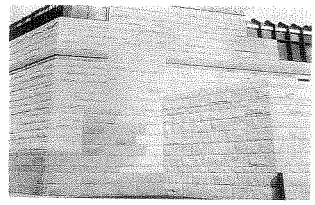
5



6

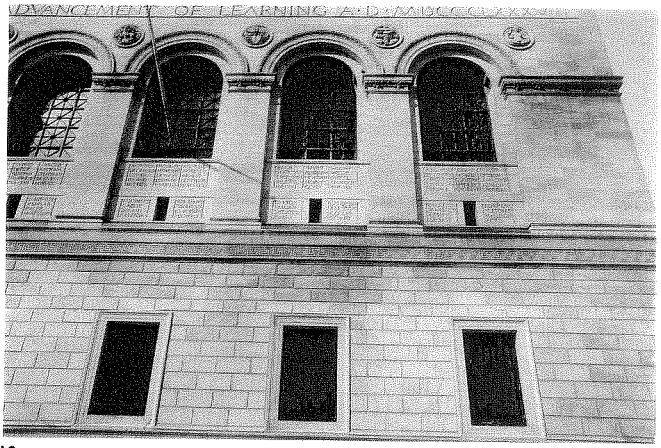


7

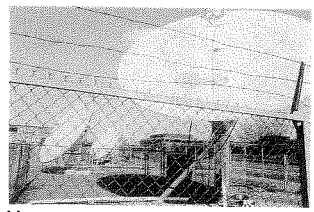


8

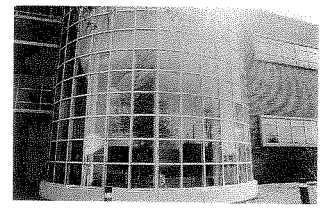
9



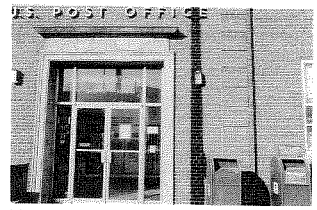
10



11



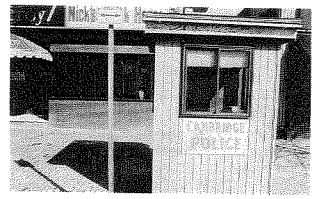
12



13

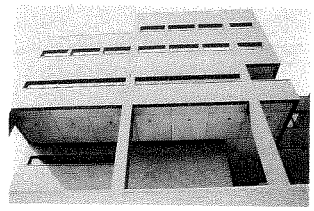
14

15



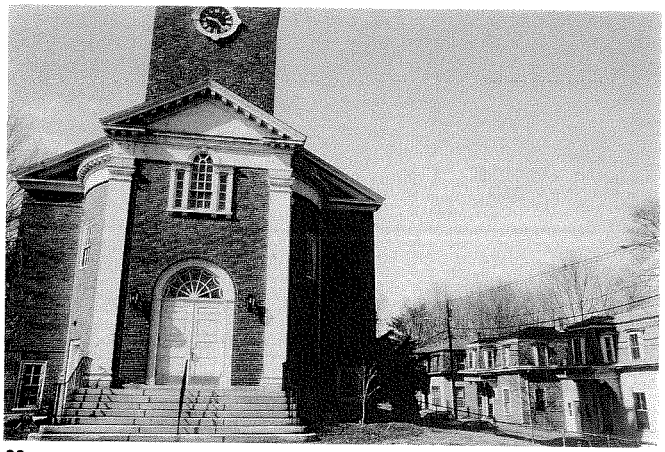
16

17



18

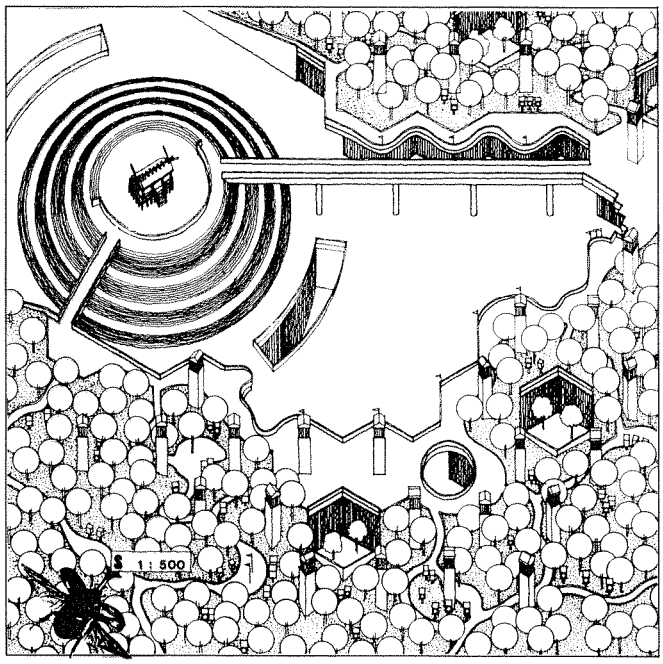
19



20

International Concept Design Competition for an Advanced Information City— Five Proposals for Kawasaki City, Japan

A Tale of Seven Cities



City of Water (Festival of Theatrical Performance on the Sea)

Entry by: Kazutoshi Ito

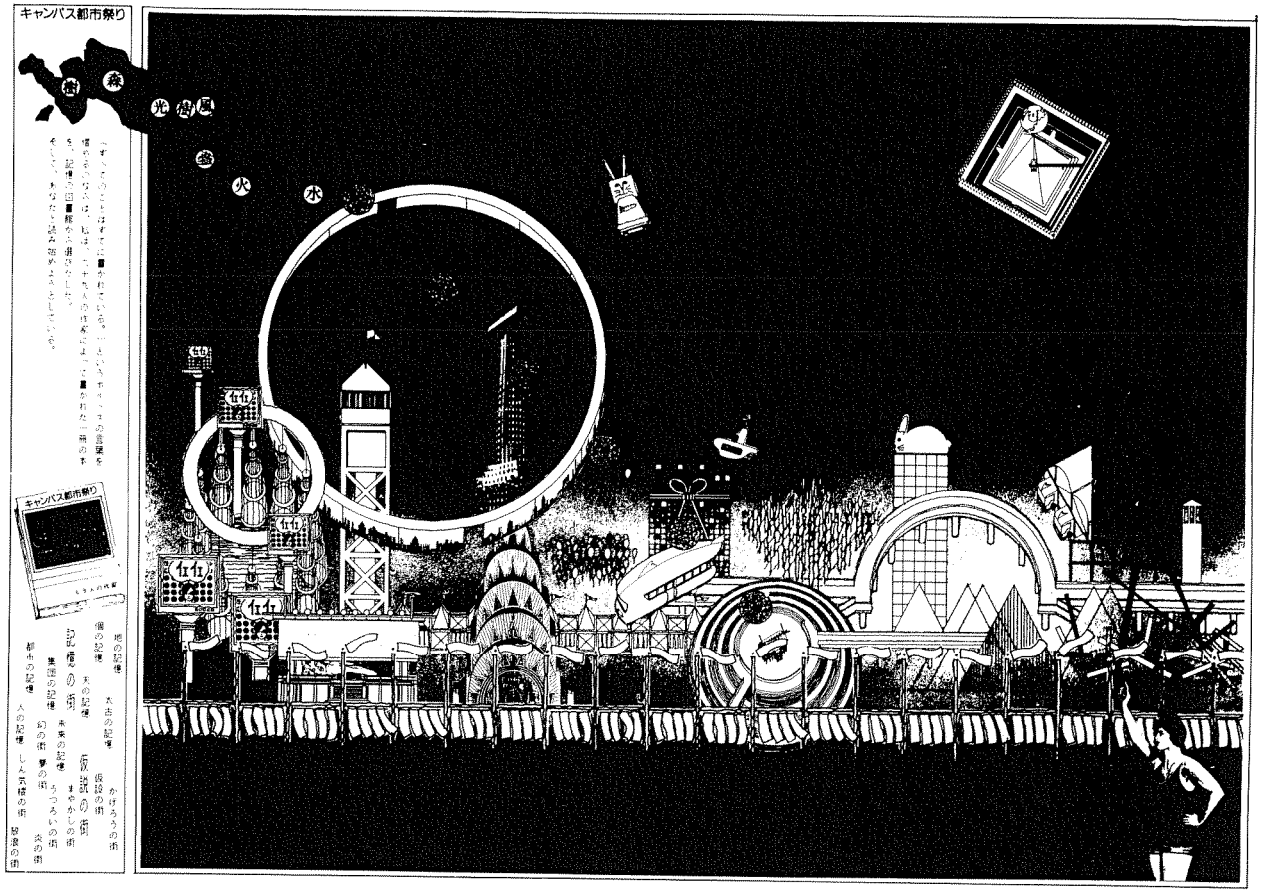
Award: Third Runner-up and Mainichi Newspapers Award

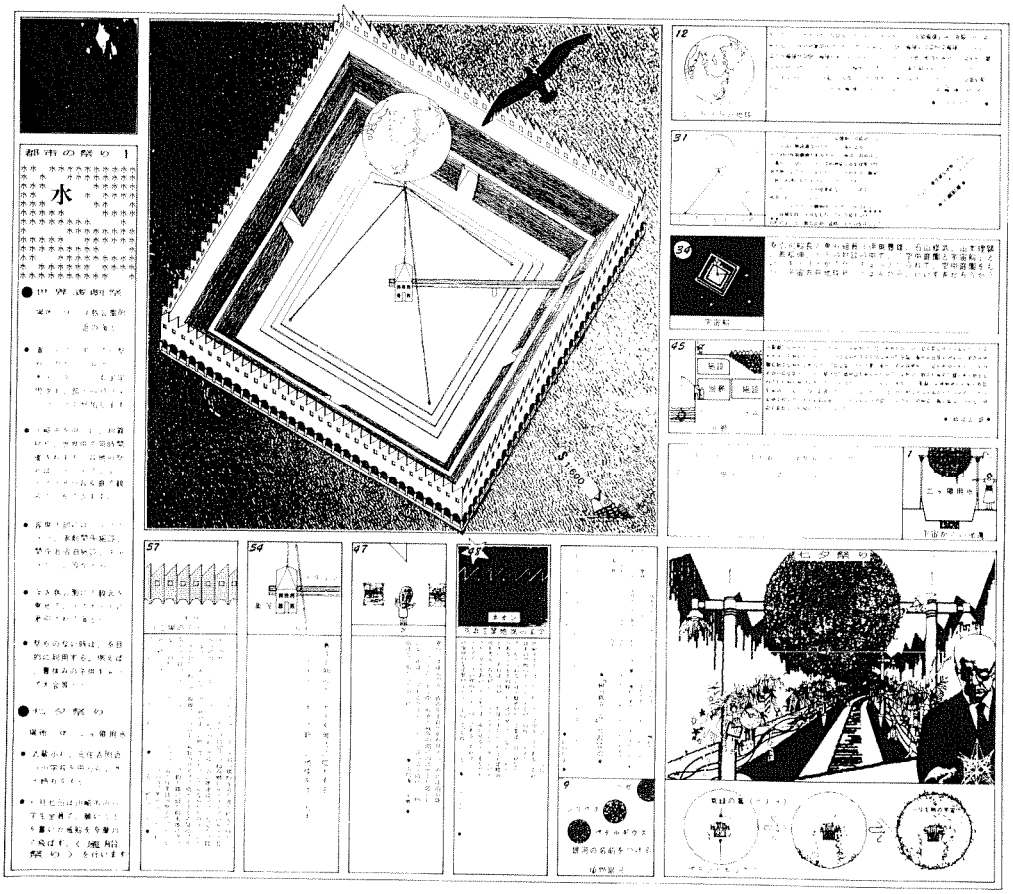
Kazutoshi Ito's Campus City Festival concepts are based on powerful personal memories, media images, and traditional mythologies of water, wind, tree, light, fire, dream, and wood. A water-based element is the Ocean-Theater, for instance, a floating chain of events surrounding the city on its waterways. Tree, fire, and wood are the themes rooting new civic "places of the mind." There is the City of Fire, for instance, the concept of a cyclical event, whereby trees would be grown, which every 30 years become the construction material for world exposition pavilions. These pavilions, in turn, would be incinerated, and the remaining carbonized site used to grow a new generation of trees:

You are watching fireworks while thinking about the exhibition that ran until yesterday. You chuckled as you thought about the fact that the International Information Exhibition would end with an old-fashioned fireworks show. The 'fire festival' will again take place in 30 years. You imagine a monument of the next festival. The thought occurs to you—you want to participate in the festival one more time. Will people 30 years from now still think the burning monument beautiful?

Ito cautiously maneuvers among the end results of the media age: its images, events, the possibilities of crafting form. Function and content of the new media networks are presumed as given. Whatever they are, they will not be so different from what current trends suggest, and, in any event, will require the engaging art of the choreographer, the stage designer, and the art director. Place-making in the advanced information society is cyclical and recycling: physical observations are transformed or exaggerated into the world of media images, which in turn seriously affect form and function of the built environment. Timing and staging are no longer exclusive attributes of the construction process: place and event converge, and the edifice, the manufactured environment, has sprung to life.

You got off an old-fashioned festival bus and started walking. A breeze from the sea blew through the floating island park. Something flashed through the pines, and then the Space Ark Theater appeared before you. "It's a ridiculous name," you thought to yourself. You stared for awhile at the theater that reflected the afternoon sun. You didn't even hear the plane coming down second by second. The past ran through your mind. "I remember I was born in a factory named the 'city'." The early summer sea slowly ruffled time.


キャンバス都市祭り
森
光
風
金
火
水
地の記憶
個の記憶
天の記憶
記憶の街
集団の記憶
都市の記憶
人の記憶
太古の記憶
仮設の街
未来の記憶
幻の街
しん気楼の街
かげろうの街
まやかしの街
うつろいの街
夢の街
次の街
碧遠の街


都市の祭り 1
水
都市の祭り ● 遊び 1
小さなところから始めよう!
インテリジェントプラザ革命
お祭りハッピの販賣
イラストタイルの販賣

Form and Function I

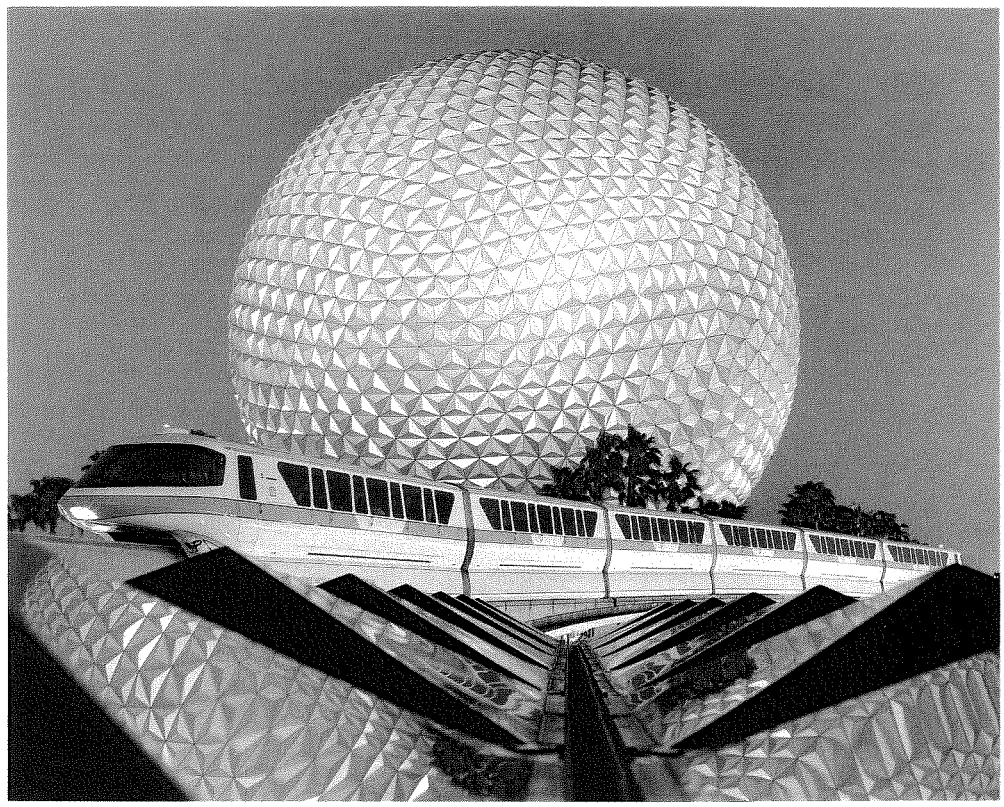
Epcot Center Entertainment Begins at Future World

Eight uniquely designed pavilions and exhibit areas, each sponsored by a leading U.S. corporation, provide close-up explorations of Future World Themes on communication, transportation, energy, agriculture, ocean life and research, imagination, technology and 21st century lifestyles.

The towering gateway to the Future World is Spaceship Earth, a 180-foot-high geosphere that is the symbol of Epcot Center and the largest structure of its kind in the world. Spaceship Earth . . . is the dominant architectural symbol of Epcot Center.

Presented by AT&T, the Spaceship Earth adventure highlights milestones in the communications vital to man's survival, from Cro-Magnon cave paintings to electronic space communications.

Scenes include Egyptian hieroglyphics, Phoenician traders, Greek dramatists, Roman and Islamic empire builders, medieval monasteries, Gutenberg's print shop, Renaissance Italy and Michelangelo at work on the Sistine ceiling. Then come the important eras in modern communications—newspapers, motion pictures, telephones, radio, television, computers and electronic networks for information.



Hieroglyphics and authentic, ancient dialects are correct, and the quadrant held by a medieval Islamic astronomer is an exact replica of the real thing. Even costuming for the 65 life-like Disney "Audio-Animatronics" figures has been thoroughly studied for historical accuracy.

"Spaceship Earth is more than a show about communications," says show designer Pat Scanlon, "It's a testimony to human enterprise for surviving and flourishing on this planet."

Forty thousand years of human history are condensed into a 15 minute journey.

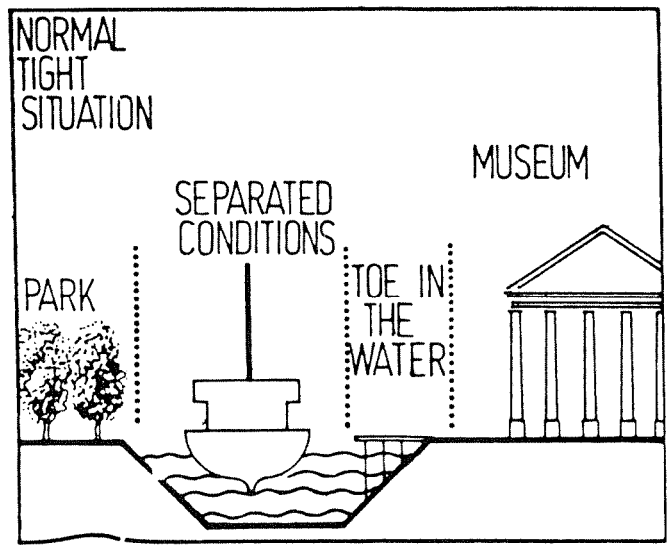
Reprinted from Disney promotional material on Epcot Center.

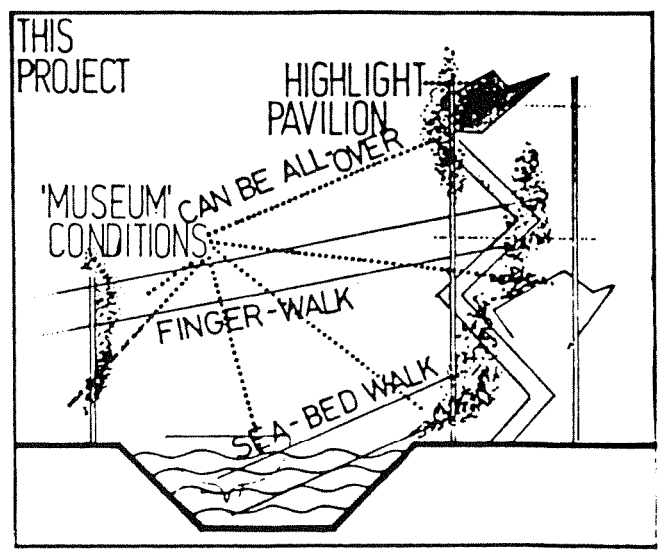
Discovery Museum Amongst a Park in the Sky

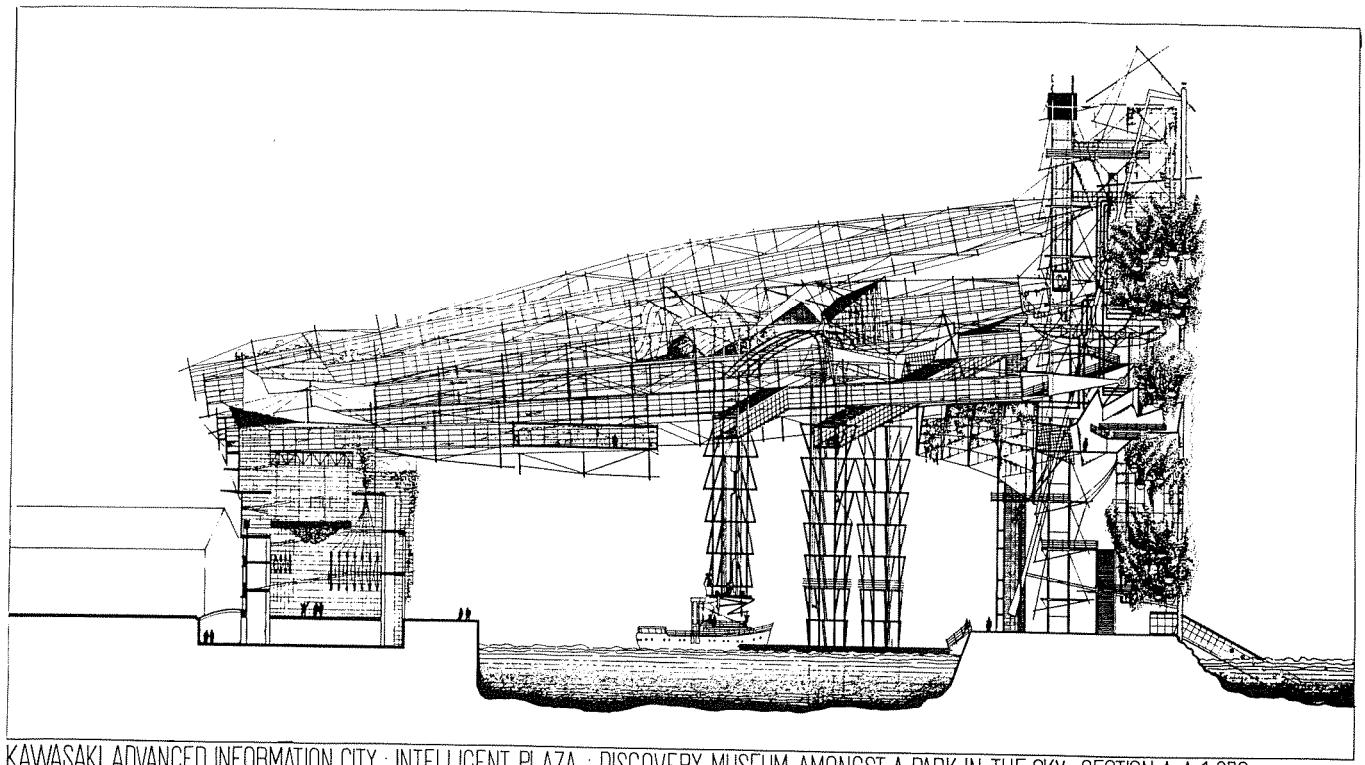
Entry by: Peter Cook
Collaborators: C. J. Lim, Claudia Nickel, and Simon Herron

Award: Second Runner-up and Building Center of Japan Award

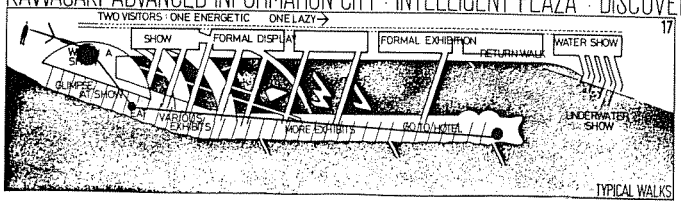
Peter Cook and his collaborators set out to specify the competition theme of the Intelligent Plaza in visionary detail. Formally derived from the nervously homogenous pastiche of Kawasaki's roofscape, his Discovery Museum Amongst a Park in the Sky is positioned and conceived as Kawasaki's landmark on the waterfront. The team proposes it as a symbiotic supermachine, both filled and empty, a construct of museum, vertical park, watering place, resort, and voyage of discovery. His thesis is that the new media should mark the death of the traditional museum and its suffocating, forbidding, "don't touch" linearity. Taken as a metaphor, Cook's museum proposal implicitly postulates that, given different political priorities, society itself could take on different, more freely exploratory, playful forms, if it only manages to creatively intertwine the strands of nature and advanced technology to tickle human inspiration. Popular games may serve as possible models for public engagement in playful electronic queries. Pachinko, the ubiquitous urban postwar habit, could inspire an "intelligent" version, and thereby make electronic data access less threatening.

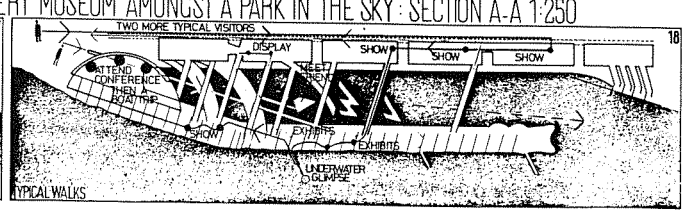






KAWASAKI ADVANCED INFORMATION CITY : INTELLIGENT PLAZA : DISCOVERY MUSEUM AMONGST A PARK IN THE SKY : SECTION A-A 1:250





Caring about Places: Future Places

This issue is the third in the volume funded in part by the National Endowment for the Arts, which relates design and cities. The first issue looked at how we learn from antiquity. The second focused on how we can extract order from the existing fabric of cities and from the built and natural landscape to guide our urban hand. This one looks at the future, even at how the future was viewed in the past, as a source of inspiration for the design of cities. And the last issue will look at city building that results from the art of the possible: city politics and planning.

For this issue on future places we asked Peter Droege to be the guest editor. Peter, architect and planner, recently won the Kawasaki City International Competition for a future, information-oriented city. He has long been interested in how information and media of communication may change the physical fabric of the city and its institutions. He took central responsibility for this issue, its conception, and much of its content. It is focused on future-minded work, especially that of a younger generation of architects who seem to be responding to shifts in demographics, technology, and representational style. To develop the material he assembled a small young team from the History, Theory and Criticism group in the Department of Architecture at MIT that formed sub-editorial groups: Anne D. Nissen and Rives T. Taylor on the American scene, and Réjean Legault for Europe. Peter took responsibility for Japan, for articles that set the context, and for coordination of the work. They were assisted by Priti Paul and Toshiaki Nagaya.

William L. Porter

Rives T. Taylor

Within the evolving American context there are, of course, a variety of specific visionary projects. The examples presented here briefly demonstrate the diversity of current approaches in future-oriented design in the United States. A dominant theme is a clear reference to the "machine for living in"—the future house in an increasingly urban, as opposed to suburban, environment. Each firm has focused on its definition of the future and on the necessary design parameters that any articulation of such a personal conception must entail. The projects respond to new technologies of construction, new images of the house, new family groups, and new conditions of siting and environment. Interestingly, few of the projects address, or see the need to address, the new communications technologies. The architects seem to state that, based on an informed design awareness, the house form can be made flexible enough to encompass an evolving communication technology.

There are also several projects for civic spaces and memorials that do make a greater statement about the future of "public communication" and the technology to support it. The notion of communication, inherent in any monument, is being examined in the new technological contexts.

These designers have chosen to explore the values and associations inherently attached to the built environment; they are using an increasingly complex architectural and societal navigation chart to plot the interrelated changes within demographics, within public and private consciousness, and within building technologies and possibilities.

Geographically, the architects and their projects show a tricoastal diversity of approach. On the East Coast, Dennis Adams critically intervenes in street architecture with visual communication. Numerous exhibitions in New York have looked at the perceived future needs of living in the city or the country. What will the living and work spaces be like? In Texas, where the lines of urban and suburban development have been notoriously blurred, William F. Stern and Associates, Architects, has taken the reality of the urban neighborhood and its lots size and context as the basis for a reconfiguration of the suburban arrangement of living spaces. The West Coast, influenced by a long tradition of "case study houses,"[1] has taken a closer look at demographics, social change, and the technological forces of mechanization. Holt Hinshaw Pfau Jones Architecture has taken the distinct contemporary realities of language, image, and economics to develop a rationalized architectural approach to the city and modern consciousness. The designer Martin Mervel, in his monuments/memorials, reevaluates architectural notions of public communication.

Finally, architect and teacher Lars Larup reflects on the lessons of demographics and how he and several of his contemporaries have designed structures to support living within a future, technology-dominated society.

Note

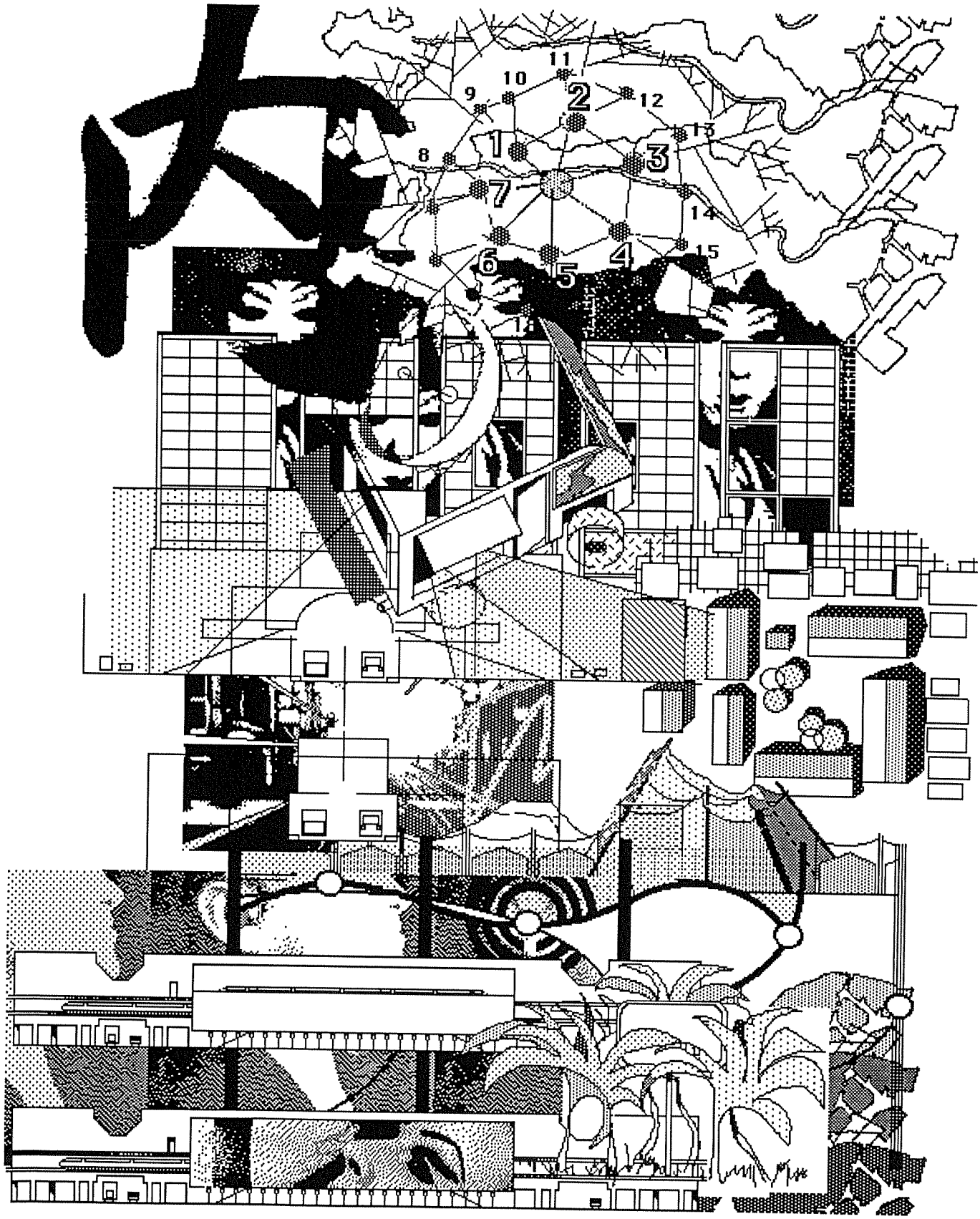
1 The Museum of Contemporary Art in Los Angeles will explore the history and legacy of California's Case Study Houses in a future exhibition. The Case Study Houses, designed and built in Los Angeles between 1945 and 1966, were a series of 36 experimental prototypes meant to acquaint the public with the modern architecture. Among others, Neutra, Eames, Rapson, Koenig, Ellwood, and Eero Saarinen contributed designs. This represented the most influential and innovative architectural research effort in postwar America.

Entry by: Peter Droege
Collaborators: Leo Marx, Lisa Peattie, Otto Piene, William L. Porter, Julie Messervy, and Winifred Richmond

Award: Grand Prix

Peter Droege and his team base their "Campus City Guide" on the notion that a "purposeful transparency" of city networks and facilities should be introduced, to prepare for a new city identity. They argue that the future would best be pursued through a strong commitment to a flexible process of physical and social community building, pursuing viable traces of the past and opportunities posed by current trends. The citizens of Kawasaki, rather than merely accepting technological innovations, are to collaborate in planning their evolution and introduction. The four competition themes are responded to in discrete concepts.

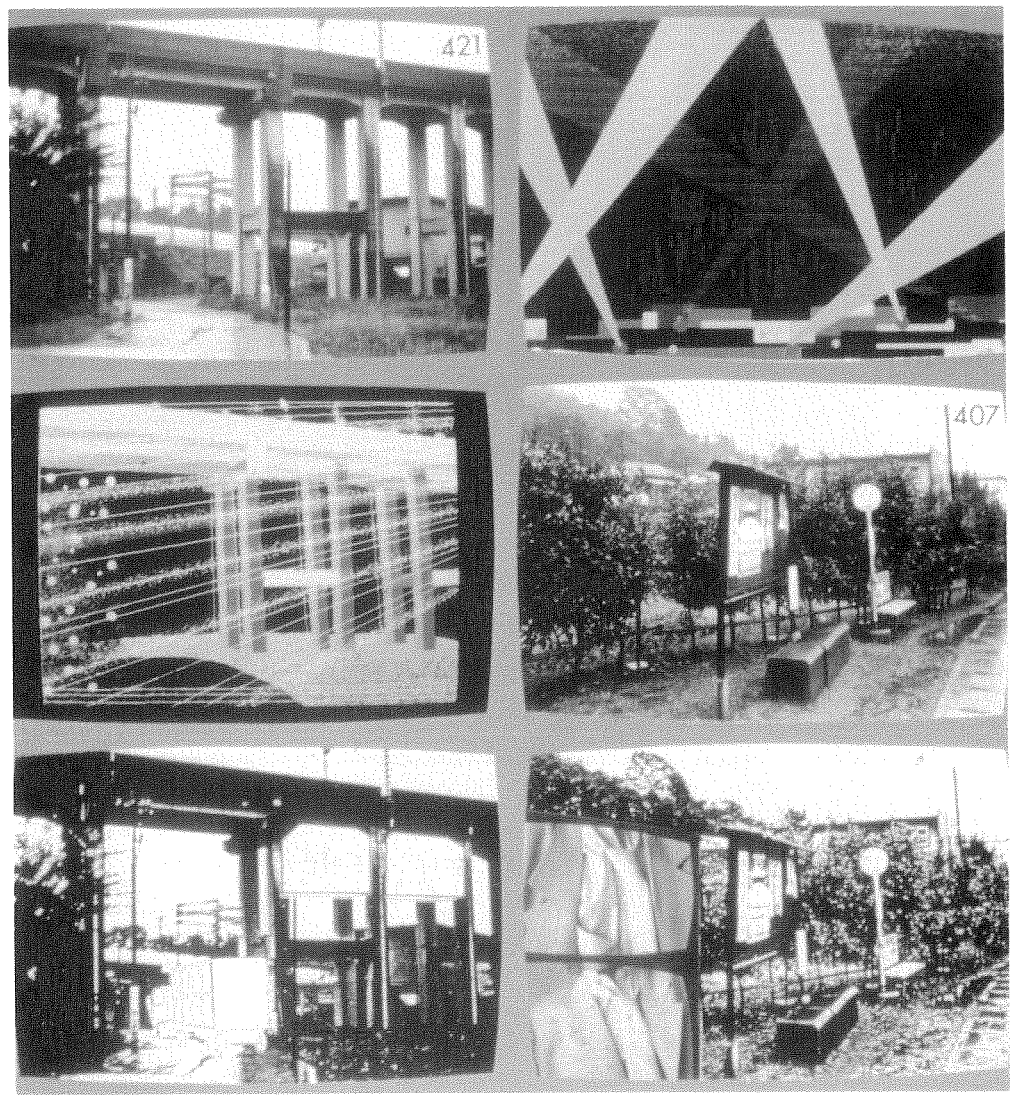
The first, Kawasaki Institute of Technology (KIT), is seen as a twenty-first-century version of Thoreau's cosmopolitan village vision and the open university tutorial system. An Intelligent City Map (InfoMap) of today's individual and institutional resources is to be the first KIT catalogue and serves as the early sketch of an evolving city-wide learning network, exploring new directions in intellectual, spiritual, and sensory realms. For the second theme, entitled "Intelligent Places," the author proposes an urban "information vernacular." It aims at programming the growth of information networks to rebuild the physical fabric of the city. "Castles," "gardens," and "fountains" become metaphors for centrally prominent, neighborhood-based and streetside places. Four major train stations, exchange nodes with supraregional lines, are presented as new communication nodes above the tracks, multiuse city gates, and invigorated district centers. Ideas for mobile, wearable, and domestic elements are presented to raise questions and stimulate discussion. Thirty kilometers of river edge are to be rebuilt as the city's lungs and "green antenna," a world of smart victory gardens, leisure lands, and advanced agricultural research stations. The third theme describes a "City of Festivals," based on the community-affirming nature of celebrations. A festive network is presented as means of community organization and a communication medium with the world. Several initial themes are suggested: language and sky events, or a world exposition where the city itself and its learning network would be on display. Finally, a strategy for the management of network access and participation is outlined, and prototype test environments are proposed as vehicles for evolutionary change, to generate ideas and check against civic values.


11
10
9
2
12
13
8
1
3
7
14
6
5
4
15

The Environmental Image Game

Entry by: Shinichi Okuyama
Collaborators: Masashi Sogabe and Masayoshi Takeuchi

Award: Second Runner-up and Kawasaki Chamber of Commerce and Industry Award



Shinichi Okuyama and his colleagues take up the challenge of developing new urban traditions, the theme of the Campus City Festival. The group proposes to alter the traditional form festivals take and make them "environmental," temporary images within everyday settings and time frames. The concept seeks to exploit the nonhierarchical and instantaneous qualities of the new media to stage ubiquitous hit-and-run events throughout the city. Okuyama searches for the city's "loose holes," all those underused and neglected spaces like parking lots, highway right-of-ways, and off-time school yards, to be transformed into playful, interactive media settings, galvanizing the neighborhood. His is the approach of the high-tech pirate, the digital graffitist, the youthful urban offender, an electronic Robin Hood distributing data to the masses. Company- and city-sponsored festival trucks are to be filled with media gadgetry, and public telephone booths mutated into intelligence nodes. The events will radically alter the city image, or at least its afterimage, by temporarily reversing figure and ground of the urban structure.

The proposal suggests that many dangers connoted by today's technological prospects, such as authoritarian determination of social reality, invasive surveillance, and civic control, are not inevitable, but are related to the degree of intelligent popular access to these media and to the political consensus and social attitudes about their development and use.

20

Future Places

Peter Droege

Two themes flow through this issue. Leading is the elusive notion of the future, and attitudes toward it in the work of place designers. Woven into this is a forcefully emerging set of issues which has come to be associated with the future in something of a reflex. The means of message exchange and information handling are undergoing dramatic changes, which in turn transform fundamental concepts of place and time. Advanced information technologies are rapidly coming to be seen both as objects of sober explorations and as an infrastructure for the promised land. The attaining and retaining of knowledge is an archetypical human endeavor, and buildings and icons throughout the ages and across cultures attest to that. It is no wonder that the information machine is being pursued so hotly today.

Much of our built environment expresses an ambiguity of status and aspiration, of current condition and hope, or fear. This ambiguity reverberates in the persistent conflict between tradition and innovation. Designing and planning are activities which are by definition mindful of what is to come, as much as they are rooted in what has been or still is. To conceive of built settings is to establish an imaginary vector along the trajectory of time, and to condense experience and aspiration into a physical abstraction. Visionary plans and utopian concepts actually tell us more about our current state than about the future. "Desires are already memories," Marco Polo tells Kublai Khan in Calvino's *Invisible Cities*.

To sort out present attitudes toward the future, signified in built and imagined urban settings, is a tricky task. The future as focus of an attentive gaze is something of a contradiction in terms since our concept of it is itself a product, a phenomenon, of a shifting here and now. Collected here are snapshots and fragments, a kind of contemporary archaeology of tomorrow's places envisioned today, and a pocket mirror of advanced technology's entry into the built environment. The message of the assembled pieces remains implied. But it is tempting to risk some general observations.

The subjects presented here stem largely from three regions of the advanced industrial world—the United States, Western Europe, and Japan—and some cultural distinctions in their future attitudes can be made. By and large, the Japanese initiatives show an optimistic readiness to embrace the future with dramatic moves. Japan is leading a growing group of countries spanning from West Germany to Australia in which "informatization" has begun to supplement or replace older urban development paradigms. Here, a veritable avalanche of initiatives seeks to endow technology-driven infrastructure and consumer market development with a social vision. In the United States the tone tends to be more skeptical, even suspicious, about such visions, certainly the ones aspiring to be of urban scale. Practitioners here have come to collectively concur with the primacy of local, pragmatic, and incremental responses. In residential buildings, ongoing shifts in technology and society at large are reflected in three new phenomena: the innovative house presented as "intelligent" appliance in a conventional cloak, as neoconstructivist statement for the new urban professional, or as result of a demographically conscious building program. Recent Western European projects exemplify a continued belief in urbanism, the city-bound rite of inaugurating the future. Here, we find re-visions and minor revolutions amid dearly held planning conventions, the reliable sources of both disenchantment and delight.

Contemporary architectural ideology, that volatile system of beliefs about the values, goals, and means of the profession, is shattered into a myriad of little credos. The most successful of architectural careers seem driven into show business, pragmatism, or insider cultural commentary. On the surface, larger dogmas seem long gone, yet some have persisted or quietly taken over. For one, technology has survived as a main theme of utopia, and with its evolution, the "wired city" of the 1960s and the "advanced information society" of the 1980s emerge as prime paradigms, for the chorus of critics and those eagerly greeting the electronic revolution alike. This is in keeping with our society's prevailing attitude toward the future, where

technological innovation has come to be understood as synonymous with social progress.[1] The public search for the electronic El Dorado, largely called off in the United States due to lack of viewer response and sponsor patience, is fully under way in Japan. Great Britain, France, West Germany, and others have dispatched smaller expeditions as well.

Meanwhile, industry and academia are busy constructing and reconstructing new "technopolitan" areas and networks, high-technology innovation and production nodes targeting rapidly evolving markets.[2] The Silicon Valleys and Route 128s of this world have been excluded from this survey and saved for future form investigations.

With notable exceptions, architectural representation has found it difficult to find new means for expressing new concepts of information management. Intrinsically elusive and ephemeral, the complex questions of the information age are being responded to with iconic curtain walls and other, more intricate forms of reinterpretation. Substance, program, and the layered meanings of contemporary society are in certain representation-minded quarters expressed by the mechanical elegance of vintage machines. Has the microchip brought about the bankruptcy of style?

To some, the natural environment and the built environment, at once manifesto and equipment for the future, have been replaced by an afterimage of what was on the picture tube one-thirtieth of a second ago. The conventional notions of the public and the private, and of inside and outside, appear to be rendered meaningless. The physical boundaries of the "traditional" place are being perforated, dissolved, and replaced by audiovisual protocols and advanced technology's regime, as manifested in new communication and surveillance systems, a development long ago introduced by telephone and -vision.[3] The experience of metropolitan public places attests to the convergence of built and transmitted media. The computer-aided information spaces of New York's Times Square and Tokyo's Shibuya station area have transformed their built environments into message supports, image screens, and echo chambers.

Several blurs distort our notions of architectural space as a source of "sense of place," a condition decried by Virilio and other critics of media abstraction as degenerative. The blurring of the human presence is brought about by the ability to be in several places at once via telecommunications, and to adopt more life-styles than one, through surrogate sampling of transmitted programs, or via intercontinental travel. The externalization of memory is perfected by the absorption, retention, and dissemination of knowledge by the growing collective of machine data banks, at once ubiquitous and intangible. The blurring of time as structured by planetary mechanics is brought about by the 24-hour continuity of automated functions. Cinema and television have irreversibly altered the nature of spatial experience, a trend amplified in electronically supported techniques. We have learned the aesthetic of the special effect and come to read all extraordinary places in this way. Hollywood's stage settings and Epcot's Future World are ambiguous hybrids of a sense of lasting presence and fleeting effect. Modern tourism is another symptom of this conditioning, where both the picturesque and the stomach-wrenching titillate the detached. And the future itself is being rehearsed as a persiflage of the present in the largely fatalistic or violent tradition of science-fiction cinema.

Architecture, imagistic and media-conscious within its representational conventions, faces renewed questions about its profoundness. These questions pose a multiple challenge related to the use of information in the broadest sense. Buildings are at once message carriers and facilities of information exchange. They are artifacts of human intelligence and more specifically manifestations of programmed societal commitment. Information about the direction of society and our cities is available, ready to be assimilated into relevant concepts. There is a role for utopias—not for ready answers, but to generate plausible and accessible questions. This is less a challenge of information access than of intelligent design advocacy. Serious research and experiments

must be launched, aimed at learning about the character of the new media, their impact on behavior, and their opportunities for reducing isolation and supporting empowerment. Information systems have become an environmental dimension, and the issues they raise may help reconnect place and societal direction in responsible ways. Visionary concepts of cultural and political relevance are needed to synthesize data and commitment, communicate conditions, and propose integrated means of change. Our physical environment must remain both reliable source and focus of our sense of reality.

Untitled photographs by Lee Friedlander. Commissioned in 1985 by the MIT Committee on the Visual Arts with support of the Massachusetts Council on the Arts and Humanities, for a photographic exhibition documenting the social landscape in our technological age.

Notes

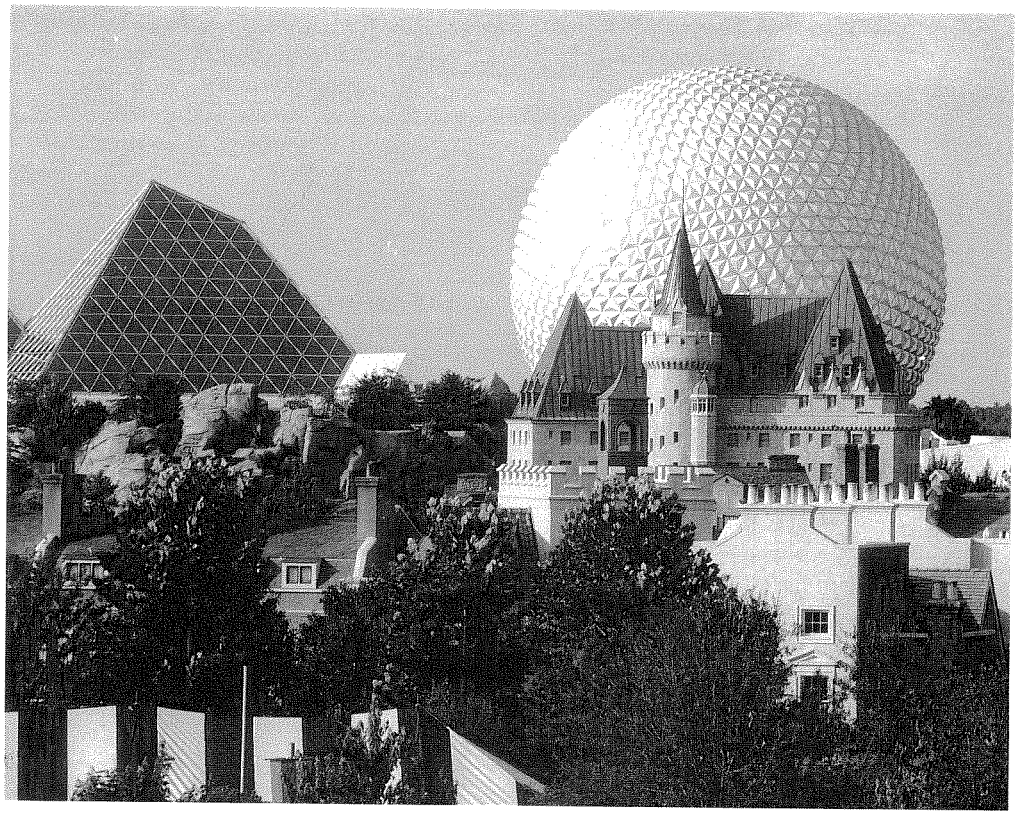
1 Leo Marx points out that there are two traditions of thought about technology and progress in the United States. One can be traced to Thomas Jefferson, who held that technological innovation must be subordinated to social ideals. The other, somewhat younger yet clearly dominant today, originates with Daniel Webster and others, who expounded the idea that technological innovation automatically spells social progress. (Leo Marx, "Does Improved Technology Mean Progress?," *Technology Review* (Cambridge: MIT, January 1987).

2 Paul Virilio, "The Overexposed City," *Zone 1/2* (New York: Urzone, 1986). Original in *L'Espace Critique*, (Paris: Christian Bourgois, 1984).

3 Raymond W. Smilor et al., *Creating the Technopolis* (Cambridge: Ballinger, 1988).

Form and Function 2

Michael Piore



The social orders of flexible specialization are very different from those of mass production. They involve a constant rearrangement of the structure of production and a continual repositioning of the different institutional components of the economy. A good deal of cooperation is required among workers and managers. Firms shift back and forth: a firm which is a competitor one day may become a subcontractor the next. The prototypical structure in this regard is the high-fashion garment industry in such urban centers as New York, Paris, and Milan. The city-centered regions of central Italy have been particularly successful in developing the new dynamic version of this type of production in products ranging from shoes and textiles to machinery. This form of production flourishes in the traditional urban economy where many small producers operate in close physical proximity to one other, each dependent on a dense industrial community.

A revival of older urban forms is not inevitable. Flexible specialization also emerges within the old mass-production corporation through the decentralization of authority, and the creation of much looser but also more cooperative and interactive linkages among the corporate components. In such organizations the new productive modes are not as heavily linked to a particular city or region. New interactive communication technologies facilitate the intimate cooperation which was once possible only through the kind of physical contact that urban conglomeration permitted. Nonetheless, it is difficult to imagine this technology substituting for the city in the near future.

Flexible specialization as a mode of production favors cities in another respect as well. Because economies of scale are reduced or eliminated, the city becomes a viable economic unit independent of the national economy. Lately we have seen certain cities, like those in central Italy or around Boston and San Francisco in the United States, flourish in a world market independently of the nations in which they are embedded. But the logic of the new technologies is that cities will increasingly be able to produce efficiently for their own needs without extensive trade with the outside world. As they do so, it becomes feasible for each city to develop its own idiosyncratic consumption patterns.

Reprinted from *Zone 1/2*, 1986, pp. 434–435, with permission from Urzone, Inc.

Martin Roy Mervel
Los Angeles

The Future Is Now

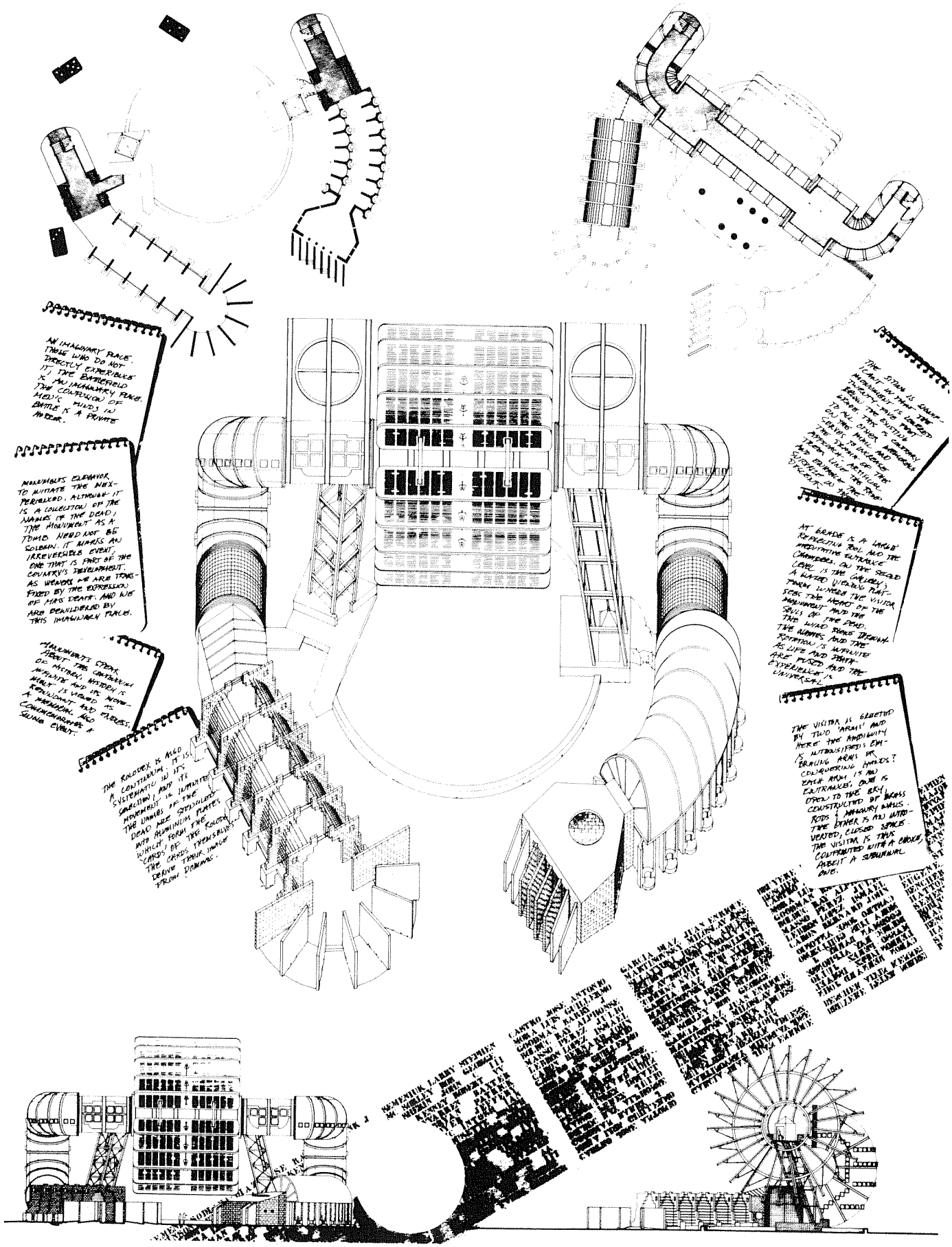
As a twentieth-century Los Angeleno, I am conditioned to move forward, but as an artist I am prone to travel laterally (off in any direction) during creative pursuits. Attempting to predict the future (of design) is vanity. Using a comic strip analogy, did Flash Gordon in the 1940s provide an accurate image of what the international space exploration effort came to be in the 1960s? Of course not, and it is equally inaccurate to use a collective image of architecture as a measuring device for what our future direction may become. if only form and technology influenced Western culture, we might all be living in a facsimile of the House of the Future from Tomorrowland, Disneyland (circa 1955). In retrospect it is easy to see this plastic object as kitsch because a stylist dictated the "futuristic" image with a palette of available technology. When an architect solves a program intelligently, function cannot preclude beauty or artistic intent.

History is a cyclical index of time. The only relevant moment is *now*. The architect's formal vocabulary must be personal expression (not regurgitated history). If change is the constant that dominates our culture, then modernism as Webster defines it, "pertaining to present and recent time; not ancient or remote," can be viewed as a sequence of obsolete actions. Time-tested principles of architecture are continuously rediscovered, as the pendulum of design measures each interval of time.

Giving old objects new life yields illuminating transformations. An obsolescent object in today's information age offers conceptual design validation *now*. (Projecting its functional use into the future would only make it obsolete). The archaeology of initial discovery compels one to imagine new uses for the found object. Rejuvenation validates the stamp of time both metaphorically and literally. Recycling urban detritus is a manipulative responsibility (of artists in all media) to (re)-organize available resources and transform technology. This process of readapting an object from one era or context into another can alter its predictable meaning into a previously unknown realm. For example, the rolodex in its everyday desk-top context offers ordered access to one level of information. Distorting the scale and context radicalizes the object when it becomes transformed into a gigantic war memorial: The Rolodex of Tyranny. It offers ambiguous readings as a welcoming anthropomorphic monument or an alienating violent machine of bloodletting.

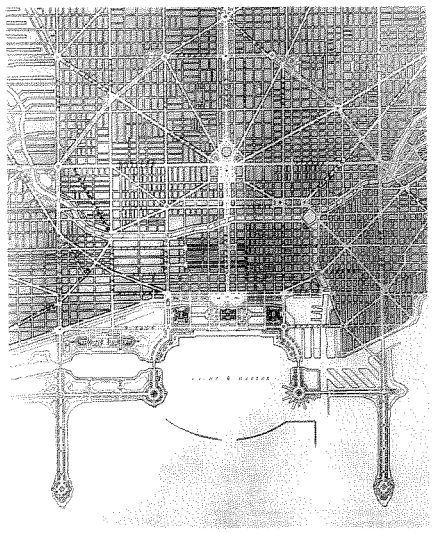
The "future" is a misnomer because it is ineffable, out of reach now, although we do get to it eventually. The uncertainty of not knowing the future is a wonder-full property of time. Sometimes while designing we can know too much. The moment we think we know, the best solution occurs at the depths of conventional thought. The concept of future as a state of uncertainty serves as a healthy process of designing. Often the search for what we do not know yields the most interesting and meaningful results.

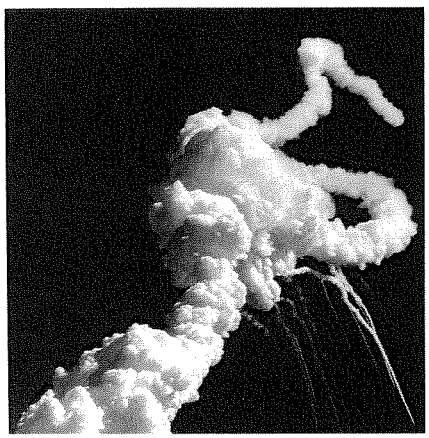
Vietnam "Conflict" Memorial


AN IMAGINARY PLACE. THOSE WHO DO NOT DIRECTLY EXPERIENCE IT — THE BATTLEFIELD THAT CONTINUES OF MEDIA MUD IN BATTLE IN A PRIVATE MANNER.
MONUMENTS ELSEWHERE TO MITIGATE THE NEX- PERILLED. ALTHOUGH IT IS A COLLECTION OF THE NAMES OF THE DEAD, THE MONUMENT AS A TOMB NEED NOT BE SOLEMN. IT MARKS AN IRREVERSIBLE EVENT, ONE THAT IS PART OF THE COUNTRY'S DEVELOPMENT. AS WE WORK WE ARE TORN FIXED BY THE EXPRESSION OF HIS DEATH. AND WE ARE BEWILDERED BY THIS IMAGINARY PLACE.
"MONUMENTS SPEAK ABOUT THE CONTINUUM OF MEMORY. WHETHER IT MINUTE AND ITS NOW- MONUMENT, AND FAILURES. COMMEMORATE A SIGNIFICANT EVENT.
THE KALEIDOX IS ALSO A CONTINUUM IN IT IS SYSTEMATIC AND IT'S SUBSTITUTION IS UNLIMITED. THE NAMES OF THE DEAD ARE STENCILLED INTO ALUMINUM PLATES WHICH FORM THE KALEIDOX CARDS OF THE KALEIDOX THE CARDS THEMSELVES DERIVE THEIR IMAGE FROM DOMINOES.
THE SITUATION IS SIMPLE- MONUMENT IS LOCATED BEHIND THE BUILDING TO ALL OTHER IS CONTAINED WITHIN AND SURROUNDED BY THE INTERIOR OF THE APPROACHING METHOD. THE INTERIOR OF THE SURFACE IS ENCLOSED BY A WALL AND THE ENTRANCE IS ON THE ROAD
AT GRADE IS A LARGE RECTANGULAR POOL AND THE CHAMBER. ON THE SECOND LEVEL IS THE GALLERY, A RAISED VIEWING PLAT- FORM LINKED THE VISITOR MONUMENT AND THE SPIRITS OF THE DEAD. THE NAMES AND THE ROTATION IS ALTERNATE AS LIFE AND DEATH ARE PLACED AND THE EXPERIENCE IS UNIVERSAL.
THE VISITOR IS GREETED BY TWO "ARMS" AND HERE THE AMBIGUITY IS MONUMENTIFIED: EM- BRACING ARMS OR CONQUERING ARMS? EACH ARM IS AN ENTRANCE. ONE IS OPEN TO THE SKY CONSTRUCTED OF BRASS RODS & IMAGINARY WALLS THE OTHER IS AN INTRO- VERTED, CLOSED SPACE. THE VISITOR IS THUS CONFRONTED WITH A CHOICE, ALBEIT A SUBLIMINAL ONE.

Beyond the Frontier I

Anne D. Nissen





2

Traditional American Notions about Future Living Places

The first European colonizers of North America imposed well-ordered, permanent communities upon the land of the northeast, communities that were bound together by civic ideas directly related to religious beliefs. This physical organization was quickly overtaken by a quest—the galvanizing promise of the American frontier, a place always just beyond the sight of the men who began to propel their families westward. To them the West would be a garden of paradisal pleasures where harvesting would consist of pulling ripe fruits off wild trees, and plentiful game and water supplies would be nearby. The frontier was a vision, neither a real nor a built place. And in practice the search for it could not be sustained; families had to settle down in order to achieve a state of stability in which to raise children as well as crops. One could not wait for the promised land to eat.

By 1893, when the western frontier was declared officially "closed" by Frederick Jackson Turner at the World's Columbian Exposition, Americans had come up with a new repository for their aspirations: the city. It was a place of promise and striving, a place, it was believed, where all would succeed if they just worked hard enough.[1] And the urban fabric itself was now believed to be an organism that could be manipulated to achieve any desirable form. To the progressive mind it was all just a question of time.

But this optimistic image faded in the face of economic pressures, and the American family withdrew to suburban lands. These were places in which housewives were to run quasi-scientific, efficient homes full of well-nurtured children. They were never places of the future, really—rather, they largely existed to shore up an idea of the family as a private unit unaffected by new social and economic realities.

By the 1960s, seemingly prompted by an upsurge of faith in new technologies, Americans reincarnated progressive urban ideas, this time wearing technological dress. One set of proposals offered during the 1960s and 1970s suggested the creation of "wired cities." The wired city was to foster an electronic superdemocracy. It failed to deliver on its promise, as its theorists discovered that simply introducing networks of information conduits did not change the world. Concurrently "space, the final frontier"[2] became a compelling national vision. Once a small number of astronauts were successfully catapulted there, however, it became hard to sustain a vision of space that held promise for Americans at large. That the colonization of space might happen within anyone's lifetime came to appear extremely unlikely. And since then, what was once seen as pure space has been sullied by the introduction of surveillance and defense systems, and the Challenger disaster. Technology no longer can be seen as neutral.

It seems that many Americans have

lost some of their optimistic faith that the noble individual[3] will continue to be able to wrestle with the future, and win. So of what future places can Americans dream?

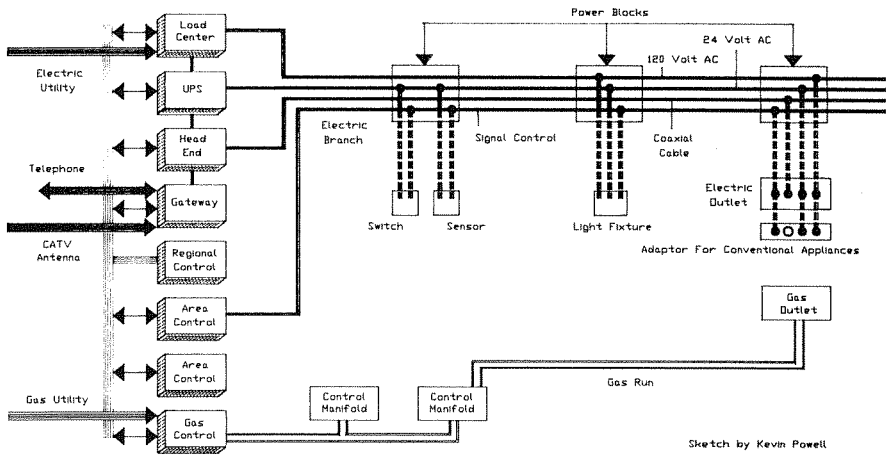
Current Designs for the Parts of an American Future City

Two major movements that forthrightly deal with notions of the future are presented here, as well as a third implicitly concerned with the future. None are overwhelmingly guided by large-scale urban thinking. American planners by and large seem disenchanted with large-scale interventions into the urban environment (think of Pruitt-Igoe); with contemporary critics, they share a common agreement that there are no overriding answers. Without a controlling scheme it is not easy to address a concept like that of a civic-minded "information city." Such a vision cannot seem to hold the American imagination.

Americans have instead largely taken to rediscovering, recycling, and "revitalizing" their cities. Even the World Future Society has stated that "the 'city of the future' will bear little resemblance to the science-fiction images from the past. Rather, cities will increasingly build on their own unique characteristics, as represented by their historic downtown areas."[4]

At first glance the architectural world seems overrun with those looking "back to the future," to days of pitched roofs, gingerbread detailing, and happy, perfect families. But behind this glossy

3



4

1 Plan of Chicago, 1909

Plan of the complete system of street circulation; railway stations; parks, boulevard circuits and radial arteries; public recreation piers, yacht harbor, and pleasure-boat piers; treatment of Grant Park; the main axis and the civic center, presenting the city as a complete organism in which all its functions are related one to another in such a manner that it will become a unit.

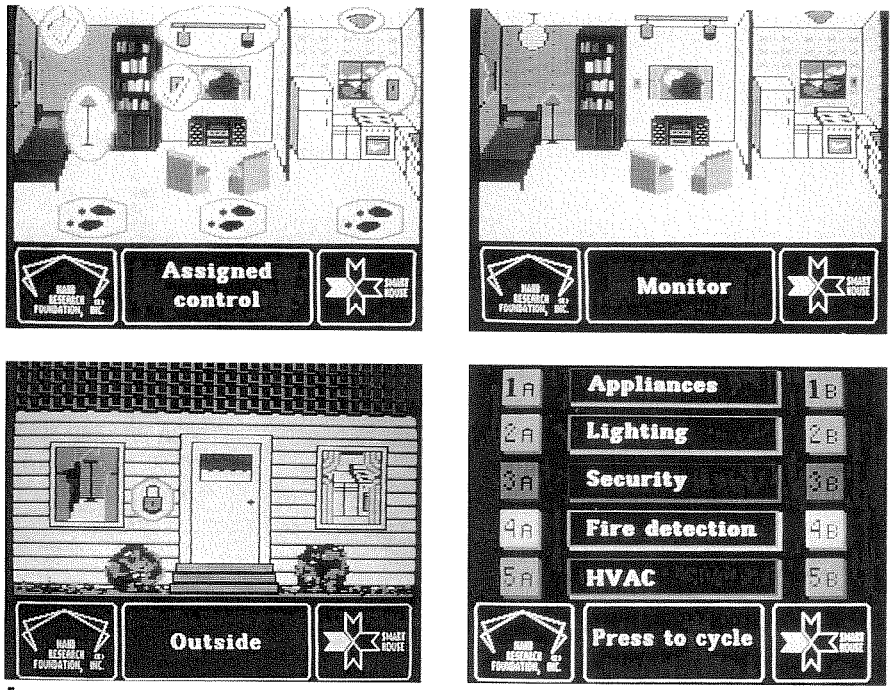
Reprinted from the *Plan of Chicago,* by Daniel H. Burnham and Edward H. Bennett, 1909 (Da Capo Press, 1970).

2 Space Shuttle Challenger Accident, January 28, 1986

Photo courtesy of NASA.

3 First constructed "smart house," built in Bowie, Maryland, by the Smart House Development Venture, Inc., with the Gas Research Institute, 1987.

4 Wiring systems make these constructions possible.



5

5 Centralized microprocessor control
The first smart house products are targeted for single-family, detached home construction in 1990. Reprinted from the *EPRI Journal*.

6 S.M.I.L.E. Preschool and Elderly Congregate Housing
Rehabilitation of 1960s nursing home, Dorchester, Massachusetts, 1987. The Women's Institute states that "the proposed design is planned to allow each of the two programs to function independently, while benefitting from the presence of the other. The two age groups in the building will enhance the 'homeyness' of the housing as well as provide the potential for an extended family for the children of single parents," as well as replacing loneliness as the chronic companion of the elderly.

Developer: S.M.I.L.E. Preschool, Roxbury, Massachusetts.

Project Manager: Women's Institute for House and Economic Development, Boston.

Architect: CityDesign Collaborative, Boston (Associate and Project Architect: Leslie Moldow).

7 Entry facade, elevation

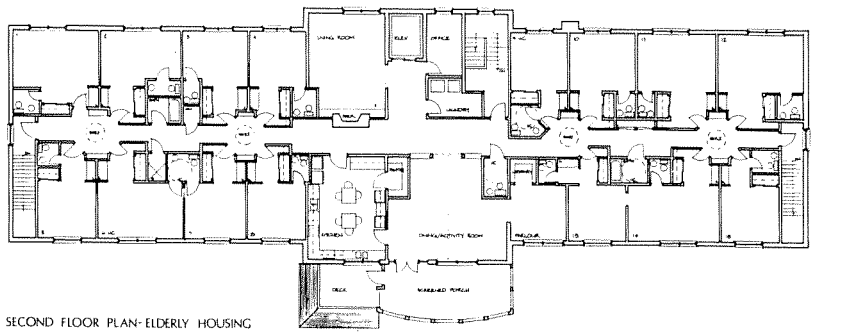
surface, other responses emerge. One is a response recognizable not so much by exterior image as in plan: the house or office as grand appliance. Another is a response driven by demographic shifts, which often does not wear an identifying look. This response happens on the smallest of scales. Last is a critical view concerned with providing formal representations of a more abstract future—often produced by younger "design intellectuals."

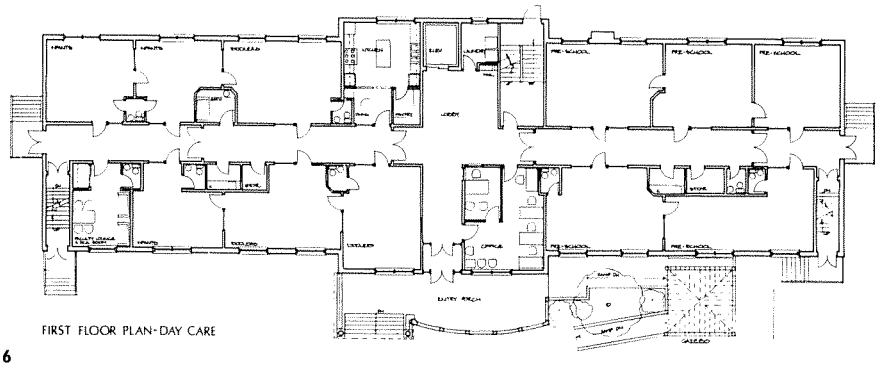
The "Smart" Environment

So-called smart buildings are being developed by manufacturers of home and office products, utilities, academics, and computer industries. Such work is evidence of a belief that foreseeable technological processes can better the American dream and the American office. Development of the smart house follows the initiatives toward the office of the future.

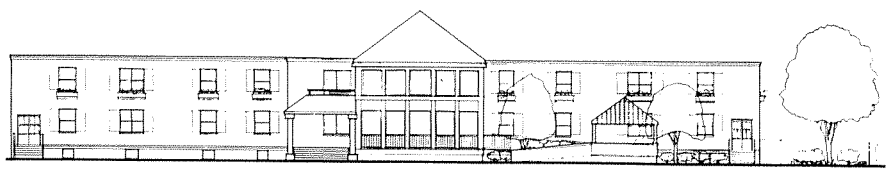
So as not to appear too new, and to appeal to the broadest possible consumer group, the recent demonstration house built by Smart House Development Venture, Inc., was clothed in traditional garb.[5] By the 1980s a host of technological items had made their way into many homes (stereos, personal computers, microwave ovens, burglar alarms, cable television, etc.). As the wiring needed to accommodate this electric activity proliferated, it became desirable to organize it all into a system. From there, it was a simple step to considering what opportunities that consolidation had opened up.

Smart house developers decided that the control of safety, energy, security, and comfort would be the key targets of their R&D. Lights and ovens would be automatically turned on and off; sensors would monitor for security; in a way, the "smart" house replaces the physical contributions of the housewife. Since any function in a smart house can be controlled or operated at any place, it is possible, technologically speaking, to rethink traditional ideas of spatial and social configuration. How flexible Americans' notions are about what the house *should* be remains to be seen, as does the size of the market for such equipment. And, of course, the American house is already under the siege of pressures that may transform the need for single-family homes in general.





6



7

Dreams and Emerging Realities

Already the traditional nuclear family is a thing of the past. Today less than 10 percent of the population lives in a family unit composed of a breadwinning father, a full-time homemaker, and children. Demographic shifts have already spurred the development of planned retirement communities, so-called mingle housing, and cooperatives. But fewer people can afford to buy such housing, or indeed any permanent, decent place in which to live.

For instance, the poverty endemic to single-parent families—the vast majority of which are headed by women—precludes their being a market that provides developers with return on their investments.

Since federal support for low-income housing has been largely curtailed, the housing situation for these and other nontraditional families is bleak. Responses to this reality are hard to find.

Although these new family types already exist, popular imagination is just beginning to catch up to this fact. But architects involved in the production of environments for people with limited income are already working on architectural issues that demographics show will only grow in importance. Often the resultant design work can be characterized as humanitarian, participatory, and incremental. Physical symbolization would seem to be the last concern; the luxury would be to have the needs met at all. Where such projects have been built, the localities into which they have been inserted have often insisted that they "blend in." But one could also say that these designs offer implicit critiques of architecture as recently conducted.

One group that has won recognition for its efforts to assist in the development of innovative housing is the Women's Institute for Housing and Economic Development, Inc. (WIHED), of Boston. The Women's Institute was started by an architect, a lawyer, and a banker committed to providing housing and economic development to low-income groups. The Women's Institute seeks to provide low-income families with houses that provide support and relief. Its other important goal is to provide a feeling of stability, of security, so that residents will no longer feel threatened with dislocation due to lack of finances. This feeling of security is a prerequisite for autonomy. All WIHED projects incorporate opportunities such as job training or access to child care within the housing environment.

The Women's Institute is presently working on a rehabilitation project that combines daycare for children with congregate housing for the elderly in one building. The floor that will house elderly residents provides spaces for communal activities and for privacy, as well as access to the daycare center below. Architect Leslie Moldow commented that because this project had a minimal budget, which should come as no surprise, she had to make the most of the existing building figuration. But to her mind a building's success is determined by the quality of its spaces. These, she believes, should be determined by timeless, fundamental human needs for such things as light, views, and small, comfortable living areas. If all such needs have been met, an underlying reason will show through to provide innate, not *a priori,* figuration. In this view, the look of future congregate buildings would be determined by future needs, as well as by future building materials and technologies. Moldow's focus on determining an architectural form from inside outward is indicative of the holistic response cited above.

The Boston city government is in the process of testing a program whereby vacant city lots are used for affordable family house projects, usually three to six families per lot. These homes are bid on by private builders and developers. What is unique about this civic program is its emphasis on the small-scale setting and local community decision-making process. The designers in the city's facilities department feel that the community has to be integral to the process; the dictates of a central agency would neither be welcomed nor successful. The designer's hand is to fade into the background.

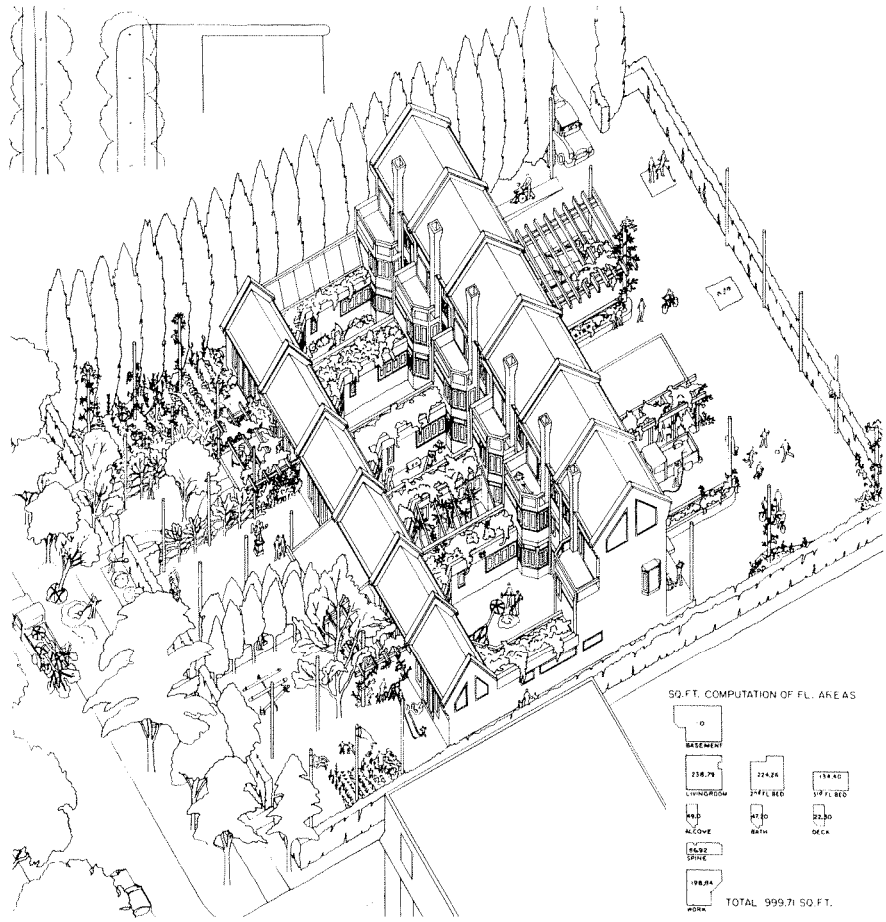
The city is most involved in creating housing that will be sold. Boston's public facilities department views its current foray into housing production as a limited mandate to reduce the risks of the often small developer or builder in such a market. Through this localized process it can encourage a response to the needs of the shifting and evolving demographics of home owners.

The New American House competition sponsored by the Minneapolis College of Art and Design and the National Endowment for the Arts in 1984 was a widely heralded response to emerging housing needs. The program required the 1,200 registrants to think of house forms that would work for members of non-nuclear households who might want or need to do professional work at home. The winning entry, submitted by architect Troy West and professor of planning Jacqueline Leavitt, was composed of six units, one of which was flipped to provide enlarged space for a daycare

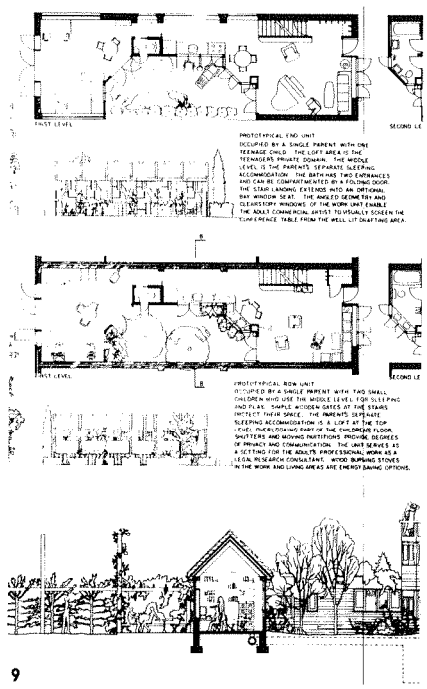
facility. Each unit contained a work area attached to the living portion of the house via a kitchen spine. Continuing their previous interests, West and Leavitt provided "private as well as shared space, areas for personal use and places where people could earn a living working at home, provisions for child care and adult socializing, and . . . connection to outdoor spaces."[6]

The difficulties encountered in trying to get this project built have shown that the existing marketplace does not adapt well to new ideas. The long time it has taken to get variances and to explain the project to a myriad of interested parties has driven up costs. Unfortunately, the development was refused public assistance for the child care component and for units for lower income single parents. The project was to prove itself entirely on a market basis. As Leavitt points out, the majority of the population that the program identified (single parents) have never had a share in the housing market.

In order to make the housing available for a few lower income people, several work spaces were made into small apartments. But even so, as Leavitt has written, "It is highly unlikely that low-income single parents are going to live in the New American House."[7] That the project will be built at all is due to the active role played by architect Harvey Sherman. He organized the competition, was awarded National Endowment for the Arts funding, ran the competition, and, when it became clear that the final design would not wend its way through



8

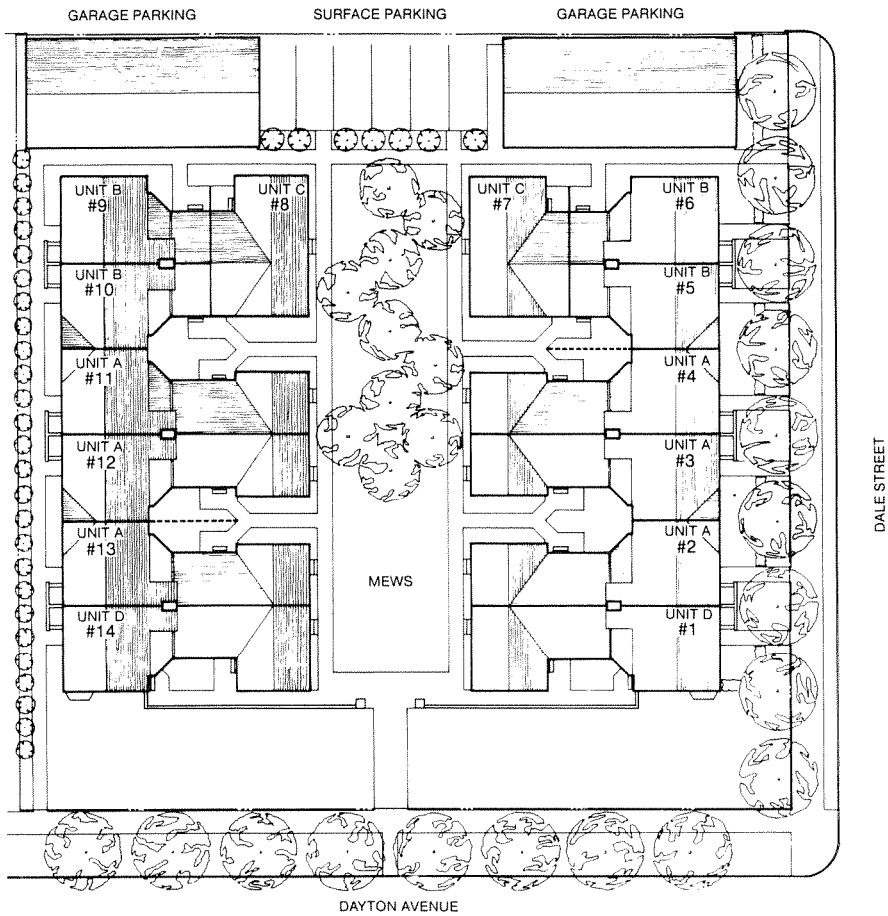


9

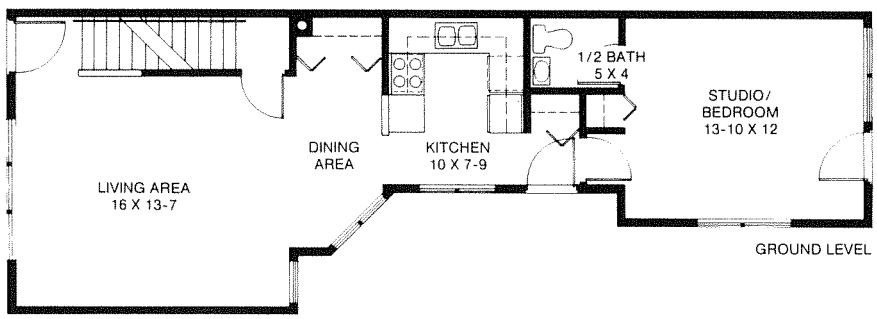
8 A New American House competition, winning entry by Troy West and Jacqueline Leavitt, 1984

Prototypical clients were visualized as, for instance, "a single parent computer scientist, whose business has expanded, has doubled the work area and glazed the private outdoor space for a wintergarden. Her two children have grown to need separate bedrooms . . ." And "a legal research consultant has covered the front of his work space with a grape arbor so he could have meetings outside and allow his two small children to play undisturbed in the private outdoor space."

9 Prototypical end unit plans



10



11

10 Dayton Court Site plan

Transformed into Dayton Court, the New American House will be built on a larger site. As the New American house was developed for this site, the community voiced concern that the project might in the end be an incursion of gentrification. Therefore two types of small apartments have been included. The units with separate studio/work place areas (most similar to the original proposal) make it possible for two households to live under one roof, sharing kitchen and dining and living areas, if they so wish. It is hoped that successful construction of Dayton Court will encourage other innovative housing projects at decreasing costs.

11 Ground level plans, Unit A, Dayton Court

the market without special coaxing, became codeveloper himself. Such initiative seems necessary for such other solutions as pooling funds for limited-equity cooperatives. Perhaps the architect of the future will have to increase his or her involvement in such endeavors. Affordable congregate housing would give architects clients to create images for, as well as providing better-tailored housing for more of America's future families.

Notes

1 Philip Fisher, *Hard Facts: Setting and Form in the American Novel* (New York: Oxford University Press, 1985), p. 131.

2 As Star Trek put it.

3 Traditionally associated with the male.

4 John Fondersmith, "Downtown 2040: Making Cities Fun!," *The Futurist*, vol. 22, no. 2 (March-April, 1988), p. 9.

5 Built in cooperation with the Gas Research Institute. Further information on the Smart House L.P. can be obtained by writing 400 Prince George's Blvd., Upper Marlboro, MD 20772.

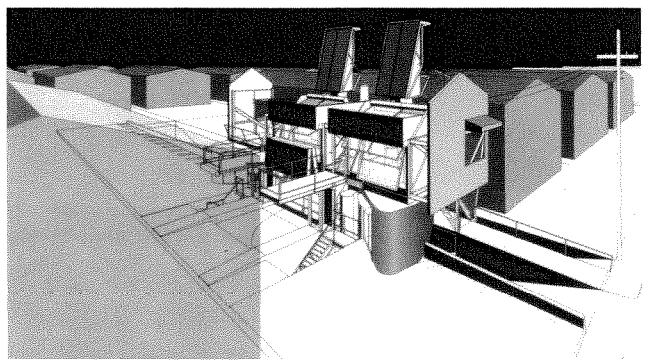
6 Harvey Sherman and Elizabeth Springs, eds., *A New American House, Architectural Design Competition, 1984: Catalogue of Winning and Select Designs* (Minneapolis: Minneapolis College of Art and Design, 1984), p. 4.

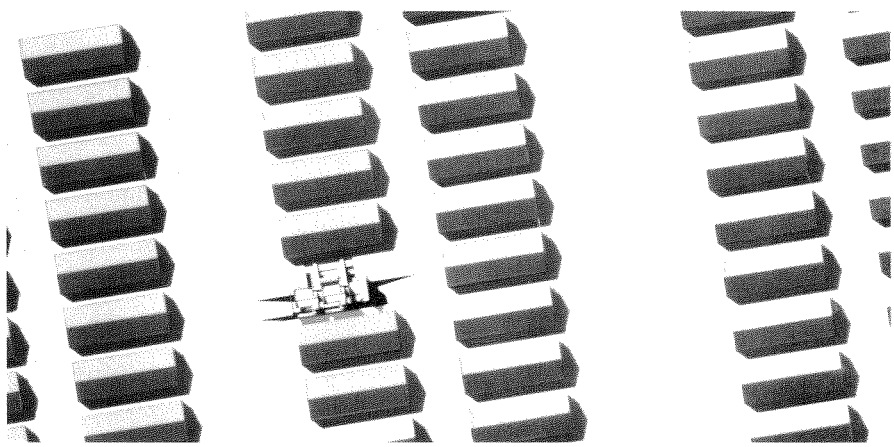
7 Jacqueline Leavitt, "Two Prototypical Designs for Single Parents: The Congregate House and the New American House," in *Alternative to the Single Family House*, edited by Karen Frack and Sherry Ahrentzen (New York: Van Nostrand Reinhold, in press), p. 28.

Holt Hinshaw Pfau Jones Architecture San Francisco

An architecture-of-the-future is as impossible as the future itself. But an architecture for a present that extends into the future is both possible and, today, uniquely desirable. Even in an age of extreme self-awareness, it remains the unquestioned role of architecture, by critique or by affirmation, to provide its society with an expression of that society's "highest" understanding of itself and its situation in the cosmos. An implicit—sometimes explicit—component of this expression is a sense of the temporal continuance of that society: architecture is the most visible evidence, and thus the greatest possible expression, of survival. An oft-remarked characteristic of our present society, however, is its lack of conviction about such issues of continuance. This is because the business of self-awareness is criticism. In pursuing this business, we have, it seems, given up (or lost) a felt connection to our future. This condition has found an expression in an exciting and vital critical architecture, but it is understandably incapable yet of supporting a mainstream or vernacular architecture. Like a critical society, a critical architecture is, by definition, tied to the object of its criticism. As the status quo, such an object can exist only in the present tense, and a critical architecture can find existence only in the problems it uncovers/expresses in its critique.

Yet there is an inescapable component of futurity in all constructions that persevere in time. Even when glancing backward, the classic architectures

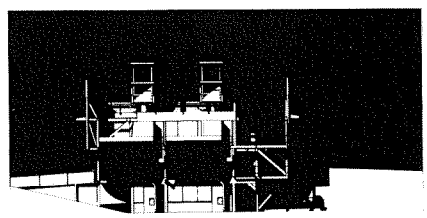


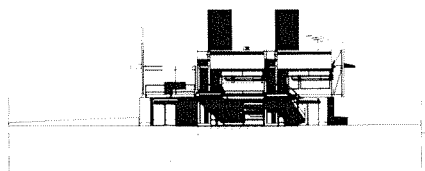


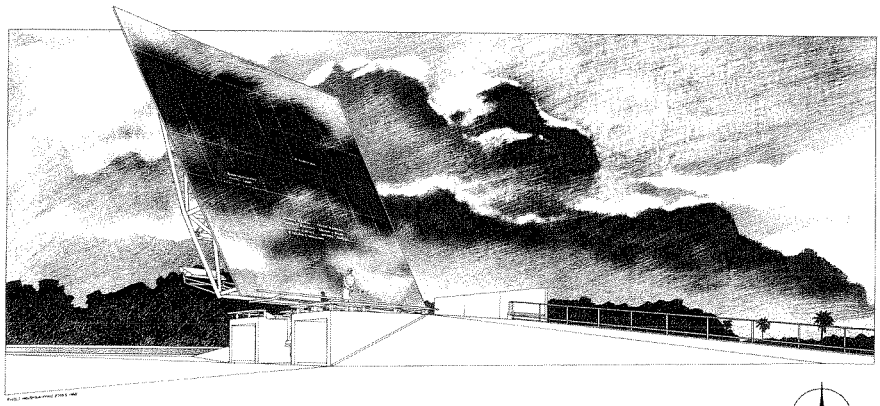
House Tract

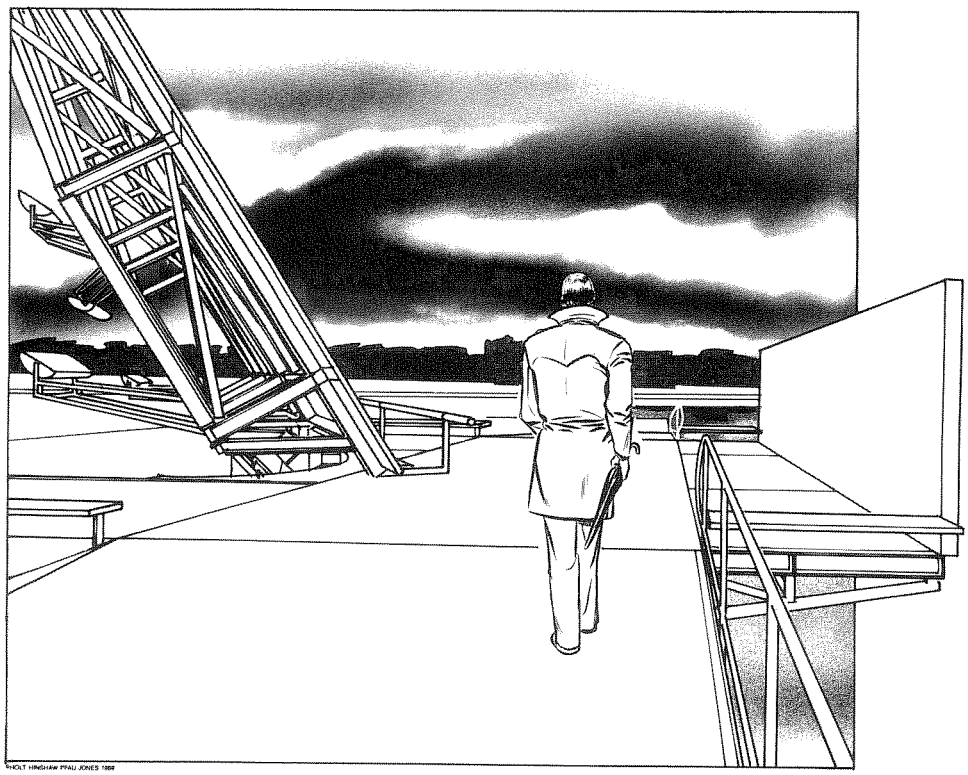
This critical project for a house in the suburbs of Southern California (Manhattan Beach) is intended to serve as a flexible prototype for replication in these characteristically undifferentiated tracts: a parallel tract, inhabiting and criticizing the original. As the land values in these postwar housing tracts skyrocket, the modest original bungalows are being systematically torn down and replaced by speculative contractor-designed houses which max out the available envelope in the service of maximum marketability, blighting the neighborhoods with their consumerist mentality.

A young developer has approached the architects with the task of designing a "house for a young family" in this area that would be a critique of this unfortunate trend by demonstrating: (1) that maximum value does not equal maximum volume, (2) that dwelling can be an active pursuit rather than a passive condition, (3) that the fission of the structure of the suburban nuclear family can be a source of growth and architectural excitement rather than of fear (it is this fear that is usually buried under the excessive square footage and inane amenities.)









of the past found their programs in the promise of immortality to their patrons (whether individuals or society). This desire for survival and continuity has disappeared from the cosmology, but not the epistheme. Jaded by critique into despair, or vaulted by fanaticism into silliness, the futurity of the object, and a conviction about the future it might impart, is deferred.

Instead of these extreme attitudes, we can imagine dealing with futureness more constructively. Indeed, we would propose an architecture based upon a "reasonable present vision" of the future: an architecture for a present that will become the future. This formulation is nothing new—it is implicit in the hoary *Commoditas* (reasonable) *Firmitas* (present) *Venustas* (visions)—but it is unusual: in an "age" marked by extremes of conformity and revolution, a well-considered, *reasonable vision* is radical indeed.

Astronauts' Memorial

To be located at the Kennedy Space Center, this vast reflective plane—a 40′-by-50′ sheet of polished black granite—will be tilted and rotated by a computer-controlled tracking system, keeping the sun behind the slab. Mirrors on the back will direct the Florida sunlight through the inscriptions cut into the granite monolith. The whole technological apparatus sits on elevated position so that it will interact with the ever-changing stratosphere. This winning entry to a national competition will be built.

Photos courtesy of Holt Hinshaw Pfau Jones Architecture

Windows for the Trojan Horse: Information Technology and the European City

Peter Droege and
Réjean Legault

European societies depend on information technologies to an ever-increasing degree. The boundaries of national economies have long been blurred by international trading and global money flows. A May 1987 Green Paper issued by the Commission of the European Communities calls, among other things, for the removal of legal and regulatory barriers to the free flow of information across national boundaries and concerted support for the Communities' telecommunications industries. Various countries eye the establishment of ISDNs, Integrated Services Digital Networks, conceived to carry all long-distance communication of voice, image, and data in a single medium.

Economic and political pressures combine to initiate a host of changes bound to affect cities and their citizens' sense of them. These changes have been under way for some time now, beginning with the introduction of the telephone network, but appear to have accelerated dramatically with the fusion of traditional means of information exchange. Urban systems are being monitored electronically. Cities like Biarritz in France are being wired with fiber optics. Advanced information technologies are introduced into working environments. Homes are supplied with information network stations, such as the French Minitel or the British Teletext system. Public spaces begin to engage the casual passerby with access to various information and communication networks. The diffused presence of an electrically sustained reality cannot but modify common notions about the urban environment.

It is not clear whether information technologies constitute another dramatic milestone in the evolution of urban technology, such as previous ones of defense, building systems, and transportation means. It is not even clear to which extent technological change in itself can be credited with a primary role in the evolution of cities. However, the emergence of information technologies may present certain issues of urban change in a new way. One reasonable question in this context might be: How do emerging technologies relate to current themes of city form?

The European city is not particularly old on a global scale, yet the intensity of conflicts and innovations staged in it over the past millenium has contributed to a very specific emotional attachment on the part of its inhabitants. Cities were defended, destroyed, and reconstructed, and even peaceful urban transformations in this century have come to be seen in these terms. The city therefore triggers certain defensive reflexes, subconscious associations with the need for protective measures. Apocalyptic future visions and unsettling or confounding new media realities have contributed to strong sentiments toward preserving the "traditional city," whatever this means, as one of the bastions of sanity in a seeming maelstrom of change.

Three recent, highly visible, metropolitan-scale programs, orchestrated to shore up the city as a stable societal dimension and a sounder habitat, are indicative of precisely this sentiment. All were initiated and supported by central public administrations. Berlin's IBA (International Building Expo) 1984/87 was organized around the salvaging of core areas as viable residential quarters. Coordinated projects scattered across the city sought to mend or reinvent the urban fabric by means of reconstruction or reinterpretation of the traditional Berlin urban block. Around Paris, the Banlieue '89 competition aimed at the assembly of design projects for the urban periphery. Three kinds of physical interventions were applied to the Parisian suburbs: enhancement of local centers, innovation in the urban fabric, and reconnection of periphery and center. And the Barcelona city administration has launched a program of urban resuscitation. It aims at a "new monumentality in the suburbs of Barcelona, designed to dignify the city and increase public life in the urban spaces."

These and other programs, such as the Milan Triennale exhibit presented elsewhere in this issue, suggest that future-oriented initiatives tend to be conceived with a strong bias toward preserving and rebuilding the city fabric as a coherent or, failing physical coherence, coherently incoherent artifact. The two archetypically competing attitudes of tradition and innovation are being played out within this generally agreed-upon framework. This competition is not merely formal but very legibly represents the political and economic struggles that continue to shape the city. Formal disputes are skirmishes of significant icons.

Western European cities now discover a new wave of futurism, squarely in the tradition of its earlier stages, but a good deal more synchronized in terms of form, program, and use. The Eiffel Tower signalled a new industrial age, but practically speaking, it barely permits the ingestion of a sandwich and a dizzying cloud-level view. The Centre Pompidou, on the other hand, within its conduit muscularity actually contains a veritable flea market of cultural information, while managing to keep its solemnly playful pipe-dream face. Another

kind of data market futuristically packaged is the new Lloyd's Bank in London. But the temptation of graphic exaggeration remains: the international competition for the replanning of Mélun-Senart, a satellite of Paris, made telling forecasts of the needs of the future city. The leading proposals expressed a collective desire to celebrate the dawn of a new age in technology, pulsating incantations of an "information future" on vellum—unfortunately, yet devoid of content.

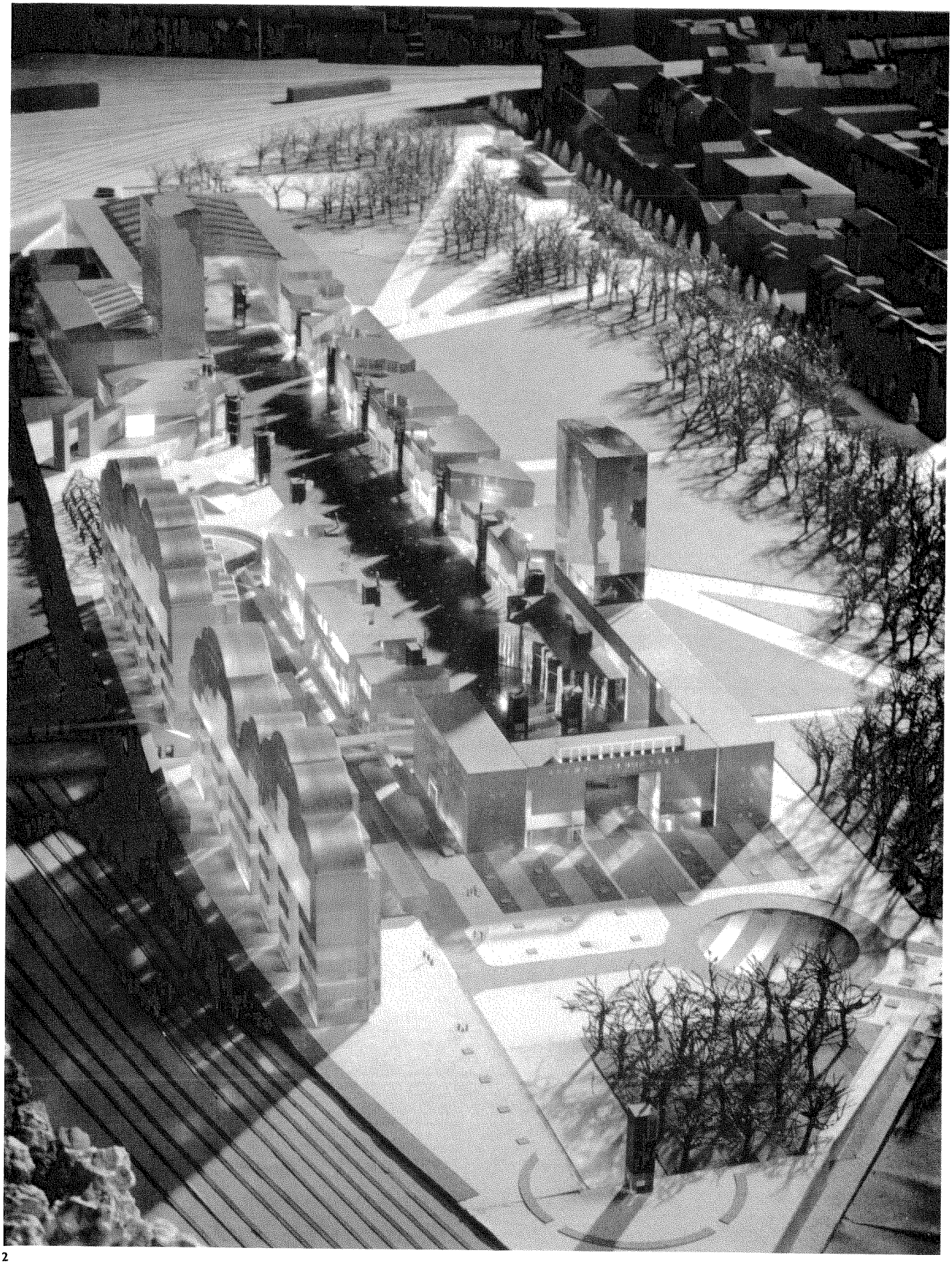
The West German Media Park project of 1987 was conceived as a national competition with international invitees, seeking concepts for a large, mixed-use communication center for a new Cologne. The competition brief presented the future city as a computer-aided information-processing node in an emerging national network of fiber-optics linked cities. The program integrated key notions of Walt Disney's Experimental Prototype City of Tomorrow with the idea of an inner-urban "designer" Silicon Valley.

One of the international contributions, a Japanese entry under the corporate auspices of Nippon Telegraph and Telephone and Shimizu Construction Corporation, presents a Media Plaza, an information structure composed of "media floors" and a "media tower." A formal setting of 500 meters by 40 meters will enable electronic systems to produce their fleeting effects as background and vehicle for experimental civic events. Three ideas were pursued, a "possible world" for innovations, a "permanent world" contributing to the city's organic evolution, and an ominous "staging of the social, economical and cultural activities of various citizens." For this staging, the complex is conceived as a four-part "citizen's stage," for the new life-style of burghers engaged in leisure, the creation of "media culture," the production of hard and of software, and in residential activities. The proposal sought to resonate the block patterns of the surrounding city fabric, and polished a blank opening in the traditional city crust, where one can inspect the city's invisibly colorful and powerful data flows, without an overly strong sense of impropriety. The relation of these new bit streams to the more traditionally rooted means of information exchange remains unexplained.

Here and in other new places the formal permanence of the city is secured, while more localized and futuristic interventions attest to the "progressive" nature of the city and its commitment to technology-based transformation. The new, advanced technologies just might be the Trojan horse within the European city, an infiltration altering not only the very sense of a "real city," but also its precarious political balance.

1 Nuremberg depicted in a sixteenth-century engraving.
Reprinted from *History of the City*, by Leonardo Benevolo (Cambridge: MIT Press, 1972).

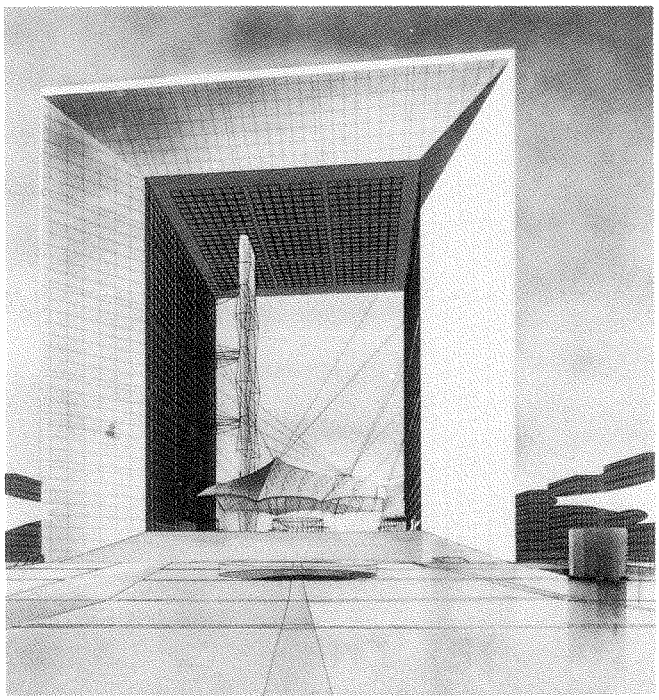
2 Cologne Media Park Project, 1987
Entry by Kei Minohara, City Planner with the Nippon Credit Bank, and Prof. Dr. Hiroshi Hara, from the Institute of Industrial Science, University of Tokyo; sponsored by Shimizu Corporation and Nippon Telegraph and Telephone Corporation.



2

Information Scenography: Paris

Réjean Legault



The "Arch" at La Defense, previously intended to house the International Center of Communication, perspective view. Reprinted from *Architecture d'Aujourd'hui,* September 1987, p. 78.

Imagine a city where you can get the stock exchange indexes through public information terminals, find cultural information on public panel displays, or watch the finale of an international tennis match at the subway station. You might think this could only happen in some newly built, information-oriented suburb of fast growing industrial power. True, this information exchange environment is already in operation. However, it is not happening in any modernistic urban setting, but in a city with a strong and weighty urban tradition: Paris.

Like many other European cities, Paris is adjusting its image to the high-tech wave and addresses the issue of new information and communication technology head-on. Many of the new urban projects highlight the need of the advanced information city: the Musée des Sciences, Techniques et Industries, the Park of La Villette, the stalled project for the Carrefour International de la Communication at the head of the Champs-Elysées.

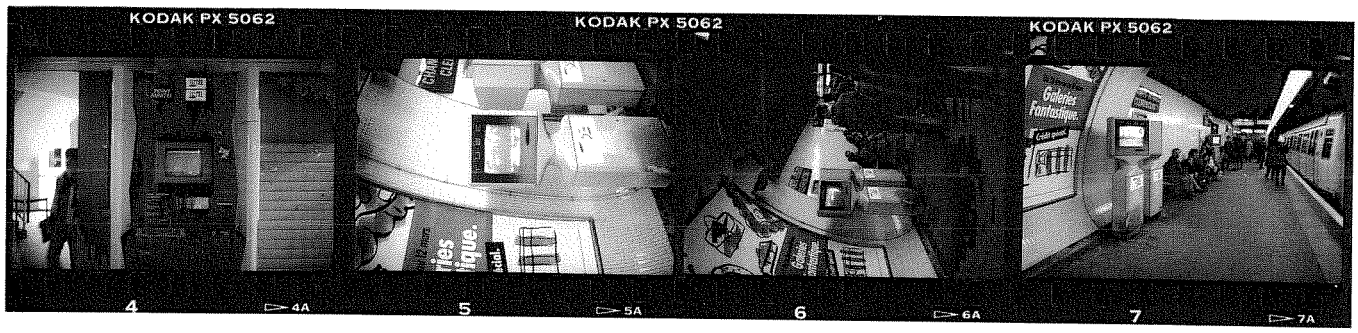
Using the Centre Pompidou as a paradigm, all these projects deal with the notion of the "accessibility of information." They respond to the socialist government's notion of communication in both its political and technological sense, attempting to express a "new type of urban culture, one based on social interaction and exchange rather than on collection and reification of artifacts."[1]

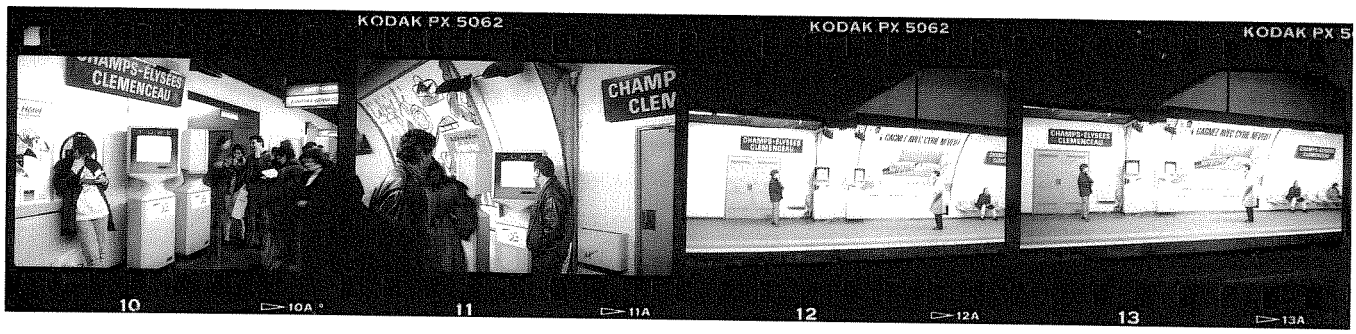
All these projects, however, are of a centralized and monumental nature. To express the role of communication in a technologically oriented society, the International Center of Communication was to gather a myriad of technological devices under a monumental "arch." Various conflicting positions have forced an adjournment of the project, showing that it was easier to build an icon than to build a consensus.

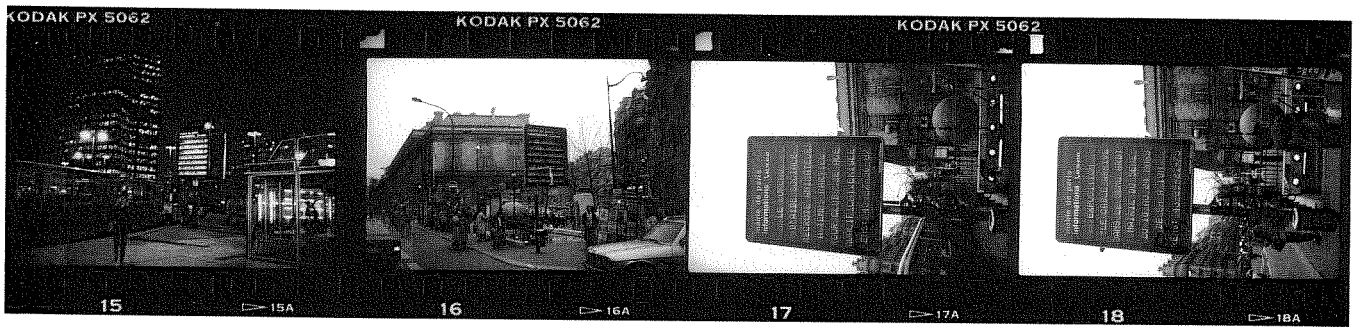
In parallel, and in contrast to these large symbolic gestures, Paris becomes a laboratory for more discrete information-oriented interventions. With the Minitel (an information system connected with the telephone network), Info-Mairie (electronic information panels set along the main boulevards of the city), and Le Tube (a video system in the subway stations), Paris is at the forefront in the scenography of the advanced information society.

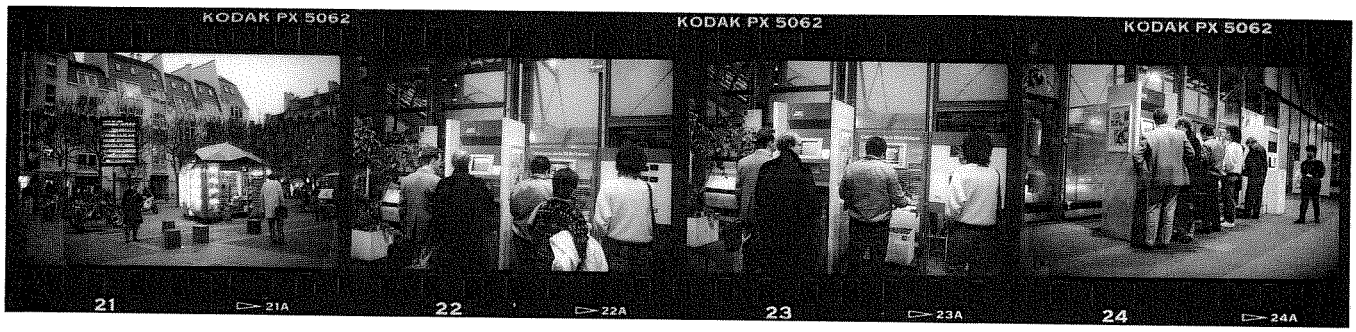
Note

1 Hélène Lipstadt, "A Paris for the 21st Century?," in *Art in America* (November 1984), p. 112.









Photos by André Lortie, Paris

An Italian Voyage

Peter Droege and Réjean Legault
based on material by Pierluigi Nicolin

The Triennale di Milano is a periodic cultural event staging temporary discursive settings on culture, social meaning, and form. It is a permanent catalyst for discussions and interventions; it is "a place about places." The Triennale, housed in the Palazzo dell'Arte, focuses on architecture, design, decorative, and industrial art. This public organization was set up over 50 years ago with the aim of providing opportunities for cultural and aesthetic reflection and for research and new projects on the country, the city, the home, and the objects that surround us.

The coming exhibition is part of a larger cycle of events about the future of urban society. The cycle began in 1986 with two exhibitions on the home (*Il Progetto Domestico*) and the workplace (*Il Luogo del Lavoro*). It was followed in 1987 with an exhibition on the theme of imagined cities (*Le Città Immaginate*), where an imaginary journey through Italy provided the conceptual framework for sponsored urban design projects.

The last exhibition, the culminating event of the cycle, is organized for September 1988 on the theme World Cities and the Future of the Metropoles. With this international endeavor, the Triennale seeks to shed some light on current trends in urban environment and, more specifically, on the future of the metropolis.

As the organizers observed: "Legends and utopias, dreams and philosophies for metropolises have, during the last decades, undergone radical rethinking or even collapsed totally, following changes in often contradictory growth patterns in society and science. Nevertheless, the conviction that there is a strict link between civilisation and the urban phenomenon has remained."[1]

Nine Projects for Nine Cities

In the 1987 exhibition *Le Città Immaginate*, the presentation of urban design proposals was a rehearsal for the exhibition to come. The Triennale saw the Italian city as a laboratory for solving current urban problems. Nine cities were chosen to be sites for architectural projects, within certain physical development frameworks.

In the section entitled "A Journey Through Italy," the visitor was assisted in understanding the complex history of urban visions in each city and their main problems today. This section was "not an architectural treatise, not an encyclopedia of solutions, but journey as a metaphor for knowledge, for knowledge with its hazards and adventures."[2]

"The projects of the 17th Triennale were set in a new space: in the middle of that inner-outer city duality, and even physically they occupied the fabric of these two city areas. . . . The general aim is a rethinking of the city through a logic that accepts its fragmentation and the composite nature of its various parts."[3] "If we were to accept as obvious the fact that architecture is by its very nature discontinuous and fragmentary, we would then no longer need fear either the presence of conventions or even read the models of the past."[4]

The Triennale organizers have involved public administrations and rallied corporate and public support, to invite proposals by several international teams for each city. In each case, large-scale architectural interventions were sought to anchor general structuring principles based largely on transportation by road, rail, and water.

Six responses from the nine city contexts have been chosen here to summarily represent the main design concept in operation.

Notes

1 *World Cities and the Future of the Metropoles*, Triennale di Milano (catalogue, 1987), p. viii.

2 Pierluigi Nicolin, "Nine projects for nine Italian cities" (unpublished manuscript, 1988), p. 4.

3 *Ibid.*, p. 1.

4 *Ibid.*, p. 2.

Rome

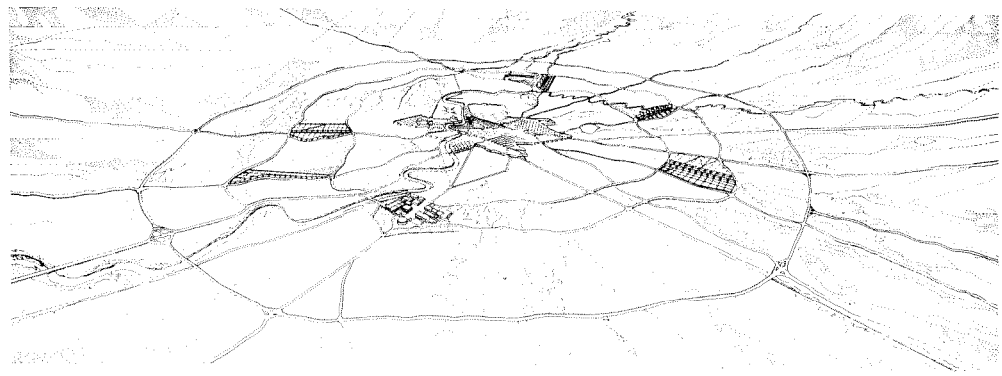
Problem

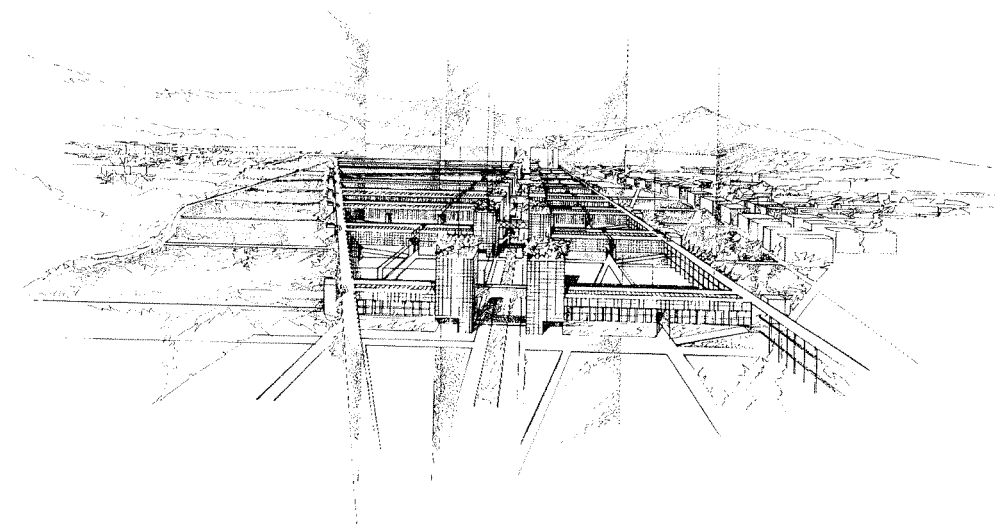
The tension between tradition and innovation continues to weigh on the planning for today and for future city needs.

Rome's physical development plan is organized into a radial-concentric pattern. "It aims to complete the existing road grid with limited operations so as to produce three ring-roads and complete the radial-concentric scheme that already exists." At the meeting points of the main radial access roads with the first ring-roads, the sites of five new projects are planned. Together with the Mussolinian "new Rome" (EUR), and the city's historic center, these five projects compose another "Seven Romes," in reference to the seven hills of the Roman Republic.

Project

The Administrative Center of Centocello, by Franco Purini and his team. The main axis of historic Rome, Via del Corso, is taken as a model and transposed into the area of the former airport of Centocello. This urban alliteration is meant to structure this administrative center as a restoring of the "normal" city, to contribute to the continuity of the Roman *genius loci.*





2

1 "Seven Romes," by Franco Purini. Project drawing for the ring-road and the five new centers.

2 Administrative Center for Centocello, by Franco Purini. Bird's-eye view of the project for a new administrative center.

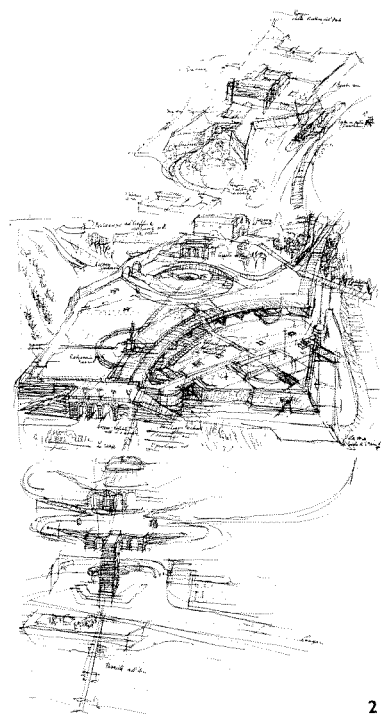
Florence

Problem

In 1870, the city of Florence was subjected to an incomplete expansion plan. "The avenues so created still form an emphatic marker for the boundary between the city centre and the beginnings of the outer city, and together they form the most important ring-road for the traffic." The design objective was to retrieve a sense of the city, and of its avenues now reduced to parking areas.

Project

The Piazzale Michelangelo by Robert Maestro and Walter Di Salvo. This proposal transforms the Piazzale Michelangelo by means of a Michelangelesque matrix. This small piazza is the primary spatial icon of Florence and is a center for mass tourism. The idea was to redesign the place with practical and aesthetic considerations: to preserve and reorganize the piazza, to enhance its presence in, and communication with, the city.

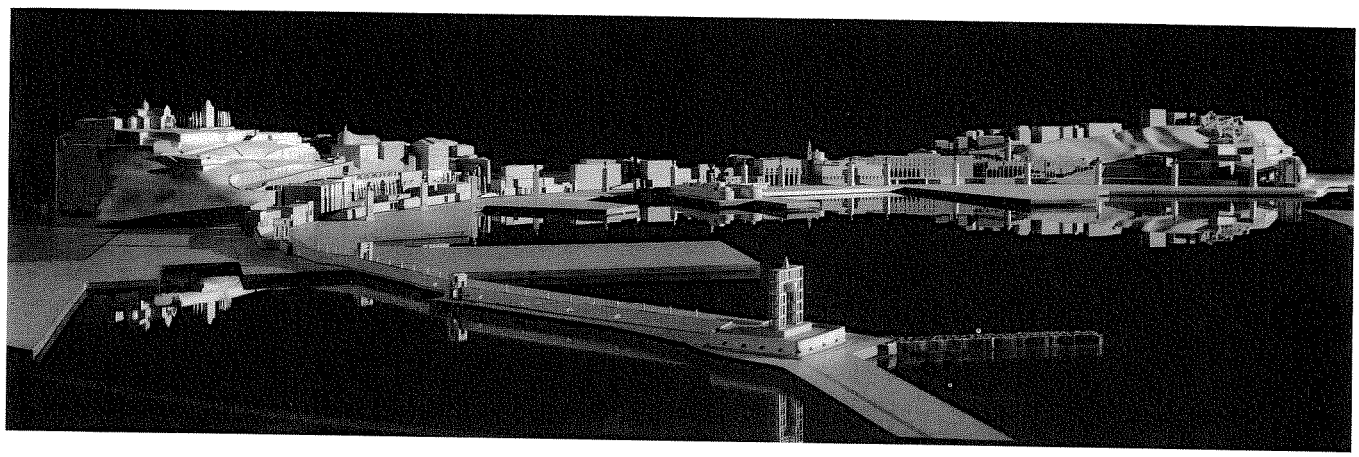


2

1 Project areas, by Adolfo Natalini. Plan of the various sites located along the ring-road.

2 Piazza Michelangelo, by Roberto Maestro and Walter Di Salvo.

Ancona

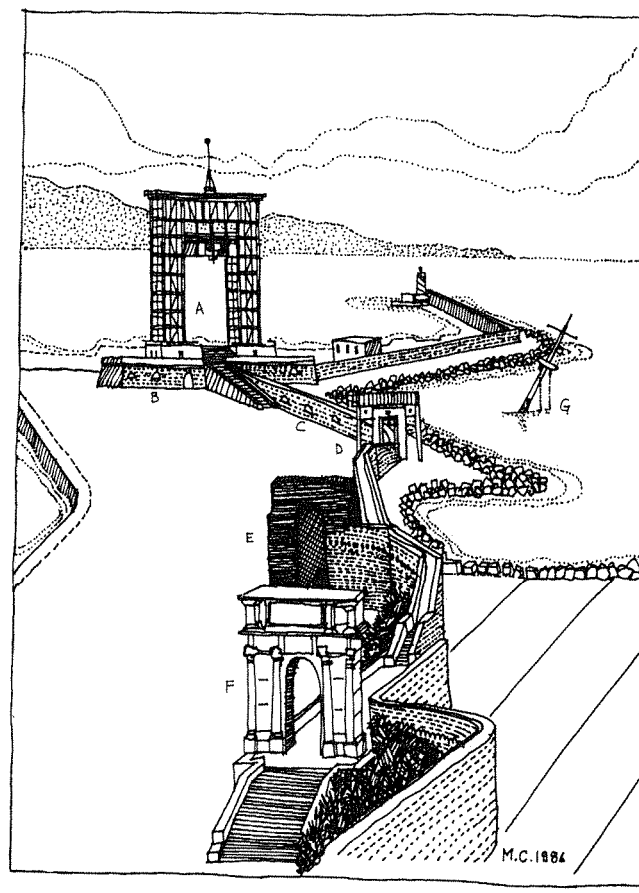


Problem

The site is set along the boundary between the built-up area of the city and the extensive docks. The great arc of the waterfront is divided into eight project sites that form a sequence touching on various points that could create links to the city. The various projects originated from a series of considerations: the city as a collective construct and its ceaseless re-formation through works and projects; the dichotomy between the "unitary" and the "fragmentary" theory of form; the revision of the comprehensive plan as a "global concept."

Project

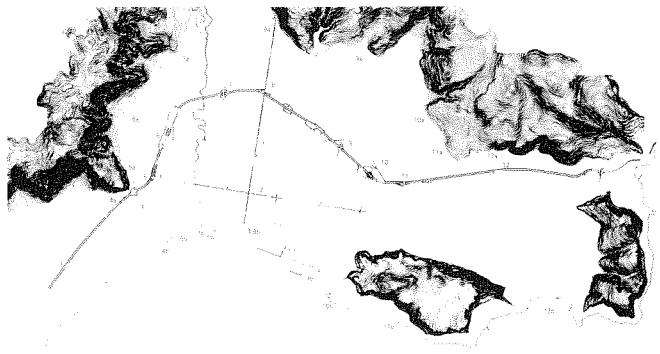
The monumental north pier, by Massimo Cartaginese, Emilio D'Alessio, and Fabio Pandolfi. The northern end of the site is shaped by the linear development of its fortification over the centuries. The corridor thus created is a clear metaphor of the passage of time. The proposal for the site responds to this temporal aspect with two monumental arches serving a dual role: they freeze time, and they prefigure its overcoming.



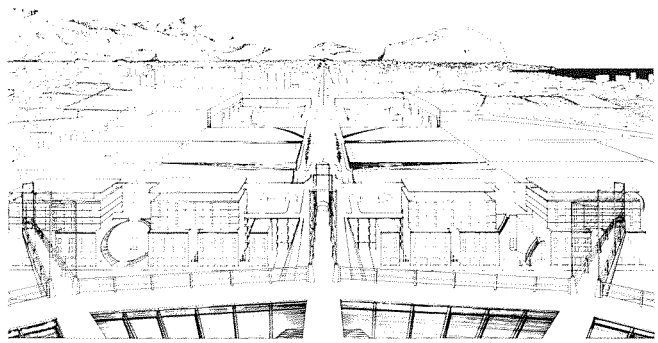
2

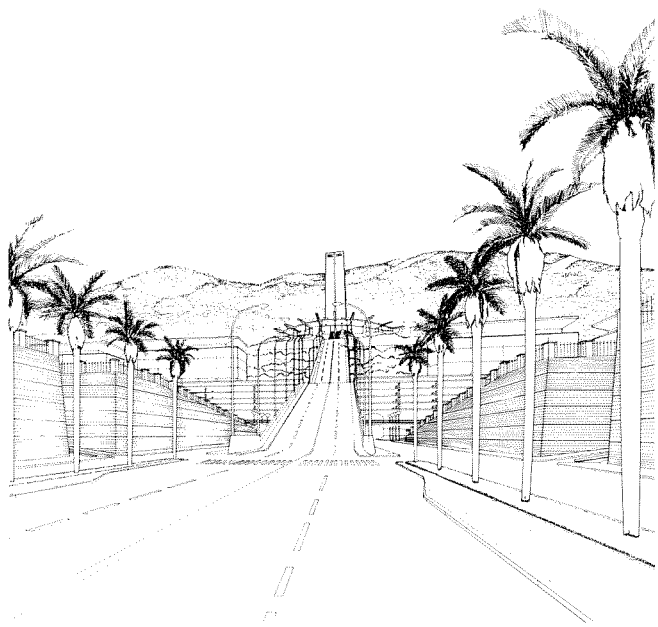
1 Ancona waterfront model, including the different design projects.

2 North pier project, by Massimo Cartaginese, Emilio D'Alessio, Fabio Pandolfi.



1





2

1 **The project area,** by Pasquale Culotta.

2 **Belvedere of the Crown of Palermo,** by Rodolfo Machado and Jorge Silvetti.

Palermo

Problem

Over the last 40 years, Palermo's population has tripled and its surface area multiplied by a factor of 10. The great axial road shuttling traffic to and from the two regional highways (Messina and Trapani) is a thoroughfare 20 kilometers long. It divides the city into two markedly different sections: a more compact and clearly defined urban fabric on one side, and a more chaotic development on the other. This project attempts to give this "express-road" the value of a great urban avenue, in keeping with the new role of the regional capital.

The design of new nodal points is intended to reinforce the ring-road's urban facilities and generate reference points for the parts of the urban fabric that still have to be completed. The elements constituting the new grammar of the ring-road—town gates, bridges, terraces, etc.—will appear as a sequence of links connecting the panoramic viewing places along the hillsides with the coast.

Project

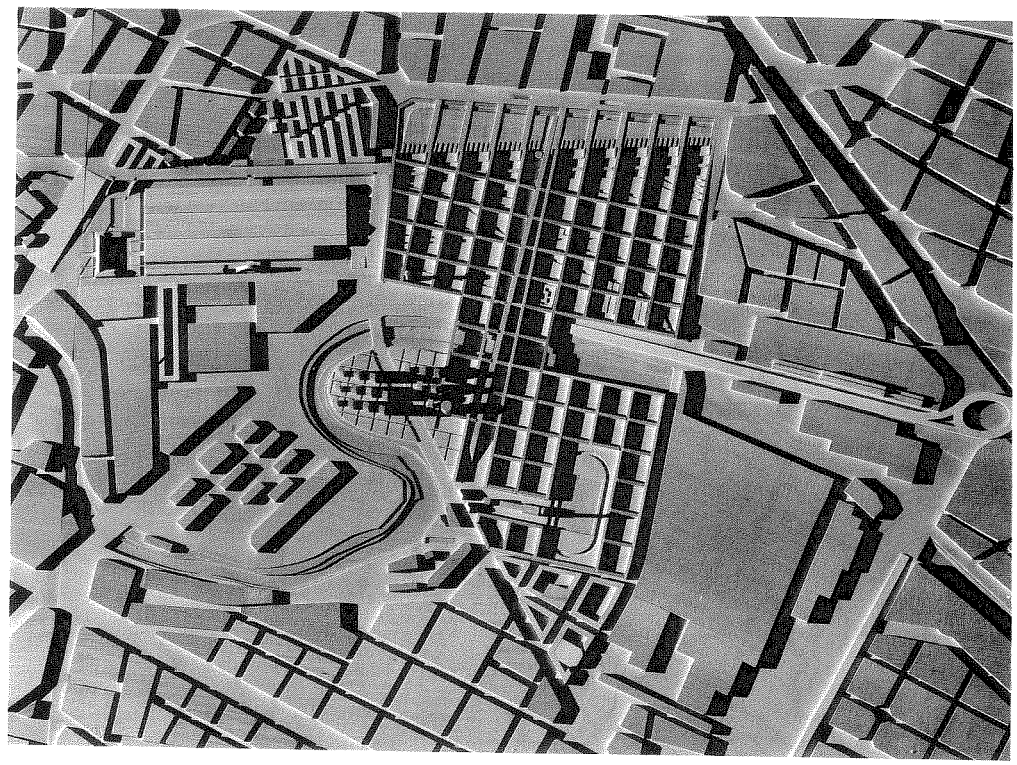
A belvedere, by Rodolfo Machado and Jorge Silvetti. It seeks to plant a "strong sign in the logic of the city's history, by appropriating technologically and functionally more advanced ingredients, devoid of whatever moralistic or messianic content."

Torino

Problem

A large abandoned site of Turin is occupied by various large factories. The site, which is divided by the river Dora, will soon be traversed by a new transit rail system and is expected to be converted to serve new uses. It is the perfect example to carry on the debate over the future townscape of an industrial city like Turin.

"Without adhering to the hypotheses of the futurists which announce the end of the industrial age and the beginning of a new 'immaterial' epoch in which electronic communications will replace the old physical reality of the world, we cannot overlook the impacts of the new communication technologies on the facilities of social exchange and their location. The key word used to define this tendency is 'decentralization,' a word which can be interpreted in various ways."



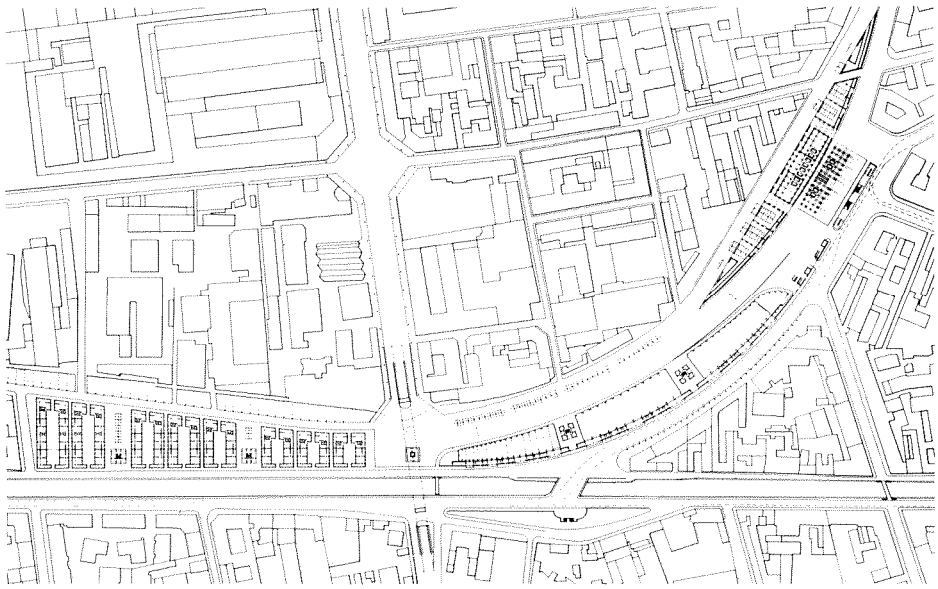
Project

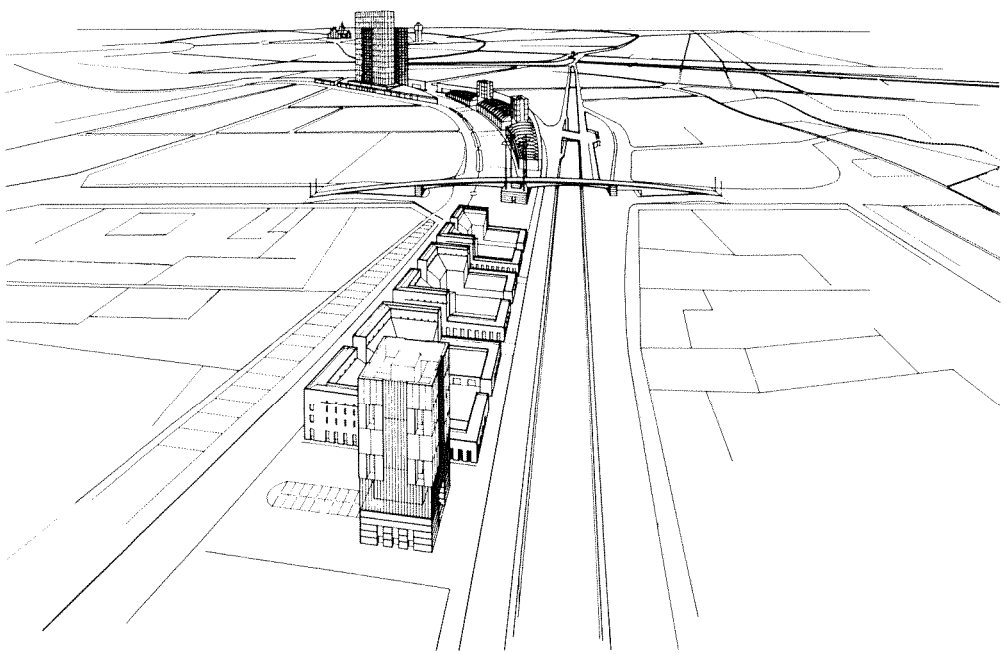
Upside-Down-City, by J. P. Kleihues.

Upside-Down-City	Privato minacciato
Magli	Ferro
Mica	Olio
Verderame	Sale
Frese	Freddo, sudore e sangue
10 secondi	Terra zuppa
100 ore	No terra quotidiana
1000 giorni	No sensi affrettati
Notti	No oblio
Luce di fuoco	Upside down:
Lucente	Vita è una volta e sempre

Città-Capovolta	Private threat
Stitches	Iron
Mica	Oil
Verdigris	Salt
Frese	Cold, sweat and blood
10 seconds	Soaked ground
100 hours	No daily world
1000 days	No rushed feelings
Nights	No oblivion
Lights of fire	Sottosopra:
Shining	Life is once and for all

Upside-Down-City, by Joseph Paul Kleihues.





2

Milano

Problem

The string of projects focuses on "the largest obsolete structures of the industrial age, the belt of railways which encloses the inner part of the city, and which literally replaced the fortified town walls with their system of passenger and freight stations and correlated industrial areas." The changes now taking place in this rail system have freed an impressive sequence of central sites which are part and parcel of the city's morphology. The sites are linked in a ring pattern, onto which abut the derelict spaces of the freight and passenger stations located near the ancient city gates.

Project

Porta Genova, by Pierluigi Nicolin. Avoiding an impossible and maybe unnecessary fusion between the railway space and the existing city fabric, the project maintains its proper character by keeping the traces of the canal and the railway.

1 Plan for Porta Genova, by Pierluigi Nicolin.

2 Bird's-eye view of the project area, by Pierluigi Nicolin.

Japan's Advanced Information Cities

Peter Droege

Japan is engaged in an awe-inspiring flurry of experiments, charged by more energy sources than one. The country exhibits an unabashed esprit of risk-taking and innovation, in seeming contradiction to its complex code of cultural conventions. It is obsessed with the future. And the planners and the designers of the *topoi, loci, places* of tomorrow's Japan do not hold back. Nowhere is the frenetic search more apparent than in current architecture, and in city building.

The City in a Post-Industrial Mood

Many postwar Japanese cities have developed as dense and drab containers of economic activities, the incidental result of accommodating production facilities, the work force, and transportation requirements over mostly agricultural land. Urban relics are found as encapsuled foreign bodies. But recently cities have come to be understood as articulators of "civic" aspirations and potent spatiovisual sculptors of social reality. New cities and urban areas are crafted into stage sets for postindustrial market spectacles. Cities and their architecture are indeed highly expressive of several underlying dynamics of Japanese society, and many have begun to transmit a sense of enthusiasm about greeting the future with an array of scenarios. Cities engage in more or less open competition, vying for new industries in these times of perceived higher mobility of both industries and populations. Especially the smaller ones advertise themselves with new images of "quality of life" and "livability," while seeking to add metropolitan aura and access to the attraction of lower land prices. Civic identity and city image have emerged as key objectives of municipal planning. Waterfront developments, pocket parks, and pedestrian amenities are three familiar themes discussed in city planning offices.

The public role of urban architecture and the concept of public space are undergoing some fascinating changes. In traditional settlements the form and structure of shared space has expressed and supported a sense of collective self, and helped root the individual in society, at least in our own romantic view. Today, the quasi-public, streetside appearance of the industrial and postwar Japanese city is equally expressive of contemporary priorities. Since there is, at least traditionally, no concept directly equivalent to "the public" in the Graeco-Roman meaning of the word, in principle recognizable in Europe or the United States, there is also no such function for the streets and squares of Tokyo, Osaka, or Kawasaki. A European-style city center, found missing by Roland Barthes in Tokyo,[1] appears inconsistent with Japanese political traditions and space-use conventions and, for different reasons, inconsistent with the United States' urban civilization as well. Common areas, with the exception of thoroughfares and major streets, are the sum of more or less openly claimed realms.[2] The public spaces easily accessible to Western recognition, such as Yokohama's waterfront, are the result of foreign-inspired fashion, designed to signify wordliness on the part of the sponsor, or built to accommodate expatriate communities. This has changed over the last decades, and recent concerted efforts described as "internationalization" reinforce a public tone in the media. The cultural iconography of television, newspapers, and urban form is now routinely marked by eclectically "international" allusions, however perfunctory.

Quite literally, three English expressions feature prominently in Japanese discussions about city form and development: identity, image, and participation. The pursuit of image in facility improvements, with the planned participation of workers and citizens, is expected to lead to a sense of identity, the citizen's personal identification with city progress. Such identification is greatly aided if the goals are straightforward. Tokyo's immediate neighbor to the South, Kawasaki City, for instance, very actively seeks to become more attractive to commuters, mobile families, and individuals, to support the new facilities it so forcefully pursues. It acts to attract new industries in the wake of the disappearance of older ones, the mass production facilities, shipyards, and steel mills. Bright pedestrian areas, street flora, and a general concern for public amenities are visible throughout the city, which has in the past often been seen as an anonymous and polluted stretch between Tokyo and Yokohama. And now it has adopted a renewal theme directly reflecting

the very industry it most wants to host, the high-technology firms such as communications and information technology based companies. Here, too, "advanced information" has become the dominant catchword.

Laboratories of the Information Society?

Technological innovation, economic development, and issues of social progress combine to form the Japanese phenomenon of information city building. The development of cities has always been sensitive to technological changes, such as innovations in defensive techniques, transportation systems, and building methods. The challenges posed by changes in the means of information transmittal are perceived as equally dramatic. They are explicit in the new media, in their advanced technologies, and in the issues both raise.

A new generation of information-handling techniques has begun to permeate production and culture in the industrialized world. Literally everyone in the globe's most affluent regions will soon be affected by interactive television, the narrowcasting of news, fiber optic networking of small computers and large cities alike, remote social services and educational programs, public data banks, and urban control systems. Citizens, government decision-makers, corporate executives, city planners, and the designers of city places and information products are presented with a palette of bright opportunities and critical constraints.

Many of Japan's cities serve as experimental settings for their own transformation into communities enhanced by the purposeful application of advanced information technologies. Several authorities of the central government steer and monitor these developments. One of these concepts seeks to link the new media cities into a national network of high-speed transportation and intensive data flow.

The background of these initiatives is a society in transition, and one which discovers its role on the global stage. The economy is shifting its base from heavy industry and mass production to activities in the finance and service sectors, advanced technology, and more flexible market responses. Family sizes are shrinking, and mobility is on the increase. International influences are seen as strongly infiltrating traditional societal values, while there is a growing orientation toward consumerism amid the perceived rise of the individual. Finally, a crisis of confidence is shaking Japan's rigid educational system.

The Case of Kawasaki

The city, one of the abutters of Tokyo Bay, is quite representative for the types of metropolitan fringe areas in which a major portion of the Japanese population works and lives, ranging from the suburban quarters to the heavy industrial zones. Kawasaki has set out to introduce the new technologies on an unprecedented scale, for the main purpose of boosting the quality of life itself. Prime objectives in Kawasaki's planned transformation are a renewed image as a comfortable, healthy, and stimulating habitat, the satisfaction of citizens' educational and cultural needs, better and more useful government services, and openness to the nation and to the world.

Kawasaki's ideas are very much embedded in the national context of city wiring initiatives. In the United States, "wired cities," to the extent they still are seriously pursued, are a phenomenon at the local level and of private and public collaborative efforts. In Japan, they are initiated by the central government. The United States' experience with wired cities has been sobering and cast a pall on the initial enthusiasm of the 1960s. Major findings from a range of past initiatives seem predictable in retrospect. Anticipated network diffusion rates were too optimistic, and one-way entertainment was ultimately more successful than the kinds of programs offered, such as interactive polling or information services. Technology and infrastructure alone turned out to be meaningless without well-conceived programming, except in experiments catering to people interested in expressing a certain life-style. Milton Keynes has come to be known as one such example.

In Japan, the national government has taken a forceful lead in the pursuit of this dream, which dates back to the early 1970s. There is less concern with the failure of individual experiments than with the persistent pursuit of infrastructural innovation and new

markets on a broad front. Major players are various ministries, broadcast, telephone and railroad companies, and leading computer and telecommunications equipment manufacturers. The ministries sponsor competing sets of experiments, both announced in 1983. Twenty New Media Communities and 128 Teletopia initiatives are all based on initial phases now largely complete, with mixed results. Teletopia, for instance, is based on the Tsukuba experiment and its Highly Integrated Information Communication System, involving 10,000 participant users in research, industry, and the general public. Home services were intended to facilitate teleshopping and -banking, utility telemetering, educational programs, information from local government and businesses, and television services.[3]

Kawasaki and other long established cities seek to benefit from these new-town, often biased programs geared toward the citizen as information consumer. More significantly, it wishes to base these telecommunication initiatives on two legs, one physical and one financial. The city looks for ways of providing networked buildings and sites for public discourse and for new industrial investment in "technopolis" initiatives, i.e., in programmed, sponsored and serviced research, development, and production environments.[4] Under national guidelines on enhancing regional information services and industrial cities it has designated a new city center as a "Teletopia" model, the central city itself as a model zone under a parallel "Future Information Metropolis" plan, and these and three other regions as model zones under the "Intelligent City" plan championed by yet another ministry, a program specifically seeking to endow urban areas with new nervous systems and intelligence nodes.[5] A private railroad company sponsors suburban fiber optic networks, and the city plans a new center for the development of information infrastructures, to be undertaken by both the public and private sectors.[6]

A Call for Model Ideas

Kawasaki is somewhat unique in the group of national information city initiatives. It forcefully emphasizes civic identity and urban image, and "Campus City Kawasaki" has become a slogan for its determination to become the world's first city-wide learning environment.

In 1987, Kawasaki City hosted the International Concept Design Competition for an Advanced Information City, which drew over 200 responses from more than 20 countries. The proposals are wide-ranging, from quite literal physical proposals to educational concepts and city wiring diagrams. Five of these projects are presented here, selected not because they are particularly representative but because their authors chose to articulate both information city concepts and their possible physical, place-making implications. Their proposals are presented rather uncritically, inviting the reader to arrive at his or her own conclusions. Fourteen final prizes were awarded, in four categories.

Certain themes were given: the idea of building a "Campus City," the transformation of Kawasaki into an open university, where every laboratory, office, or household could become a classroom wired into a city-wide, even international network; the notion of internationalization; and finally four optional themes for further detailing: Intelligent Plazas, Kawasaki Institute of Technology, Campus City Festival, and Intelligent Network.

The competition was organized by the Japan Association for Planning Administration and Mainichi Newspapers, supported by fourteen ministries and agencies of the national government, and sponsored by a number of major high technology, telecommunications, and construction companies.

Notes

1 Roland Barthes, *Empire of Signs*, (New York: Hill and Wang, 1982).

2 Note also Bun-san's musings in John D. Morley, "Pictures from The Water Trade," (Boston/New York: Atlantic Monthly Press, 1985).

3 William Dutton et al., *Wired Cities—Shaping the Future of Communications* (Boston: G. K. Hall, 1987).

4 Sheridan Tatsuno, *The Technopolis Strategy: Japan, High Technology and the Control of the 21st Century* (New York: Prentice Hall, 1986).

5 Fumio Hasegawa, *Tokyo, A Highly Information-Oriented City* (unpublished manuscript, MIT, 1988).

6 United Nations Centre for Regional Development, *Information Systems for Government and Business* (Nagoya: 1987).

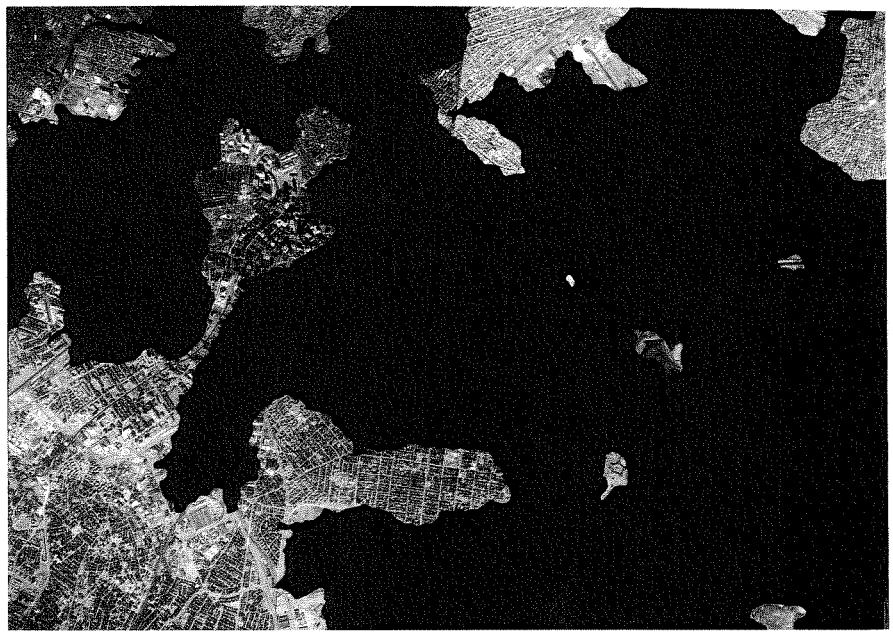
Past Futures

Alex Krieger

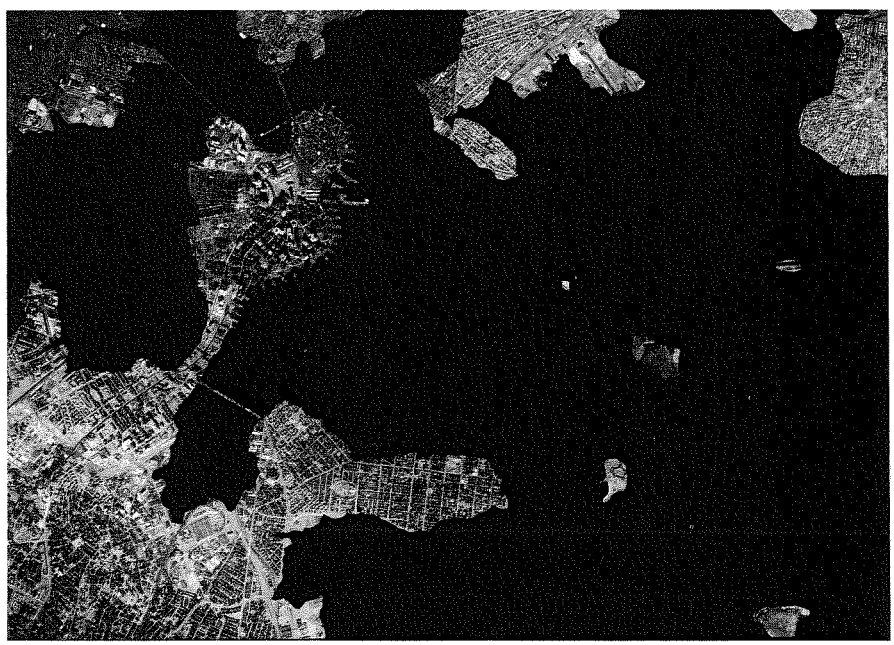
Boston: Visionary Plans and Practical Visions

American cities have always been characterized by their newness and boldness, by the portrayal of potential rather than the cherishing of a past. Some blame this on an absence of history. American cities are, after all, still new in comparison to their European counterparts. Even venerable old Boston has periodically embraced only a future, as the 1964 aerial photograph attests. But whereas the citizens of many American cities have simply come to expect and accommodate rapid, even radical, physical change, Bostonians have tended to anticipate the shaping of their city.

Enlightened self-interest coupled with necessity, caused by the topographic limitations of the originally inhabited peninsula, have compelled Bostonians to contemplate the manner in which their city was expanding, and to reflect upon its evolving form. Through personal initiative and collective pursuit, and with an unlikely combination of audacity and naivete, Bostonians have expressed their urban concerns by projecting schemes for ordering their city's growth. Boston's history, therefore, like that of any thriving city, vibrates with its past futures of places imagined and places made.[1]



1

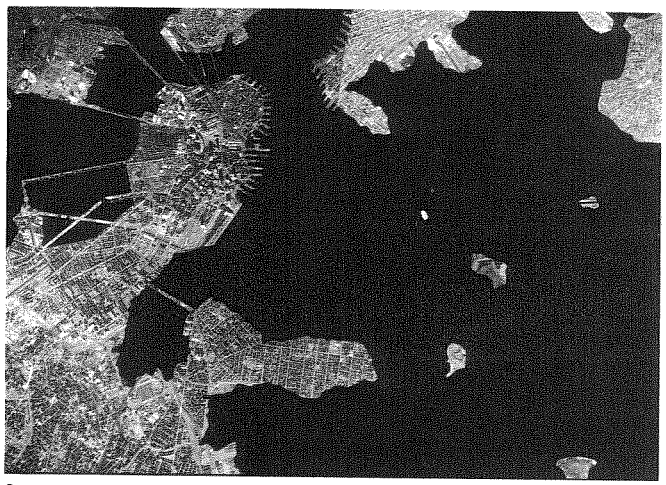


2

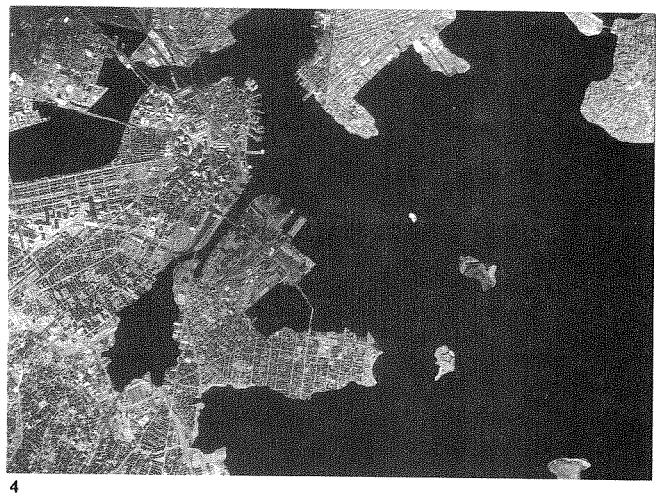
1–6 Boston, 1640–1985

Note

1 This material was originally assembled for an exhibition and catalogue entitled "Past Futures: Two Centuries of Imagining Boston," cosponsored by the Harvard University Graduate School of Design and the State Street Bank and Trust Company.



3



4

5

6

Expansion of the City

Boston has had no option but to grow at the expense of its principal geographical feature, the shoreline. The city today has a land mass that is over four times the area of the original Shawmut Peninsula. Approximately 785 acres have become more than 4,000 acres by an ongoing series of landfill programs dating back to the beginning of the nineteenth century.

The often delightful, sometimes frustrating fabric of Boston is largely the product of these landfills, many of which have left their imprint in the form of a distinct precinct of streets and open spaces. Using a 1985 aerial photograph of the city and "cutting" away the areas of landfill, the above images represent the actual configuration of land in 1640, 1795, 1830, 1885, 1920, and 1985.

Filling the Back Bay

By far the most ambitious landfill program in the history of the city was the filling of the nearly 600 acres of the former back bay of the Charles River. Work commenced in 1857 and for the next 40 years, day and night, a specially constructed railroad carried gravel and fill from Needham to provide raw material for the creation of one of Boston's (and for that matter America's) most distinctive nineteenth-century residential fabrics.

The first great plan for Boston, preceding by more than a decade the decision to fill the back bay, was both visionary and (although never specifically pursued) quite prophetic. A remarkable, three-mile-long crescent composed of several boulevards, and a series of circles and squares surround a newly defined Charles River Basin. Gourlay's home town of Edinburgh and his knowledge of London and Bath no doubt influenced his plan. It was an appeal to envision a city of three million people, which he correctly predicted would occur within a century, and to prepare for it becoming "the grand landing place from Europe." A decade before Boston had even seen a horse car, he recommended a network of suburban commuting rail lines that would continue underground as they passed the city. His underground railway alignments clairvoyantly anticipated several of the current subway lines and even individual stations.

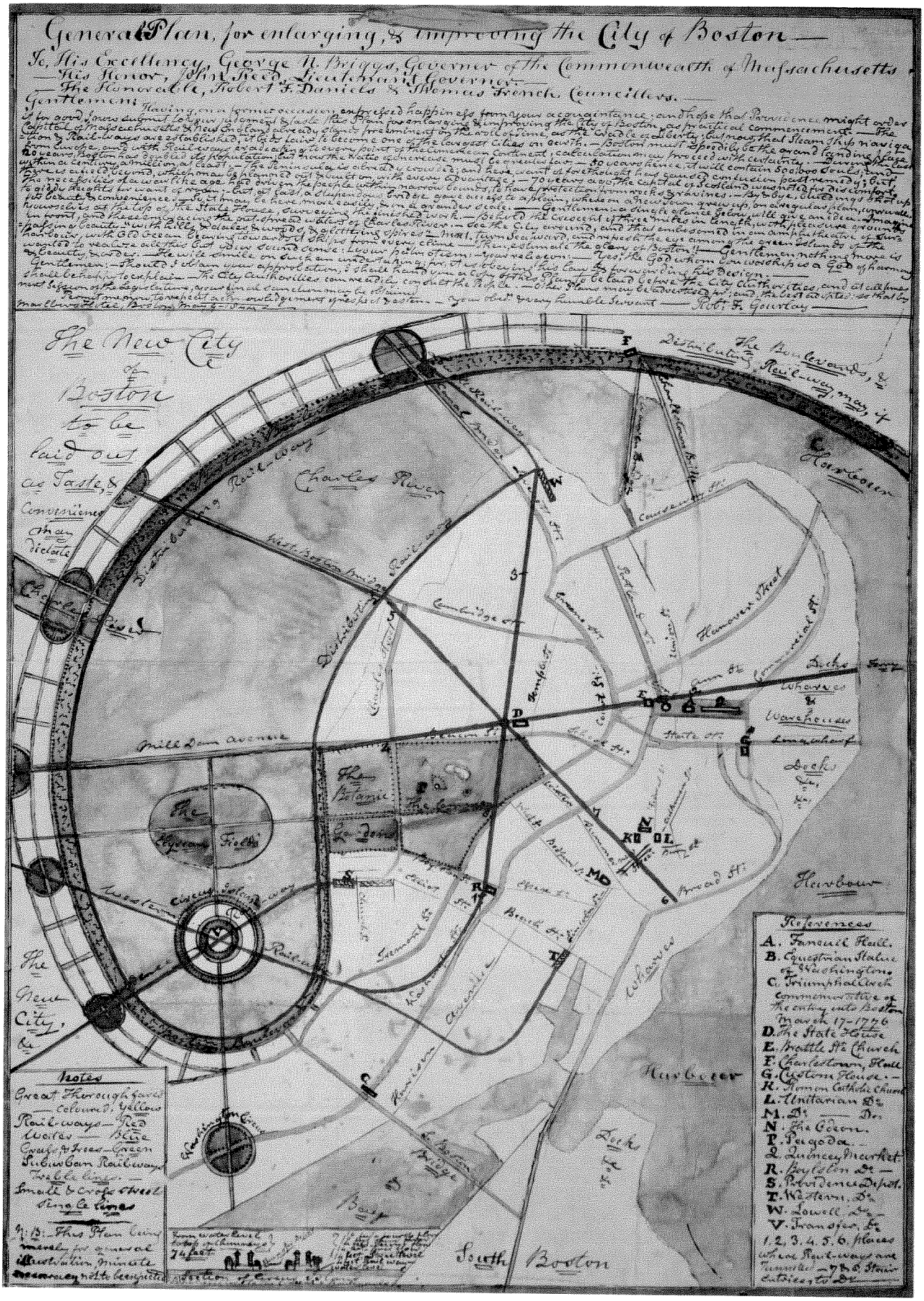
The two photographs, one dating from 1859 and the other 1984, look westward from similar vantage points and show the dramatic consequences of filling Back Bay. Today's Beacon Street (at the right of the 1984 photograph) corresponds to the Mill Dam shown in the earlier photograph. Once built the Mill Dam, along with the railroad beds which crisscrossed the mud flats, interrupted the daily tidal action that carried town wastes to sea and created a serious municipal health hazard that ultimately led to the landfill program.

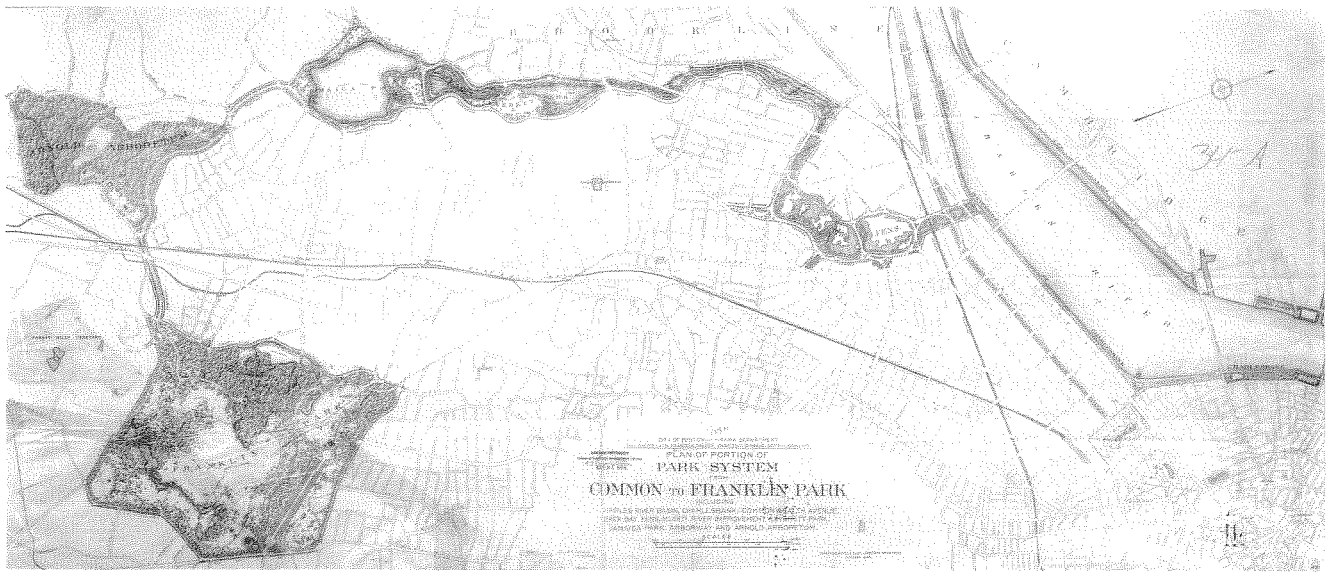
7

8

7–8 Back Bay, 1859 and 1984

9 General Plan for Enlarging and Improving the City of Boston, Robert F. Gourlay, 1844.


General Plan, for enlarging, & improving the City of Boston —
To His Excellency George N. Briggs, Governor of the Commonwealth of Massachusetts —
— His Honor, Thos. Fred. Hedges, Lieut. Governor —
— The Honorable, Robert T. Daniel & Thomas French Councillors. —
Gentlemen:
The New City of Boston to be laid out as Taste & Convenience shall direct
Charles River
Mill Dam Avenue
Hancock Street
Beacon Hill
Boston Common
Public Garden
Back Bay
Mount Vernon
Fort Hill
Dock Sq.
Long Wharf
Mill Pond
Charlestown
Bunker Hill
Navy Yard
East Boston
South Boston
Roxbury
Dorchester
Cambridge
Chelsea
Milton
Brookline
Notes
Great Thoroughfares — coloured, Yellow
Railways — Red
Wharves — Blue
Squares & Trees — Green
Fifth Class Railways
Double Lines
Small & Crooked Streets
Single Lines
References
A. Faneuil Hall.
B. Equestrian Statue of Washington
C. Triumphal Arch
D. The State House
E. Brattle St. Church
F. Charlestown Ferry
G. Custom House.
H. Roman Catholic Church
L. Unitarian Do.
M. Do. Do.
N. The Green.
O. Pagoda.
P. Quincey Market.
R. Baptist Do.
S. Episcopal Do.
T. Methodist Do.
W. Lowell Do.
V. Ironsides Do.
1, 2, 3, 4, 5, 6. Places of the Railways and Tunnels.
The Docks, Entries, &c. &c.

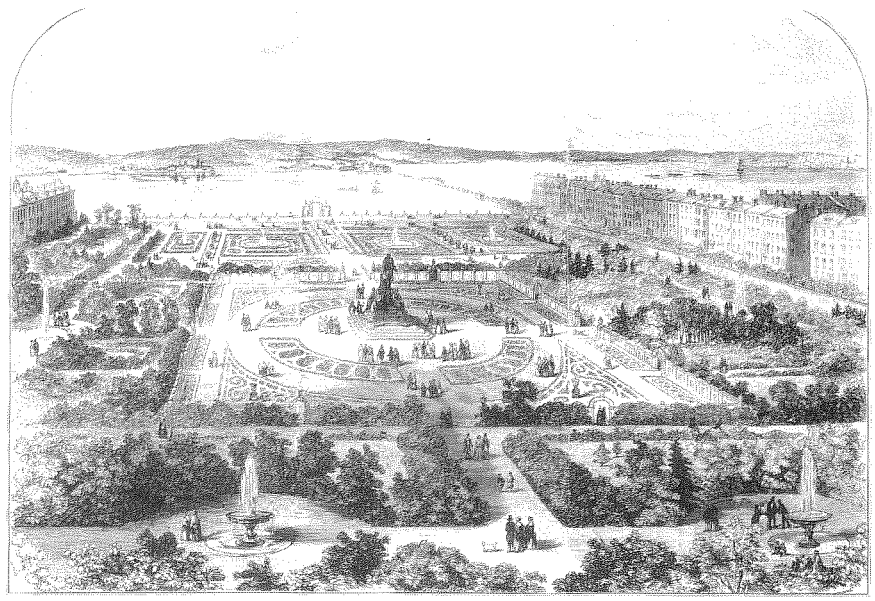


10

The Park Systems

Perhaps Boston's most visionary plan, as it was for a number of American cities during the latter third of the nineteenth century, was the projection of a regional park network as a means of structuring the city's subsequent growth. This is the most familiar of Olmsted's drawings of the Boston Park System, and the one most associated with what would later be coined the "Emerald Necklace." A paradigm for urbanization was Olmsted's principal concern, the parks and connecting parkways simply a vehicle for responsible city planning. City dwellers, he argued, needed places in proximity to their daily habitats and activities where they could encounter the natural world, or an approximation of it. Such places would serve as counterpoints to the harsh and at times dehumanizing forces of modern urban life—places of stasis and repose amid the constantly changing city. These parks would thus be instrumental in maintaining the physical and spiritual well-being of urban dwellers, possibly even making them better citizens, as well as establishing boundaries for physical expansion of the city.

As the momentum to fill the Back Bay accelerated, various proposals to enlarge Boston Common were suggested. "Gleason's Pictorial" of February 26, 1853, showed this remarkable design for a formal garden. It is from the decade in which the controversy over the use of the land at the base of the old Commons was most pronounced, with each succeeding plan to subdivide it for residential uses (making it the first block of the Back Bay landfill program), generating a rebuttal in the form of an elegant projection of its possibilities as a public garden.



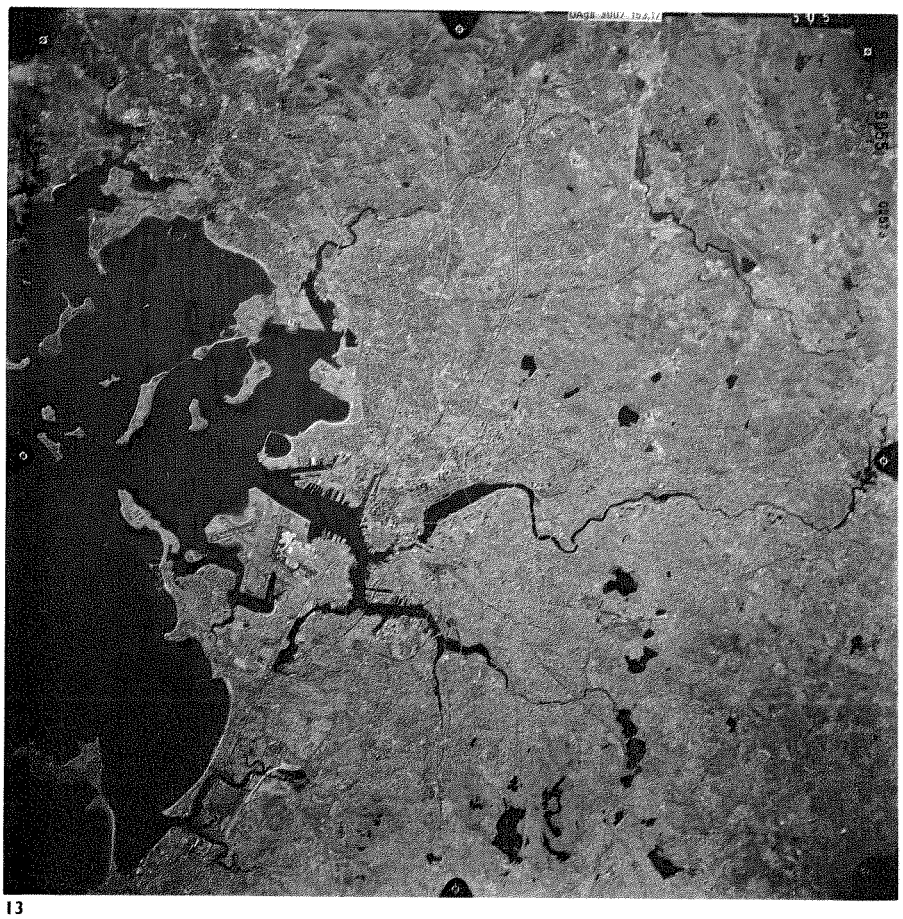
11

The advocates for a garden would eventually prevail and would go on to champion the cause for a city-wide park system.

10 Park System from the Common to Franklin Park, Olmsted, Olmsted & Eliot, 1894.

11 Proposed Plan for the Public Garden, Billings, 1853.

12



13

The major figures involved in developing the Boston Parks had always imagined them as part of a larger, more ambitious metropolitan system. By the early 1890s, Charles Eliot and Sylvester Baxter were ensuring that it would be so by forming the Trustees of Public Reservations, which began to survey and acquire large areas of land. Out of this effort emerged this plan for a second "necklace" of open spaces dedicated to the public and to the preservation of the New England landscape.

The vision and success of the builders of the Metropolitan Park system are apparent in comparing this high-altitude infrared photograph with the 1893 Eliot Plan for the Metropolitan District. Foliage reflects infrared radiation; both Olmsted's Emerald Necklace and Eliot's Metropolitan Reservations are gloriously red: the inner and outer-rings of an imagined, pursued, and implemented open space network unparalleled among American cities.

12 Existing Public Reservations and Proposed Open Spaces for the Metropolitan District, Charles Eliot, 1893.

13 Metropolitan Boston, NASA High Altitude Infrared Photograph, 1980.

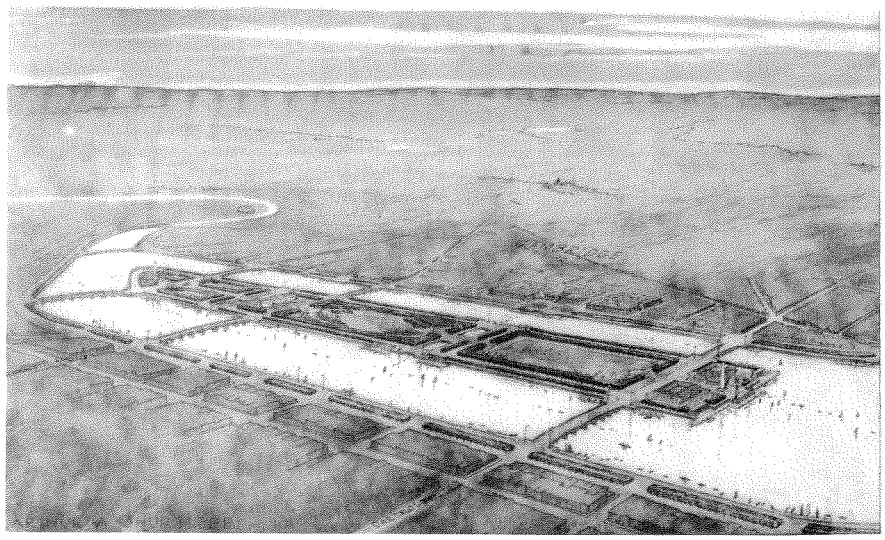
The Charles River Basin

The potential of a grand basin at the heart of Boston captivated the imaginations of numerous Boston citizens and produced a succession of schemes from the 1850s until the 1930s, when the current Charles River Esplanade was finally realized. Robert Gourlay's metropolitan-scaled crescent was followed by Charles Davenport's romanticized evocation of Hamburg's Alster Basin and the plans by Olmsted to connect the river to the metropolitan park system. Nearly a dozen separate proposals for islands, invoking the qualities of the Seine, the Tiber, and the Thames, explored the virtues of intimate scale and density of activity. Marvelous projections of esplanades, terraces, and pleasure drives made apparent the need to reserve both banks for public purposes. Characteristically of the American city, eventual creation of the basin was propelled less by visions of place than by transportation imperatives, the esplanade being built as part of the widening of the embankment along the river to accommodate a road.

Calling himself the "First Projector of the Embankment," Davenport remained an ardent proponent of his riverside park idea throughout his life, ceaselessly publishing material, illustrating alternatives, and cajoling anyone who would listen to him to work toward this civic goal.

The rationales for Cram and Shurtleff were similar: to shorten the bridges being proposed to span the basin, to offer prominent sites for important public buildings, and to increase the sense of connection between Boston and Cambridge. Both architects were convinced that the Charles River Basin was too wide and needed the equivalent of Paris' Ile St. Louis.

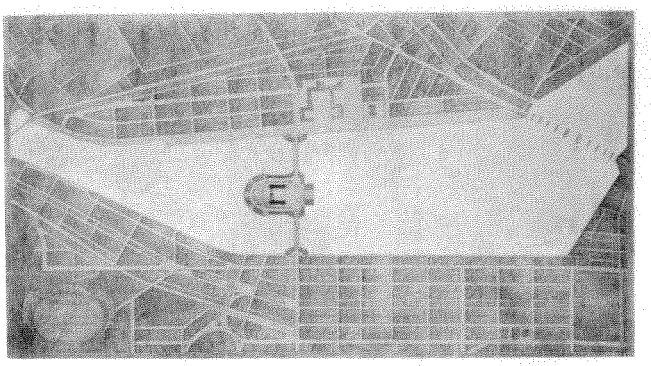
14



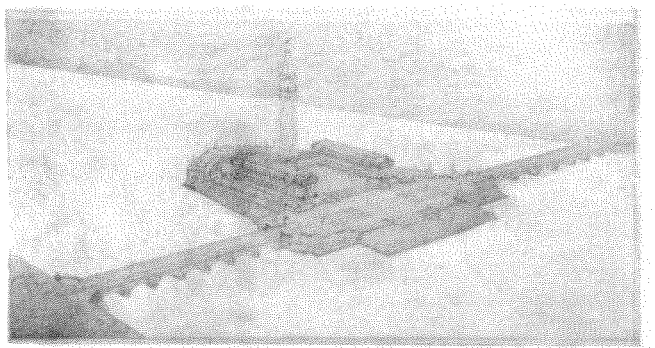
15

14 New Boston and Charles River Basin, Charles Davenport and Albert Coolidge, 1875.

15 Plan for an Island in the Charles River, Ralph Adams Cram, 1907.

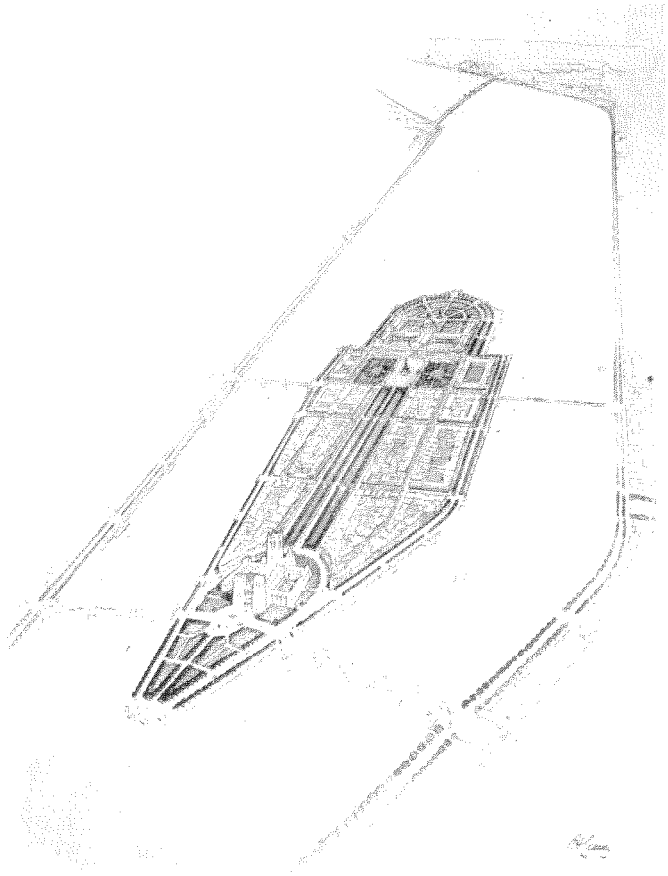


Plan showing the location of the proposed island in the Charles River basin upon which it is proposed to build the Memorial to Soldiers, Sailors and Marines who gave their lives in the Great War. It is contemplated to replace Harvard bridge with new bridges from Boston and Cambridge.

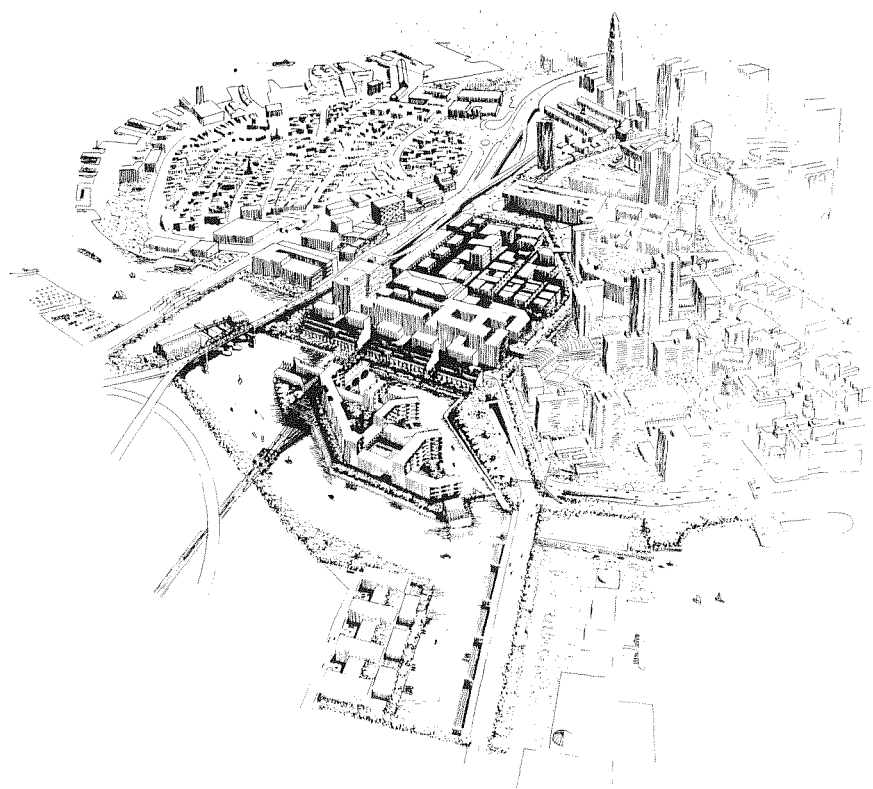


Air view of the proposed island in the Charles River basin at the Harvard Bridge on Massachusetts Avenue, upon which it is proposed to erect the Memorial to Soldiers, Sailors and Marines of Boston, who lost their lives in the Great War.

16



17



18

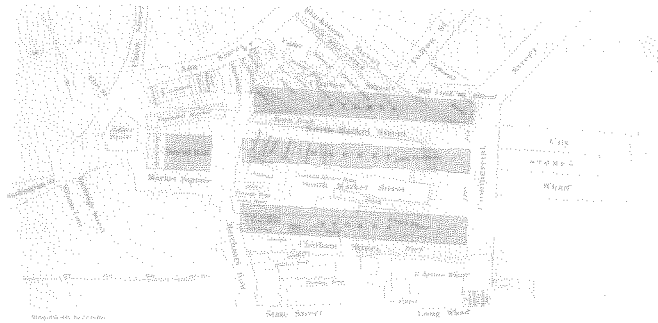
More than a decade following the initial island proposals, a committee that included Cram and Shurtleff designed a memorial island for Bostonians who perished during World War I. The city was to build this as part of an upgrading of a bridge across the Charles River. Since the same bridge is being rebuilt once more today, there may be an opportunity to reintroduce the concept.

Among the most provocative aspects of this plan for revitalizing the North Station area is the proposal for an island on which housing would be located. This plan briefly rekindled the now 75-year-old tradition of advocating an island for the Charles River.

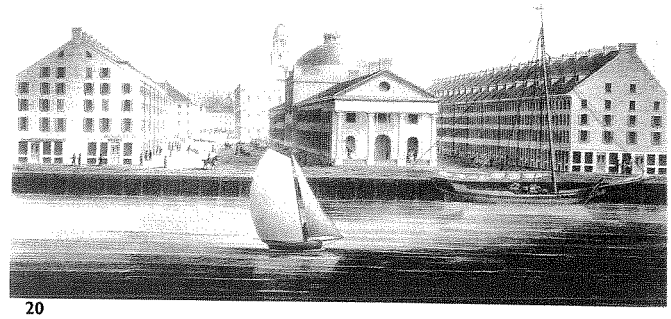
16 An Island for the Charles River, Arthur A. Shurtleff, 1911.

17 Proposed Memorial to Soldiers, Sailors, and Marines, rendered by C. H. Walker, 1920.

18 North Station Master Plan, Moshe Safdie, 1978.



19



20

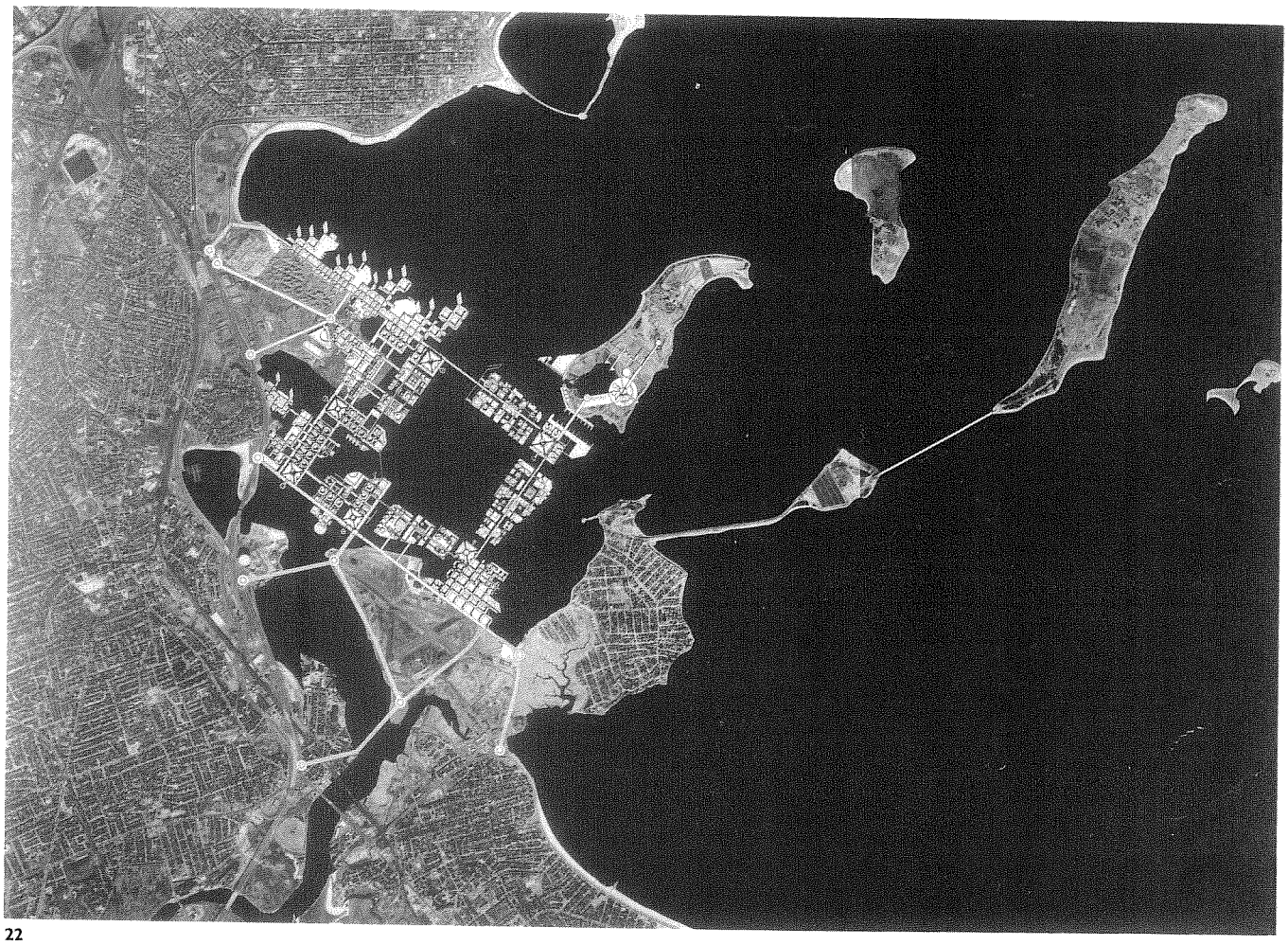
The Waterfront and Harbor

The waterfront *and its design* have always been fundamental concerns for Boston. During the eighteenth and nineteenth centuries piers, markets, and wharves formed what Walter Muir Whitehill called the "avenue(s)" to Boston from the parts of the world that really mattered. Well into the twentieth century ambitious schemes for the enlargement of port facilities held the attention of municipal authorities and initiated landfill ventures. Today a shrinking port, abandoned maritime infrastructure, and polluted waters are principal challenges, as well as opportunities to recapture the waterfront for public purposes.

Parris's design could be called the first great effort at waterfront urban renewal. The markets were built over the seventeenth-century Town Dock, which had become a local slum and eyesore by the beginning of the nineteenth century. They provided badly needed storage and retail space for the rapidly expanding town and, equally important, projected a noble new civic face seaward.

Bourne, a prominent Boston architect, undertook a common turn-of-the-century problem for his MIT thesis. The design is for an immense Beaux Arts-inspired circular harbor, as large as the entire peninsula of Boston. Seventy-five years later another MIT graduate, I. M. Pei, recognized the area's potential as a visual gateway to the city, and designed the John F. Kennedy Library on a site that would have fallen somewhere in the middle of Bourne's harbor.

21



22

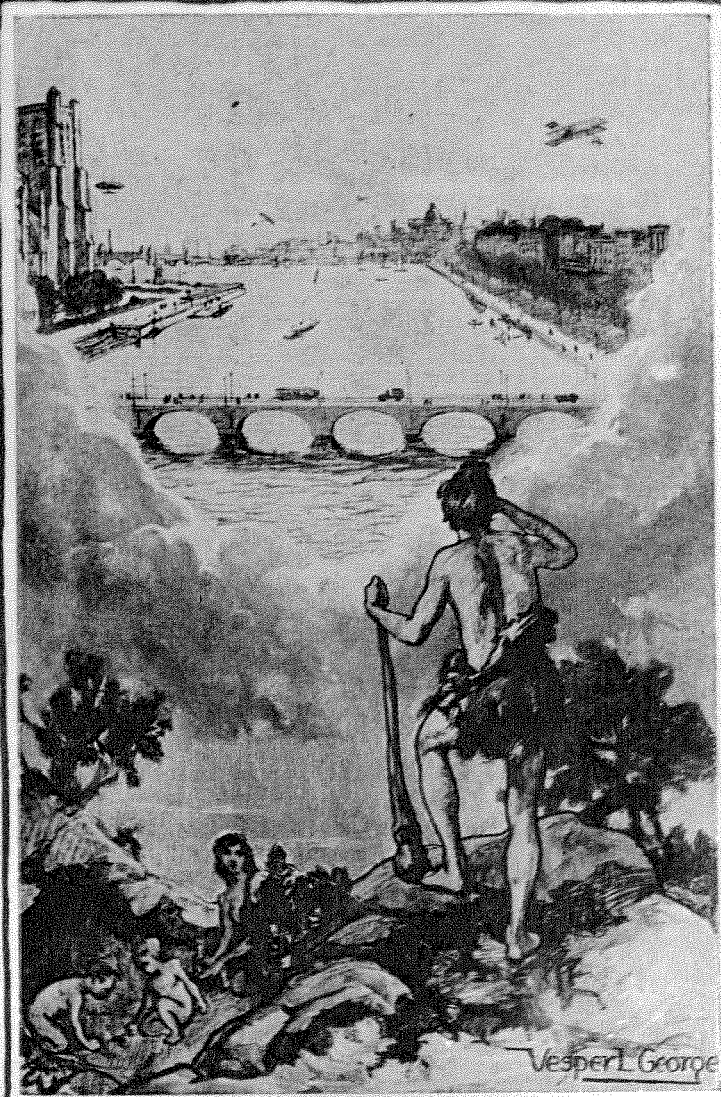
This was the second serious effort to host an international exposition in Boston. It was to have been the centerpiece of the nation's Bicentennial celebrations. The first attempt was part of the Boston–1915 movement and was intended to culminate a five-year program of municipal improvement. The Bicentennial Exposition was to result in a new community of 20,000 units, and was to serve as a prototype for similar communities throughout the world. Interestingly, both chose the city and contemporary urban life as the principal theme for an exposition. Both sought to create a "laboratory" for testing solutions to urban problems. Though neither was realized, each confirmed long-standing Bostonian interest in urban affairs and design.

19–20 Faneuil Hall Market, Alexander Parris, 1825. Restoration and reuse, Benjamin Thompson and Associates, 1967–1974.

21 A Free Port for Boston, Frank T. Bourne, 1896.

22 Proposal for a U.S. Bicentennial World Exposition, Jan Wampler and the staff of the Boston Redevelopment Authority, 1969.

NEW BOSTON
CIVIC ADVANCE CAMPAIGN



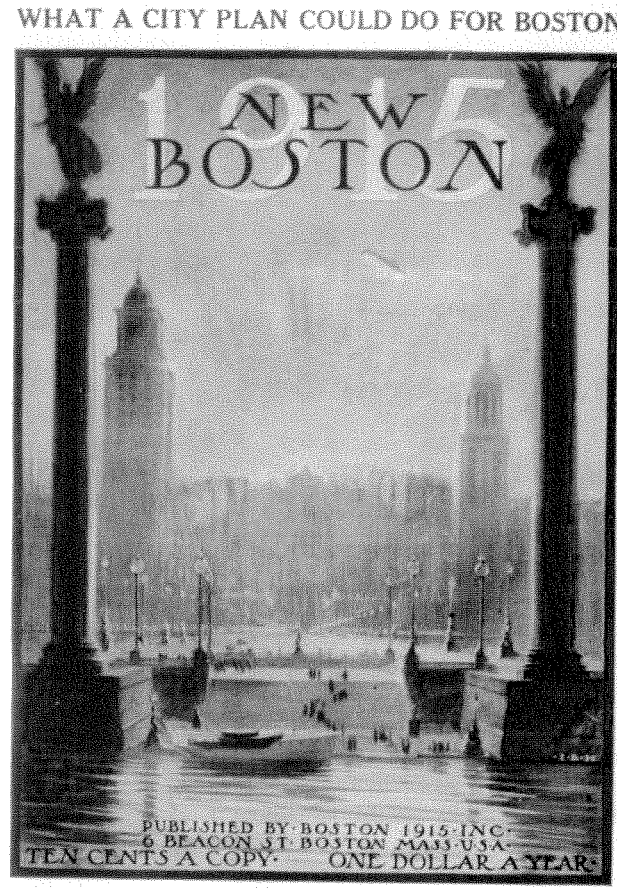
A MONTHLY RECORD OF PROGRESS IN DEVELOPING A GREATER AND FINER CITY

PUBLISHED BY BOSTON · 1915 · INC · 6 BEACON ST ·
BOSTON · MASSACHUSETTS · U·S·A·

VOL. I — DECEMBER, 1910 — NO. 8

TEN CENTS A COPY — ONE DOLLAR A YEAR

24



25

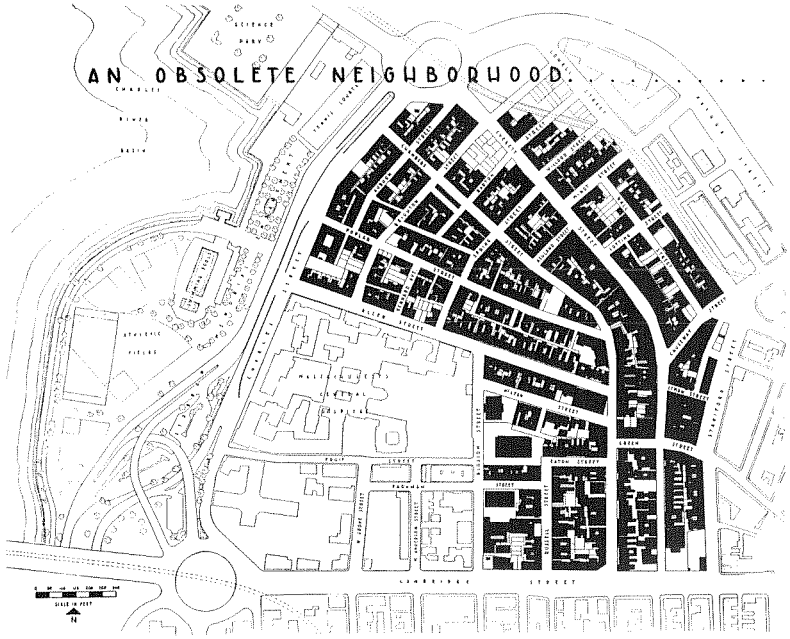
Progressive Municipal Reform

A monthly periodical called *The New Boston—1915* was the principal instrument of a local municipal reform movement dedicated to educating the public on the imperatives and possibilities of city planning. Characteristic of the City Beautiful era, a monumental civic image graced the covers of the 19 issues published between 1910 and 1912. Thirteen of the covers included a visionary gateway for the harbor. The subject of the image was not merely a renderer's whim. Where else but toward the harbor, long its lifeline, would a prospering and progressive Boston turn its new face? For the organizers of *Boston–1915*, the vertical city growing beyond the twin columns represented a modern counterpart to the eighteenth-century Long Wharf and the nineteenth-century Faneuil Hall Market. For contemporary Bostonians the cover may represent the first conceptualization of the "Walk-to-the-Sea."

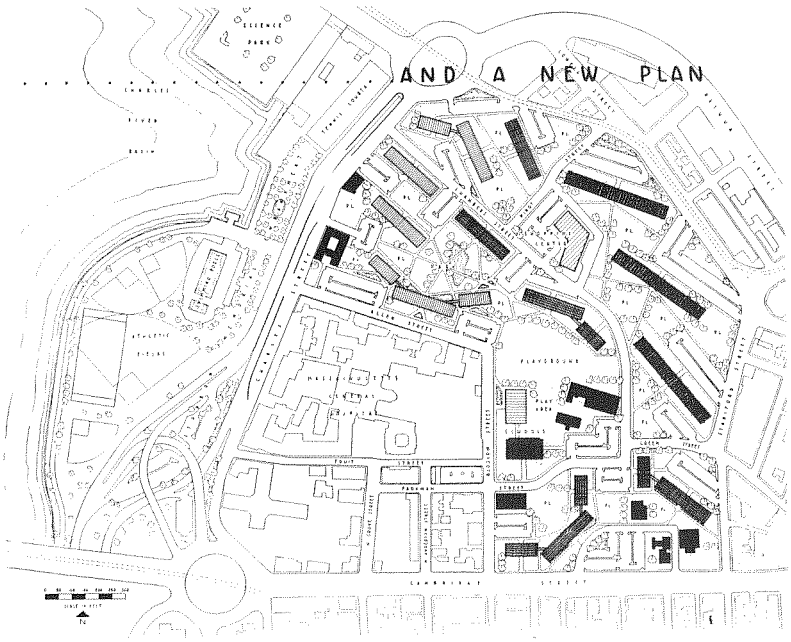
23, 24, 25 ***The New Boston–1915***

Urban Renewal

For nearly half a century, between World War I and the late 1950s, Boston hibernated, gradually losing its industrial and mercantile economic base and a good third of its population. People came to regard it as a dying town with hardly a prospect for resurgence, until the rampant economic stagnation and urban decay instigated what many considered a hopeless effort toward large-scale redevelopment. Propelled by practical-minded visionaries and generous federal urban renewal subsidy programs, an almost desperate period of reconstruction ensued. A quarter of a century and much success later Boston is flourishing again, and paradoxically is also facing a crisis. The very attractions of a momentary balance between progress and preservation have brought new and even greater pressures for large-scale development. Boston's response to this predicament will surely determine the longevity of its current renaissance and its next future.



26



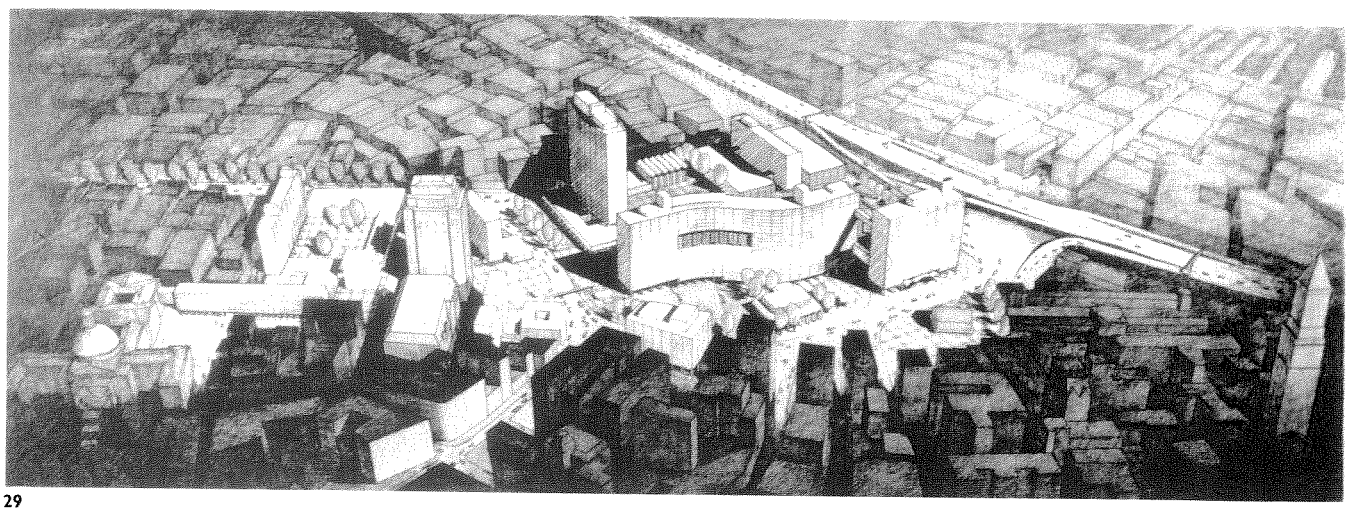
27

Facing pages from the 1950 General Plan for Boston readily showing the somewhat heavy-handed initial approach toward renewal and reminding one of the frequent rejoinder to critics of urban renewal: "You can't make an omelette without cracking some eggs." The old West End was selected as among the first eggs, but the tragedy of its complete demolition probably helped save the Back Bay and most of the South End, both of which came perilously close to becoming "ground zero" for additional "Charles River Parks."

With its heart virtually demolished (including the area labeled an "obsolete plan") Boston awaits reconstruction, its planners confident that only a step this radical would bring economic and cultural renewal.

26–27 General Plan for Boston, Boston Planning Board, 1950.

28



29

This was among the first renewal-era plans for the rebuilding of historic Scollay Square into the new Government Center area. Gropius's proposal echos with his words from a public address made 20 years earlier: "Today we are in a position to prove conclusively that the outward form of modern architecture and design are not the whim of a few architects or artists hungry for innovation, but the inevitable consequential product of the intellectual, social and technological conditions of our age." By the early 1960s a final plan that was only slightly less bold and extensive was designed, approved, and had begun to be implemented, serving as a symbol of a more confident Boston reestablishing itself after its long stagnation.

28 Aerial View of Central Boston, 1964.
29 Proposal for a Government Center, Walter Gropius and The Architects Collaborative, 1957.

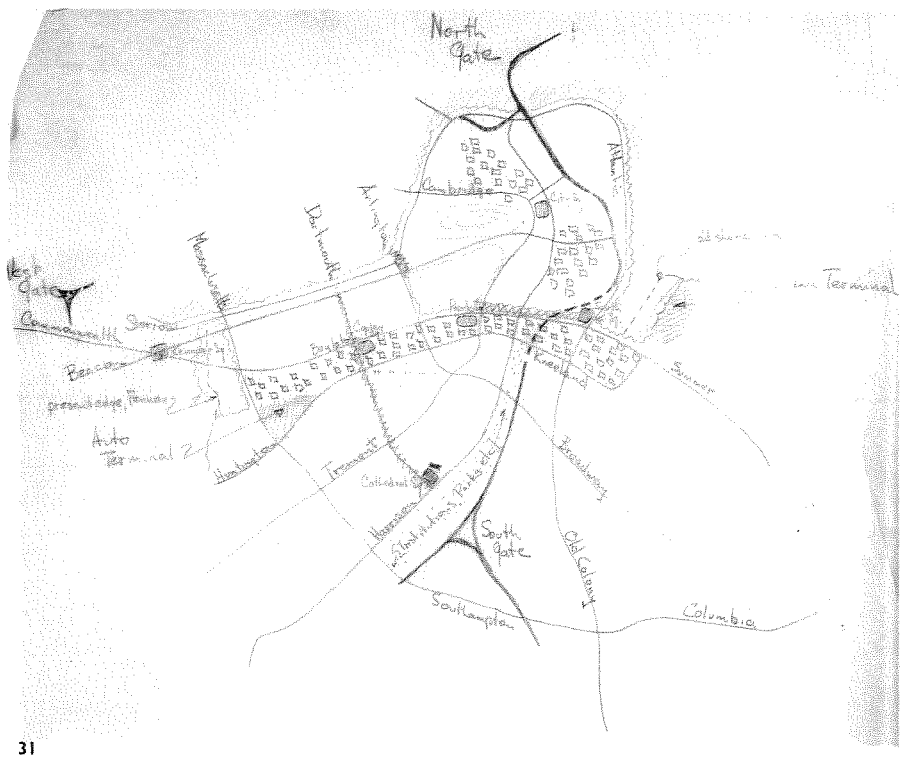
Visions of a Vertical City

Among the most recent of the visionary proposals motivated by practical aims has been the concept of a "tall spine," a rationale for distributing tall buildings—the paradigmatic building type of the modern city—in and around the central core. Though greatly stressing the fragile fabric of streets, spaces, and buildings of the old Boston, an unanticipated consequence of the new forest of tall buildings has been to recall in a new way the general form and orientation of the original peninsula, fundamentally altered by two centuries of landfill.

Compelled by a modernist fervor to express new urban form, this project by a German disciple of Walter Gropius proposes a radical physical transformation of the city, and thus anticipates the "tall spine." The future Boston would take the form of a continuous megastructure following the alignment of the principal highway. Selected survivals of the old city—the historic monuments—would remain as pavilions in a new park that would fill the Shawmut Peninsula.

A conceptualization of the "tall spine," as an expansion of the downtown into a dense linear band between the historic neighborhoods of the Back Bay and the South End. Merely a sketch, its logic has both officially and unofficially guided the physical transformation of the commercial core. Kevin Lynch foresaw the need to channel contemporary-scaled development away from fragile historic districts. Being more optimistic about tall buildings than Boston's current planners, and more mindful of the fact that they are as characteristic of the late-twentieth-century city as the Back Bay was for the nineteenth-century city, he devised a system for locating them. Current sentiment, after several decades of building them, favors radical curtailment, if not a total ban, on their construction in the downtown.

30

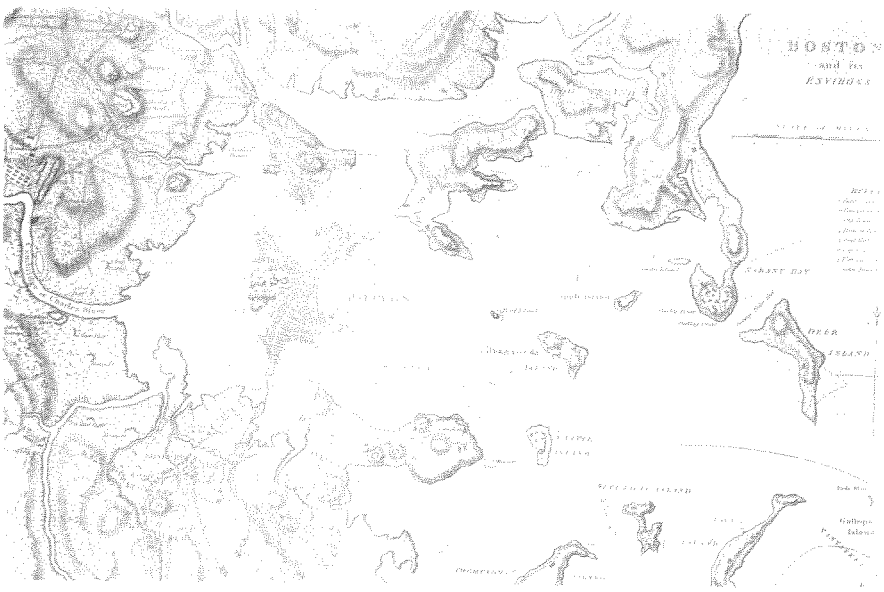


31

30 Plan for Central Boston, Martin Wagner, 1947.

31 Concept Sketch for the Architects' Plan for Boston, Kevin Lynch, 1961.

32



33

34

32 View of the "tall spine" after 25 years of building—the unanticipated yet somehow poetic result.

33 Eighteenth-century map of Boston showing the original topographic conditions of the region with the Shawmut Peninsula being virtually an island.

34 Contemporary aerial photograph looking toward the downtown, indicating the unanticipated yet somehow poetic consequence of the "tall spine" serving to reassert the contours of the original city.

Buddha's Beacons

Peter Droege

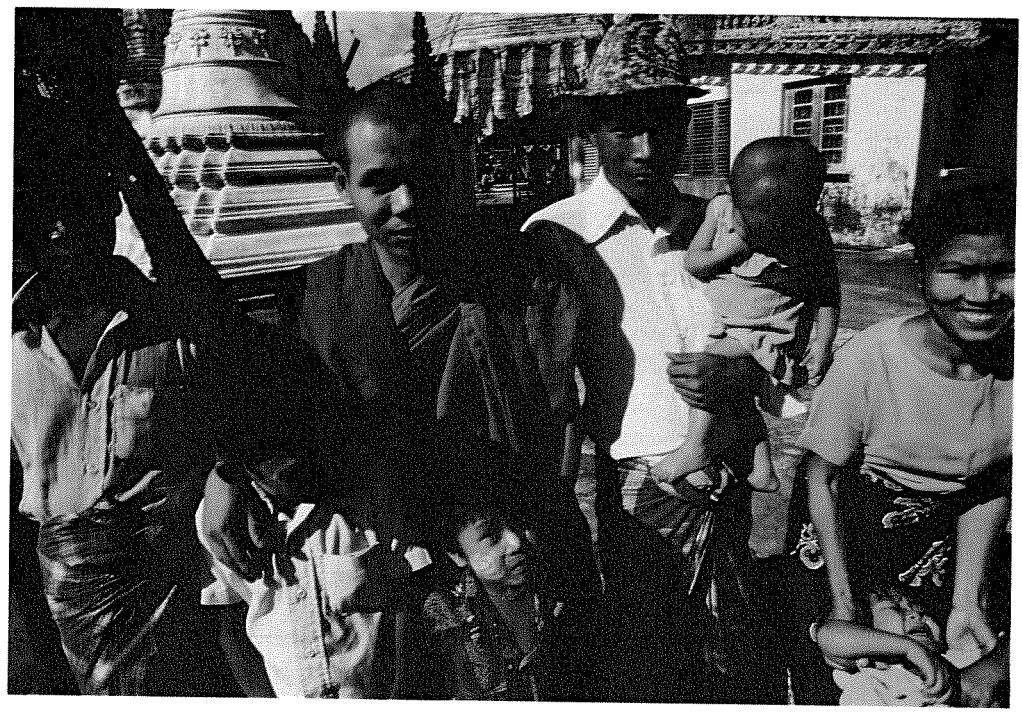
Photos by Peter Droege

A massive golden cone hovers above Rangoon. From the window of the banking jet it is the city's most prominent feature, the epicenter of Shwe Dagon, the sacred hilltop compound. Elaborate wooden entrance structures descend like tunnels in four directions, taking in and releasing steady streams of visitors.

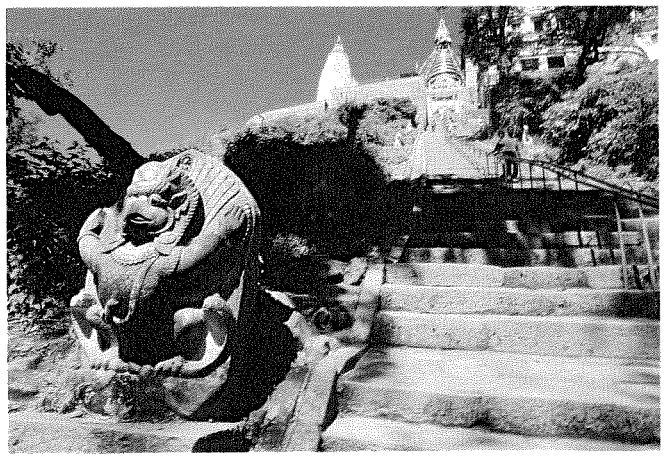
The hill hosts one of Burma's most important sanctuaries, and its central cone continuously begets new shrines on its paved crest. Nearly 100 can be counted. Some are being constructed, others have been there for centuries. The site is 2,500 years old, and today it retains its active role as a civic attraction and a center of public discourse. The pagoda looms large in the city's mind, a Buddhist sanctum in a socialist temple. It is a community center, one of Rangoon's few formal spaces, a protected public-private plane, an elevated orbit for countless circumambulations. The compound generates exchange of friends and relatives, and of oneself with the transcendent realms reached in solitary meditation.

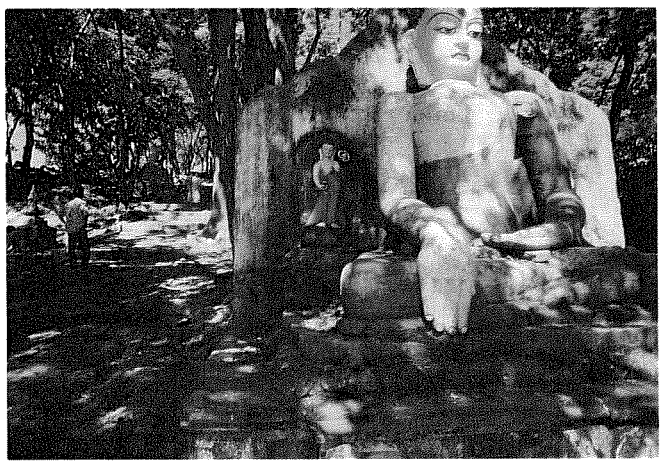
The evening sun is saturated with red-gold, its rays horizontal in submission to Shwe Dagon's gravity. Into this luminous haze, in measured pace, surface the sunset pilgrims from the tunnels' ascendant darkness. They halt for a moment,

squint into the sun, gaze across the square, then commence their clockwise circulation. Some seem from the city, others from the fields, all in their finest cloth. The plaza comes alive with whispers and quiet laughs. Garlands and incense are offered, purchased in the tunnels below. The sinking sun amplifies the sense of presence, of oneself and the city, the country, the sky. The plateau spins suspended, an entrance into ethereal existence, floating amid the city sounds below. The spired cone is an antenna of faith and a beacon of reassurance, charged by collective pleas, a relay station between earth and the heavens, made conductive with tons of gold.



Later on, the pilgrims stroll south, across the railway tracks, to Rangoon's other communication center, the district of movie houses. Tonight's attractions include a short presentation on West Germany's recent industrial and cultural achievements, an Indian melodrama, 007, and Hong Kong kung fu.





At five o'clock in the morning the festival is fully under way. Red dust between their eyes, the pilgrims wander westward. Roads and paths meander toward the bridge and lead across the river to the fringe of the city. In the distance Swayambhunath, Buddhist enclave in Hindu kingdom, is perched atop a hill. Ramps and stairs climb through dozing neighborhoods. The trail is lined with mounds of flower petals and peddlers of multicolored powder. The procession prods itself along with drums, gongs, and wooden flutes. It passes by hybrid icons, small temples, and sacred statues, Buddhas, Ganeshes, and Garudas. The rising system of paths is the root structure of the sanctuary, and the roadside icons signal the temple's presence. As it draws closer the balance between the profane and the sacred gradually tips in favor of the latter. The roofs of Kathmandu fall back, and dawn breaks.

The valley is thought to have been a lake in prehistoric times, and this hill would then have been its island. A gate on its foot marks the wooded site. Steps surge skyward to the upper entrance of the temple proper. Here modest temples, brick dwellings, and a library of Tibetan scriptures are gathered around the small square. Clamoring pilgrims pace in a circle, through and by the ancillary structures, around the stupa. The white egg is the very focus of the temple and of the elaborate network of paths and places which link it inseparably to the city.

The stupa restages an ancient Indian feature, a mutated tumulus, bearing relics of the Buddha or a universal emperor. Yet, it is not an exclusively Buddhist icon. The Sanskrit word *stupa* literally is "that which has been amassed in praise of something," and its synonym *caitya* translates into "support for contemplation." It consists of the dome on its base, carrying a small palace-like structure and one umbrella or a stack of them, royal emblem of excellence. The structure is organized around a real or imaginary *yupa*, symbol of a sacrificial post, the Buddha's divine ladder between the transcendent and the immanent worlds. The stupa and especially its central dome carry a plenitude of meanings, over time and in the different regions where it is found. It signifies the "human aspect in cosmic dimensions," roof of the world, cosmic mountain, center of the world, the cosmic lotus in the pond, the skull of the monkey king, the head and body of the Buddha, his residence, and his death, the Buddha's final nirvana.[1]

India's golden-age stupas carry stories from the Buddha's life and the *yatakas*, the body of

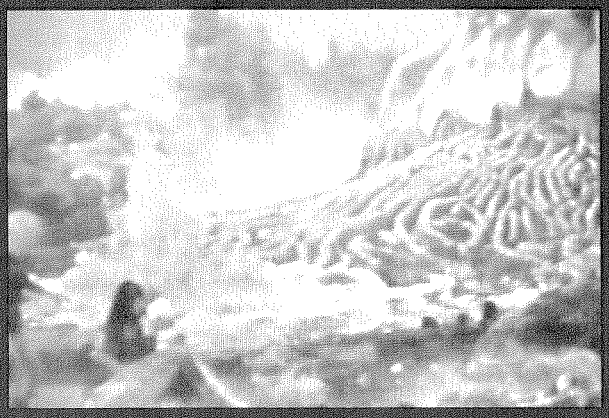
Buddhist myths, messages about correct attitude. The Nepalese stupa is less laden with literal information. Still, Swayambhunath and others are powerful manifestations and sources of social reality. The result of common patronage, stupas and pagodas at once manifest and affirm communities; designed to retain universal knowledge, they permit their visitors to attain it in return.

Note

1 Pramod Chandra, George P. Bickford Professor of Indian and South Asian Art, Harvard University.

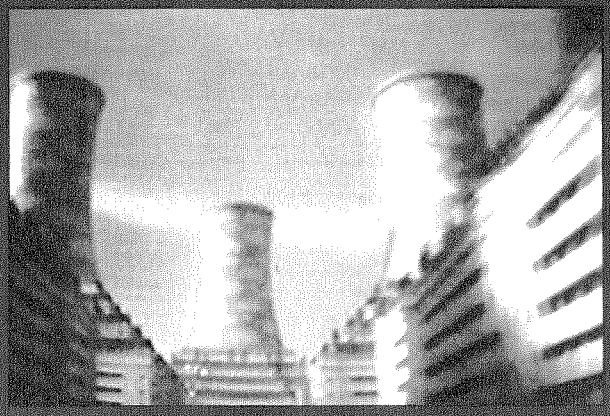
Cine-city

Peter Droege

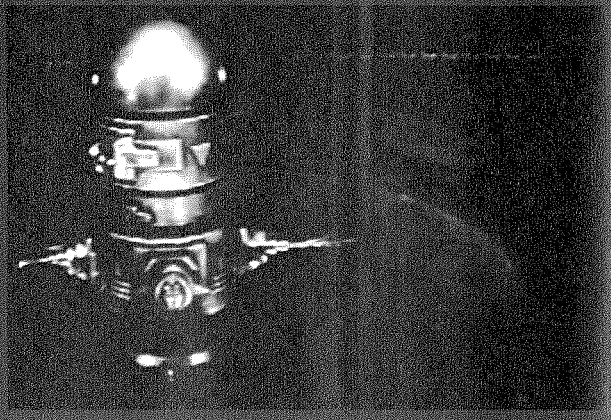


Barbarella, Paramount, 1967

Blade Runner, Ladd Company, 1982



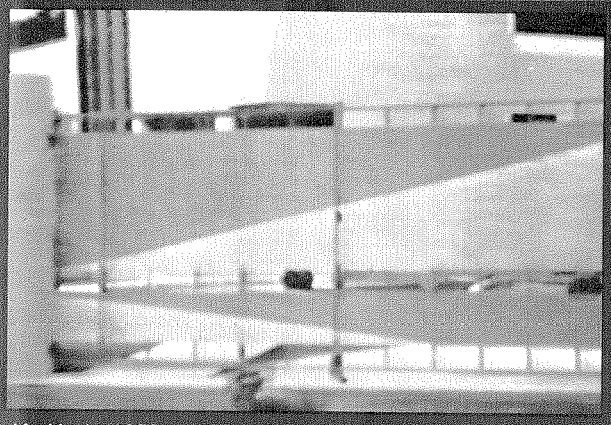
Brazil, MCA Home Video, 1984



Dune, MCA Home Video, 1985

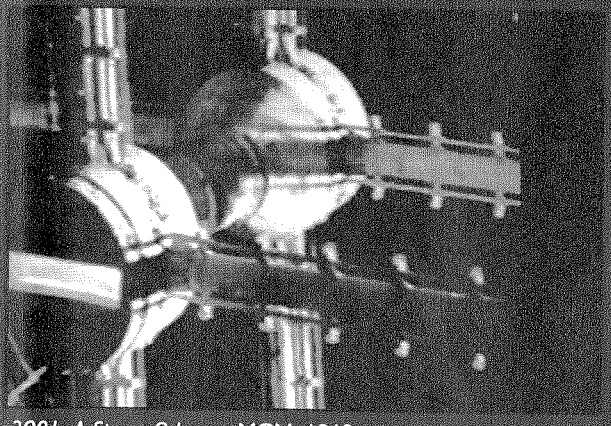
Max Headroom, Chrysalis Visual Programming, 1985

Metropolis, UFA, 1925



My Uncle, 1958

1984, Virgin Cinema Film, 1984



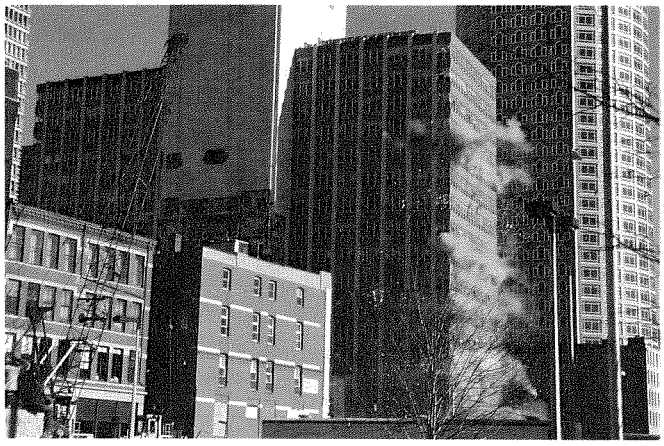
2001: A Space Odyssey, MGM, 1968

2001: A Space Odyssey, MGM, 1968

Star Wars, 20th Century-Fox, 1974

The Day After, American Broadcasting Companies, 1983

Peter Droege



Traveler's Insurance Company
Building (1959)
Boston, March 6, 1988

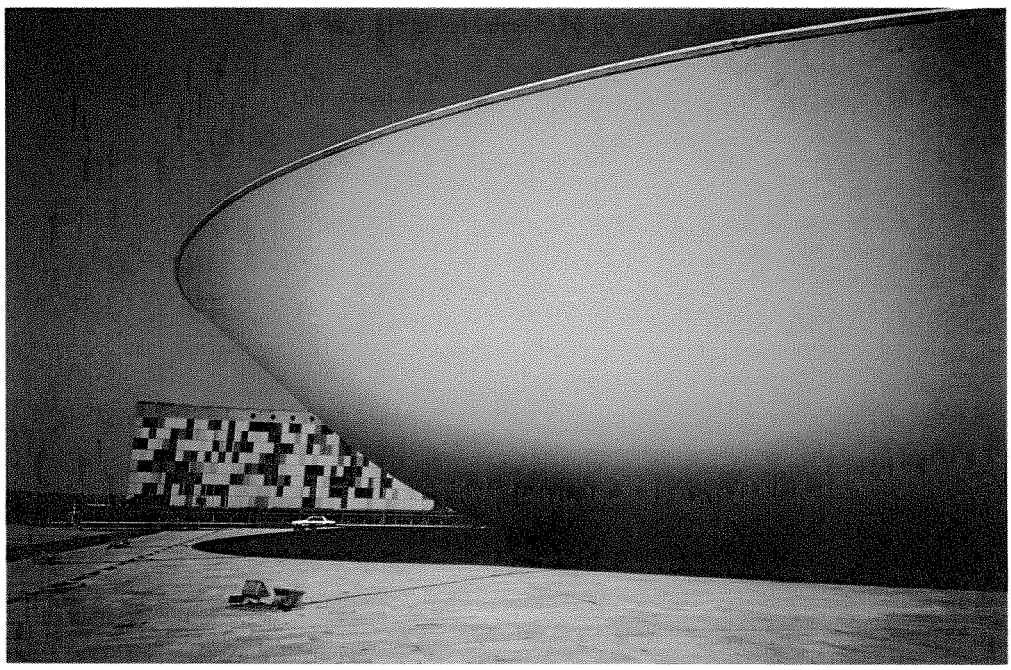
This is a gorgeous building. It's big, it's new, it's nice. It's going to move and just flow to the ground. It'll be beautiful.

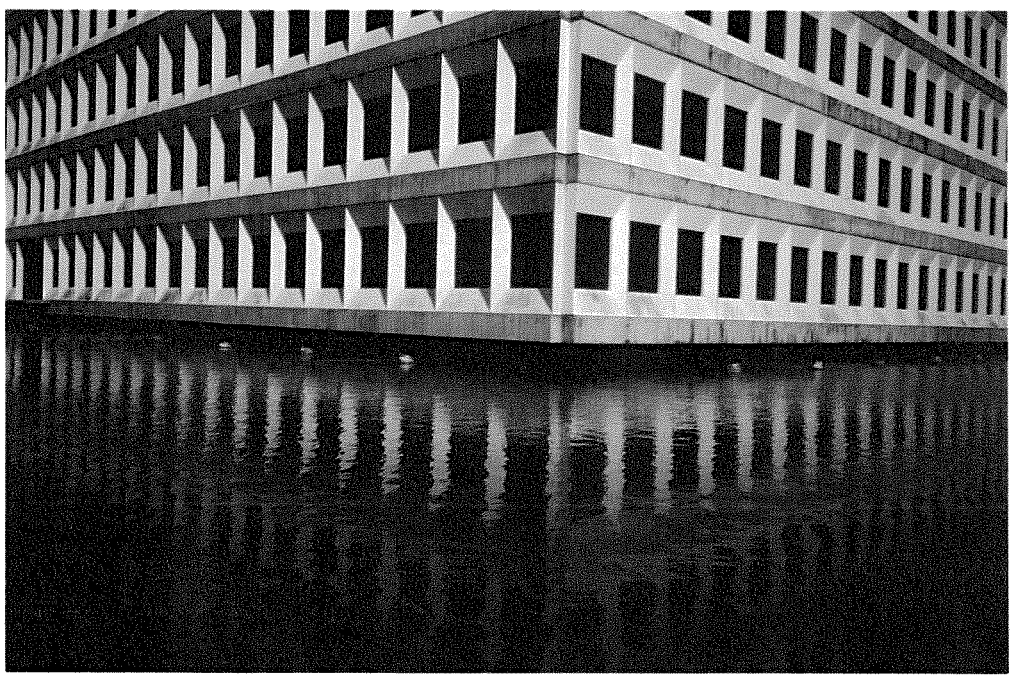
J. Mark Loizeaux, President,
Controlled Demolition, Inc.,
Maryland

Photos by Peter Droege

El Dorado

Jack Gantos

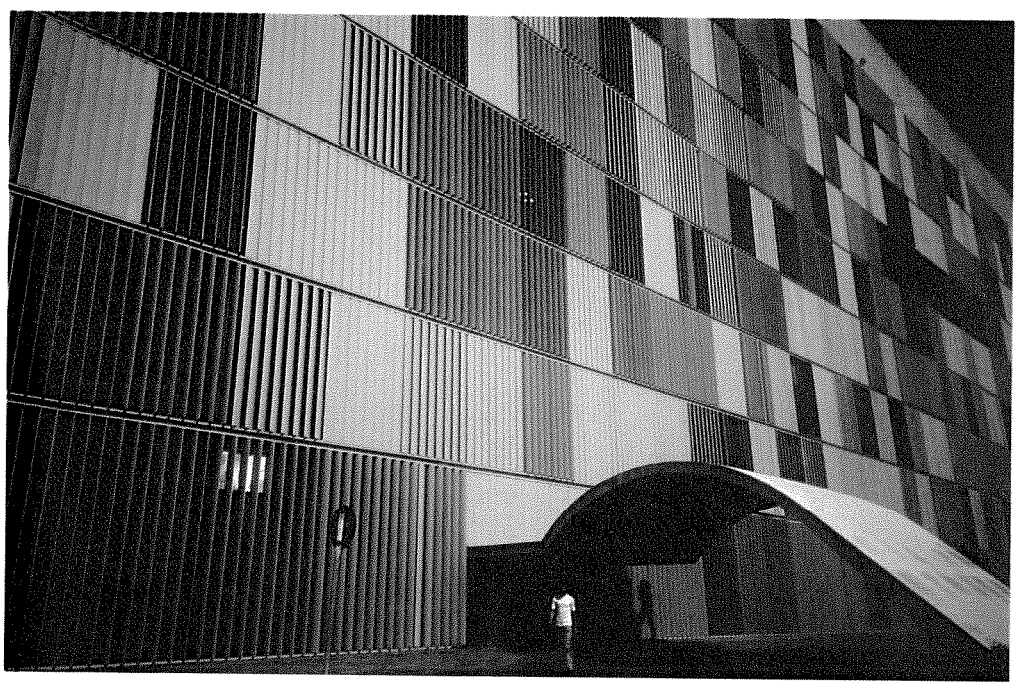


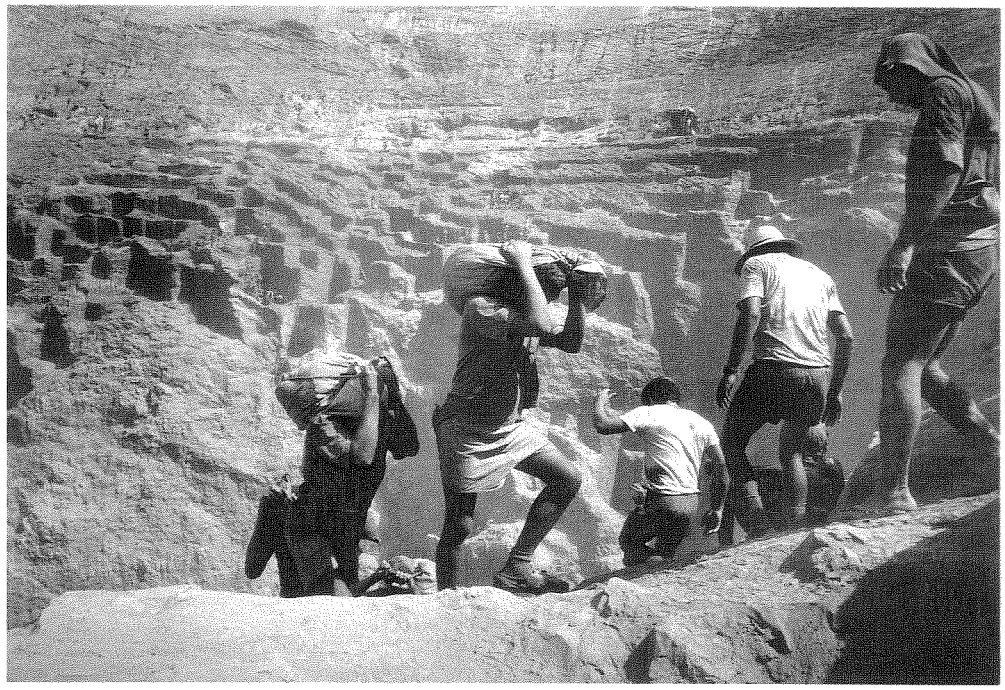


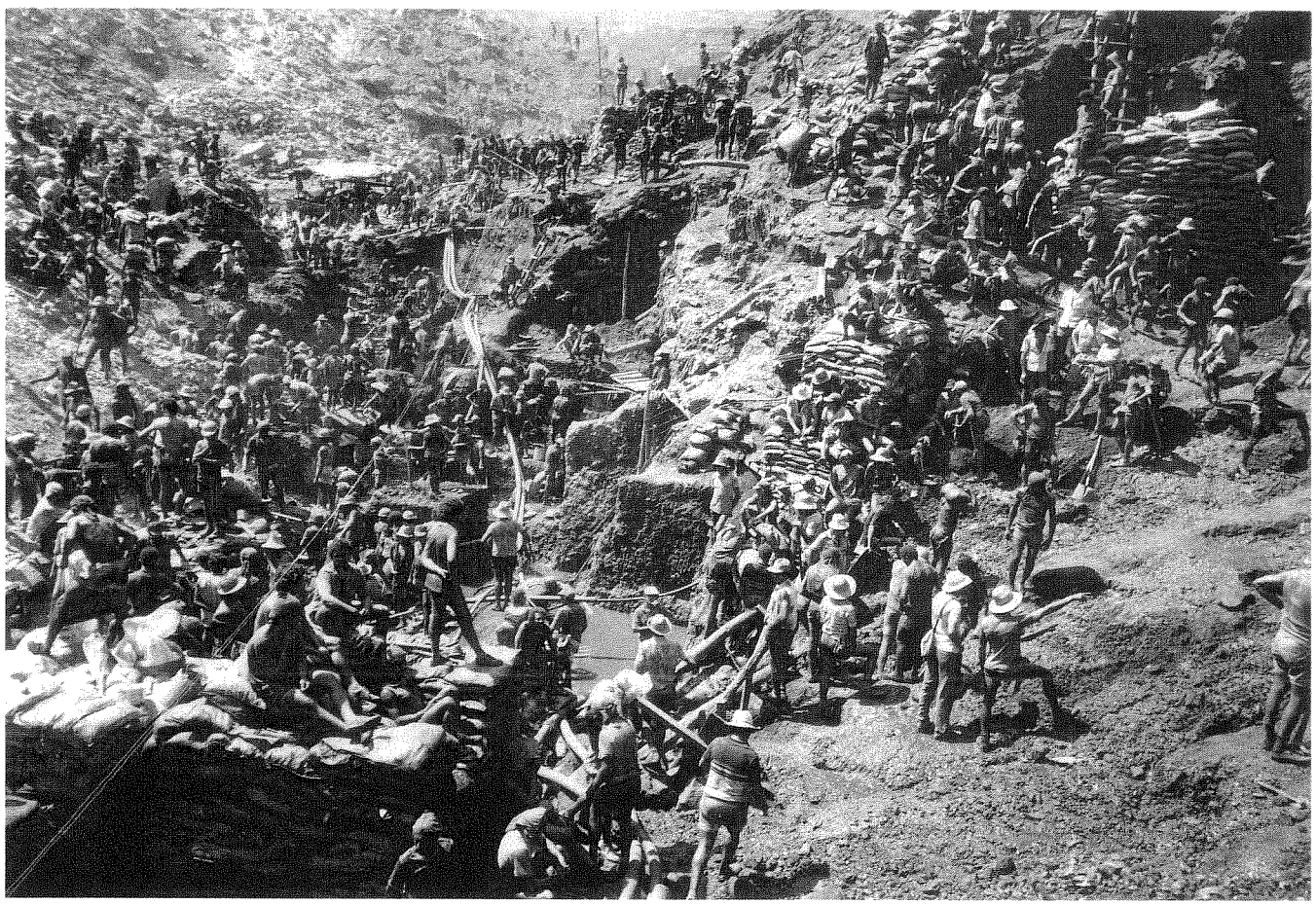
Photos by Peter Droege and Jack Gantos

The conquistadors believed there was a gilded king who went about dressed only in an ointment of gold dust. They believed he bathed in a lake now filled with the gold sediment that washed off the king. They believed he was solid gold and carried about in a hammock. They believed he lived in a city of gold and strolled in a garden of golden trees stocked with golden animals. Gonzalo Pizarro couldn't find this mythic city. Friar Gaspar de Carvajal couldn't find it. Lope de Aguirre couldn't find it. They either went mad, starved and ate their horses and saddles, or were killed by Indians, poisons and insects, disease or each other. Spanish, Portuguese, and Germans alike went crashing through the jungle berserk with the desire for gold.

The Brazilians couldn't find El Dorado and so they manufactured the myth. They built El Dorado and called it Brasilia: an artificial utopia of socialist architecture and bureaucratic organization, a gateway to the untapped natural resources of the jungle, an ideal surrounded by plains of *favelas* and infertile earth. Constructing the city cost more than the country's annual budget. The treasury printed excess money but there was no gold to support the paper. Bankruptcy greeted the project's completion. In the end, Brazil's president, Juscelino Kubitschek, was presented with the golden

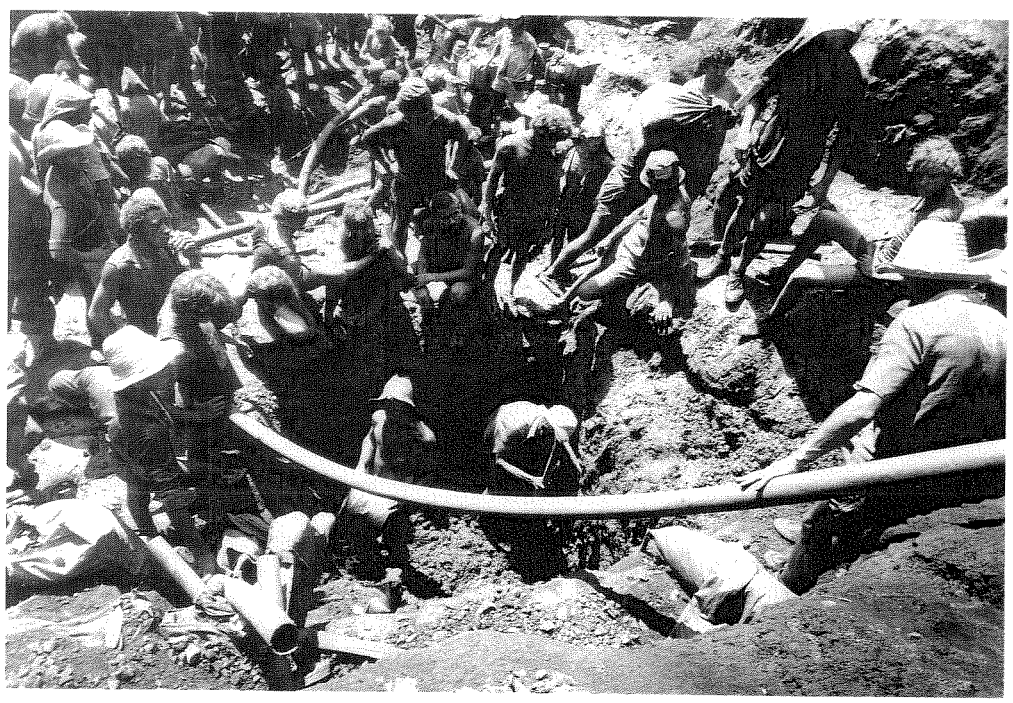






key to the city. And the capital city is now the jungle port of foreign banking once again investing in explorations for minerals, iron ore, bauxite, manganese, and oil. This is the El Dorado whose purpose is to make concrete its myth.

Serra Pelada did not need such a mythic prehistory. It is not a site first created by myth but the opposite. Myths have been created since gold was first found in its soil. In 1980 a tree fell over during a thunderstorm. In the uprooted soil were found nuggets of gold the size of a man's fist. Twenty thousand men rushed to the site. In the first 10 months over 10 metric tons of gold were removed. Plots of earth, four meters square, were distributed by government agents. The first men built shelters of tree limbs and black plastic. Now a wooden town has grown around its rim. Each morning men descend the ladders and footpaths to the claims. The ore is dug out simply, by hand, and the 40-kilo sacks of earth are carried up and out on the backs of men who have seen the gold with their own eyes. The terraced plots have been worked to uneven depths from varied success and this great unplanned crater is the labor of a city inverted. Now the amphitheater is one mile square. It is said that everyone is a king at Serra Pelada. "Babylonia," the miners call that hole, that kin to El Dorado.



Centricity

Lebbeus Woods

The most imaginative intellects of the twentieth century chose physics as their field of play. Games of light and chance. Episodes of inferences, relationships without certainty, effects without cause, interdependence of time and space, mysteries of matter thoroughly explored, but retained as mysteries. An epoch of conditional truths. In a sense the 400-year history of modern science culminates and ends in these physics, having outrun its premises. A new epoch has opened, though few of us have reached its threshold.

Certainly modern architecture has not. Architecture more than ever clings to history and language for its origins. Visions of ethereal energies and exotic matter have not yet roused architects from their comfortable ruminations in the past. And let us not forget that language merely circumscribes what has been. Only perhaps when the rest of the world is utterly transformed by new understandings of its substance and dynamics will architecture be released from questionable certitudes of an imagined history.

History—Voltaire called it the lie commonly agreed upon. History is a fiction. It is necessary, but not unconditional, not true. It is useful, practical, instrumental, but illusory as a tender song, sung by drunkards, illusory as an electron cloud hovering near the core of matter. Modern physics has no use for fictions disguised as fact, for a sacrosanct history. Today, physics prefers a special kind of undisguised fiction. Today physics invents the instantaneous history of the Now. It closes in on an instant of being, touching but not seizing an essence of motion, of change, in flashes of light crossing infinite and infinitesimal space, at once. Can architecture exist so dangerously?

Physics is theory and experimentation, vision and construction. Apparatus exists only to verify the elegance of an ideal. Everywhere in nature, the same laws apply—so it says. Everywhere in nature, truth is only instantaneous—it is only Now. The machines physicists build—accelerators, interferometers, radio telescopes—are an architecture of the elusive instant, the ephemeral Now. Can architecture also certify mere being?

The influence of modern physics on architecture has hardly begun. Architecture is slow to receive the new, especially when it is dangerous—how much safer to dwell in an idyllic past circumscribed by walls of literature and poetry, music, painting, and sculpture. Architecture, at its best today, seeks always the healing touch of art, the always warm Mother-embrace of art, which protects and comforts and saves us from the cold, relentless Father of science, threatening with the indifferent glance of eternity. Architecture as we know it rightly fears the austere glance of objective vision, which would tear it from every consolation, every comfort, every protective domestic illusion that softens the dread of universal mortality.

Introduction for the catalogue *CENTRICITY: The Unified Urban Field* (Berlin: AEDES/SEIGEN, 1987).

When architecture finally feels the difficult and disturbing influence of modern physics, how will it be manifest? Immediately the thought comes up, like some terrible indigestion, of a Wellesian "Things to Come": the reign of the Airmen and the Engineers, conquest and technology, a millenial military-industrial civilization. But this is a fear-image, a shrinking back from the cruelly enlightening Father. Science may lead to technology, but it begins in understanding. The origin of science, and of an architecture of science, is an instinct to comprehend, to know the world comprehensively, and "without interest," as Schopenhauer said, without desires that bend knowledge to a limiting purpose.

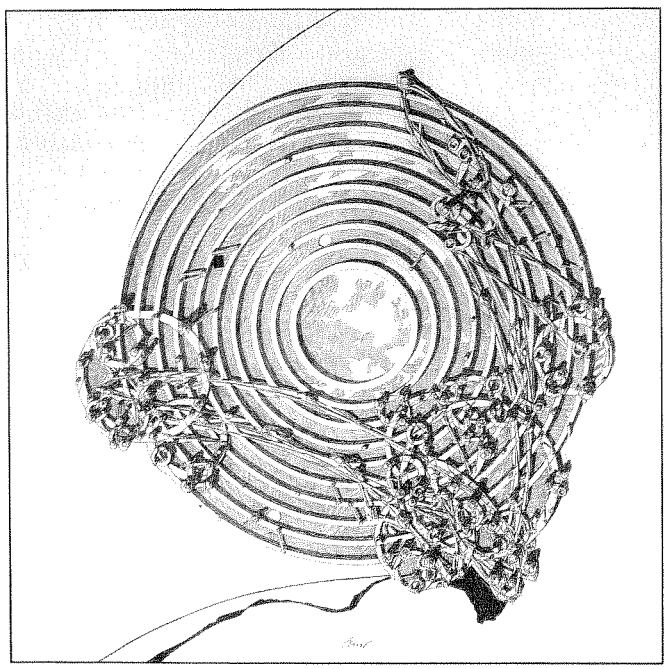
The influence of physics on architecture, when it comes, will be more fundamental than the influence of technology. Tools increase human capacity by extending the senses and by adding mechanical strength to the inherited organic. Science changes the very ideas of what is natural and human, of what human capacity and strength really are.

The influence of Relativity, when it comes, will be to restore being to the center of a cosmos of its own experience, leading to a new, dynamic humanism of urban life, and to new architectural responses, which will be new centers and new kinds of centers at every scale of the city.

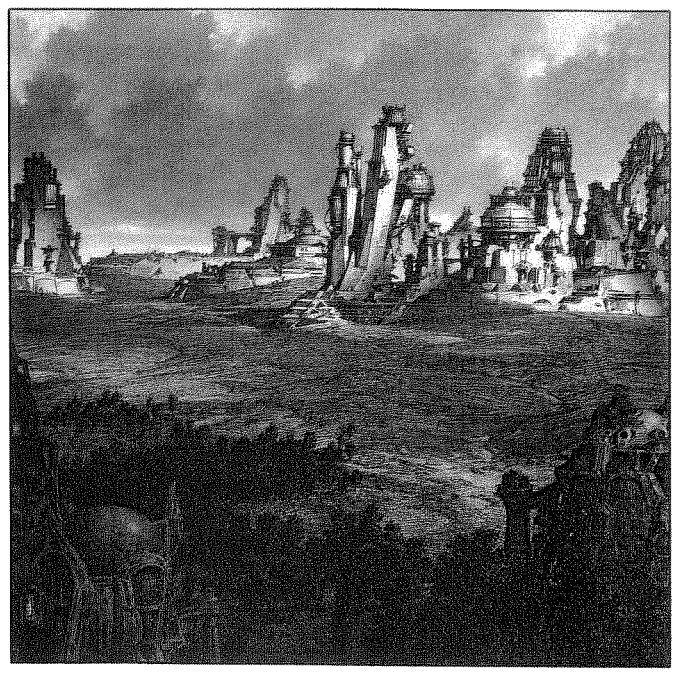
The influence of quantum theory and mechanics, when it comes, will be to release social existence and its architecture from rigid boundaries and forms, to free thought and action from specious certitudes of both history and prediction. Uncertainty and probability are concepts from physics that will give the present moment supremacy in things conceptual and material. And they will revolutionize the meanings of these two words relative to each other. The visionary world of wave phenomena will become palpable, present, and material.

Physics will affect architecture not by the notions of scientific methodology as they are commonly believed, but by the paradoxical synthesis of imagination and mathematics revealing the atom and cosmos. In fact, the changes to come are entirely synthetic in nature and method, to be supported by fragmentary analysis, but occurring in a realm beyond it. This is the realm of ordinary experience, the realm in which architecture can become the instrument and laboratory of a humanistic science whose outline and workings can today only be imagined.

I would like to propose at least an image of this science, which I have called a universal science. It is an image of poised intensity, of great inward tensions held in dynamic equilibrium by even greater inner strengths. These are the strengths of knowledge, gained by a universal science practiced on the fields of human experience. Knowledge of this order comes from the individual's command of primitive inner forces of being through successive transformations of experience. Freud spoke of sublimation. Even earlier, Schopenhauer raised to the highest an ideal of the Sublime. Beauty, he said, is the knowledge we gain through pleasure; the Sublime is more difficult, more cold and fearful, being the knowledge gained through common human suffering. A civilization of science and the sublime will create through command of every pain of being an architecture of indifference to consolation and comfort, an architecture of resistance to every domesticating fear, in order to turn its gaze, fearlessly, into the immense void of being.



1



2

Centricity is Adjective and Noun, Modifier and Modified.

New patterns of urban form and living arise from concepts of time and space considered as one, as *timespace*. The interplay of metrical systems establishing boundaries of material and energetic form is the foundation of *a universal science whose workers include all individuals, whose principal instrument of research is architecture, and whose interactive field is centricity.*

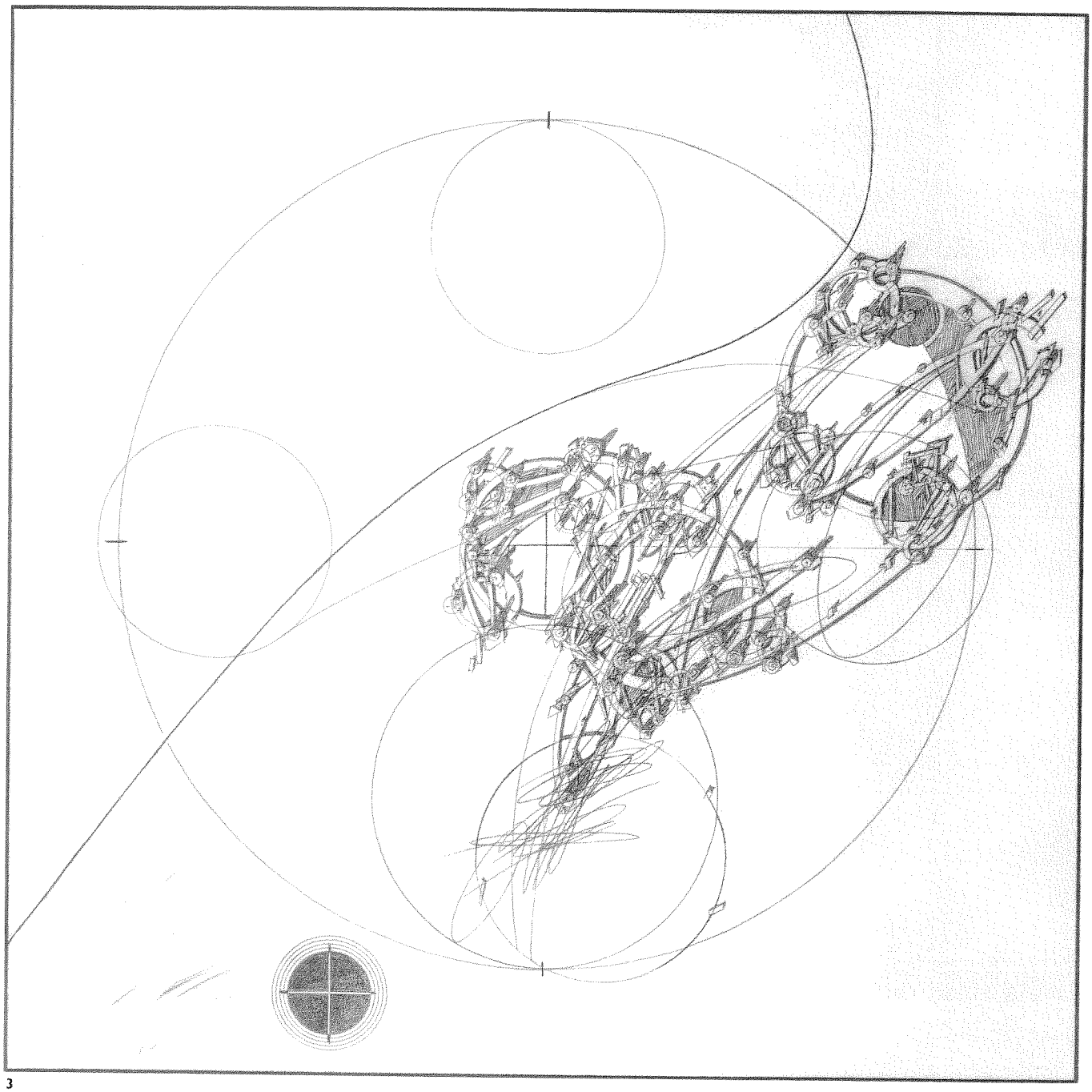
The Aim of Research Is Knowledge, and That of Knowledge, Achievement.

A universal science seeks general principles whose discovery *continuously* reunifies all fields of knowledge on a universal plane, toward the achievement of an egalitarian and humanistic *culture* of universality. This universal plane is the urban field, universally experienced and within which the timespace continuum is universally perceived and understood.

1 **Centricity:** concentric field

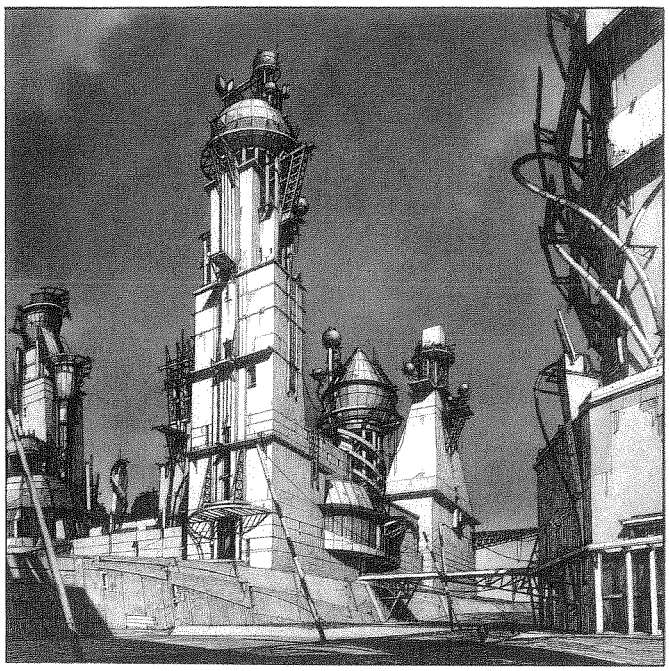
2 **Citylimit:** towers and rings

Drawings by Lebbeus Woods, 1987, 23″ by 24″, pencil on paper

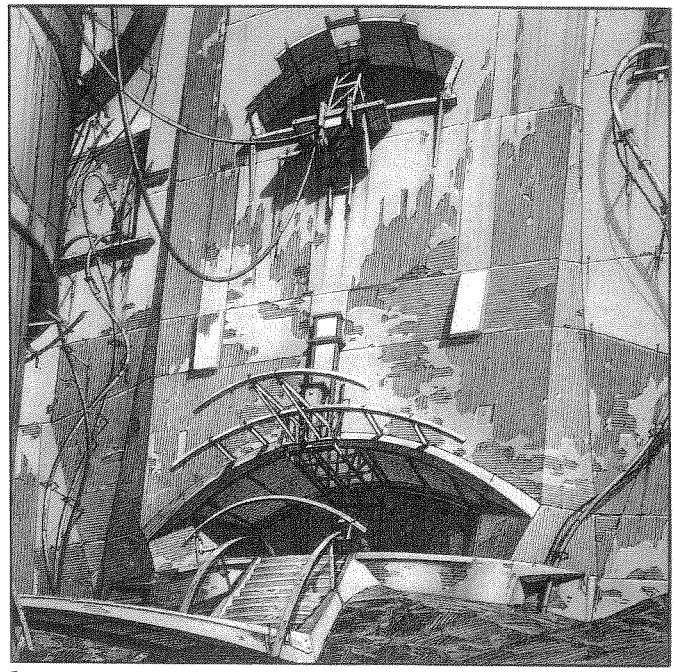


3

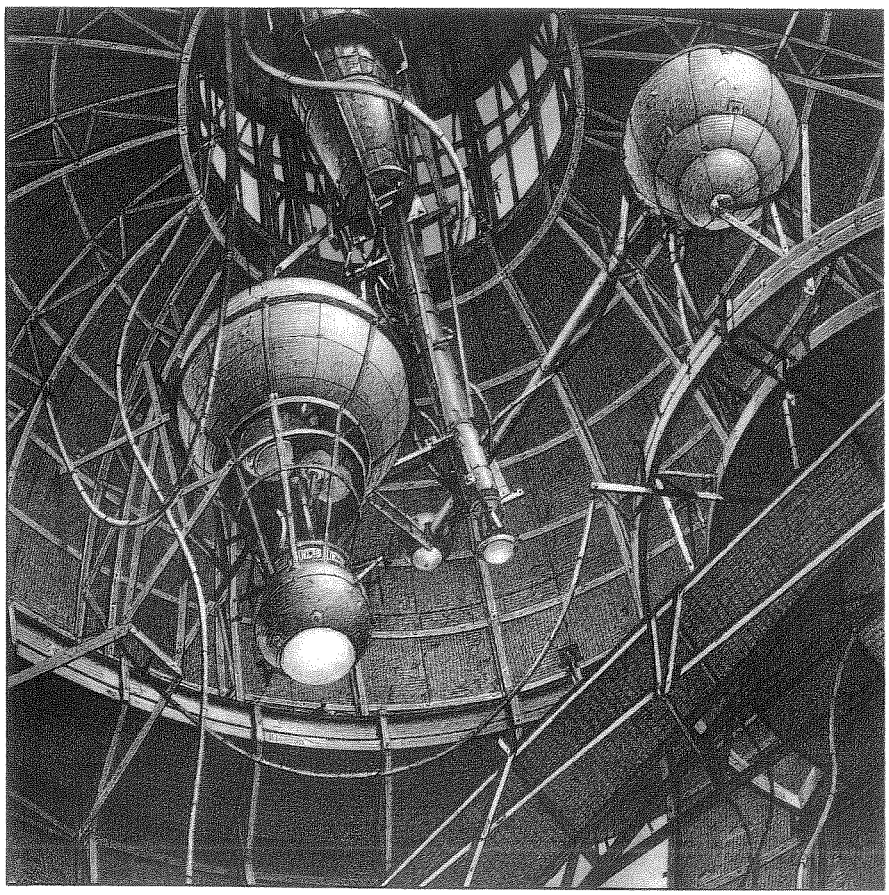
3 Unified urban field: centricity



4



5



6

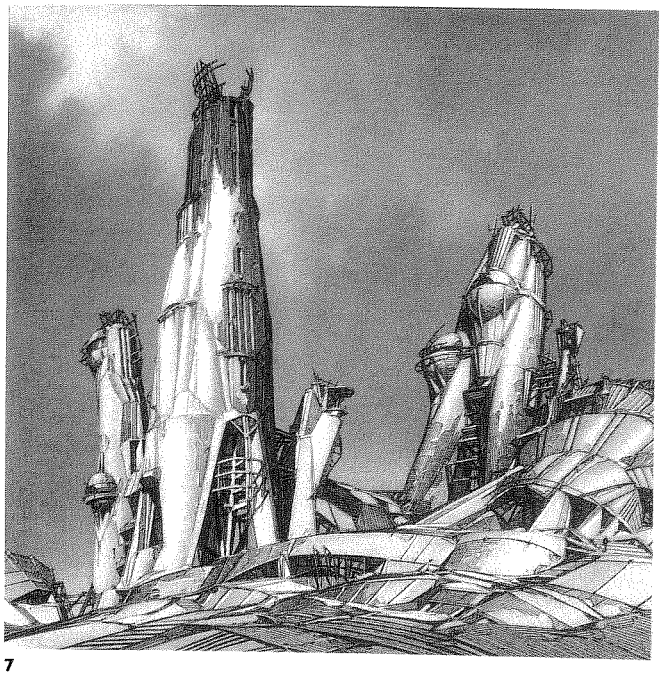
4 **QUAD.9A:** square with geodynamic towers

5 **Geomechanical towerbase,** with wave interference screen

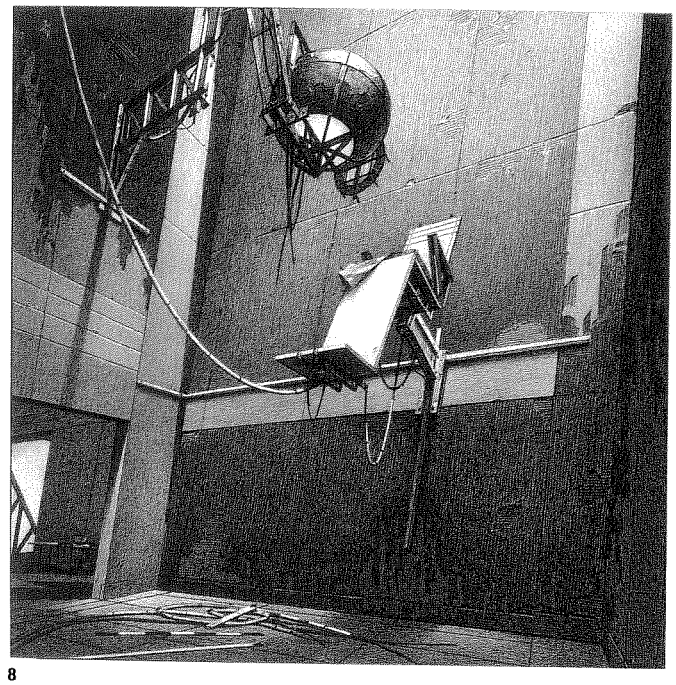
6 **Centrum chamber,** with kinetic light machines

The Roots of a Universal Science Exist Within Present Knowledge.

Visible light is the wave phenomenon constant to matter and energy in the universally perceived urban field. Visible light is *formed* by architecture that reveals an intrinsic order, that is, a form of visible light's metrical transformations. The architectonic mathematics (Archimatics) of visible light is the foundation of the general principles of a universal science. *The architecture and urban forms of a universal science reveal the timespace transformations of metrical light* (*cf.*, Le Corbusier's "Architecture is the masterly, correct and magnificent play of forms assembled under light").



7



8

A Centricity of Universal Science Exists Within the Present Timespace-Overtaken.

The architecture of dynamism (geodynamism, biodynamism, mechanodynamism) moves recursively toward order and disorder as unity, and is composed of the dual metricalities (geometric, biometric, mechanometric) of unified timespace, the centrisymmetrical and eccentrisymmetrical (circular and elliptical), corresponding respectively to quadrapolar (QUAD.) and deformed-quadrapolar (D-QUAD.) timespace rings, according to visible light distribution and relativistic distortions.

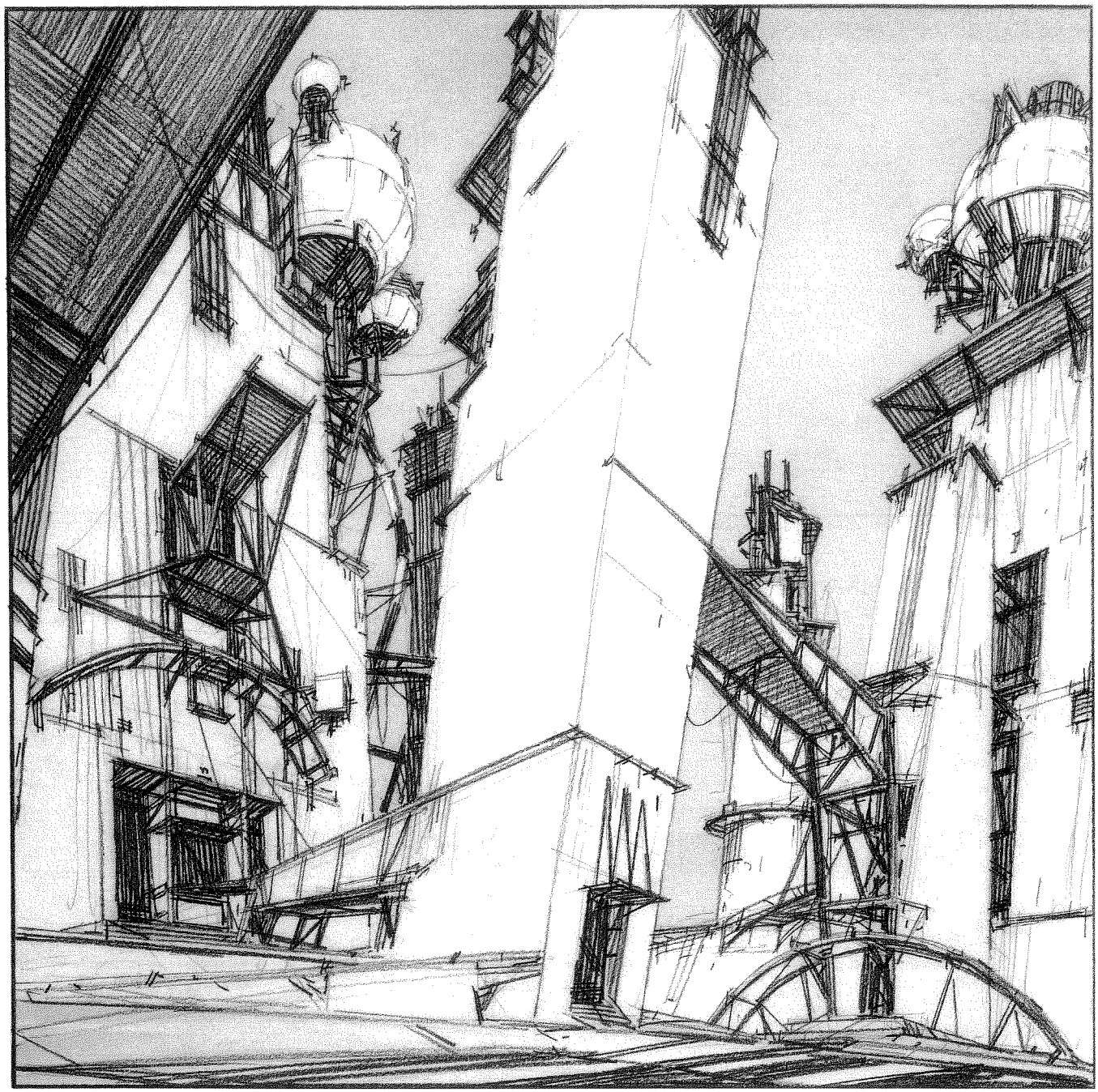
There Is Nothing to Create But Vision.

Visual research yields a unification of reductive knowledge into expansive knowledge sought by a universal science. The visible urban field continuously reunified by vision of metrical light is timespace recursively overtaken by itself. The resulting knowledge sphere is small, but powerfully concentrated by centricity. Centricity expands timespace to the limits of the visible universe, and beyond, to the anti-limits of timespace invisibility: the freefield. There the unknown is but the unenvisioned form of metrical light.

There is beauty of form only where there is beauty of idea.

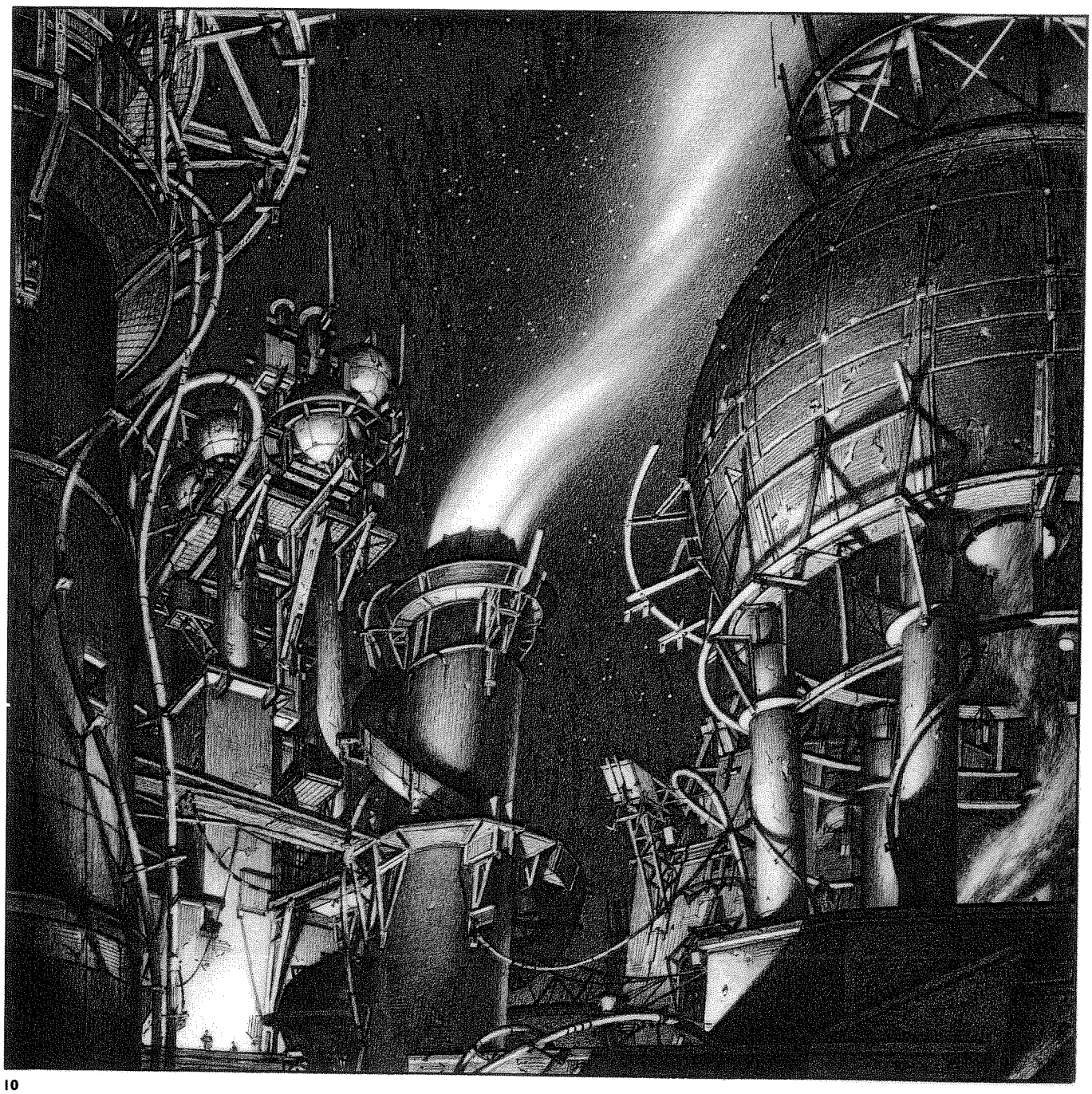
7 D-QUAD.9M, with groundshields

8 Neomechanical tower (upper) chamber



9

9 QUAD.A15: centerspace



10

10 QUAD.19, with central photon accumulator

Two Towers

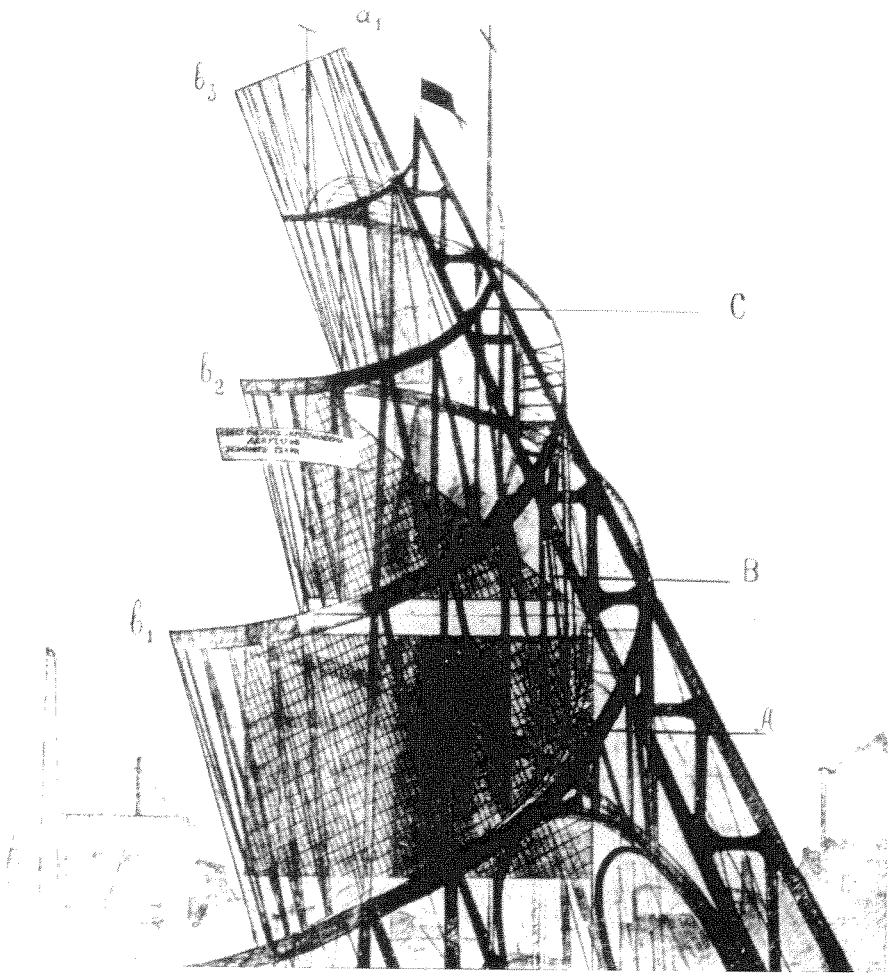
Peter Droege

Babel's Tower

And the whole earth was of one language, and of one speech. And it came to pass, as they journeyed from the east, that they found a plain in the land of Shi'nar; and they dwelt there. And they said to each other, Go to, let us make bricks, and burn them thoroughly. And they had brick for stone, and slime they had for mortar. And they said, Go to, let us build us a city and a tower, whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth. And the Lord came down to see the city and the tower, which the children of men builded. And the Lord said, Behold, the people is one, and they have all one language; and this they begin to do: and now nothing will be restrained from them, which they have imagined to do. Go to, let us go down, and there confound their language, that they may not understand one another's speech. So the Lord scattered them from thence upon the face of all the earth: and they left off to build the city. Therefore is the name of it called Babel; because the Lord did there confound the language of all the earth: and from thence did the Lord scatter them abroad upon the face of all the earth.

Genesis 11 : 1–9

Gustave Doré, 1832–1883, from the "Illustrated Bible" (around 1860), reprinted from *Rassegna* V (16/4, December, 1983).



Vladimir Tatlin, *Elevation of the Monument to the Third International,* 1919–1920, published on the cover of Nikolai Punin's *The Monument to the Third International,* Petrograd, 1920.

Tatlin's Tower

Vladimir Tatlin's Monument to the Third International (1920) marked a turning point in constructivism, imbuing it with social commitment. It was conceived to surpass the Eiffel Tower in height. Rooms were to rotate on three levels, marking off time like a clock. A cylinder on top, moving around its axis once a day, was meant to distribute the intended world government's decisions through "printing presses, propaganda offices, a telegraph office, projection equipment for the proposed large screen and a radio station." The central room, a pyramid for executive administrative committees, rotated once a month, and the base, a cube housing legislative functions and large meetings such as the International, moved around once a year. "Tatlin's tower provided an image of the social macrocosm, of collective man." It was a cosmological vision indeed, resting on the sphere of the earth as its first hall, its spire to reach toward the pole star. Social, economic, and psychological conflicts were resolved by the smooth functioning of the machine.[1] One could say that it, unconsciously, sought to reverse the damage inflicted onto mankind by God's punitive and preemptive expedition to Babel.

Note

1 John Milner, *Vladimir Tatlin and the Russian Avant-garde* (New Haven: Yale University Press, 1983).

The City Within

The Great Khan's atlas contains also the maps of the promised lands visited in thought but not yet discovered or founded: New Atlantis, Utopia, the City of the Sun, Oceana, Tamoé, New Harmony, New Lanark, Icaria.

Kublai asked Marco: "You, who go about exploring and who see signs, can tell me toward which of these futures the favoring winds are driving us."

"For these ports I could not draw a route on the map or set a date for the landing. At times all I need is a brief glimpse, an opening in the midst of an incongruous landscape, a glint of lights in the fog, the dialogue of two passersby meeting in the crowd, and I think that, setting out from there, I will put together, piece by piece, the perfect city, made of fragments mixed with the rest, of instants separated by intervals, of signals one sends out, not knowing who receives them. If I tell you that the city toward which my journey tends is discontinuous in space and time, now scattered, now more condensed, you must not believe the search for it can stop. Perhaps while we speak, it is rising, scattered, within the confines of your empire; you can hunt for it, but only in the way I have said."

Already the Great Khan was leafing through his atlas, over the maps of the cities that menace in nightmares and maledictions: Enoch, Babylon, Yahooland, Butua, Brave New World.

He said: "It is all useless, if the last landing place can only be the infernal city, and it is there that, in ever-narrowing circles, the current is drawing us."

And Polo said: "The inferno of the living is not something that will be; if there is one, it is what is already here, the inferno where we live every day, that we form by being together. There are two ways to escape suffering it. The first is easy for many: accept the inferno and become such a part of it that you can no longer see it. The second is risky and demands constant vigilance and apprehension: seek and learn to recognize who and what, in the midst of the inferno, are not inferno, then make them endure, give them space."

Italo Calvino, *Invisible Cities*

"The City Within" is an excerpt: pages 164–165 from *Invisible Cities,* by Italo Calvino, © 1972 by Giulio Einaudi editori, s.p.a.; English translation © 1974 by Harcourt Brace Jovanovich, Inc. Reprinted by permission of the estate of Italo Calvino and Harcourt Brace Jovanovich, Inc.

Selected References

American Broadcasting Companies, Inc., *The Day After* (1983)

Anderson, Stanford, *Planning for Diversity and Choice: Possible Futures and Their Relations to the Man-Controlled Environment* (Cambridge: MIT Press, 1968)

Barthes, Roland, *Empire of Signs* (New York: Hill and Wang, 1982)

Brand, Stewart, *The Media Lab* (New York: Viking Penguin, 1987)

Berger, Peter L. and Thomas Luckman, *The Social Construction of Reality* (Garden City: Doubleday and Company, 1967)

Center, vol. 1: *Architecture for the Emerging American City* (1985)

Calvino, Italo, *Invisible Cities* (New York: Harvest/HBJ, 1974)

Compaine, Benjamin M., *Understanding New Media* (Cambridge: Ballinger, 1984)

Dallapiccola, A. L., ed., *The Stupa: its religious, historical and architectural significance* (Wiesbaden: Franz Steiner Verlag, 1980)

Davis, Douglas and Allison Simmons, *The New Television: A Public/Private Art* (Cambridge: MIT Press, 1978)

Diamond, Edwin, *Sign Off* (Cambridge: MIT Press, 1982)

Dutton, William H. et. al., eds., *Wired Cities: Shaping the Future of Communications* (Boston: G. K. Hall, 1987)

Eichler, Margrit and Hilda Scott, eds., *Women in Futures Research* (Oxford: Pergamon Press, 1982)

Forester, Tom, *The Information Technology Revolution* (Cambridge: MIT Press, 1985)

———, *High-Tech Society: The Story of the Information Technology Revolution* (Cambridge: MIT Press, 1987)

Gappert, Gary and Richard V. Knight, eds., *Cities in the 21st Century* (Beverly Hills: Sage Publications, 1982)

Gilliam, Terry, director, *Brazil* (MCA Home Video, Inc., 1984)

Hayden, Dolores, *Redesigning the American Dream: The Future of Housing, Work, and Family Life* (New York: W. W. Norton, 1984)

Kubrick, Stanley, director, *2001: A Space Odyssey* (MGM, Inc., 1968)

Lang, Fritz, director, *Metropolis* (UFA, 1925)

Leavitt, Jacqueline, "Two Prototypical Designs for Single Parents: The Congregate House and the New American House" in *Alternative to the Single Family House,* edited by Karen Franck and Sherry Ahrentzen (New York: Van Nostrand Reinhold, in Press)

Lucas, George, director, *Star Wars* (Twentieth Century-Fox Film Corp., 1974)

Lynch, David, director, *Dune* (MCA Home Video, Inc., 1985)

Lynch, Kevin, *A Theory of Good City Form* (Cambridge: MIT Press, 1981)

Marx, Leo, "Does Improved Technology Mean Progress?," in *Technology Review* (Cambridge: MIT, January 1987)

Milner, John, *Vladimir Tatlin and the Russian Avant-Garde* (New Haven: Yale University Press, 1983)

Morton, Rocky, and Annabel Jankel, *Max Headroom* (Chrysalis Visual Programming Ltd., 1985)

Pool, Ithiel de Sola, *Technologies of Freedom* (Cambridge: Belknap/Harvard, 1983)

Radford, Michael, director, *1984* (Virgin Cinema Film Ltd., 1984)

Scott, Ridley, director, *Blade Runner* (The Ladd Company, 1982)

Sherman, Harvey and Elizabeth Spring, eds., *A New American House, Selected Design Competition, 1984, Catalogue of Winning and Select Designs* (Minneapolis: Minneapolis College of Art and Design, 1984)

Smilor, Raymond W., George Kozmetsky, and David V. Gibson, eds., *Creating the Technopolis: Linking Technological Commercialization and Economic Development* (Cambridge: Ballinger, 1988)

Tafuri, Manfredo, *Architecture and Utopia* (Cambridge: MIT Press, 1976)

Tati, Jacques, director, *My Uncle* (1958)

Tatsuno, Sheridan, *The Technopolis Strategy* (New York: Prentice Hall Press, 1986)

Thoreau, Henry David, *Reading,* in *Walden* (New York: Viking Press, 1947)

Turkle, Sherry, *The Second Self* (New York: Simon and Schuster, 1984)

United Nations Centre for Regional Development, *Information Systems for Government and Business* (1987)

Vadim, Roger, director, *Barbarella* (Paramount, 1967)

Werkele, Gerda R., et. al., eds., *New Space for Women* (Boulder: Westview Press, 1980)

Women and Environments, vol. 7, no. 1 (Winter 1985), "Will Women Change Technology or Will Technology Change Women?"

Wurman, Richard Saul, *Making the City Observable* (Minneapolis: Walker Art Center, 1971)

Youngblood, Gene, *The Mass Media and the Future of Desire* (*CoEvolution Quarterly,* Winter 1977/78)

Zone 1/2 (Urzone, Inc., 1986)

Die Zukunft der Metropolen, Paris, London, New York, Berlin. 3 vol. (Berlin: Buchhandelausg, 1984)

Contributors

Dennis Adams is a New York based conceptual artist working with environmental message systems. Current exhibitions and public works in progress are staged in Paris, Essen, New York, Seattle, and Evansville.

Italo Calvino is among the world's best storytellers. He died in 1985.

Peter Cook, one of Archigram's founding fathers, maintains an active working and teaching presence in Great Britain and West Germany. In London, he has been working in partnership with Christine Hawley since 1978, and in Frankfurt am Main he has been directing the Städelschule since 1985.

Peter Droege has been teaching and practicing in Boston and Cambridge since 1978. He received the 1987 Grand Prix of the International Concept Design Competition for an Advanced Information City in Kawasaki, Japan. Periodically he consults in Africa and the Middle East on behalf of the United Nations Development Programme.

Jack Gantos is Associate Professor of Creative Writing and Literature at Emerson College, in Boston. He is currently completing a novel researched in Brazil with the help of a grant from the National Endowment for the Arts.

Kazutoshi Ito lives and works in Yokohama, running his own architectural office and frequently engaging in conceptual and visionary projects.

Alex Krieger is Associate Professor of Architecture and Urban Design at the Harvard Graduate School of Design, and a principal of the firm Chan Krieger Levi Architects.

Réjean Legault is a graduate student in the History, Theory and Criticism of Architecture program at MIT.

Lars Lerup teaches architecture at the University of California at Berkeley. His most recent book, *Planned Assaults: No Family House, Love/House, Texas Zero,* was published in 1987 by MIT Press and the Canadian Centre for Architecture.

Martin Roy Mervel teaches at the South California Institute of Architecture, and practices in the Los Angeles area.

Kikoh Mozuna, one of Japan's most prominent and seriously committed young avantgardists, operates his design studio in Tokyo. Motoaki Terajima, one of his key collaborators in the Information City competition, currently is programming the soft environment of the new Tokyo city museum.

Pierluigi Nicolin, Professor of Architectural Composition at the Politecnico, Milan, has been directing the design periodical *Lotus International* since 1977 and is a member of the Triennale's Executive Committee. He currently works on independent design commissions in Milan and West Berlin.

Anne D. Nissen received a Master of Science in Architectural Studies degree from MIT in 1988. Previously she worked in the exhibition department of the National Building Museum in Washington, D.C.

Shinichi Okuyama is currently a graduate student in architecture at Tokyo Institute of Technology.

Peter Pfau and **Wes Jones** are partners of Holt Hinshaw Pfau Jones, a San Francisco based firm which gained national recognition for its Astronaut Memorial project.

Michael J. Piore, Professor of Economics at MIT, wrote *Birds of Passage: Migrant Labor and Industrial Societies* and, with Charles Sabel, *The Second Industrial Divide.*

William F. Stern teaches architecture at the University of Houston. His architectural practice based in Houston is involved in urban residential and planning projects.

Rives T. Taylor received a S.M.Arch.S. degree from MIT in 1988. He worked for Robert A. M. Stern in New York City and William F. Stern in Houston. He is a practicing architect involved in residential and institutional projects.

Lebbeus Woods has lived and worked in New York City since 1976, concentrating on design research. He is Visiting Professor of Architecture at the Cooper Union and the Pratt Institute, and was an invited participant in the 1987 International Congress on Urbanism in Sao Paulo, Brazil.