Cold War Hangovers:
Planning in Prague's Post-Communist Landscape

MICHAEL TAVEL and DAVID KAHN
University of Colorado

INTRODUCTION

Since 1993, the University of Colorado's College of Architecture and Planning, in collaboration with the city government of Prague, Czech Republic, has been conducting a summer program in Prague. Through this program, students and faculty work with city officials and community members to study urban design problems within the fragmented, communist-developed city edge. This paper begins by introducing the ideological nature of centralized, communist planning and follows with an overview of the planning problems being faced today in Prague during the transition to capitalist democracy. It then outlines the urban design strategies that are being applied to these problems by the University of Colorado (CU) program. In response to the authoritarian, diagrammatic, and highly segregated approach of communist-era planning, the CU program is advocating a highly integrated, site-specific approach to urban design. The paper concludes by arguing that urban design and design education in the post-Cold War era should emphasize integration — both in the physical design of the city, and as a political activity fostering a democratic process.

COLD WAR LANDSCAPES, COLD WAR IDEOLOGIES

Following World War II, the ideological confrontation between Communist East and Capitalist West fueled radical approaches to land use, planning, and urban design. These approaches led to distinct ideological landscapes, whose physical and psychological remnants linger as concrete, Cold War hangovers. The landscape legacies of communist and capitalist development are strikingly similar - staggering environmental destruction, obsolete military and industrial complexes, alienating residential environments, and fragmented, sprawling growth on urban peripheries.

While both East and West saw their landscapes shaped on a grand scale by federal authorities, there were some key differences in the process of land development. Communist development followed exclusively from a centrally controlled planning process. In order to overcome the shortcom-

Fig. 1. Novy Barrandov Residential District. University of Colorado design studies proposed improvements to the public landscape and the addition of new employment, commerce, and public transit for this communist-era satellite city on the edge of Prague.

ings of a democratic, capitalist development process, all development was coordinated by the central government as part of a larger plan for organizing the relationships between individuals, society, resources, and the processes of production.[1] In the West, democratic development was shaped by federal and state investment in infrastructure, but also by the power of private interests wielding capital, and to a minor extent by local democratic processes.

Both Communist East and Capitalist West sought the creation of egalitarian, industrial-era societies. These were to be based, in both instances, on strong economies and on effectively managed, large-scale approaches to natural resources, infrastructure, industrial production, and urban planning. As Susan Buck-Morss has written: "...both shared intimately the optimistic vision of a mass society beyond material scarcity, and the collective, social goal, through massive industrial construction, of transforming the natural world."[2]

COMMUNIST PLANNING IN PRAGUE

After World War II, the Communist Party took control of the Czechoslovak government by democratic vote and soon

began manifesting the new ideology within the built environment. Years earlier, Lenin had clearly articulated the goals of communist planning:

> "We must aim at the fusion of industry and agriculture, based on the rigorous application of science, combined with the utilization of collective labor, and by means of a more diffused settlement pattern for the people. We must end the loneliness, demoralization, and remoteness of the village, as well as the unnatural concentration of vast masses of people in the cities."[3]

Land planning under communism was to be undertaken as part of "a unified plan for the national economy" which comprehensively organized the relationships between individuals and society.[4] The first step in this process involved collectivizing all property and redistributing the existing housing stock across class boundaries. While the long-term goal involved the establishment of new patterns of urbanism, the first building projects were focused on jumpstarting the economic engine of communism and consolidating public support. In Prague, the economic and moral virtues of communism were communicated through large-scale industrial projects, transportation infrastructure, housing, cultural centers, and heroic sculptural works such as the mammoth Stalin Monument which formerly overlooked the city.[5]

In order to compete economically with the West, and to provide affordable housing for growing populations, the Communist Party decreed an ambitious campaign to industrialize the process of building, with an emphasis on efficient use of resources, systemization, and mass production. Beginning in the 1950s, and continuing through to the 1990s, satellite cities have been constructed on the outskirts of Prague. Today, the *Panelaks*, meaning "panel-builts," have become home to nearly half of Prague's 1.2 million inhabitants.[6]

The Built Bubble Diagram

These satellite cities manifested the effort to construct the "ideal communist city." Imposed upon the agrarian landscape beyond the city edge, they provided an idealized alternative to the "accidental character of city growth" due to traditional capitalist development.[7] Because of the centralized process of communist planning, these districts were developed as part of a comprehensive plan for Prague — organizing residential development with industry, commerce, open-space, and modes of transportation.

The diagram for the ideal communist city consisted of discrete parts — high-rise housing complexes, state run factories, communal farms, belts of "nature," and mass transportation links to the old city center. The primary component was to be the New Unit of Settlement ("NUS") containing educational, cultural, recreational, and commercial amenities in addition to high-rise, prefabricated housing. Each of these residential sectors were to house tens of thousands of inhabitants.

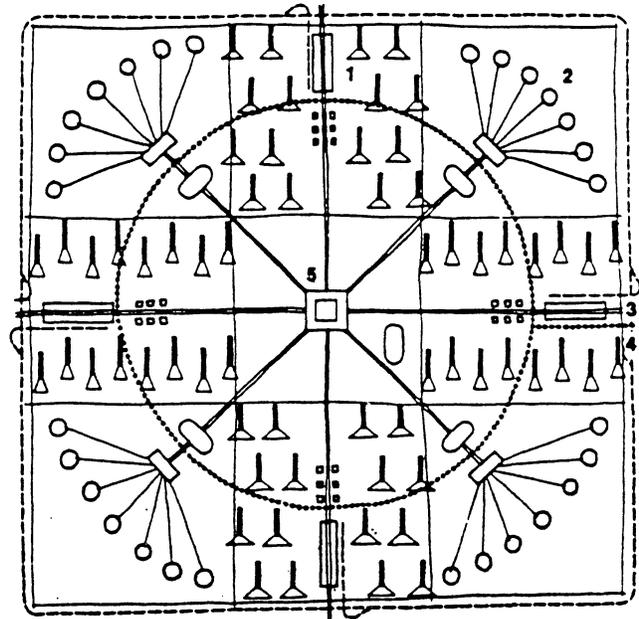One goal was to create an environment which provided

Fig. 2. Diagram of the "New Unit of Settlement" including: 1) Residential units, 2) School and sports areas, 3) Rapid transit above pedestrian level, 4) Highway, 5) Community center of the NUS. From *The Ideal Communist City*, Alexei Gutnov, et al.

equal mobility to all and eliminated conflicts between pedestrian and vehicular traffic. All distances were to be planned for pedestrians. Easy proximity was planned between apartment buildings and area parks, open space, schools, and the NUS center containing the regional transportation link and commercial and cultural amenities.

Around Prague, the Czech government has been building these satellite cities continuously over the past forty years. Today, they are found scattered around the entire periphery of the city.

COLD WAR HANGOVERS

Communist planning had very admirable social intentions, and was successful in providing functional, affordable housing to the masses. But in the race to compete economically with the West, the efficiency of the communist city took precedence over its quality. Communist era development in Prague suffered from a severe shortage of capital, thus magnifying any problems in design or conception.

The resulting "ideological landscape" is highly segregated, and in stark contrast to traditional relationships between people and place, and between cultural and natural history. Ironically, the quest for egalitarianism has led to alienating and depersonalized environments, devoid of human scale. Large-scale planning and construction was done without regard to site specific natural processes. Ill-conceived adjacent land uses have created toxic living environments. The institutional nature of this public realm, and of the centralized political process, bred a new culture of disenfranchisement.

Physical Hangovers

After the Velvet Revolution of 1989, these problems emerged as "Cold War Hangovers," facing planners and politicians in the new era of capitalist democracy. One of the most pressing problems are toxic environments. In Eastern Europe, many environments have been polluted by industrial activities.[8] In Prague, some of the major sources of pollution have been curtailed, but toxic sites still remain in most neighborhoods in the guise of landfills, factories, and polluted creeks. Many industrial sites, beyond pollution problems, have also been rendered obsolete due to an inability to adapt to capitalist markets. These sites remain as voids within the city, awaiting redevelopment.

Automobile use has increased dramatically of late, worsening the air pollution over Prague and assaulting the pedestrian environment. The communist-planned freeway system around Prague has not been completed, and hence regional highways unload traffic at the city edge. This causes local surface streets to be used for high-speed traffic, even through residential neighborhoods. While the communist goal was to segregate the efficient flow of vehicles away from pedestrians, the result is a dangerous pedestrian environment dominated by reckless, high-speed, vehicular traffic.

In the satellite cities, the drive for efficiency created a repetitive and banal landscape. Each building is nearly identical, singular in use, and with no connection at grade between interiors and exteriors. Site planning and site relationships were also systematized. New buildings were often arranged so that one crane on one rail-road track could erect several identical apartment building in succession. To accommodate this process, the earth was entirely regraded, destroying any idiosyncratic character of the natural and historic landscape. The resulting, manipulated landscape was harshly diagrammatic in its character. Outdoor spaces are negative "no-man's lands"—poorly landscaped, seldom maintained, and barely inhabited.

While the edge city was envisioned as a hybrid environment providing the ideal proximities for industry, agriculture,

Fig. 3. Prague city officials at the Strahov Tunnel. Part of the high-speed ring road begun by under communism, this tunnel will deliver high volumes of traffic into a pedestrian commercial zone in the historic urban core.

and urban life, the resulting landscape failed to function in this manner. Today, the edge of Prague is chopped-up into isolated fragments containing historic villages and farms, military and industrial complexes, toxic landfills, high-speed surface roads, and high-rise housing blocks. Virtually all inhabitants must commute long distances through the city center in order to arrive at public amenities and places of work.

Cultural Hangovers

Under communism, much of the public felt disenfranchised from the political process and from controlling their own destinies. This was further reflected in the built environment. With all lands being public, there was little sense of belonging to one's place of residence, and a lack of social structures which encouraged stewardship of one's physical environs. Public places, particularly in the satellite cities, received little maintenance and remained visibly in a state of abandon or decay.

The housing market today is under much stress. As properties go through a restitution process, some individuals gain while others become disenfranchised. Rent control maintains rents far below the market, straining relations between landowners and tenants. As affordable housing has been a central part of life, many people consider a right and are reluctant to accept a market-based housing market.

> "The short history of the changes in the housing system and housing policies of the Czech Republic after 1989 exemplifies a more general transformation in which radical neo-conservative ideas have clashed with the socially oriented Czech tradition and with the politically motivated endeavor to maintain social consensus."[9]

Politicians have thus maintained government support of affordable housing, but this has severely inhibited investment in new housing by the private sector. Western developers, who are the only developers with considerable capital, have therefore been reluctant to include housing as part of any new development.

A significant cultural hangover is the need to recreate government, with all the trials and errors and even corruption that accompanies the transition to capitalist democracy. This has manifested itself in three ways. First, the voting public is not accustomed to participating in democratic processes. In the struggle to survive economically during the transition to capitalism, citizens put their energy into their own economic circumstances and not into participating as neighborhood advocates in the planning process. Second, planners are not trained in facilitating democratic participation nor are they trained in capitalist economics. The profession of planning, therefore has to go through a period of trial-and-error learning as it develops into a new profession.[10] Third, there is widespread distrust of planning. It is seen as an centralized process inherited from communism. Local district governments see the main city government as

a continuation of the centralized communist tradition and struggle against the main city government for authority in planning. While local representation at all scales is crucial to a democratic process, the struggle for authority over planning poses a threat to comprehensive, regional planning.

PLANNING FOR CAPITALIST DEMOCRACY

In the wake of the 1989 Velvet Revolution, government, at all scales, underwent a wholesale transformation. The process of democracy was new, and the degree of authority of different scales of government remained to be negotiated. The first generation of elected officials consisted primarily of persons who had never belonged to the communist party. These people therefore had no prior experience in positions of authority within institutions.

One such official, Karel Pavek, had been appointed Vice Mayor of the Environment for the Fifth District of Prague. Pavek had been approached by many developers wanting to build casinos, gas stations, shopping malls. One proposal had even been prepared by the French architect Jean Nouvel on behalf of a Dutch developer.[11] Pavek realized that local representation was needed in the planning process. He did not trust foreign developers or even the main Prague planning office to make decisions about the future of neighborhoods under his jurisdiction. Pavek therefore commenced a tradition of the district government conducting its own planning process parallel to that of the main city government. The University of Colorado program was initiated by Pavek as a way for the local government to conduct urban design studies, and to gain insight from designers who have experience working in a capitalist democracy.

In the first two years of the program, 1993 and 1994, the city government of Prague's Fifth District wanted to assess environmental design "hangovers" remaining from the communist era. Foremost was the preponderance of sites which had no current zoning or plan. This included exploited areas like landfills, obsolete military bases and factories, as well as unplanned open spaces that lay between developed areas. Secondly, were areas of low environmental quality. On the finer scale, these included pedestrian environments and streetscapes. On the larger scale, however, was the fragmented character of the city edge as a whole.

To respond to these problems, CU students and faculty looked at the entire district, gaining a comprehensive understanding of existing patterns of land use and building types, natural areas and parks, and transportation and infrastructure. Design studies looked at how the existing fragments of land uses throughout the edge city could be better woven together via improved public infrastructure — streetscapes, public transit, pedestrian trails, bicycle routes, and networks of open space.

In 1995 a new slate of city officials were elected. This group included former communist party members. They were people with experience in institutions who desired to facilitate economic development. Under these officials, the

CU program began to address pending development projects and joint public-private ventures. For the first time, developers and business executives became clients of the students' work along with elected officials.

Urban design studies focused on infill sites within the historic urban core, as well as large parcels of land on the city's periphery. While developers have seen profit in singular-use developments like hotels and office complexes, city officials and community members prefer more diverse, civic-oriented projects. Hence, the CU program has worked as advocates for the city in proposing mixed-use developments which balance the need for economic development and employment with the need for mixed-use neighborhoods providing housing and public amenities.

THE INTEGRATED CITY: URBAN DESIGN STRATEGIES

Communist planning aspired to comprehensiveness, but it failed to comprehend the complexity of urban interrelationships. In response to this tradition, the University of Colorado program is conceiving of the city as a complex integrated system.

Healthy cities contain mixtures. Mixtures of uses within buildings, mixtures of activities within neighborhoods, mixtures of natural systems with urban systems.[12] Integrated cities are relatively dense. They have good public transit, pedestrian networks, and lively public spaces. They provide a diversity of opportunities for employment, commerce, and habitation. They integrate nature and agriculture with the patterns of urban life.

Single-use, segregated cities are common artifacts of the last fifty years in both East and West. But the mixed-use city, combining places to live with places to work, shop, and socialize, has a long history — particularly in Prague. Historic Prague is inherently mixed-use, as are the surrounding historic villages and agrarian landscapes. During the 1920s and 30s, modernist architects built numerous mixed-use neighborhoods on Prague's periphery.[13] In general, one could consider mixed-use as the norm, with the advent of the automobile and Cold War era development as the exception.

The "New Urbanism," transit-oriented-development concepts consider some elements of this mix with regard to new suburban developments. However, many "new urbanist" proposals treat the landscape as a blank slate, imposing a diagram upon the site, while ignoring its existing cultural and natural characteristics. It is more useful to analyze *existing* urban environments for their mixtures and to consider ways of infilling and intensifying their integrated systems.

Weaving an Urban Landscape

In the CU program, design studies begin with site analyses at both a regional and local scale. Physical systems, like building types and drainage, behavioral systems, and patterns of land use are selectively mapped as individual layers within the complex fabric of the city.[14] From site analysis,

one can perceive how patterns of form and use are highly integrated within the historic city, yet segregated within the city edge. While planning data can suggest urban needs — like economic development, places of employment, types of housing, transit links — site analysis can also shed light on these needs. When the city is viewed as a system, gaps in that system can be seen as exceptions to a rule. The mix of uses and systems in a surrounding fabric can give clues for what should continue in the gaps between.

The formal metaphor used by the CU faculty to describe this integrated city to students is that of a *plaid*. In a plaid fabric, strength and beauty come from the way in which different colored strands are imbedded in and across one another. For a city, different strands could be mixed-use commercial streets, transit lines, greenways along creeks. Areas in between the strands could be residential neighborhoods, industrial sites, parks. Every piece, however, is part of a larger network. New urban "strands" should not simply be imposed on the existing urban fabric. Rather, they need to be integrated — integrated with other systems, integrated with the public realm, and integrated within the subtleties of existing landscapes. New urban systems and urban fabrics emerge from the traces of existing systems, and are best laid-out on site where the designer can experience the site specific conditions of the urban landscape.

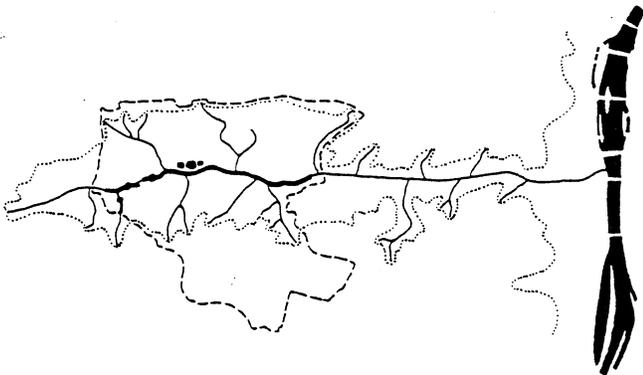Two key systems in which to weave new development are

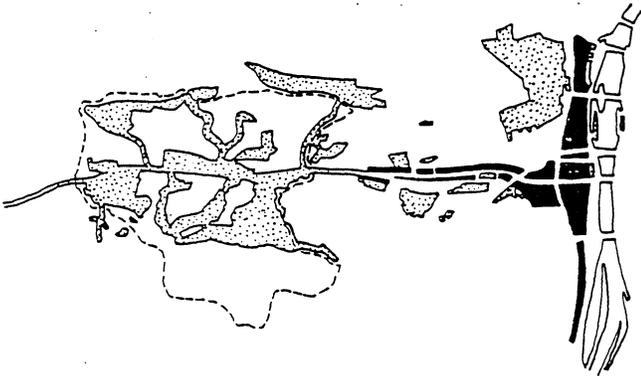Fig. 4. Analysis of an urban watershed, Motol Valley, Prague.

Fig. 5. Proposed pedestrian and urban greenspace system for Motol Valley, based on hydrologic patterns.
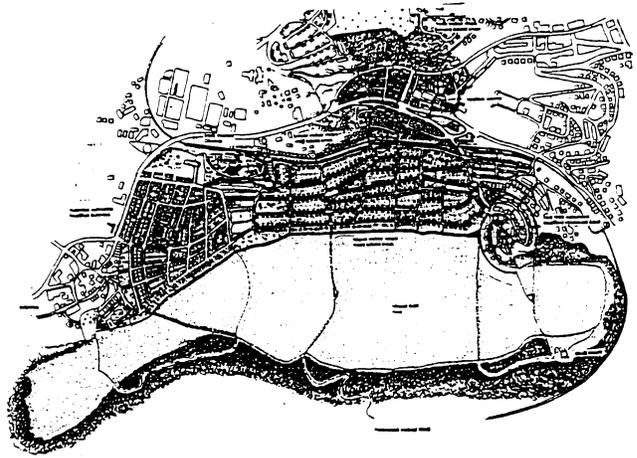

Fig. 6. Site plan for Radlicka Valley: A series of transit oriented mixed-use neighborhoods linked to agricultural and natural areas. The layout and circulation system is based upon site hydrology, and the paths, roads, and land parcels of the historic agrarian landscape.

the *traces of historical development* and the *functioning of natural processes*. Historic traces can be as concrete as old roads and buildings, or as subtle as the ways in which cultivation has shaped the agricultural landscape. Natural processes might include the drainage of water through a valley, or plant and animal ecosystems. When new development builds upon the subtleties of existing conditions, as when a pedestrian path follows an old road, an irrigation ditch, or a stream, it connects everyday experience with the cultural and natural foundations of a region.[15]

Conclusions: The Integrated Edge City

Sustainable design needs to support not only natural processes, but more so, sustainable design needs to support the interrelationships which individuals and communities can have to these processes. While design in general does not determine peoples' experiences and actions, an integrated approach to urban design can help to sustain the relationships between people and place through the following design strategies:

* Provide a diversity of uses in a neighborhood including places for living, working, commerce, education, and recreation.
* Provide a diversity of transportation systems including pedestrian, bicycle and public transit.
* Preserve agriculture and natural processes as integral with urban processes.
* Encourage development which results in the reclamation of damaged sites.
* Support environmental awareness by integrating new development and new public space with historic traces and natural processes.
* Conceive of all new urban development as an inherently diverse fabric, woven in to the specificity of existing contexts.
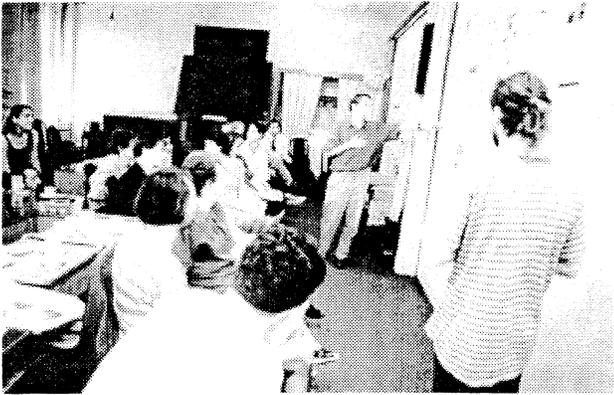
Fig. 7. CU students presenting design studies to community members and city officials at the Prague 5 city hall.

URBAN DESIGN AND DEMOCRATIC PROCESS

While Eastern Europe is undergoing a process of political transformation, it is also undergoing a period of rapid development. The fear of Prague officials is that ensuing capitalist development will further fragment an already fractured place. The city is therefore hard at work in developing planning goals and a new planning process. The University of Colorado program is participating in this effort.

In the post-Cold War era, architecture, urban design, and design education needs to emphasize *integration* in contrast to segregation. *Physical design* can integrate urban and natural systems, and allow for a diversity of uses and modes of transit. And *the act of design itself*, to be politically effective, should integrate with the physical and cultural complexity of real world design problems and integrate with the processes of democracy. Regarding the political role of architecture, Michel Foucault has stated:

> "I do not think that there is anything that is functionally ... liberating. Liberty is a *practice* ... [Architecture] can and does produce positive effects when the liberating intentions of the architect coincide with the real practice of people in the exercise of their freedom."[16]

REFERENCES

[1] For an well-organized description of the goals of communist planning, see Alexei Gutnov, et al *The Ideal Communist City*. Translated by Renee Neu Watkins from the Italian text (Idee per

la Città Communista) il Saggiatore, Milano, 1968. Preface by Giancarlo de Carlo. (New York: George Brazilier, 1970).

[2] Buck-Morss, Susan "The City as Dreamworld and Catastrophe," in *OCTOBER 73*, Summer 1995, p.3. (Cambridge, MA: MIT Press).

[3] Quoted by Ernst May in "Moscow: City Building in the USSR," from *Das Neue Russland*, VIII-IX, Berlin 1931. Translated by Eric Dluhosch in *Russia: An Architecture for World Revolution*, by El Lissitzky (Cambridge, MA: MIT Press, 1970).

[4] Alexei Gutnov, et al., *The Ideal Communist City*, p.6.

[5] For an overview of communist-era architecture in Prague see Jaroslav Stanková et al, *Prague: Eleven Centuries of Architecture* (Prague: PAV Publisher, 1992). Also see Anders Aman, *Architecture and Ideology in Eastern Europe During the Stalin Era: An Aspect of Cold War History* (Cambridge, MA: MIT Press, 1992).

[6] *Prague 93: Metropolitan Area Report Urbanistic Development of the Town*, p.25. (Prague: City Architect's Office of Prague, March 1993).

[7] Alexei Gutnov, et al., *The Ideal Communist City*, p.6.

[8] See Paul Hofheinz, "The New Soviet Threat: Pollution," in *Fortune*, July 27, 1992.

[9] See Jiří Musil, "The Czech Housing System in the Middle of Transition," in Urban Studies, Vol. 32, No. 10, 1995, p.1679.

[10] Karel Maier, "Planning and an Education in Planning in the Czech Republic," in *Journal of Planning Education and Research* 13:263-269. Association of Collegiate Schools of Planning, 1994.

[11] *Smichov Urban Design Proposal*, Jean Nouvel, Emmanuel Cattani et Associés, Paris, June 1991.

[12] For a philosophical approach to "integrated thinking," see Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1987). From the standpoint of architecture, see Steven Holl, *Intertwining* (New York: Princeton Architectural Press, 1996).

[13] For an overview of Czech functionalist architecture see Vladimir Slapeta, *Czech Functionalism 1918-1938* (London: 1987), and Rotislav Svácha, *The Architecture of New Prague 1895-1945* (Cambridge, MA: MIT Press, 1995).

[14] The overlay mapping approach to site analysis and land use planning was developed by Ian McHarg in Design with Nature (New York: Natural History Press, 1969).

[15] For a further development of this idea, see Michael Tavel, David Kahn, and Keith Dubinsky, "Open Contact: Phenomenal Experience and 'Natural' Processes," in *Ecology, Aesthetics and Design* (Washington, DC: American Society of Landscape Architects, 1994).

[16] Michel Foucault, "Space, Knowledge, and Power," interview by Paul Rabinow, trans. Christian Hubert, in *The Foucault Reader*, ed. Rabinow. pp. 245, 246. (New York: Pantheon Books, 1984).