

Chapter 15



Programming the Urban Surface

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In recent years, a number of urban projects in Europe have fallen between the traditional categories of landscape and urbanism. These works signal a shift of emphasis from the design of enclosed objects to the design and manipulation of larger urban surfaces. They also indicate a renewed interest in the instrumentality of design—its enabling function—as opposed to representation and stylization. Here, the term *landscape* no longer refers to prospects of pastoral innocence but rather invokes the functioning matrix of connective tissue that organizes not only objects and spaces but also the dynamic processes and events that move through them. This is landscape as active surface, structuring the conditions for new relationships and interactions among the things it supports.¹

In describing landscape as urban surface, I do not mean to refer to simply the space between buildings, as in parking lots, planted areas, and residual spaces. Neither do I want to limit the use of the term *landscape* to wholly green, natural, or recreational spaces. Instead, I refer to the extensive and inclusive ground-plane of the city, to the “field” that accommodates buildings, roads, utilities, open spaces, neighborhoods, and natural habitats. This is the ground structure that organizes and supports a broad range of fixed and changing activities in the city. As such, the urban surface is dynamic and responsive; like a catalytic emulsion, the surface literally unfolds events in time.

In this sense, the urban surface is similar to a dynamic agricultural field, assuming different functions, geometries, distributive arrangements, and appearances as changing circumstance demands. This adaptability derives in part from the planar character of the surface, to its smooth and uninterrupted continuity, but also from the equipment and services embedded within it. Thus, if the goal of designing the urban surface is to increase its capacity to support and diversify activities in time—even activities that cannot be determined in advance—then a primary design strategy is to extend its continuity while diversifying its range of services. This is less design as passive ameliorant and more as active accelerant, staging and setting up new conditions for uncertain futures.²

Fig. 1. The contemporary metropolis—an endless cityscape.

The Contemporary Metropolis

Much of the reason for revising practices of landscape and urbanism today derives from the changing nature of cities. The traditional notion of the city as a historical and institutional core surrounded by postwar suburbs and then open countryside has been largely replaced by a more polycentric and weblike sprawl: the regional metropolis (Fig. 1). Here, multiple centers are served by overlapping networks of transportation, electronic communication, production, and consumption. Operationally, if not experientially, the infrastructures and flows of material have become more significant than static political and spatial boundaries. The influx of people, vehicles, goods, and information constitute what urban geographers call the “daily urban system,” painting a picture of urbanism that is dynamic and temporal.³ The emphasis shifts here from *forms* of urban space to *processes* of urbanization, processes that network across vast regional—if not global—surfaces.⁴

The effects of urbanization today are multiple and complex, but three are of particular significance with regard to planning and design. First is the rise of new kinds of urban site. These are the ambiguous areas that are caught between enclaves. They may even be so extensive as to constitute entire generic zones. These might be called *peripheral sites*, middle landscapes that are neither here nor there, and yet are so pervasive as to now characterize the dominant environment in which most people actually live.⁵ In contrast, the old city centers are becoming increasingly themed around tourist and entertainment functions. A second effect of modern urbanization is a remarkable increase in mobility and access. This refers not only to the increase of private automobiles and transportation alternatives—that, for many, encompasses a fully fledged lifestyle—but also to the rising density of population, the increased instability of capital and investment, and to the abundance of information and media.

A third effect, and a consequence of the above two, involves a fundamental paradigm shift from viewing cities in formal terms to looking at them in dynamic ways. Hence, familiar urban typologies of *square*, *park*, *district*, and so on are of less use or significance than are the infrastructures, network flows, ambiguous spaces, and other polymorphous conditions that constitute the contemporary metropolis. Unlike the treelike, hierarchical structures of traditional cities, the contemporary metropolis functions more like a spreading rhizome, dispersed and diffuse, but at the same time infinitely enabling.⁶

These emergent conditions demand that designers and planners revise their approaches toward the making of urban projects. A renewed concern with infrastructure, services, mobility, and with the provision of flexible, multifunctional

surfaces promises a revitalized role for the design professions. The grafting of new instruments and equipment onto strategically staged surfaces allows for a transformation of the ground-plane into a living, connective tissue between increasingly disparate fragments and unforeseen programs.

There is, of course, a recent history to these shifts. In the 1950s, architects and critics already were increasingly preoccupied with the larger urban environment. The rapid spread of cities and the atomization of buildings across vast landscapes reduced the distinctions between city and countryside as well as the differences between places.⁷ During the Aspen Design Conference in 1955, the architect/planner Victor Gruen exhorted architects to look beyond the limits of the individual building to the environment, to the context in which the building was to function. He proclaimed:

Architecture today cannot concern itself only with that one set of structures that happen to stand upright and be hollow “buildings” in the conventional sense. It must concern itself with all man-made elements that form our environments: with roads and highways, with signs and posters, with outdoor spaces as created by structures, and with cityscape and landscape.⁸

Gruen’s context for these remarks was his view that it was less individual buildings that needed the attention of design and more the landscapes that were emerging as cities dispersed across the region. His work was aimed toward resisting decentralization and undifferentiated sprawl by creating new nodes of concentration and focus. Perhaps it was his European background that made it impossible for him to accept the idea of a continuously settled, dispersed landscape.

By the mid-1960s, the programs for rebuilding European cities following the second world war and American cities as part of urban renewal policies stimulated new thinking about large-scale urbanism and landscape. Some of the more radical speculations proposed new forms of settlement type. The Florentine group Superstudio envisaged a continuously developed, artificial surface. In their project *Supersurface 5*, the formal device of the grid was inscribed across a pure, planar landscape, providing both a metaphor and an instrument for the networks of energy and information that could extend to every corner of the earth (Fig. 2).⁹ In contrast, the projects drawn by the British group Archigram showed concepts of plug-in communities and new infrastructural support landscapes.¹⁰ Their agenda was not only to empower the individual but also to stage



event-structures that could bring about new metropolitan dynamics. Depicted in many of Archigram's ideas were individuals plugging into larger networks of interactive information, education, and entertainment. While projects such as *Rokplug* and *Logplug* proposed a transitory and flexible existence on the surface, others such as *Instant City* proposed large-scale infrastructures to support mass events and activities—an image inspired, perhaps, by the emerging technology of rock concerts and festivals (Fig. 3).

The strategic aspects of Archigram's work derive from the inherent flexibility of the designed system; parts can be added, removed, or rearranged at will, accommodating a range of uses at different times, from mass exhibitions and festivals one day to individual mobile homes and gardens the next. These radical speculations demonstrated tangible, urbanistic techniques for making urban environments that used emerging technology to achieve individual freedom within new collective structures.

A Field of Social Instruments

Many of the above themes provided an early inspiration to Rem Koolhaas and the Office for Metropolitan Architecture (OMA), based in Rotterdam. Since the 1970s, Koolhaas and his colleagues have continuously and critically developed the role that program plays in the making of a project. More than aware of the highly changeable and unpredictable characteristics of the contemporary

metropolis, these architects have attempted, in a number of ways, to push ideas of program toward more dynamic and productive ends. Program is viewed as the engine of a project, driving the logic of form and organization while responding to the changing demands of society. If the problems of urbanization had been identified in the 1950s and 1960s and the new technologies for rethinking these issues were developed during the late 1960s and into the 1970s, then the specific development of new design strategies has occurred since that time, largely under the vision and direction of Koolhaas and OMA. A seminal moment in this trajectory of ideas occurred in 1982, during the competition for the Parc de la Villette along the industrial periphery of Paris.

One of the first and most daring of President Mitterand's *Grands Projets*, the Parc de la Villette awoke designers to the difficulties of dealing with large-scale abandoned tracts of land in the city, especially when the intentions of the commissioning agency were both ambitious and uncertain.¹¹ The 121 acres of land were left over from the old nineteenth-century slaughterhouse complex that once occupied the site. There were many logistical problems, especially in terms of site reclamation and modernization of services. This was further complicated by a bewildering and exhaustive list of programmatic demands by the client, together with a sense of uncertainty about what, how, and when different parts of this program would be developed.

The problem, then, was less one of design in terms of styling identity, representation, or formal composition, and much more one of strategic organization. The surface had to be equipped and staged in such a way as to both anticipate and accommodate any number of changing demands and programs. OMA responded with the superposition of four strategic layers for organizing different parts of the program: the "east-west strips" of varying synthetic and natural surfaces, the "confetti grid" of large and small service points and kiosks, the various "circulation paths," and the "large objects," such as the linear and round forests (Fig. 4). The designers described their multilayered project as a "landscape of social instruments," where the quality of the project would derive from the uses, juxtapositions, and adjacency of alternating programs over time.¹²

Rather than a fixed design, the project offered the city a framework for developing flexible uses as needs and desires changed. The strips and grids

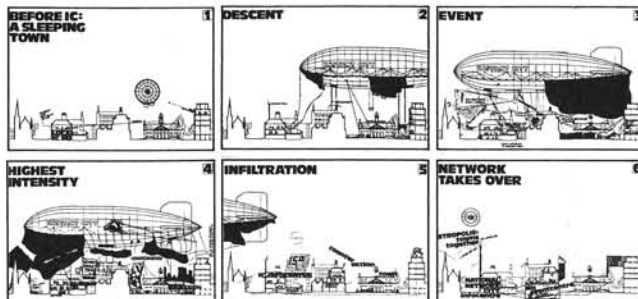


Fig. 2 (top). *Five Tales*. Superstudio, 1971–1973. Source: *Superstudio and Radicals* (Tokyo: Japan Interior, 1982), 13.

Fig. 3 (bottom). *Instant City: Sequence of Effect*. Archigram, 1970. The descent of the event-structure "instant city airships" on a typical English town intensifies, infiltrates, and stimulates new networks in the old, sleeping city. Source: Peter Cook, ed., *Archigram* (London: Studio Vista, 1972).

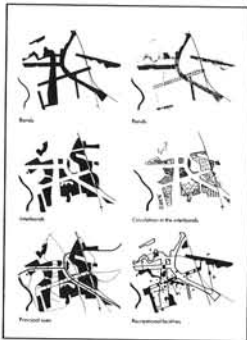
Fig. 4. Plan, Parc de la Villette, competition entry. Office for Metropolitan Architecture, 1983.



across surfaces, the point services, and the larger structures were designed to be both responsive and adaptive. The action of sliding one thing over another allowed for quantitative changes without loss of organizational structure. This framework of flexible congestion, whose character and efficacy lies in its capacity to adapt to change, set a significant precedent in later formulations of urbanism.¹¹

One such formulation was proposed by Koolhaas and OMA in 1987 for the new town of Melun-Senart, France.¹⁴ This project reverses the formal and structural roles of figure and ground, building and open space (Fig. 5). Rather than concentrating on the planning and arrangement of buildings, variously programmed voids are outlined. These derive from a careful analysis of existing conditions, habitats, historical fragments, existing infrastructure corridors, and new programs. Together they form a sort of massive hieroglyph, isolating various islands for future development.

The voids exercise a greater effect on the subsequent built environment than does the design of particular building layouts. They provide a resilient structure that can withstand the unpredictable political and economic pressures that architects and urban designers are rarely able to influence. Melun-Senart continues a logic that progressively reverses the significance normally attached to buildings and directs attention instead to the spaces in between. By incorporating the character and potential of the urban plan in the designed characteristics of the voids, the designers leave the building sites open and undetermined. Basically, anything can take place on the island sites as long as the void framework is preserved. As with the Parc at la Villette, the design is first a tactical strategy, anticipating the uncertainties of future development.



Mobility and Access: Surface as Collector and Distributor

The design and integration of new transportation infrastructure is central to the functioning of the urban surface. The importance of mobility and access in the contemporary metropolis brings to infrastructure the character of collective space. Transportation infrastructure is less a self-sufficient service element than an extremely visible and effective instrument in creating new networks and relationships. Whereas the railroad station and the airport offer a centralized infrastructural condition—a density that almost resembles the city, in terms of

services and programs—the more amorphous connective web of roads has rarely been recognized as a collective space unto itself. As the Italian architect Vittorio Gregotti argues:

We are trying to return a positive morphological value to the road...in an attempt to revive it as a component of the settlement event and by restoring the road to the architectural realm [while] forcing one's discipline to consider the problems it implies as its own specific ones.¹⁵

One very clear example, in answer to Gregotti, is the second beltway of Barcelona, completed for the 1992 Olympics. The northern arc, the Ronda de Dalt, extends between the interchanges at the Diagonal Avenue (northwest) and the Trinitat Park (northeast) and was designed by a team of architects and engineers led by Bernardo de Sola (Fig. 6).¹⁶ The Ronda de Dalt was conceived to achieve not the highest through-capacity of vehicles but the highest capacity of collection and distribution among local and regional transportation networks. The design also created opportunities to reconfigure the local conditions for new programs and open space. This is especially the case at the interchanges, where new typologies between landscape and building have begun to emerge.

Thus, the significance of the design of this highway is less its scenic and efficiency value than the road's actual capacity to stimulate and support new forms of urban space. This is achieved partially by the segregation of the sectional character of the road, with faster (regional) lanes in the center, flanked by slower (local) lanes that connect with new frontage and neighborhood streets. In some places, the space above the highway is occupied by new public buildings, especially high-volume structures such as sports venues. New parks and recreational areas are also designed into the system, linking once isolated housing estates to larger public spaces. The Ronda de Dalt thus demonstrates, in contemporary terms, the forgotten idea of the 1920s parkway as an instrument of connection, convenience, and mobility.

A second example of new infrastructural design demonstrates how the space of mobility may also be a collective space. Among the northern suburbs of Paris, between St. Denis and Bobigny, is a mix of industrial zones, large social housing estates, cemeteries, hospitals, and areas of waste ground. Existing transportation infrastructure reflects the nineteenth-century pattern of radial



Fig. 5. Planning diagrams, Melun-Senart new town. Office for Metropolitan Architecture, 1987.

Fig. 6. Aerial view, Ronda de Dalt, Barcelona. Bernardo de Sola, I.M.P.U.S.A., 1982.

extension and effectively divides communities into separate sectors. Between 1990 and 1995, the landscape architect Alexandre Chemetoff and the Bureau des Paysages implemented the design of a new trolley line running between St. Denis and Bobigny (Fig. 7).¹⁷ This is a nine-kilometer line with twenty-one stations, and it is the first tangential boulevard in this area of Paris, initiating new relationships among once isolated sectors. Because of this new transportation line superimposed across the urban fabric, the project forms the basis for a host of other urban interventions.

The tramline is, literally, a link that provides a coherent system across an otherwise fragmented field. It comprises three series: the material of the surface; the vegetation structure of hedges, trees, and plantings; and furnishings, such as bollards, fences, lamps, trellises, and seating. Organized in different configurations, the families of surface, vegetation, and furnishings produce a contrapuntal effect in relation to the untidy irregularity of the surrounding fabric. The integrity and continuity of these elements produces not only an image of public space but also the necessary environmental conditions to support public activities. On a Sunday morning, for example, the line is crowded with French families of African, Arabic, and Asian background making their way to and from the street markets along the length of the line.

Chemetoff's design is a prime example of how infrastructure engages social and imaginative dimensions as much as it does engineering concerns. It effectively integrates parts of the city, reduces the marginalization and segregation of certain social groups, and stimulates new forms of interaction.

An Inhabitable Surface

The design of large-scale infrastructures such as those discussed above provides new conditions for other kinds of surface project. One such example is Eduard Bru's Vall d'Hebron Park in Barcelona, completed in 1992 (Fig. 8). This is a 26-hectare site in the inner suburbs, formerly dominated by an oppressive landscape of postwar social housing. Located directly north of the Gothic center and its nineteenth-century extension, the park spans the buttresses of the mountain chain to the north of the city. Bru understood that the beltway is the best location for leisure facilities that serve local and metropolitan users. Thus,

the park is a collage of sports surfaces, routes, and park elements. In particular, the elaboration of the routes creates an intermediate landscape between the Ronda (Paseo Vall d'Hebron) and the surrounding neighborhoods. As Bru describes:

This movement means that when existing elements permit, the streets become whirlpools, widening and forming what we might call deltas in the public areas of the park. The streets are asphaltic flows; they find geometries contained between the interstices and move according to circle arcs and clothoids.¹⁸

Bru describes a dynamic and changing landscape, one where the demands of changing programs lead to a different reading of the site. Moreover, he reflects many of these uses through new techniques of material fabrication. In using grass, wood, metal, concrete, asphalt, and recycled rubber tires in new and unusual ways, Bru creates a lively surface that promotes a diversity of functions. The automobile, too, is not excluded from this park, but rather fully incorporated into its design. As the designer describes:

Driving to a super-market car park, and spending Sunday with the car door open, listening to the radio while the children play in the car park is a highly respectable custom. Here, the users surround themselves with those objects most dear to them: the car, the children, the radio. And they spend their Sunday placidly.¹⁹

Waiting for Appropriation

The Netherlands, especially the city of Rotterdam, has proved to be a steady source of innovation with regard to addressing the increased complexity of the growing metropolis. Partly this is due to the culture of the country, essentially progressive and technologically oriented, but it is also due to the very real problems of density and growth since the end of the second world war. The work of OMA has certainly played a role in the advance of new approaches toward urbanism; recently a younger generation of designers also has begun to make its

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Fig. 7. St. Denis-to-Bobigny Tramway, Alexandre Chemetoff, 1988–1993.

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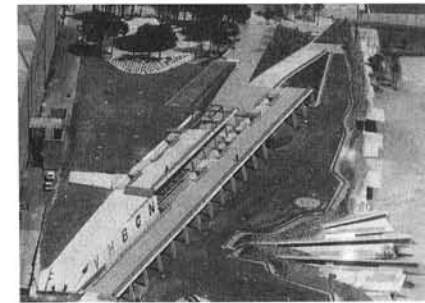
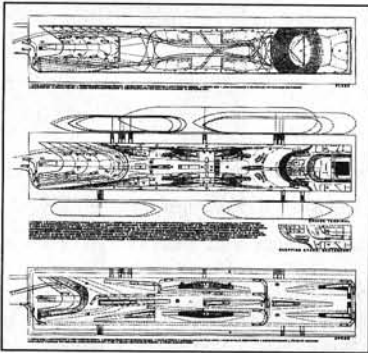
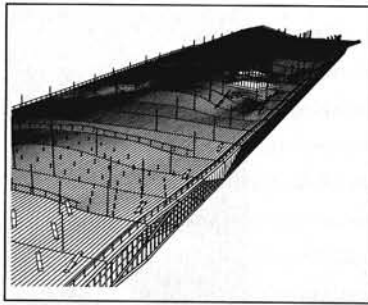


Fig. 8. Aerial view, terraces and surfaces, Vall d'Hebron, Barcelona. Eduard Bru, 1982.



concave floors (Figs. 12, 13). This form is intended to mediate between the competing dimensions of the program—the differences between land and sea, natives and foreigners, city and harbor, and public and private. Moreover, the changeable character and size of ships docked along the pier is accommodated in a scheme that is both flexible and open. Rather than a typologically defined building with discrete enclosure and limits, the design provides a field that creases and warps to allow for alternate uses and needs. The designers provided the city with a project that is at once private and secure *and* public and open, “a model that is capable of integrating differences into a coherent system; an unbounded *landscape* rather than an over-coded, delimited *place*.”²⁴

Surface Strategies

The projects considered above are all located in previously built sites, whether open space—as in la Villette and the Schouwburgplein—or infrastructure,

as in Ronda de Dalt or the Yokohama terminal. Even the projects of Melun-Senart, Vall d’Hebron, and the St. Denis–Bobigny tramline incorporate and link existing contexts. Rebuilding, incorporating, connecting, intensifying—these words describe not only the physical character of these projects but also their programmatic function. They are instruments, or agents, for unfolding new urban realities, designed not so much for appearances and aesthetics as for their instigative and structuring potential. Their strategies are targeted not only toward physical but also social and cultural transformations, functioning as social and ecological *agents*.²⁵ It is possible to summarize the more productive principles and strategies for designing the urban surface as follows.

Thickening. At the Schouwburgplein, West 8 conceived of a thickened, multi-layer surface that solved not only technical problems, such as drainage, struc-

ture, and utilities, but also brought a greater dramatic effect to the square while multiplying its range of uses. The expansion of inhabitation of subterranean networks in cities such as Montreal and Tokyo, and of aerial passageways in cities such as Atlanta and Minneapolis, effectively multiplies the number of public ground-planes. The multilevel movement of people, together with the connector flows of elevators, moving stairs, ramps, and so on, creates a marvelous spectacle in the city. This is the thickened surface, continuous, multiple, and dynamic.

Folding. Cutting, warping, and folding the surface creates a kind of smooth geology that joins interior and exterior spaces into one continuous surface. At the new port in Yokohama, Foreign Office Architects adopted a continuous, folded surface, as in a multilayered laminate wherein each floor “rolls” into others. Sectional joining and definition varies as the program demands. Consequently, the flows of people and goods combine in newly visible ways, as traditional zonal separations become more fluid and interactive.²⁶

New materials. Developing new and synthetic materials brings a welcome diversity to the pedestrian realm. At the Vall d’Hebron, the use of asphalt, rubber tires, wood, and metal in new ways expresses and provokes new activities. The appearance of graffiti, skateboarders, and boom boxes does not necessarily mean that the park is in any way compromised; on the contrary, the presence of these everyday features acknowledges certain trends in youth culture while extending the range of uses typically associated with parks.

Nonprogrammed use. Equipping the surface with services and furnishings that can be appropriated and modified by the public enables a diverse and flexible range of uses. Instead of comprising elements serving only one function, a design that can accommodate many functions is both economical and enriching of social space. Eduard Bru and Adriaan Geuze are two designers who are especially interested in making things and places that are indeterminate in their functions and thereby allow their users to invent and claim space for themselves. Such investment by the users subsequently ensures a long and affectionate occupation of public space.

Impermanence. Program and function are, perhaps, the most changeable aspects of any city. Needs and desires can change overnight, and city administrators must be able to respond quickly without massively overhauling entire tracts of

Fig. 12 (top). Aerial view, Yokohama International Port Terminal, Japan. Foreign Office Architects, 1995.

Fig. 13 (bottom). Plans, Yokohama International Port Terminal, Japan. Foreign Office Architects, 1995.

land. Designing to create an indeterminate and propitious range of affordances replaces the traditional fascination of designers with permanence with that of the temporal and dynamic. The OMA projects at la Villette and Melun-Senart offer not only a designed landscape but also a framework capable of absorbing future demands without diminishing the integrity of the project. Indeed, the integrity of the project is predicated upon such changing demands, juxtaposing conditions as a great montage of effects.

Movement. In popular culture, the instruments and spaces of mobility—especially the automobile and the freeway—have provided new sites of collective life. A real challenge to urban design is to accept that infrastructure is as important to the vitality and experience of the contemporary metropolis as the town hall or square once was. At the Ronda de Dalt, Bernardo da Sola exploited the section of the site to create a new and public type of urban corridor, collecting, distributing, and connecting a great range of users and functions. As we move into the twenty-first century, one of the primary roles of urban design will be the reworking of movement corridors as new vessels of collective life.

Conclusion

The projects and ideas discussed above address the complexity and density of reconstructing cities and landscapes today. The emphasis is on the extensive reworking of the surface of the earth as a smooth, continuous matrix that effectively binds the increasingly disparate elements of our environment together. This synthetic form of creativity draws from all of the traditional disciplines of landscape architecture, architecture, urban planning, and engineering. The conditions these practices engage—mobility, density, congestion, instability—demand new techniques of practice, new modes of representation, and new kinds of discussion and conceptualization. Such activities can no longer be said to apply only to peripheral and derelict sites, as now even the most traditional city centers involve the same issues. Cities everywhere are competing to retain investment, capital, tax base, population, infrastructure, and amenities. The function of design is not only to make cities attractive but also to make them more adaptive, more fluid, more capable of accommodating changing demands and unforeseen circumstances.

We are witnessing a recovery of certain landscape themes and techniques that seem to have particular applicability to these problems. First, of course, landscape is the horizontal and continuous surface, the field that is best appre-

ended in maps and plans. Here, plans are of particular significance because they organize the relationships among parts and activities; all things come together on the ground. But a second use of landscape is the attention it draws to processes of formation and thus to issues of temporality, efficacy, and change. That many landscape architects study and are inspired by ecology is especially significant here, for ecology addresses the interrelationships of parts and dynamic systems.²⁷

Also, landscape architects are taught early on to appreciate larger regional scales (watersheds, ecosystems, infrastructures, and settlement patterns, for instance) as well as understanding smaller, more intimate places as part of the larger framework. The surfaces they see are not just visual patterns but more mutable and thickened topographies, systemic and alive. If landscape architecture has been thought of as merely an art of amelioration, of secondary significance to buildings and urban planning, then today it finds itself assuming a more relevant and active role in addressing the regional and ecological questions that face society—questions about place, time, and process.

In the aftermath of the 1980s building boom, the potential and significant field of action today is less the design of monuments and master plans than the careful modification and articulation of the urban surface. The surface is manipulated in two ways: as planar folds and smooth continuities, and as a field that is grafted onto a set of new instruments and equipment. In either case, the surface becomes a staging ground for the unfolding of future events. The surface is not merely the venue for formal experiments but the agent for evolving new forms of social life.

The projects described above suggest how the surface may support future buildings and programs. Perhaps the synthesis of landscape, architectural, and urbanistic skills into a hybrid form of practice may allow for the invention of newly supple and reflexive built fabrics, new landscapes.²⁸ Such dynamic surface structurings may be the only hope of withstanding the excesses of popular culture—restless mobility, consumption, density, waste, spectacle, and information—while absorbing and redirecting the alternating episodes of concentration and dispersal caused by the volatile movement of investment capital and power.

Notes

I would like to thank James Corner for his many suggestions in finalizing this essay.

- 1 Many of the themes surrounding the shift from object to surface were presented and discussed in a symposium and exhibition called "Cityscape: The Urban Surface,"

- organized by Alex Wall at the Graduate School of Fine Arts, University of Pennsylvania, in April 1994. Participants included James Corner, Bill McDonald, Susan Kolatan, Laurie Olin, Susan Nigra Snyder, Steve Kieran, and Bob Geddes.
- 2 I draw this formulation from James Corner, "Field Operations," (unpublished lecture notes). See also Rem Koolhaas, "Whatever Happened to Urbanism?" in *S,M,L,XL* (New York: Monacelli Press, 1995), 958–971; and Stan Allen "Infrastructural Urbanism," in *Scroope* 9 (Cambridge: Cambridge University Architecture School, 1998), 71–79.
 - 3 See J.S. Adams, ed., *Association of American Geographers Comparative Metropolitan Analysis Project: Twentieth-Century Cities*, vol. 4 (Cambridge, Mass.: Ballinger, 1976); and David Harvey, *The Condition of Postmodernity* (Cambridge, Mass.: Blackwell, 1989).
 - 4 See David Harvey, *Justice, Nature, and the Geography of Difference* (Cambridge, Mass.: Blackwell, 1996).
 - 5 See Rem Koolhaas, "The Generic City," in *S,M,L,XL*, 1238–1264; and Joel Garreau, *Edge Cities: Life on the New Frontier* (New York: Doubleday, 1991).
 - 6 See Gilles Deleuze and Felix Guattari, "Rhizome," in *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1987), 3–25; and Corner, "Field Operations."
 - 7 See Vittorio Gregotti, "La Strada: Tracciato e Manufatto / The Road: Layout and Built Object," in *Casabella* 553–554 (January–February 1989): 118.
 - 8 Victor Gruen, "Cityscape-Landscape," in *Arts and Architecture* (September 1955): 18–37.
 - 9 Superstudio and Moryami Studio, eds. *Superstudio and Radicals* (Tokyo: Japan Interior, 1982), 9–86.
 - 10 See Archigram, "Instant City," in *Archigram*, ed. Peter Cook (London: Studio Vista, 1972), 86–101.
 - 11 See Marianne Barzilei, ed., *L'Invention du Parc: Parc de la Villette, Paris, Concours International* (Paris: Graphite Editions, 1984).
 - 12 See Koolhaas, *S,M,L,XL*, 894–939; and Jacques Lucan, ed., *Rem Koolhaas/OMA* (New York: Princeton Architectural Press, 1991), 86–95.
 - 13 See Koolhaas, "Whatever Happened to Urbanism?"
 - 14 See Koolhaas, *S,M,L,XL*, 972–989; and Lucan, *Rem Koolhaas/OMA*, 114–117.
 - 15 Gregotti, "The Road," 118.
 - 16 See Antonio Font, "Edges and Interstices: The Ordering of the Borders of the New Barcelona Ring Road," *Quaderns* 193 (1993): 112–119.
 - 17 See Jacques Lucan, "A Grand Boulevard for the Outskirts," in *Lotus* 84 (1995): 88–101; and Alessandro Rocca, "Chemetoff's Inter-Suburban," in *Lotus* 84 (1995): 86–87.
 - 18 Eduard Bru, "Untested Territories," *Quaderns* 193 (1993): 82–85. See also Josep Parcerisa Bundo, "Vall d'Hebron: Metamorphosis of a Park," *Lotus* 77 (1993): 6–17.
 - 19 Bru, "Untested Territories," 83.
 - 20 See Adriaan Geuze, *Adriaan Geuze/West 8* (Rotterdam: 010 Publishers, 1995); see also Bart Lootsma's essay "Synthetic Regionalization" in this collection.
 - 21 Gerrie Andela, "Challenging Landscapes for Explorers: Estrangement and Reconciliation in the Work of West 8," *Archis* 2 (February, 1994): 38–49.
 - 22 See Koolhaas, *S,M,L,XL*, 1210–1237; and Sanford Kwinter, "The Reinvention of Geometry," *Assemblage* 18 (1996): 83–112.
 - 23 See Foreign Office Architects, "Yokohama Port Terminal Competition," *AA Files* 29 (1995): 17–21.
 - 24 Ibid., 7.
 - 25 See James Corner, "Ecology and Landscape as Agents of Creativity," in *Ecological Design and Planning*, eds. George Thompson and Frederick Steiner (New York: John Wiley & Sons, 1997), 80–108.
 - 26 See Greg Lynn, "Architectural Curvilinearity: The Folded, the Pliant, the Supple," in *Architectural Design Profile 102: Folding in Architecture* (1993), 8–15; see also Peter Eisenman, "Unfolding Events," in *Zone 1/2* (New York: Urzone, 1986), 423–427.
 - 27 See James Corner, "Ecology and Landscape," and also "The Agency of Mapping," in *Mappings*, ed. Denis Cosgrove (London: Reaktion, 1998).
 - 28 See Lynn in *Architectural Design Profile 127: Architecture After Geometry* (1997) and *Architectural Design Profile 133: Hypersurface Architecture* (1998).