

# Terra Fluxus

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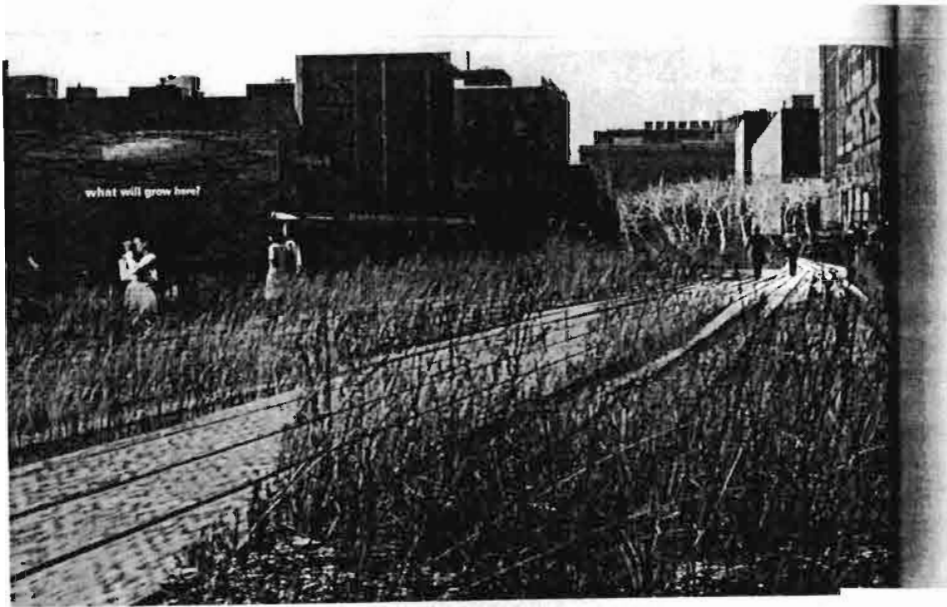


FIG 1 The High Line, New York, 2004; view of hard and organic surfaces bleeding into one

In the opening years of the twenty-first century, that seemingly old-fashioned term landscape has curiously come back into vogue (FIG. 1). The reappearance of landscape in the larger cultural imagination is due, in part, to the remarkable rise of environmentalism and a global ecological awareness, to the growth of tourism and the associated needs of regions to retain a sense of unique identity, and to the impacts upon rural areas by massive urban growth. But landscape also affords a range of imaginative and metaphorical associations, especially for many contemporary architects and urbanists. Certainly, architecture schools have embraced landscape in recent years, even though not long ago architects could not (or would not) even draw a tree, let alone demonstrate interest in site and landscape. Today, however, it is not merely an interest in vegetation, earthworks, and site-planning that we see espoused in various schools of design and planning, but also a deep concern with landscape's conceptual scope; with its capacity to theorize sites, territories, ecosystems, networks, and infrastructures, and to organize large urban fields. In particular, thematics of organization, dynamic interaction, ecology, and technique point to a looser, emergent urbanism, more akin to the real complexity of cities and offering an alternative to the rigid mechanisms of centralist planning.

Leading schools of landscape architecture have traditionally understood the scope of landscape as a model for urbanism, embracing large-scale organizational techniques alongside those of design, cultural expression, and ecological formation. Recently, a few landscape architects have shed their professionally defined limits to expand their skills across complex urbanistic, programmatic, and infrastructural areas. So it seems that certain elements within each of the design professions—architecture, landscape architecture, urban design, and planning—are moving toward a shared form of practice, for which the term *landscape urbanism* holds central significance, as described through the formulation *landscape urbanism*. What is the precise nature of this hybrid practice, and how are each of the terms *landscape* and *urbanism* altered?

This new disciplinary collusion was anticipated in the Landscape Urbanism symposium and exhibition in 1997, originally conceived and organized by Charles Waldheim, and has been further articulated through a range of publications.<sup>1</sup> It is a proposition of disciplinary conflation and unity, albeit a unity that contains, or holds together, difference—difference in terms of the ideological, programmatic, and cultural content of each of those loaded and contested words, “landscape,” “urbanism” (FIG. 2).

Clearly, much of the intellectual intent of this manifestolike proposition, and the essays collected under that formulation here, is the total dissolution of the two terms into one word, one phenomenon, one practice. And yet at the same time each term remains distinct, suggesting their necessary, perhaps inevitable, separateness. Same, yet different; mutually exchangeable, yet never quite fully dissolved, like a new hybrid ever dependent upon both the *x* and *y* chromosome, never quite able to shake off the different expressions of its parents.

Such a dialectical synthesis is significant, for it differs from earlier attempts to speak of urban sites as landscapes, or from attempts to situate landscape in the city. The more traditional ways in which we speak about landscape and cities have been conditioned through the nineteenth-century lens of difference and opposition. In this view, cities are seen to be busy with the technology of high-density building, transportation infrastructure, and revenue-producing development, the undesirable effects of which include congestion, pollution, and various forms of social stress; whereas landscape, in the form of parks, greenways, street trees, esplanades, and gardens, is generally seen to provide both salve and respite from the deleterious effects of urbanization. A most canonical instance of this, of course, is Olmsted's Central Park, intended as relief from the relentless urban fabric of Manhattan—even though the catalytic effect that Central Park exerted on surrounding real estate development links it more closely with a landscape urbanist model. In this instance, landscape *drives* the process of city formation.

Danish émigré and Chicago landscape architect Jens Jensen articulated this sentiment when he said, "Cities built for a wholesome life... not for profit or speculation, with the living green as an important part of their complex will be the first interest of the future town-planner." "Complex" is an important term here, and I shall return to it; suffice it to say that for Jensen, as for Olmsted—and even for Le Corbusier in his Plan Voisin—this "green complex" comes in the form of parks and green open spaces, accompanied by the belief that such environments will bring civility, health, social equity, and economic development to the city.

More than aesthetic and representational spaces, however, the more significant of these traditional urban landscapes possess the capacity to function as important ecological vessels and pathways: the hydrological and stormwater system underlying the necklacelike structure of Boston's Back Bay Fens, for example, or the greenway corridors that infiltrate Stuttgart and bring mountain air through the city as both coolant and cleanser. These kinds of infrastructural landscapes will surely continue to be important to the overall health and well-being of urban populations. These precedents also embody some of the more significant potentials of landscape urbanism: the ability to shift scales, to locate urban fabrics in their regional and biotic contexts, and to design relationships between dynamic environmental processes and urban form.

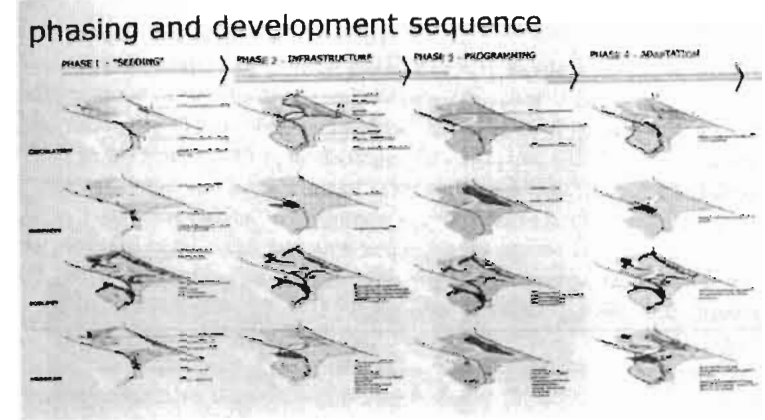


FIG. 2 Fresh Kills Lifescape, Staten Island, 2004; phasing diagrams

The challenge in looking to these precedents for insight into our contemporary conditions is their invocation of a cultural image of "Nature," an image to which landscape is so firmly attached. Nature, in the above-mentioned examples, is mostly represented by a softly undulating pastoral scene, generally considered virtuous, benevolent, and soothing, a moral as well as practical antidote to the corrosive environmental and social qualities of the modern city. This landscape is the city's "other," its essential complement drawn from a nature outside of and excluding building, technology, and infrastructure.

A more complex and contradictory example is the Los Angeles River, which runs from the Santa Susana Mountains through downtown L.A. The "river" is actually a concrete channel built by the U.S. Corps of Engineers in response to the serious flood threat posed by the springtime snow-melts combined with surface runoff from surrounding developments. The channel is designed to optimize the efficiency and speed at which the water is discharged. Its advocates view "nature" here as a violent and threatening force—and rightly so. On the other hand, landscape architects, environmentalists, and various community groups want to convert the channel into a green corridor, replete with riparian habitat, woodlands, birdsong, and fishermen. For these groups, "nature" has been defaced by the engineer's zeal for control. It is, I believe, a well-intentioned but misguided mission, and it underscores the persistent opposition in people's minds.

This contest goes both ways. The debate is not only concerned with bringing landscape into cities but also with the expansion of cities into surrounding landscape—the source of the pastoral ideal, characterized by vast agrarian fields, wooded hillsides, and natural preserves. In 1955, the mega-mall urbanist Victor Gruen coined the term "cityscape," which he posited in contradistinction



FIG. 3 East Darling Harbor, Sydney, Australia, 2005; aerial view of new waterfront urban development as an exotic topographical landscape

to “landscape.” Gruen’s “cityscape” refers to the built environment of buildings, paved surfaces, and infrastructures. These are further subdivided into “technoscapes,” “transportation-scapes,” “suburb-scapes,” and even “subcityscapes”—the peripheral strips and debris that Gruen calls the “scourge of the metropolis.” On the other hand, “landscape,” for Gruen, refers to the “environment in which nature is predominant.” He does say that landscape is not the “natural environment” per se, as in untouched wilderness, but to those regions where human occupation has shaped the land and its natural processes in an intimate and reciprocal way. He cites agrarian and rural situations as examples, invoking an image of topographic and ecological harmony, bathed in green vegetation and clear blue sky. For Gruen, cityscape and landscape were once clearly separated, but today the city has broken its walls to subsume and homogenize its surrounding landscape in an economic and “technological blitzkrieg”—the various “scapes” now in conflict and with boundless definition.<sup>1</sup>

This image of one thing overtaking another (with competing values attached to each, as in either landscape permeating the city or the city sprawling across its hinterland) is reminiscent of debates surrounding the design of Parc de la Villette, in which many landscape architects initially decried the lack of “landscape” in the park’s design, seeing only the buildings or “follies.” More recently, landscape architects have revised this sentiment, suggesting that upon further inspection, the still maturing landscape has come to prevail over the buildings. This sentiment is very telling, for—as with Jensen, Olmsted, Le Corbusier, Gruen, and their contemporaries, or indeed for the various groups contesting the Los Angeles River today—it keeps the categories of building/city versus green landscape as separate entities: the follies at la Villette are somehow not recognized as being

part of the landscape, just as the concrete river channel is not recognized as a landscape element, even though its landscape *function* is solely hydrological.

Moreover, we know full well that each of these categories—landscape and urbanism—belongs to a certain profession, or institutionalized discipline. Architects construct buildings and, with engineers and planners, they design cities; landscape architects build landscapes, in the form of earthwork, planting, and open-space design. Implicit in the sentiments of many landscape architects is indignation that the Parc de la Villette was designed not by a landscape architect but by an architect. Similarly, when a landscape architect wins a competition today that architects think belongs in their domain, there can be heard some rather cynical grumbling in that court too. So this antinomic, categorical separation between landscape and urbanism persists today not only because of a perceived difference in material, technical, and imaginative/moralistic dimensions of these two media, but also because of a hyper-professionalized classification, a construction further complicated through competing power relations.

For example, it has been argued by others that landscape tends to be repressed by architects and planners, or appropriated only to the extent that it frames and enhances the primacy of urban form. Landscape is employed here as a bourgeois aesthetic, or naturalized veil. Moreover, it is increasingly the case that vast developer-engineering corporations are constructing today’s world with such pace, efficiency, and profit that all of the traditional design disciplines (and not only landscape) are marginalized as mere decorative practices, literally disenfranchised from the work of spatial formation.

Conversely, of course, many ecologically aligned landscape architects see cities as grossly negligent with regard to nature. While the accomplishments of environmental restoration and regulation are both urgent and impressive, the exclusion of urban form and process from any ecological analysis remains extremely problematic. Moreover, so-called “sustainable” proposals, wherein urbanism becomes dependent upon certain bioregional metabolisms, while assuming the place-form of some semi-ruralized environment, are surely naive and counterproductive. Do the advocates of such plans really believe that natural systems alone can cope more effectively with the quite formidable problems of waste and pollution than do modern technological plants? And do they really believe that putting people in touch with this fictional image called “nature” will predispose everybody to a more reverent relationship with the earth and with one another (as if relocating millions from cities to the countryside will actually somehow improve biodiversity and water and air quality) [FIG. 3]?

YES! →

At the beginning of the twentieth century, only sixteen cities in the world had populations larger than a million people, yet at the close of the century more than five hundred cities had more than a million inhabitants, many boasting more than ten million residents and still expanding. Metropolitan Los Angeles has a current population of approximately thirteen million and is projected to

double in the next twenty-five years. Given the complexity of the rapidly urbanizing metropolis, to continue to oppose nature against culture, landscape against city—and not only as negational absolutes but also in the guise of benign, complementary overlaps—is to risk complete failure of the architectural and planning arts to make any real or significant contribution to future urban formations.

With this preface, we can begin to imagine how the concept of landscape urbanism suggests a more promising, more radical, and more creative form of practice than that defined by rigid disciplinary categorizations. Perhaps the very complexity of the metabolism that drives the contemporary metropolis demands a conflation of professional and institutionalized distinctions into a new synthetic art, a spatio-material practice able to bridge scale and scope with critical insight and imaginative depth (FIG. 4).

By way of providing a schematic outline for such a practice, I can sketch four provisional themes: processes over time, the staging of surfaces, the operational or working method, and the imaginary. The first of these themes addresses processes over time. The principle is that the processes of urbanization—capital accumulation, deregulation, globalization, environmental protection, and so on—are much more significant for the shaping of urban relationships than are the spatial forms of urbanism in and of themselves. The modernist notion that new physical structures would yield new patterns of socialization has exhausted its run, failing by virtue of trying to contain the dynamic multiplicity of urban processes within a fixed, rigid, spatial frame that neither derived from nor redirected any of the processes moving through it. This emphasis on urban processes is not meant to exclude spatial form but rather seeks to construct a dialectical understanding of how it relates to the processes that flow through, manifest, and sustain it.

This suggests shifting attention away from the object qualities of space (whether formal or scenic) to the systems that condition the distribution and density of urban form. Field diagrams or maps describing the play of those forces are particularly useful instruments in furthering an understanding of urban events and processes. For example, the geographer Walter Christaller's diagrams of population distribution and city planner Ludwig Hilberseimer's diagrams of regional settlement patterns each articulate flows and forces in relation to urban form.<sup>4</sup>

In comparing the formal determinism of modernist urban planning and the more recent rise of neo-traditional "New Urbanism," the cultural geographer David Harvey has written that both projects fail because of their presumption that spatial order can control history and process. Harvey argues that "the struggle" for designers and planners lies not with spatial form and aesthetic appearances alone but with the advancement of "more socially just, politically emancipatory, and ecologically sane mix(es) of spatio-temporal production processes," rather than the capitulation to those processes "imposed by uncontrolled capital accumulation, backed by class privilege and gross inequalities of



FIG. 4 Botanical Garden of Puerto Rico, San Juan, 2004; site plan depicting the garden as a new hybridized form, conjoining urban programs, research, technology, and information with nature, open space, and rain forest

political-economic power."<sup>5</sup> His point is that the projection of new possibilities for future urbanisms must derive less from an understanding of form and more from an understanding of process—how things work in space and time.

In conceptualizing a more organic, fluid urbanism, ecology itself becomes an extremely useful lens through which to analyze and project alternative urban futures. The lessons of ecology have aimed to show how all life on the planet is deeply bound into dynamic relationships. Moreover, the complexity of interaction between elements within ecological systems is such that linear, mechanistic models prove to be markedly inadequate to describe them. Rather, the discipline of ecology suggests that individual agents acting across a broad field of operation produce incremental and cumulative effects that continually evolve the shape of an environment over time. Thus, dynamic relationships and agencies of process become highlighted in ecological thinking, accounting for a particular spatial form as merely a provisional state of matter, on its way to becoming something else. Consequently, apparently incoherent or complex conditions that one might initially mistake as random or chaotic can, in fact, be shown to be highly structured entities that comprise a particular set of geometrical and spatial orders. In this sense, cities and infrastructures are just as "ecological" as forests and rivers.

Since the publication in 1969 of Ian McHarg's *Design With Nature*, landscape architects have been particularly busy developing a range of ecological techniques

for the planning and design of sites. But, for a variety of reasons, some outlined earlier, ecology has been used only in the context of some thing called the “environment,” which is generally thought to be of “nature” and exclusive of the city. Even those who have included the city in the ecological equation have done so only from the perspective of natural systems (hydrology, air-flow, vegetational communities, and so on). We have yet to understand cultural, social, political, and economic environments as embedded in and symmetrical with the “natural” world. The promise of landscape urbanism is the development of a space-time ecology that treats all forces and agents working in the urban field and considers them as continuous networks of inter-relationships.

One model for such a conflation that comes to mind in this context is Louis Kahn’s 1953 diagram for vehicular circulation in Philadelphia. With regards to this project, Kahn wrote:

Expressways are like rivers. These rivers frame the area to be served. Rivers have Harbors. Harbors are the municipal parking towers; from the Harbors branch a system of Canals that serve the interior; . . . from the Canals branch cul-de-sac Docks; the Docks serve as entrance halls to the buildings.\*

Later, in Kahn’s proposal for Market Street East came a whole repertoire of “gateways,” “viaducts,” and “reservoirs,” each finding new expression in the urban field as iconographic figures illuminated in colored light at nighttime allowing for both navigation and the regulation of speed.

Kahn’s diagrams suggest the need for contemporary techniques of representing the fluid, process-driven characteristics of the city, wherein the full range of agents, actors, and forces that work across a given territory might be brought into consideration, mobilized, and redirected. This work must necessarily view the entire metropolis as a living arena of processes and exchanges over time, allowing new forces and relationships to prepare the ground for new activities and patterns of occupancy. The designation *terra firma* (firm, not changing; fixed and definite) gives way in favor of the shifting processes coursing through and across the urban field: *terra fluxus*.

The second theme of the landscape urbanism project concerns itself with the phenomenon of the horizontal surface, the ground plane, the “field” of action. These surfaces constitute the urban field when considered across a wide range of scales, from the sidewalk to the street to the entire infrastructural matrix of urban surfaces. This suggests contemporary interest in surface continuities, where roofs and grounds become one and the same; and this is certainly of great value with regard to conflating separations between landscape and building—one thinks of the collaborations between Peter Eisenman and Laurie Olin in this regard. However, I would emphasize a second understanding of surface: surface understood as urban infrastructure. This understanding of the urban surface is

evident in Rem Koolhaas’s notion that urbanism is strategic and directed toward the “irrigation of territories with potential.” Unlike architecture, which consumes the potential of a site in order to project, urban infrastructure sows the seeds of future possibility, staging the ground for both uncertainty and promise. This preparation of surfaces for future appropriation differs from merely formal interest in single surface construction. It is much more strategic, emphasizing means over ends and operational logic over compositional design.

For example, the grid has historically proven to be a particularly effective field operation, extending a framework across a vast surface for flexible and changing development over time, such as the real estate and street grid of Manhattan, or the land survey grid of the Midwestern United States. In these instances, an abstract formal operation characterizes the surface, imbuing it with specificity and operational potential. This organization lends legibility and order to the surface while allowing for the autonomy and individuality of each part, and remaining open to alternative permutations over time. This stages the surface with orders and infrastructures permitting a vast range of accommodations and is indicative of an urbanism that eschews formal object-making for the tactical work of choreography, a choreography of elements and materials in time that extends new networks, new linkages, and new opportunities.

This understanding of surface highlights the trajectories of shifting populations, demographics, and interest groups upon the urban surface; traces of people provisionally stage a site in different ways at different times for various programmatic events, while connecting a variety of such events temporally around the larger territory. This attempts to create an environment that is not so much an object that has been “designed” as it is an ecology of various systems and elements that set in motion a diverse network of interaction. Landscape urbanism is here both instigator and accelerator, working across vast surfaces of potential. This approach, at once simple and conventional, affords residents a range of programmatic configurations as seasons, needs, and desires change. The thrust of this work is less toward formal resolution and more toward public processes of design and future appropriation. Concerned with a working surface over time, this is a kind of urbanism that anticipates change, open-endedness, and negotiation.

This leads in turn to the third theme of landscape urbanism, which is the operation or working method. How does one conceptualize urban geographies that function across a range of scales and implicate a host of players? Moreover, beyond issues of representation, how does one actually operate or put into effect the work of the urbanist, given the exigencies of contemporary development? There is no shortage of critical utopias, but so few of them have made it past the drawing board. It is both tragic and ironic that as designers we are all ultimately interested in the density of building but that most who actually accomplish this can only do so through the typically unimaginative and uncritical techniques of

design as a service profession. On the other hand, the visionaries, it would seem, are as always provocative and interesting, but their utopias continually evade the problem of an operative strategy.

There is much more that the practice of landscape urbanism holds for questions of representation. I believe that landscape urbanism suggests a reconsideration of traditional conceptual, representational, and operative techniques. The possibilities of vast scale shifts across both time and space, working synoptic maps alongside the intimate recordings of local circumstance, comparing cinematic and choreographic techniques to spatial notation, entering the algebraic, digital space of the computer while messing around with paint, clay, and ink, and engaging real estate developers and engineers alongside the highly specialized imaginers and poets of contemporary culture—all these activities and more seem integral to any real and significant practice of synthetic urban projection. But the techniques to address the sheer scope of issues here are desperately lacking—and this area alone, it would seem to me, is deserving of our utmost attention and research.

This of course arrives at the fourth theme of landscape urbanism, which is the imaginary. There is simply no point whatsoever in addressing any of the above themes for their own sake. The collective imagination, informed and stimulated by the experiences of the material world, must continue to be the primary motivation of any creative endeavor. In many ways, the failing of twentieth-century planning can be attributed to the absolute impoverishment of the imagination with regard to the optimized rationalization of development practices and capital accumulation. Public space in the city must surely be more than mere token compensation or vessels for this generic activity called “recreation.” Public spaces are firstly the containers of collective memory and desire, and secondly they are the places for geographic and social imagination to extend new relationships and sets of possibility. Materiality, representation, and imagination are not separate worlds; political change through practices of place construction owes as much to the representational and symbolic realms as to material activities. And so it seems landscape urbanism is first and last an imaginative project, a speculative thickening of the world of possibilities.

In conclusion, I would return to the paradoxical separateness of *landscape* from *urbanism* in the formulation that occasions this essay. Neither term is fully conflated into the other. I do believe that this paradox is not only inescapable but necessary to maintain. No matter how ambitious and far-reaching the above outlined practices may be, at the end of the day there will still always be doors, windows, gardens, stream corridors, apples, and lattes. There is an inevitable intimacy with things that characterizes rich urban experience. The failure of earlier urban design and regionally scaled enterprises was the oversimplification, the reduction, of the phenomenal richness of physical life. A good designer must be able to weave the diagram and the strategy in relationship to the tactile and

the poetic. In other words, the union of landscape with urbanism promises new relational and systemic workings across territories of vast scale and scope, situating the parts in relation to the whole, but at the same time the separateness of landscape from urbanism acknowledges a level of material physicality, of intimacy and difference, that is always nested deep within the larger matrix or field.

In mobilizing the new ecologies of our future metropolitan regions, the critically minded landscape urbanist cannot afford to neglect the dialectical nature of being and becoming, of differences both permanent and transient. The lyrical play between nectar and NutraSweet, between birdsong and Beastie Boys, between the springtime flood surge and the drip of tap water, between mossy heaths and hot asphaltic surfaces, between controlled spaces and vast wild reserves, and between all matters and events that occur in local and highly situated moments, is precisely the ever-diversifying source of human enrichment and creativity. I can think of no greater *raison d'être* for persisting with the advancement of landscape urbanism than this.

#### Notes

1. Landscape Urbanism Symposium and Exhibition, April 1997, Graham Foundation, Chicago. See also, for example, my essays in *Stalking Detroit*, ed. Georgia Daskalakis, Charles Waldheim, and Jason Young (Barcelona: Actar, 2001); *Landscape Urbanism: A Manual for the Machinic Landscape*, ed. Mohsen Mostafavi and Ciro Najle (London: Architectural Association, 2003); and David Grahame Shane, *Recombinant Urbanism* (London: John Wiley, 2005).
2. Jens Jensen, *Siftings* (Baltimore: Johns Hopkins University Press, 1990). On Jensen's work and life, see Robert E. Grese, *Jens Jensen: Maker of Natural Parks and Gardens* (Baltimore: Johns Hopkins University Press, 1992).
3. Victor Gruen, *The Heart of our Cities: The Urban Crisis, Diagnosis and Cure* (New York: Simon and Schuster, 1964). See also Gruen, *Centers for the Urban Environment: Survival of the Cities* (New York: Van Nostrand Reinhold, 1973).
4. See Walter Christaller's *Central Place Theory* (Englewood Cliffs, NJ: Prentice-Hall, 1966); and Ludwig Hilberseimer's *New Regional Pattern* (Chicago: P. Theobald, 1949).
5. David Harvey, *The Condition of Post-Modernity* (Cambridge, England: Blackwell, 1990.)
6. Louis Kahn “Philadelphia City Planning: Traffic Studies,” Philadelphia, PA, 1951–53. These drawings and project papers are in the Louis I. Kahn Collection, Architectural Archives of the University of Pennsylvania.
7. Rem Koolhaas, “Whatever Happened to Urbanism,” Koolhaas and Bruce Mau, *S, M, L, XL* (New York: Monacelli, 1995), 969.