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Hybrid Morphologies

Infrastructure, Architecture, Landscape

Marc Angéll

If there is to be a "new urbanism" it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential; it will no longer aim for stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallized into definitive form; it will no longer be about meticulous definition, the imposition of limits, but about expanding notions, denying boundaries, not about separating and defining entities, but about discovering unnameable hybrids; it will no longer be obsessed with the city but with the manipulation of infrastructure for endless intensifications and diversifications, shortcuts and redistributions – the reinvention of psychological space.

Rem Koolhaas, "What Ever Happened to Urbanism", 1994

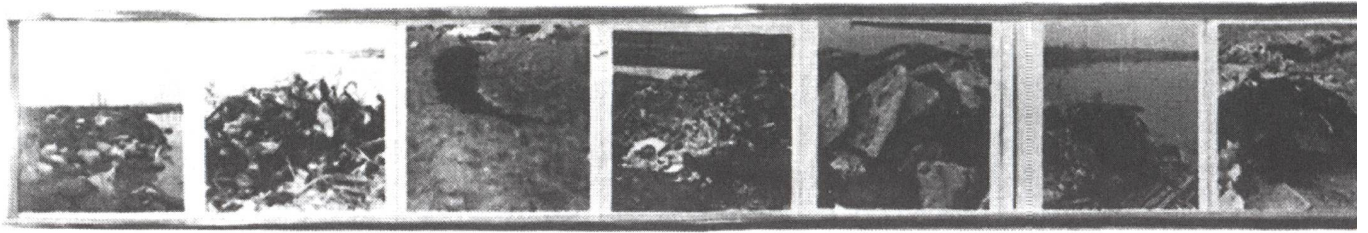
Site and Non-Site

Robert Smithson compares in his essay "The Crystal Land" the built landscape of urban agglomerations with the structure of geological formations. Smithson recalls an excursion with Nancy Holt, Julie Judd, and Donald Judd through New Jersey during which abandoned quarries were visited. The text describes specific characteristics of the physical environment traversed during their journey. Consisting of unrelated fragments of built and natural landscapes, a unified image of the existing terrain emerges, despite the differences among the fragments themselves. Urban infrastructures, such as freeways and power lines, as well as the single family houses and shopping centers of suburban neighborhoods, are seen with the landscape as sediments of one and the same geology.

Smithson writes: "The highways crisscross through the towns and become man-made geological networks of concrete. In fact, the entire landscape has a mineral presence. From the shiny chrome diners to glass windows of shopping centers, a sense of the crystalline prevails."¹ From a driver's viewpoint, this artificial landscape merges with the topography of the car's dashboard. The reflections on the windshield, the plastic buttons of the car radio, and the depression of the glove compartment are read as a kind of extension of the urban territory. This type of landscape, according to Smithson, is as much a conglomerate of parts as an amalgamation of processes. In its geology, the urban landscape consists of a stratification of both natural and synthetic layers forming a consolidated yet amorphous entity.



Robert Smithson, Photographs from "Monuments of Passaic", 1967



- 1 Robert Smithson, "The Crystal Land", *Harper's Bazaar*, 1966; *Robert Smithson: The Collected Writings*, Jack Flam, University of California Press, Berkeley & Los Angeles, 1996, p. 8.
- 2 Robert Smithson, "A Provisional Theory of Non-Sites", 1968; *Robert Smithson: The Collected Writings*, Jack Flam, University of California Press, Berkeley & Los Angeles, 1996, p. 364.
- 3 Jack Flam, "Introduction: Reading Robert Smithson", *Robert Smithson: The Collected Writings*, University of California Press, Berkeley & Los Angeles, 1996, p. xxii.
- 4 Rem Koolhaas, "Pearl River Delta, The City of Exacerbated Difference©", *Politics-Poetics documenta X – the book*, Cantz Verlag, documenta and the Museum Fridericianum, Kassel, 1997.

Smithson introduces a method by which to explore, through the juxtaposition of the terms *Site* and *Non-Site*, the interaction between the real conditions of a place and interpretations of that place.² *Site* stands for the material reality of a pre-existing situation, as for example, the familiar landscape of New Jersey. A *Non-Site*, on the other hand, is an abstract interpretation of the site in the form of a text, a map, or a sculpture. A *Non-Site* does not reproduce a site but constructs it. It is a fabrication with an operative function, its task being to reframe established understandings of a given condition. Smithson's earthworks, which he calls "a sedimentation of the mind," involve *in situ* a context, while concurrently suggesting other readings of that context. In a series of interventions referred to as *flows* in which "large quantities of asphalt, concrete, mud, or glue" are "poured across parts of landscapes," *Non-Site* strategies are superimposed onto an existing site, thus altering its perception.³

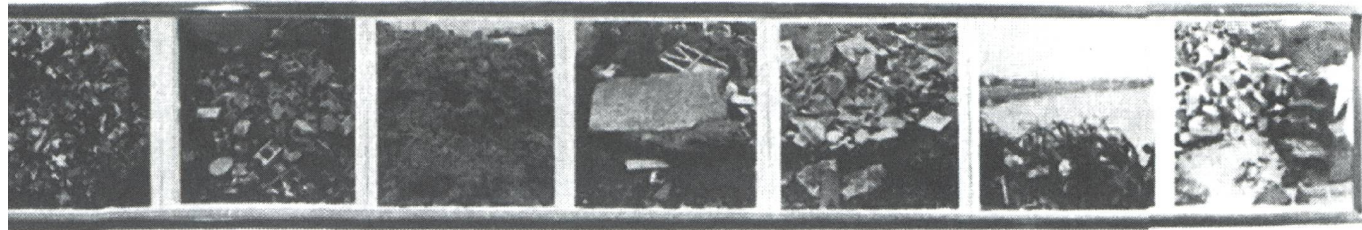
Smithson's writings on residual urban conditions, while alluding to the notion of the contemporary city as a non-place, are *Non-Sites* in their own right. As textual constructions, they work toward a mobilization of a new sensibility vis-à-vis the natural and man-made environment. The analogies in "The Crystal Land" between city and geology, between the topography of the urban landscape and the car's dashboard, suggest new readings overlaid onto the given context. Smithson operates here with the technique of double exposures, by which discrete elements are made to overlap, smoothing over distinctions. Despite their differences, freeways, buildings, and landscapes become one. Aiming at a meltdown of parts, a new type of space emerges. Transposed onto one another, *Site* and *Non-Site* coalesce into a new physical-mental landscape. They demarcate a space that, according to Smithson, can be traversed.

Scape©

"SCAPE©," a term introduced by Rem Koolhaas, implies a reading of the contemporaneous urban territory as landscape.⁴ The term prompts a strategic distancing from traditional terminologies. The binomial nouns *town-scape* and *land-scape* are not considered separate entities but are conjoined to form a singular expression. "SCAPE©" is an idiom for the edgeless, sprawling city, in which the distinction between center and periphery, between inside and outside, between figure and ground is erased. The city is understood as a continuous, topologically formed field, its modulated surface covering vast extensions of urban regions. Despite its inherent discontinuities, breaks, and fragmented orders, a specific form of cohesion is attributed to the city, the urban landscape perceived as an interconnected tissue. There is no evidence of composition, no systematic arrangement of parts, no refined forms of organi-



Robert Smithson, *Asphalt Rundown*, Rome, 1969



Robert Smithson, Documentation for Non-Site
'Line of Wreckage', New Jersey, 1968

zation. One encounters instead a seeming random deposit of pieces. Koolhaas speaks of a city of "exacerbated difference" that does not follow the ideal of a harmonic order but is marked through the juxtaposition of opposites by a permanent hybridity constituting the city's primary connective principle.

In his essay "The Generic City," Koolhaas attempts to identify the integral elements and structures of this form of urban constellation. He writes: "How to describe it? Imagine an open space, a clearing in the forest, a leveled city. There are three elements: roads, buildings, and nature; they coexist in flexible relationships, seemingly without reason, in spectacular organizational diversity. Any one of the three may dominate: sometimes the 'road' is lost – to be found meandering on an incomprehensible detour; sometimes *you see no building*, only nature; then, equally unpredictably, you are surrounded only by building. In some frightening spots, all three are simultaneously absent."⁵

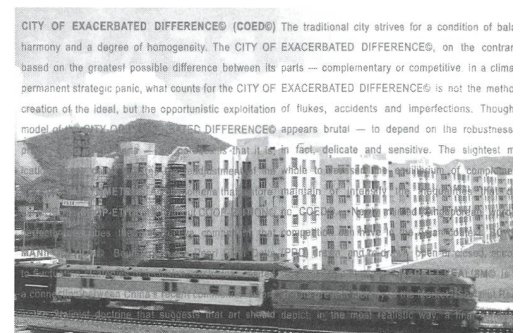
Such a view leads to a dissolution of traditionally established categories. *Infrastructure*, *architecture*, and *landscape* amalgamate to become one. Instead of accentuating their differences and treating them as separate entities, the possibility of their convergence is proposed. When architecture is declared as landscape, infrastructure as architecture, and landscape as infrastructure, then the predicament is given for potentially understanding the phenomenon *city* on other grounds than those conventionally pursued. The method deployed is that of a hybridization of terminologies, identified by Koolhaas with the term *MERGE*© and allowing hitherto separate phenomena to be connected: "landscape and city = *SCAPE*©, business and pleasure = *BUSINESS VACATION*©, golf course and urban fabric = *SMOOTH*© green crust of *THIN*© urbanism".⁶

The disparate elements of the city form a network conglomerate of variable components which amidst divergences offers the impression of a steady uniformity. This unifying principle leads to a particular notion of spatiality considered by Koolhaas, alluding to Gilles Deleuze and Félix Guattari, a type of *smooth space*.⁷ This peculiar kind of space is not bound by the specificity of place but is marked by a multiple displacement of its constituting parts. *Smooth space* connects differences and distinctions; it literally smoothes over divisions.

Scape / -schaft

Such an understanding of the city as a dissolved and yet consolidated territory has historical antecedents. Hans Scharoun, for example, transposes the concept of landscape within urbanism onto the concept of city, as suggested by his

- 5 Rem Koolhaas, "The Generic City" (1994), in Rem Koolhaas & Bruce Mau, "S,M,L,XL", The Monacelli Press, New York, 1995, p. 1254.
- 6 Rem Koolhaas, "Pearl River Delta, The City of Exacerbated Difference©", op. cit.
- 7 See Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, University of Minnesota Press, Minneapolis, 1987; *Mille plateaux*, Les Éditions de Minuit, Paris, 1980.



Rem Koolhaas, "Pearl River Delta, The City of Exacerbated Difference", Documenta X, Kassel, 1997



Hans Scharoun, *Hauptstadt Berlin*, Competition Entry, Berlin, 1958

- 8 Jörg C. Kirschenmann & Eberhard Syring, *Hans Scharoun, die Forderung des Unvollendeten*, Deutsche Verlags-Anstalt, 1993, p. 233.
 9 Klaus-Jakob Thiele, *Über Hans Scharoun*, Alexander Verlag, Berlin, 1986.
 10 Hans Scharoun, "Organisches Bauen", Vortrag anlässlich der 31. Referendartagung, Berlin, 30. Mai 1961; Peter Pfankuch, *Hans Scharoun: Bauten, Entwürfe, Texte*, Akademie der Künste, Band 10, Gebr. Mann Verlag, Berlin, 1974.



Hans Scharoun, State Library, Mezzanine Level, Berlin, 1964-1979

choice of vocabulary. He speaks of an *urban-land-scape* and of an awareness of the *urban-land-scape-space* as a basic condition for any form of planning development. In his writings, one encounters repeatedly the term *-schaft*, derived from the Old High German *schaft*, meaning *to give form* or *to shape*. Word combinations used by Scharoun as *Gemein-schaft* (community), *Nachbar-schaft* (neighborhood), *Himmel-schaft* (sky-scape), or *Land-schaft* (land-scape) form the basis of what might be termed *Stadt-schaft* (city-scape).

According to Scharoun, this form-giving process must relate to the "demand which expresses itself in the unfinished," that is, in open systems, whose formation he considered an essential objective of urban design.⁸ Rather than based on "formal-dogmatic principles" but on processes of transformation that take up and heighten prevalent tendencies, Scharoun describes urban space as a system constantly exposed to change. Analogous to natural environments, the city is not a static entity but a mutable organization made of different components, adaptable to varying circumstances. The contradictory conditions of urban contexts are marked by irregularities. In a differentiated play of dense and empty spaces, of infra-structures and housing-structures, of natural and artificial natures, an uninterrupted urban landscape is formed. Through the superimposition of systems, a field is generated promoting spaces of a connective quality.

This formation process pertains to heterogeneous and nonetheless coherent relationships developing into a cohesive entity.⁹ The city evolves, in this sense, not through the external imposition of order but according to internal interdependencies. For Scharoun the urban field emanates from a process which includes the traces and histories of past processes. Urbanity is an expression of a "mental landscape" mirroring societal changes both at material and cultural levels.¹⁰

This conceptual framework forms the base of Scharoun's architecture. In his design for the Berlin Cultural Forum, the buildings of the Philharmonic, the Chamber Music Hall, and the State Library literally comprise an urban landscape. A "valley" is formed between the "mountains" of free standing edifices as objects. The stepped-down geometry of the building's volumes contributes to the integration of structures of varied scales, incorporating the New National Gallery by Mies van der Rohe and the Matthei Church by Martin Stühler into a coalesced loose ensemble. Urban space is created, less by the implementation



Hans Scharoun, *State Library*, Berlin, 1964-1979

of predetermined type forms than by the tension resulting from a field of interactive forces. Architecture eludes the domain of bounded compositions to favor the unceasingly fluid condition of continuous space.

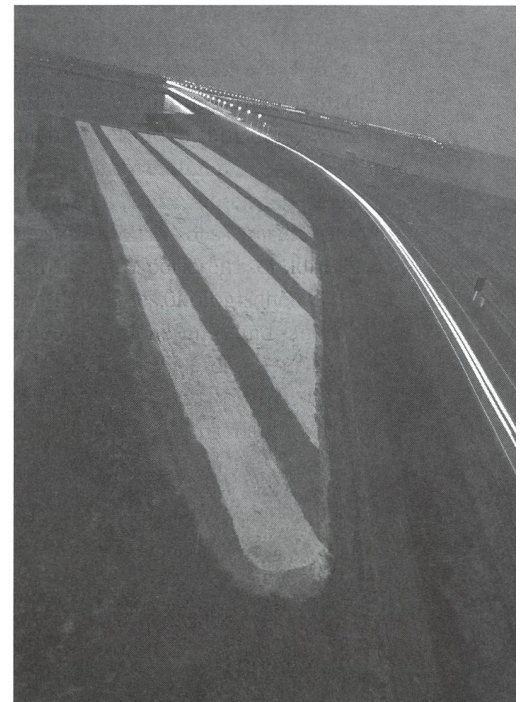
Infrastructure-Architecture-Landscape

Potential interconnections of infrastructure, architecture, and landscape are being increasingly tested within architectural design practice. In the work of Adriaan Geuze, Zaha Hadid, and Rem Koolhaas, for example, one encounters proposals for structures of a hybrid nature, structures pertaining concurrently to different categories. Through mutations and transformations, new morphologies are explored. Here the possibility of an *architecturalization* of landscape and infrastructure is being taken into consideration, reciprocally suggesting the potential for an *infrastructuralization* or *landscapification* of architecture.

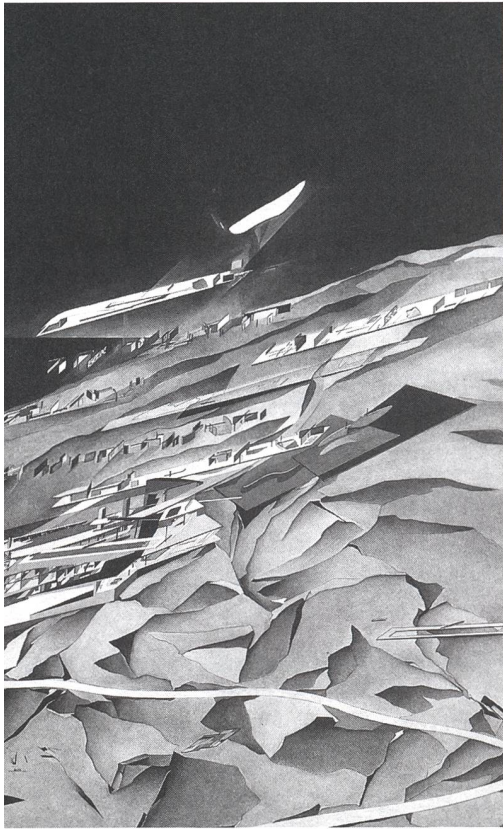
The landscape architect Adriaan Geuze addresses in his work prevalent urbanization patterns of the natural landscape, inferring from such conditions a distinctive spatial conception. Rather than separating landscape and infrastructural elements, he interweaves them, so as to form new assemblages. An example of this strategy is the Storm Surge Barrier project in Zeeland, a coastal region artificially created by land reclamation processes and marked by infrastructures, farming, abandoned industrial sites, and sand depositories.¹¹ Geuze approaches the site as an ecological system. From the residues of the local mussel industry, a polder landscape is created using black and white sea shells, functioning as a hatching ground for prevailing bird populations. The project responds to the large scale of the surrounding landscape. The alternating light and dark stripes of sea shells appear as an extension of nearby infrastructures forming a linked territorial complex. According to Geuze, the landscape is always subjugated to a process of transformation in which disparate elements are conjoined into a fluid spatial continuum.

A similar preoccupation with prospective configurations of the land is at the core of Zaha Hadid's work. She considers architecture as a form of landscape extension. Her buildings, while responding to varied influences of their surrounding contexts, are conceived as dynamic fragments strategically bundled into a congruous assembly. In the Hong Kong Peak competition project, the building is thought of as an artificial landscape, its formal vocabulary derived

¹¹ Adriaan Geuze, *West8, Landscape Architecture*, Rotterdam-Maaskant Foundation, Rotterdam, 1995, pp. 20-23.



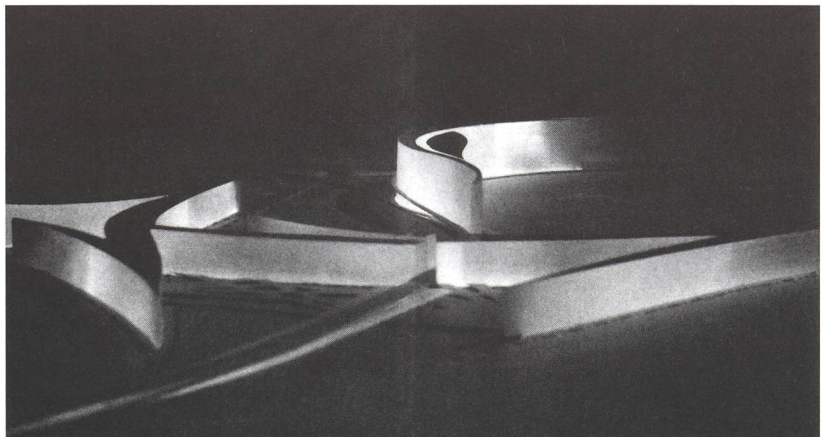
Adriaan Geuze, *Storm Surge Barrier*, Eastern Scheldt, Zeeland, Netherlands, 1991



Zaha Hadid, *The Peak*, Competition Project, Hong Kong, 1982-83

from a reading of the site, expanding and heightening its topographical characteristics. Through the superimposition of architectonic layers and the blurring of boundaries, the structure unfolds as a tectonic field, countering traditional notions of the architectural object as a finite entity. The building dissolves as the structure multiplies into a series of levitating planes seemingly dissipating into the mountain itself. "To conceive of the building as an artificial mountain is to render the floor as a faceted escarpment and to project the roof as a dematerialized cavern. Hadid's Hong Kong project can be seen as a piling up of geological plates, which through their mutual displacement serve, at one and the same time, both to excavate and reconstruct the original body of the mountain. The strength of Hadid's work resides in its energetic spatial fluidity."¹²

Rem Koolhaas understands the city as a field determined by accumulations, connections, densities, transformations, and fluctuations. This choice of terms, borrowed from the field of topology, points to a conception of the city as a dynamic system in which architecture, infrastructure, and landscape are no more than events or occurrences within an uninterrupted field. In a project entitled "Dolphins", strategies are developed pertaining to possible interpretations of traffic infrastructures using architectural means. Koolhaas focuses on the spaces created by freeway intersections, or as he calls it, the "slack within seemingly exhausted infrastructural spiderwebs."¹³ These left-over spaces are densified using landscape and architectural elements. Green open spaces and a dense built fabric are interlaced within the network of streets creating a conglomerate of mutually dependent parts. A wasted territory within the city is reclaimed through the introduction of new programs as well as through the blending of systems that are normally kept apart, such as those of infrastructure, architecture, and landscape. The project avoids any type of compositional order which might prioritize architecture; it instead alludes to potential strategies promoting a hybridization of components within a space of topological extension.



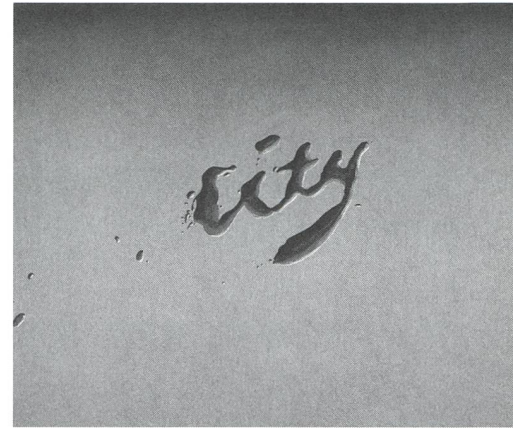
Rem Koolhaas, OMA, *Dolphins*, Competition Project, 1989

Fluid Morphologies

While the traditional city demarcates a figure against the ground of its surrounding landscape, in the contemporary city figure-ground distinctions are revoked. Landscape and built fabric increasingly interact, entangle, interweave. Neither ground nor figure can explicitly be discerned within the amalgamated and indefinable field of the urban territory, thus requiring other formal differentiations. Moving from closed to open structures, the city as an urban landscape increasingly evolves as a dynamic process, questioning the authority of self-reliant architectural form. The boundaries between architecture, infrastructure, and landscape dissolve while de-centering the notion of the architectural object as a closed entity.

The morphology of traditional city planning encompasses organizational geometries such as grids, axes, and radial organizations through which to establish order within the urban fabric. These principles confirm the specific distinctions between center and periphery, core and edge, inside and outside, categories no longer adequate to describe the urban conglomerate in its entangled complexity. In the new city, formal principles of compositional provenance miss their aim. Its morphology instead unfolds from a system of relations between different, sometimes contradictory forces, no longer as an absolute but in reference to other structures. Formal and spatial constellations emerge from continually changing processes, open to new interpretations. The city forms a territory of strategic possibilities in which the relation between different parts is unceasingly renegotiated. The city morphology, in this sense, is fluid and formally undetermined, pertaining to the oscillating interdependencies of contextual forces rather than to the logic of pre-established form. Encapsulating magnitudes of processes the city manifests itself as an open field.

The city is a system in motion, characterized by fluid conditions. Within such a dynamic conglomerate, infrastructure, architecture, and landscape lose their autonomy, the established meaning of their respective definitions exposed to mutable significations. With the dissolution of categories, an indeterminate state is attained that repudiates firmly secured hierarchies.



Ed Ruscha, *City*, 1968

12 Kenneth Frampton, "A Kufic Suprematist: The World Culture of Zaha Hadid", *Zaha Hadid Planetary Architecture*, The Architectural Association, London, 1983.

13 Rem Koolhaas & Bruce Mau, *S,M,L,XL*, The Monacelli Press, New York, 1995, p. 999.

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