Environment as Process

by Marco Polo

Site section

Site plan

Tree City

Introduced by a series of provocative statements critical of Toronto's poor record of investment in public space, *Tree City* eschews detailed prescriptive planning, positing instead a flexible patchwork of planted clusters separated by undesignated open areas. The clusters are without assigned program, which is left to evolve over time. Recreational and cultural activities will be programmed to meet emerging demands and needs, while commercial activities will be developed when necessary to support the park's maintenance costs.

The matrix of circular tree clusters covers about 25% of the site, supplemented by meadows, playing fields and gardens and overlaid with a criss-crossing network of paths for cyclists, joggers and pedestrians. Emphasis is placed on soil remediation: in the first year, the entire park will be seeded with clover, which will be cultivated under while in full bloom to add nitrogen and green manure; this will be followed in the second year by a crop of wheat or barley that will also be turned under. After this, the site will be ready for the first phase of hard and soft landscaping, laying the foundations for the future development of the park.

Core Design Team: Office of Metropolitan Architecture, Bruce Mau Design, Oleson Worland Architects, Inside Outside, Ove Arup & Partners, International; Rem Koolhaas, Bruce Mau, Anita Matusevics, Jason Halter, David Oleson, Petra Blaisse, Jeffrey Inaba, Amanda Sebris, Louis-Charles Lasnier, Howard Wong, Michelle Lavigne, Simon Chan, Henry Cheung, Donald Mak, Riki Nishimura, Shadi Rahbaran, Kent Aggus, David Wilkinson, Maris Mezulis
Consultants: Armin Linke, Milan; Häns Ulrich Olbrist, Paris; Horst Dickert, Moonstone; Martina Juvara, Arup Environmental; Tony Yates, BA Consulting; Colin Williams, RWDI

Vignettes

Programmatic matrix

Detail of model

"There is one mysterious feature about the new and potent environment we now live in. The really total and saturating environments are invisible. [But] while they are quite invisible in themselves they do make visible the old environments. We can always see the Emperor's old clothes, but not his new ones."
—Marshall McLuhan, "The Invisible Environment," CA May/June 1966

Marshall McLuhan is widely regarded as having been ahead of his time, and his words from 34 years ago ring remarkably true today. His prescient comments in the May/June 1966 issues of *Canadian Architect* find implicit expression in the results of a recent international design competition for the creation of Canada's first National Urban Park. The competition brief outlined an ambitious vision for a park that would incorporate recreational green space, celebrate Canada's physical and human diversity, provide a setting for leading edge environmental practices, and bring together public, private and educational institutions in the creation and maintenance of a site that would "be at the forefront of park design in Canada and the world." The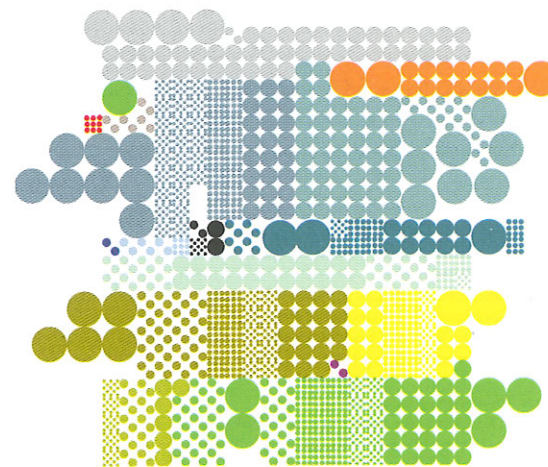se once distinct "old environments" would come together to form the content of a totalizing and as yet invisible "new environment."

Located in the northwestern reaches of Toronto, the bilingually named Parc Downsview Park comprises a 120-hectare (320-acre) site within a 260-hectare (644-acre) property that since 1947 served as a base for the Canadian military. The base was closed in 1994, at which time the federal government announced that part of the site would be used for the development of an urban recreational green space. The balance is being retained for the Department of National Defence and for commercial development, the revenue from which is intended to help finance the park.
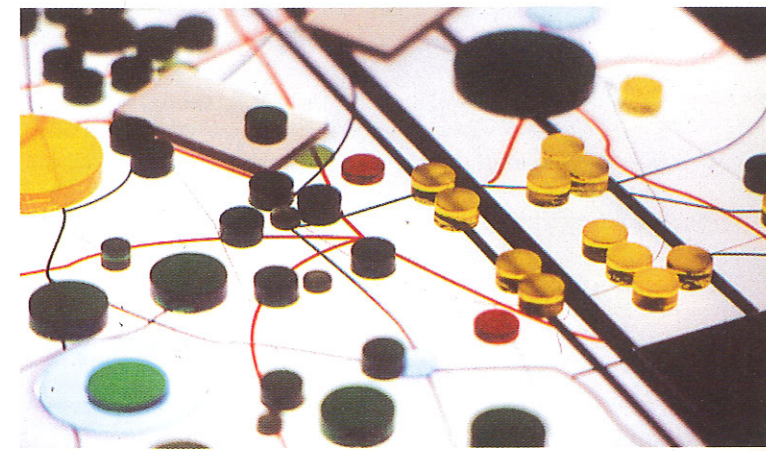
Occupied in part by aircraft manufacturer de Havilland since 1929, the site retains much of its former military/industrial character, peppered with buildings and infrastructure that include housing, factory buildings, hangars, a massive one million square foot supply depot, and a runway around which the site wraps. Since the base was decommissioned in 1994, these facilities have been used for various activities, including film sets in the supply depot and indoor soccer in the hangars. The site occupies one of the city's highest points, offering distant views to the downtown and acting as a watershed feeding Toronto's two major river systems, the Humber to the west and the Don to the east.

In July 1999, Canada Lands Company Ltd., the federal crown corporation responsible for the management of the site, established Parc Downsview Park Inc. and initiated a call for proposals for the Downsview Park International Design Competition. The competition announcement stated that the aim of the design was to create "an urban park that sets the 21st Century standard for excellence in landscape architectural design and urban recreational planning." The proposal call attracted 179 submissions from 22 countries.

A short list of five teams was announced in November 1999. The teams, each of which boasted a complex interdisciplinary list of participants, were led by Brown and Storey Architects of Toronto, James Corner of Philadelphia with Stan Allen of New York, Foreign Office Architects of London and Tokyo with Kuwabara Payne McKenna Blumberg Architects of Toronto, Rem Koolhaas' Office for Metropolitan Architecture of Rotterdam with Bruce Mau Design and Oleson Worland Architects of Toronto, and Bernard Tschumi of New York with Sterling Finlayson Architects and Dereck Revington of Toronto.

Each of the short-listed teams was provided with $100,000 to prepare their second stage submissions. The competition brief stipulated a total capital budget of $145 million phased over 15 years, with $40 million set aside for the first five-year phase. The submissions were reviewed, in turn, by the Professional Advisor, Detlef Mertins of the University of Toronto Faculty of Architecture, Landscape and Design, to ensure compliance with the submission requirements, and by a Technical Review Committee to ensure programmatic and technical feasibility. The entries were then passed on to a jury consisting of Kurt Forster, Director of the Canadian Centre for Architecture in Montreal, Ydessa Hendeles, director and curator of the Ydessa Hendeles Art Foundation in Toronto, Cornelia Hahn Oberlander, landscape architect from Vancouver, Terence Riley, Chief Curator of Architecture and Design at New York's Museum of Modern Art, and Gerald
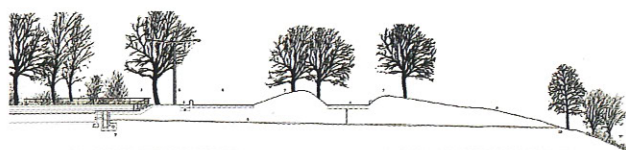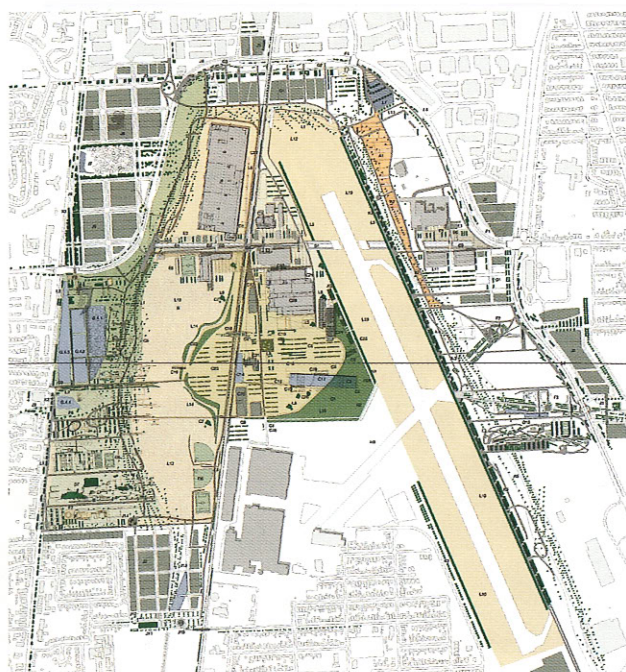
The Cultural Campus

Oak Savannah

Detail section

Site plan

Emergent Landscapes

This scheme is informed by the same kind of complex analytical mapping process embodied in Brown and Storey's Garrison Creek Community Project (see *CA*, June 1994). Isolating road and pathway infrastructure, water drainage systems, and planting, the scheme uses the three separate but interconnected systems to organize the park. In each case, the major concentration of elements occurs at the perimeter, the first part of the park to be developed, establishing a clear edge as well as relationships with neighbouring communities.

Along the western edge, activity spaces include playing fields, allotment gardens, water features, bicycle and skateboard facilities and other intensive use areas, while the northern and eastern edges accommodate building sites and sports facilities. A linear oak savannah separates the intensive use areas from a series of open fields and buffer landscapes consisting of naturalized prairie grasses, wildflowers and herbaceous shrubs. These landscapes surround a cultural campus that occupies new and reclaimed structures at the core of the park. A major east-west concourse traverses the site, tunneling under the runway to connect the eastern edge of the park to the cultural campus.
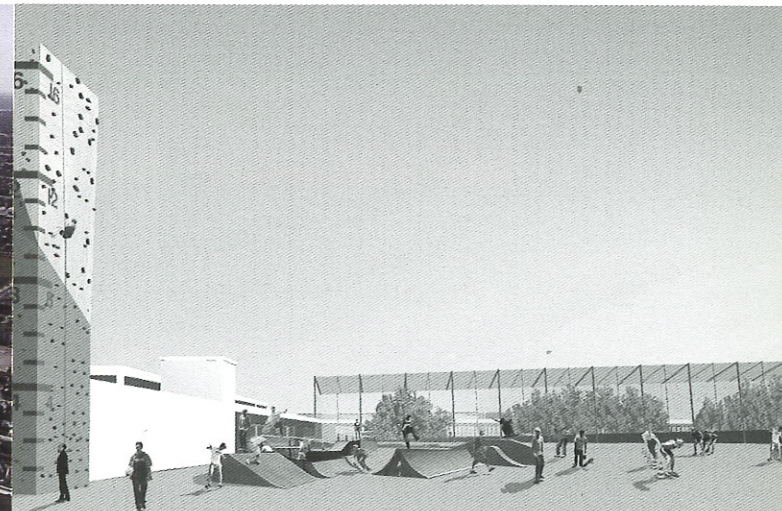
Core Design Team: Brown and Storey Architects (BSA); James Brown, Kim Storey, Stephen King, Ben Payne, James Roche
Landscape Design: James Roche, M.L.A. (BSA), Sam Biettenholtz, B.L.A. (BSA), Fidenzio Salvatore, KMK/SCI Consultants Ltd.—Landscape Architects
Model: Frank Bowen, Glénn Edwards, Ryan Harvey, Ben Payne, Eric Shelton
Computer renderings: studioblackbox; Joe Frasca, Daniel Herljevic, Carlo Parente, Richard Park
Design Advisors: Rodolphe el-Khoury, John Mighton
Technical Advisors: Prof. Dr. Heiko Sieker, Urban Hydrology (Berlin); Dr. Harold Schroeter, Ph.D., P. Eng., Urban Hydrology (Guelph); Itrans, Transportation Engineering (Toronto); Stephen Smith, Urban Forest Associates (Toronto); Yolles Engineering, Structural Engineers (Toronto)

Sheff, chairman and chief executive officer of Gluskin Sheff + Associates Inc. of Toronto. Following the jury deliberation, which included input from the Technical Review Committee and representatives of the surrounding community, Parc Downsview Park Inc. announced in late May that the unanimous jury choice was *Tree City*, the submission by the Koolhaas/Mau/Oleson Worland team.

The official jury report praises the overall quality of the submissions, but notes that next to *Tree City*, there were "no other projects of comparable vision and promise." This is echoed by Gerald Scheff, who adds that "if *Tree City* was not there, it would have been very difficult to choose from among the other entries." He also notes that the Koolhaas/Mau/Oleson Worland entry stood out because while "the others tried to plan a park," *Tree City* focused on laying down the foundation for a park by concentrating on remediating the soil (see project description on p. 14). Cornelia Oberlander concurs, saying that the emphasis on "how to restore the soil made so much sense; it is absolutely the right thing to do."

The design team agrees that they did not, so to speak, plan a park.

In an interview following last May's announcement, Bruce Mau stated that *Tree City* is "not a design at all; it's a recipe or strategy for a series of operations at a meta-level." This strategy is summarized graphically in a series of matrix diagrams describing the relative weighting, phase by phase, of various components of the park, and verbally in the form of a rhetorical equation on one of the presentation panels: "Grow the park + Manufacture nature + Curate culture + 1000 pathways + Destination and dispersal + Sacrifice and save = low density metropolitan life."

Mau explains that one of the team's intents was to "introduce randomness" and to allow the park to evolve over time. This sentiment clearly appealed to the jury, whose official statement praised the scheme for reflecting "its responsiveness to community interests and... its respect for individual experience" and for "the mix of randomness and choice that characterize current living conditions," as well as for being "conceived as a living entity, with all the indeterminacy of that condition." Ydessa Hendeles adds that the jury admired the project's conceptual coherence and that "it is ripe with possibilities."

View from north

Extreme sports track

Site plan

A New Synthetic Landscape

The scheme involves the large-scale reorganization of the site's topography by means of a complex series of paths and a north-south corrugation pattern of earthworks distributed throughout the west side of the park, referring to glacial erosion. Interspersed among the paths and earthworks are playing fields, other athletic facilities, and wildflower meadows. The north end of the park is slated for development related to research, technology and military training, the area east of the runway accommodates commercial and retail development, and the cultural campus occupies the core and includes a large amphitheatre.

The manipulation of the topography creates a system of paths appropriate for walking, running, cycling, or cross-country skiing, and also reconfigures the site's hydrological patterns, slowing surface runoff and increasing groundwater penetration. This strategy for storm water management forms part of a larger strategy of sustainability that includes *living machines* (ecologically engineered greenhouse facilities), wetlands, wind turbines, and solar photovoltaic panel light standards.

Core Design Team: Foreign Office Architects, Kuwabara Payne McKenna Blumberg Architects, Peter Walker and Partners Landscape Architects
Consultants: Cochrane Brook, Atom Egoyan, MBTW Group, Dillon Consulting, Habitat Works, Allen Kani Associates, Kirk Biggar & Associates, Helyar and Associates, Marjory Jacobson, Gerry Shikatani, Yolles Partnership, RWDI, Hahn Smith Design, Aercoustics Engineering Ltd.

Cornelia Oberlander notes that some of the community representatives would have liked to see a more concrete proposal, but maintains that the scheme's high degree of flexibility offered the most promising future for the site. Terence Riley describes *Tree City* as "open-ended in terms of implementation, but not at the conceptual level," adding that the winning project was geared to accommodate an unpredictable, discontinuous development process. Detlef Mertins offered that "this is not a fixed plan, but rather one that truly has the unknown built into it."

In fact, this is not altogether unique to *Tree City*. In *Emergent Ecologies*, the James Corner/Stan Allen team states that its approach is to "seed the site with potential. Others will fill it in over time. We do not determine or predict outcomes; we simply guide or steer flows of matter and information." Similarly, the Foreign Office/KPMB submission, *A New Synthetic Landscape*, claims that "The form of the new Park is determined... by the actual operations and intersections of its systems, providing a flexible infrastructure for continued change and adaptation as these systems shift and transform." But in spite of this rhetoric, these schemes suggest a level of detail resolution that comes across as more deterministic than the jury's choice.
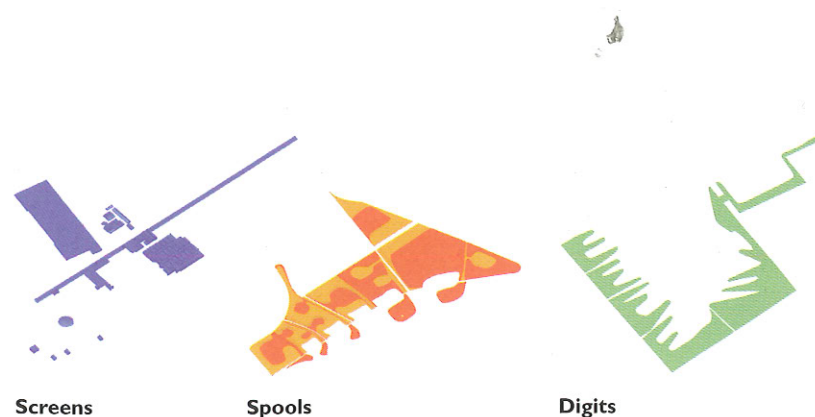
This is particularly true of the submissions by Brown and Storey (*Emergent Landscapes*) and Foreign Office/KPMB, which suggest the greatest degree of resolution. *Emergent Landscapes* is particularly well articulated at the micro scale; *A New Synthetic Landscape* presents an exhaustive system of circuits and topographic manipulation, and articulates a comprehensive approach to ecological sustainability. Corner and Allen's *Emergent Ecologies* and the Tschumi team's *The Digital and the Coyote* address the site's potential for the surreal juxtaposition of the natural and the manmade. The former gives careful consideration to the provision of wildlife habitat within an urban context, and the latter uses the juxtaposition of culture and nature to generate an essential gestalt for the park.

With the exception of *Emergent Landscapes*, each of the schemes other than *Tree City* proposes extensive regrading of the site. Kurt Forster observes that these represent "highly elaborate attempts to transform the landscape," whereas the winning scheme presents a
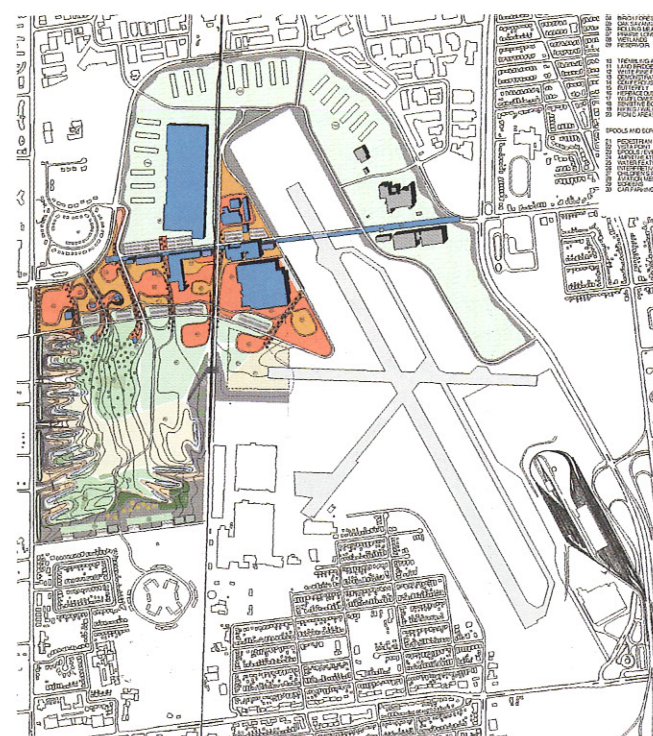
Looking towards Cultural Campus

Screens   Spools   Digits

Circuit Ecologies

Through-Flow Ecologies

Playing fields/Linear amphitheatre

Site plan

Site plan

The Digital and the Coyote

Organized around three major elements—*screens*, *spools*, and *digits*—the scheme strives to create opportunities for the opposing forces of culture and nature to permeate one another. The term *digits* refers to the fingerlike forms at the site's perimeter that maximize the interface between the park's heavily landscaped edge and cultural programming at the core. The *spools*, or *basins of attraction*, occur in the cultural campus and accommodate programmatic activities including sports, education, and mass events. The *screens* are attached to existing buildings and are used to announce programmatic events occurring in the cultural campus.

The southern portion of the site is given over to a series of succession ecozones, including mixed woods forest, tall grass savannah, meadow, and maple forest. A series of watercourses and ponds create riparian and wetland habitats and help process and restore storm water. The cultural campus cuts a swath clear across the site, and is crossed by a series of landscape channels that connect the north and south portions of the park. The north end is designated as a future development site.

Core Design Team: Bernard Tschumi Architects, Dereck Revington Studio, Sterling Finlayson Architects
Consultants: Gunta Mackars Landscape Architecture, Stephen Murphy, W. Andrew Kenney, Eric Haldenby, Stantec Consultants, Ove Arup and Partners, Carinci Burt Rogers Engineering Inc., Dan Euser Waterarchitecture Inc., Read Voorhees and Associates Ltd., Helyar Limited
Models: Thorax Design, Andrew Chatham, Geoffrey Thün, Blake Revington

Emergent Ecologies

The park emerges from the overlay of what the designers call *Circuit Ecologies* and *Through-Flow Ecologies*. *Circuit Ecologies* refers to a series of interlocking ribbons and surfaces that accommodate all program and activity spaces and the circulation infrastructure that supports them. *Through-Flow Ecologies* are a continuous matrix of drift and gradient fields consisting of unprogrammed or loosely programmed open spaces, watercourses and habitat nests.

A continuous activity track surrounds the site, accommodating a variety of vehicular, bicycle and pedestrian traffic. The southern portion of the site is largely covered by open meadows and ridge and furrow drainage basins with selective habitat planting and crossed by linear arrays of deciduous specimen trees. The core of the site contains the cultural campus with extensive sporting facilities and a linear covered amphitheatre, while the northern and eastern portions are designated for commercial development.

Core Design Team: James Corner, Field Operations (Landscape Architect); Stan Allen Architect
Consultants: Michael Horsham, Tomato (Communication Art); Craig Schwitter, Buro Happold (Engineering); Hervé Descottes, L'Observatoire International (Lighting Design); Tom Cahill & Michelle Adams, Tom Cahill Associates (Stormwater and Environmental Management); Chris Zlocki, HLW Strategies (Economic Strategy); Chris Graham, Royal Botanical Gardens (Horticulture); Mark Mayer, The Power Plant Contemporary Art Gallery (Art Consultant); Edward Relph, University of Toronto (Geographer); Nina-Marie Lister, University of Toronto (Ecologist); Penn Praxis, University of Pennsylvania (Research and Support)
Assisted by: Kris Lawson, Julie Parrett, Amanda Sachs, Michel Hslung, Claudia Meyer, Ming Tung

"clear concept, fully aware of the magnitude and implications" of such a large, complex project. "What attracted us was that [*Tree City*] was very thorough and very minimal at the same time." Although *Tree City*'s text makes reference to berms, the drawings and models do not describe the location and extent of earthworks, in contrast to the other entries whose drawings clearly indicate site contours and whose models represent the topography literally.

Given the relatively small impact of changes in section over such a large site, models are perhaps not the best medium for describing this type of project, and most of the teams seemed to struggle with this. The *Tree City* team's response was to represent the landscape as a flat, backlit plateau punctuated with a series of colourful disks and bars indicating tree clusters, water features, and buildings, all criss-crossed by a complex network of "1000 pathways." On the larger-scale detail model, tree clusters are represented by gummi bears, an expression of the playful irreverence familiar in Koolhaas' work since *Delirious New York* (Oxford, 1978).

This also comes through in the perspective drawings, which again are not literal representations, but impressionistic vignettes. They suggest the merging of picturesque landscape traditions and surrealism, something that might result from crossing the bucolic rolling estates of Capability Brown with Teletubbyland. This exaggerated artificiality refers to the invocation "Manufacture nature," accepting that the park—as is true of any deliberate landscape intervention—is not a return to an idealized pre-development lost wilderness, but a human artifact, a product of culture.

Tree City is very much a product of its culture, and also of its time, both in its open-ended approach and its interdisciplinary nature. Although all of the consortiums were by definition interdisciplinary, the Koolhaas/Mau/Oleson Worland team embodied this most fully in the core design group. Both Koolhaas and Mau are operating at the forefront of what they describe as "boundaryless practice," expanding beyond the confines of traditional design disciplines. Mau's practice has expanded well beyond its original focus on graphic and book design to incorporate exhibition design, identity packages and, increasingly, collaborations with architects, most notably Koolhaas—
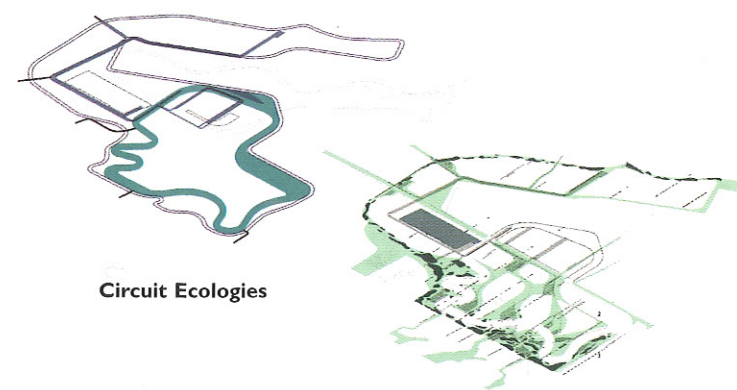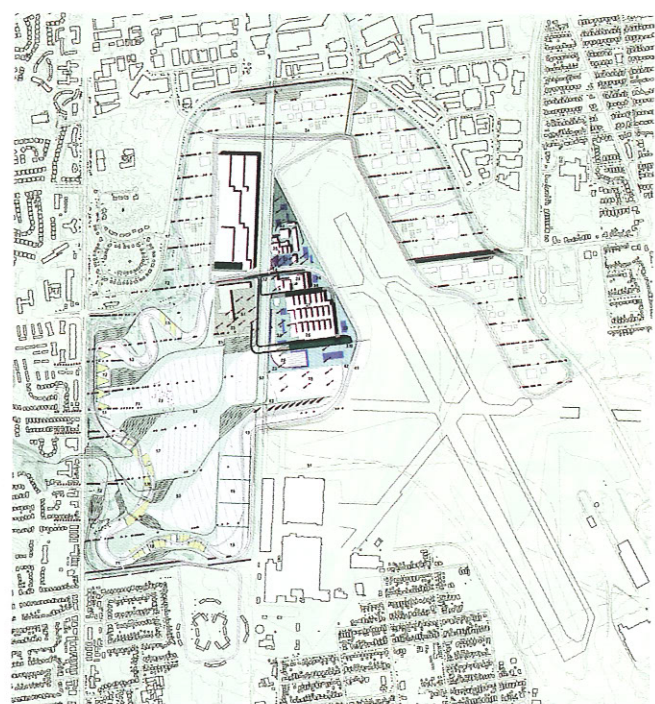
S, M, L, XL (Monacelli, 1995), the Seattle Public Library—and Frank Gehry. Forster comments that this history of collaboration served Mau and Koolhaas well: "It was clear that this was not the result of a shotgun marriage... there was no sense of divergence or conflicting or poorly matched tendencies."

Mau's talent for graphic design is also clearly evident in *Tree City*. According to members of the jury, one reason the project stood out was the clarity and simplicity of its presentation. Cornelia Oberlander stated that when she entered the room where the boards were displayed, she "looked around, saw all the submissions, and walked straight to *Tree City*." Gerald Scheff concurred that "the graphic presentation clearly stood out."

It certainly did, for its clarity and simplicity, as the jurors suggested, but also for its abstraction and its frank omission of design detail. The presentation panels and models are backed up by a book-sized document recording the team's research and by what Mau refers to as a "banker's box of urban design studies." But the site sections are very schematic and bring to mind Koolhaas' well-documented interest in

the universal and the generic. Mau notes that "many things are left unsaid," and the laconic quality of the sections and vignettes invites viewers to complete the picture with their own notions of "park." Forster stated that the winning entry "would probably not appeal to the naïve viewer." Far from naïve, *Tree City* is immersed in the psychology of a culture bombarded with media, and, particularly, advertising: by adopting an explicitly flexible approach rather than articulating a complete final vision, it remains open to myriad possibilities and provides a canvas for the projection of ideals and desires. In this, it is wholly contemporary. *Tree City* isn't a plan for an environment; it is a technology, an example of McLuhan's "invisible environments."

David Oleson of Oleson Worland Architects reports that the daunting task of implementation is under way, with an eye to commencing work at the site in the coming Spring. Back in 1966, Marshall McLuhan wrote in *Canadian Architect* that "Environments are not just containers, but are processes that change the content totally." A generation later, it seems that architects and designers are starting to catch up with McLuhan's thinking. ca