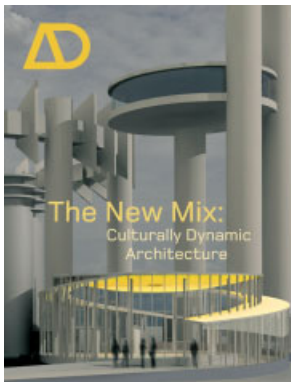




Landscape Architecture: Site/Non-Site

Guest-edited by Michael Spens

**Δ Architectural Design
Backlist Titles**



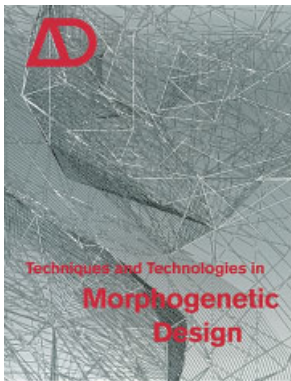
Volume 75 No. 5
ISBN 0470014679



Volume 75 No. 6
ISBN 0470024186



Volume 76 No. 1
ISBN 047001623X



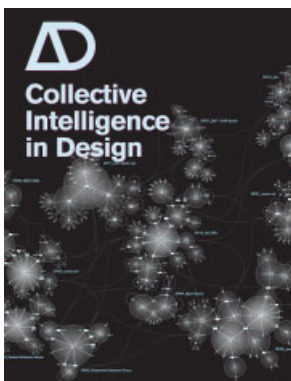
Volume 76 No. 2
ISBN 0470015292



Volume 76 No. 3
ISBN 0470018399



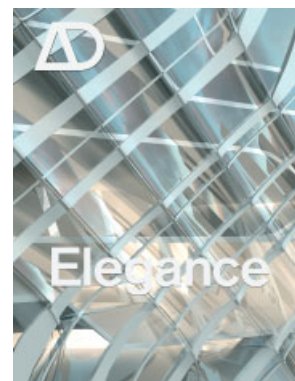
Volume 76 No. 4
ISBN 0470025859



Volume 76 No. 5
ISBN 0470026529



Volume 76 No. 6
ISBN 0470026340



Volume 77 No. 1
ISBN 0470029684

Individual backlist issues of Δ are available for purchase at £22.99. To order and subscribe for 2007 see page 144.

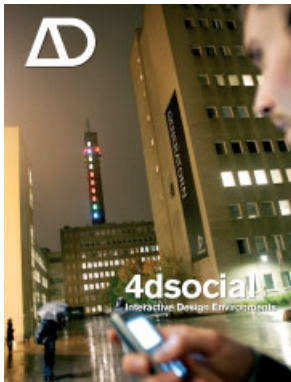


May/June 2007, Profile No 187

Italy: A New Architectural Landscape

Guest-edited by Luigi Prestinenza Puglisi

Every five or six years, a different country takes the architectural lead in Europe: England came to the fore with High Tech in the early 1980s; by the end of the 1980s France came to prominence with François Mitterrand's great Parisian projects; in the 1990s Spain and Portugal were discovering a new tradition; and recently the focus has been on the Netherlands. In this ever-shifting European landscape, Italy is now set to challenge the status quo. Already home to some of the world's most renowned architects – Renzo Piano, Massimiliano Fuksas and Antonio Citterio – it also has many talented architects like Mario Cucinella, Italo Rota, Stefano Boeri, the ABDR group and Maria Giuseppina Grasso Cannizzo, who are now gaining international attention. Moreover, there is an extraordinary emergence of younger architects – the Erasmus generation – who are beginning to realise some very promising buildings of their own.



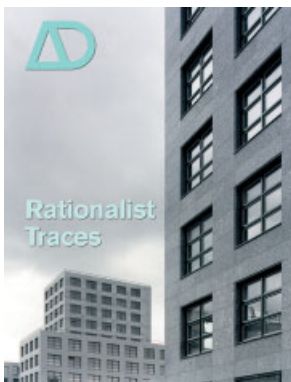
July/August 2007, Profile No 188

4dsocial: Interactive Design Environments

Guest-edited by Lucy Bullivant

A new breed of social interactive design is taking root that overturns the traditional approach to artistic experience. Architects and designers are responding to cues from forward-thinking patrons of architecture and design for real-time interactive projects, and are creating schemes at very different scales and in many different guises. They range from the monumental – installations that dominate public squares or are stretched over a building's facade – to wearable computing. All, though, share in common the ability to draw in users to become active participants and co-creators of content, so that the audience becomes part of the project.

4dsocial: Interactive Design Environments investigates further the paradoxes that arise when a new form of 'socialisation' is gained through this new responsive media at a time when social meanings are in flux. While many works critique the narrow public uses of computing to control people and data, and raise questions about public versus private space in urban contexts, how do they succeed in not just getting enough people to participate, but in creating the right ingredients for effective design?



September/October 2007, Profile No 189

Rationalist Traces

Guest-edited by Andrew Peckham, Charles Rattray and Torsten Schmiedenecht

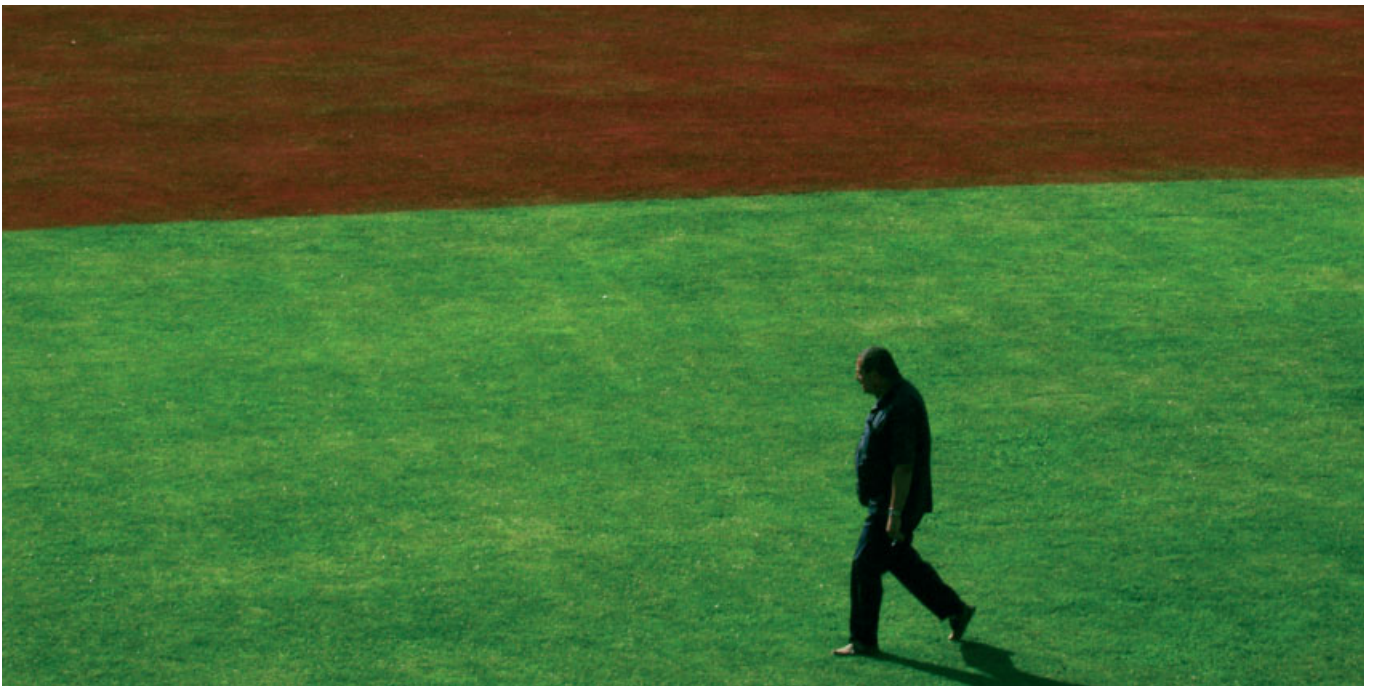
Modern European architecture has been characterised by a strong undercurrent of rationalist thought. *Rationalist Traces* aims to examine this legacy by establishing a cross-section of contemporary European architecture, placed in selected national contexts by critics including Akos Moravanszky and Josep Maria Montaner. Subsequent interviews discuss the theoretical contributions of Giorgio Grassi and OM Ungers, and a survey of Max Dudler and De Architekten Cie's work sets out a consistency at once removed from avant-garde spectacle or everyday expediency. Gesine Weinmiller's work in Germany (among others) offers a considered representation of state institutions, while elsewhere outstanding work reveals different approaches to rationality in architecture often recalling canonical Modernism or the 'Rational Architecture' of the later postwar period. Whether evident in patterns of thinking, a particular formal repertoire, a prevailing consistency, or exemplified in individual buildings, this relationship informs the mature work of Berger, Claus en Kaan, Ferrater, Zuchi or Kollhoff. The buildings and projects of a younger generation – Garcia-Solera, GWJ, BIQ, Bassi or Servino – present a rationalism less conditioned by a concern to promote a unifying aesthetic. While often sharing a deliberate economy of means, or a sensual sobriety, they present a more oblique or distanced relationship with the defining work of the 20th century.

Architectural Design
March/April 2007



Landscape Architecture Site/Non-Site

**Guest-edited by
Michael Spens**



ISBN-13 9780470034798
ISBN-10 0470034793
Profile No 186
Vol 77 No 2

Editorial Offices
International House
Ealing Broadway Centre
London W5 5DB
T: +44 (0)20 8326 3800
F: +44 (0)20 8326 3801
E: architecturaldesign@wiley.co.uk

Editor
Helen Castle

Production Controller
Jenna Brown

Project Management
Caroline Ellerby

Design and Prepress
Artmedia Press, London

Printed in Italy by Conti Tipicolor

Advertisement Sales
Faith Pidduck/Wayne Frost
T +44 (0)1243 770254
E fpidduck@wiley.co.uk

Editorial Board
Will Alsop, Denise Bratton, Mark Burry, André Chaszar, Nigel Coates, Peter Cook, Teddy Cruz, Max Fordham, Massimiliano Fuksas, Edwin Heathcote, Michael Hensel, Anthony Hunt, Charles Jencks, Jan Kaplicky, Robert Maxwell, Jayne Merkel, Michael Rotondi, Leon van Schaik, Neil Spiller, Ken Yeang

Contributing Editors
Jeremy Melvin
Jayne Merkel

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except under the terms of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London W1T 4LP, UK, without the permission in writing of the Publisher.

Front cover: Gross.Max, Garden for a Plant Collector at the House for an Art Lover, Glasgow, Scotland, 2005 – © Gross.Max

Requests to the Publisher should be addressed to: Permissions Department, John Wiley & Sons Ltd, The Atrium Southern Gate Chichester, West Sussex PO19 8SQ England

F: +44 (0)1243 770571
E: permreq@wiley.co.uk

Subscription Offices UK
John Wiley & Sons Ltd
Journals Administration Department
1 Oldlands Way, Bognor Regis
West Sussex, PO22 9SA
T: +44 (0)1243 843272
F: +44 (0)1243 843232
E: cs-journals@wiley.co.uk

[ISSN: 0003-8504]

Δ is published bimonthly and is available to purchase on both a subscription basis and as individual volumes at the following prices.

Single Issues
Single issues UK: £22.99
Single issues outside UK: US\$45.00
Details of postage and packing charges available on request.

Annual Subscription Rates 2007
Institutional Rate
Print only or Online only: UK£175/US\$315
Combined Print and Online: UK£193/US\$347
Personal Rate
Print only: UK£110/US\$170
Student Rate
Print only: UK£70/US\$110

Prices are for six issues and include postage and handling charges. Periodicals postage paid at Jamaica, NY 11431. Air freight and mailing in the USA by Publications Expediting Services Inc, 200 Meacham Avenue, Elmont, NY 11003
Individual rate subscriptions must be paid by personal cheque or credit card. Individual rate subscriptions may not be resold or used as library copies.

All prices are subject to change without notice.

Postmaster
Send address changes to 3 Publications Expediting Services, 200 Meacham Avenue, Elmont, NY 11003

C O N T E N T S



4
Editorial
Helen Castle

6
Introduction
Site/Non-Site:
Extending the Parameters in
Contemporary Landscape
Michael Spens

12
From Mound to Sponge:
How Peter Cook Explores
Landscape Buildings
Michael Spens

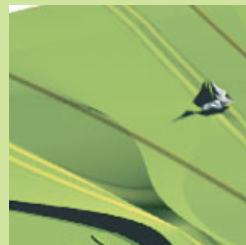
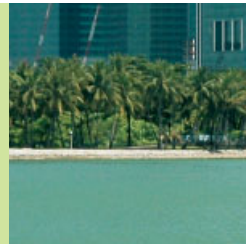
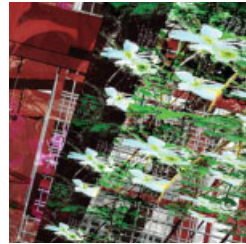
16
New Architectural Horizons
Juhani Pallasmaa

24
Recombinant Landscapes
in the American City
Grahame Shane

36
Urban American Landscape
Jayne Merkel

48
Toronto Waterfront Revitalisation
Sean Stanwick

52
Operationalising Patch Dynamics
Victoria Marshall and
Brian McGrath



60

Recent Works by Bernard Lassus
Michel Conan

66

Deep Explorations Into
Site/Non-Site:
The Work of Gustafson Porter
Michael Spens

76

'Activating Nature':
The Magic Realism of
Contemporary Landscape
Architecture in Europe
Lucy Bullivant

88

Landscapes of the
Second Nature:
Emptiness as a Non-Site Space
Michael Spens

98

City in Suspension: New Orleans
and the Construction of Ground
Felipe Correa

106

Impressions of New Orleans
Christiana Spens

109

Is There a Digital Future
Landscape Terrain?
**Lorens Holm and
Paul Guzzardo**



114+

Interior Eye
Seoul's Interior Landscapes
Howard Watson

120+

Building Profile
Louise T Blouin Institute,
West London
Jeremy Melvin

126+

Practice Profile
The Tailored Home: Housebrand
Loraine Fowlow

134+

Home Run
Dossion in Casier, Italy
Valentina Croci

140+

McLean's Nuggets
Will McLean

142+

Site Lines
Night Pilgrimage Chapel
Laura Moffatt



Alison and Peter Smithson, Upper Lawn Pavilion, Fonthill, Wiltshire, UK, 1959–
View through the patio window to the Fonthill woods to the north, 1995, taken after the Smithsons left Fonthill. The Smithsons' placemaking skills are evident in the domestic tranquility that their architecture here evokes.

Editorial

If the museum was the architectural leitmotif of the turn of the millennium, it has been eclipsed in the noughties by landscape architecture. As guest-editor Michael Spens so aptly brings to our attention in the introduction to this issue, it is the planet's ecological plight and the confinement of people to an ever shrinking natural world that has jettisoned landscape architecture – within a matter of a decade – from a discipline responsible for creating elitist 'Arcadias' to that of much sought-after human 'sanctuaries'. Whether situated on urban, suburban or greenfield sites, these sanctuaries are very much for public consumption (or at least semi-public when attached to an institution or corporation). Certainly they are not like the landscaped estates of the 18th century, land that was partitioned off for the appreciation of all but the smallest ruling elite. Whether the schemes featured here are situated in Beirut, Singapore, New York, Toronto or Birmingham, they engender a sense of place that is precious in its provision of outdoor space for increasingly displaced urban populations, but also enriching in terms of a city's political and socioeconomic kudos. The design for Toronto's waterfront, for instance, led by Adriaan Geuze and West 8, is to reclaim a continuous promenade at the edge of Lake Ontario for which three levels of government have pledged \$20.1 million for the first phase of construction. This is the tail end of the state-sponsored 'Superbuild' programme that has commissioned a college of art from Will Alsop, a substantial reworking of the Art Gallery of Toronto by Frank Gehry, and a makeover of the Royal Ontario Museum by Daniel Libeskind.

It is all too easy to regard landscape architecture as an entirely new episode – severed from any previous tectonic or artistic roots. In his introduction, Spens poignantly corrects this notion by tracing the lineage of landscape architecture's expanded field from the Land Art of the 1970s, which effectively dispelled architecture's obsession with buildings as objects. An understanding of the potential of the landscape art of the picturesque for architecture was, though, latent even in the postwar period. As Jonathan Hill has pointed out, Alison and Peter Smithson were influenced by Nikolaus Pevsner's promotion of the picturesque.¹ For them, the picturesque placed the emphasis on the observer giving meaning. It was about perception and the genius of place making. This is most evident at Fonthill in Wiltshire where the Smithsons bought a cottage in the estate of the ruined folly. The new house they built there was in no way intended to be authentic; one window was displaced to create the garden wall. Life there, though, was described by Alison Smithson as 'Jeromian', evoking with its serenity and air of studious calm Antonello da Messina's *St Jerome in His Study* (National Gallery, c 1475). It was this triumph of atmosphere over form that was prophetic for 21st-century landscape.

Helen Castle

Note

1. I am indebted to Jonathan Hill for his observations in his paper 'Ambiguous Objects: Modernism, Brutalism and the Politics of the Picturesque', presented at the 3rd annual Architectural Humanities Research Association International Conference, St Catherine's College, Oxford, 17–18 November 2006), and also for his help sourcing this fascinating photograph from Georg Aerni.

Site/Non-Site

Extending the Parameters in Contemporary Landscape

As the world teeters on the verge of environmental collapse, landscape architecture has taken on a new significance offering a longed-for sanctuary for our increasingly urbanised lives. Here, in his introduction to the issue, guest-editor **Michael Spens** explains how by taking its impetus from land art, landscape architecture, as an expanded field, transcends the conventional confines of site. This renders it possible to read architecture 'as landscape, or as non-landscape, as building becomes non-site' and the 'site indeed materialises as the work per se'.



To assume a critical standpoint in landscape design today requires the jettisoning of all inherited precepts, necessarily in the global context where environmental design is transformed into a form of disaster management. Our 21st-century confinement, where humanity becomes increasingly entrapped, enclosed and endangered, marks a tragic condition. In the late 1990s, the Swiss landscape designer Dieter Kienast appropriated from a Latin tomb text the phrase *Et in Arcadia, Ego* to illustrate the dilemma facing landscape designers. 'I equate Arcadia with the longing always to be somewhere else. ... I am sure this longing to escape from all our problems exists in all of us.'¹

Sanctuary has now replaced Arcadia as a destination, and without the dreams. Land art has now elaborated the conceptual vacuum of the 1980s, as John Dixon Hunt claims, bringing as process 'its invocation of abstraction and its confidence in its own artistry.'² In this issue of *AD*, Juhani Pallasmaa demonstrates how ideas come to haunt the cultural appropriations of terrain, and in Dixon Hunt's view this representation of land as art is now a fundamental ambition of the landscape architect today. We are wise to abandon all such Arcadian visions, aware as architects, landscape designers and land artists that we inhabit a fragmented disaster zone. New Orleans, post-Katrina, shows how it remains both the butt and the paradigm of this tragic condition.

In the past decade, the role of landscape design has experienced a veritable global transformation. While 'environment' has become the flag of convenience under which a wide variety of proprietorial and intellectual vessels sail, this usage has tacitly recognised the occlusion of buildings with landscape architecture, for its predominant role in designing on a particular site. The recent 2006 International Architectural Biennale in Venice revealed full well the confusion that reigns. Director Ricky Burdett's focus on urban landscapes as such demonstrated the absence of architecture itself from its historically predominant position, notwithstanding such successful ventures as the upgraded spaces in Bogotá. This is a dilemma that has been forming stealthily for most of this decade.

A number of key markers have pointed towards fresh directions for the recovery of the urban landscape. For example, Hiroki Hasegawa's Yokohama Portside Park in Japan (1999) was quick to exploit its waterside location.³ In this city zone of mixed-use development, earthwork berms were designed to run along the full length of the waterfront, thus 'oceanic' identity was merged with the purely urban connotation of the site. Hasegawa created a series of sequential layers that gave the location a strong identity. Very small-scale landscape detailing, such as cobbles, setts (granite paving blocks) and larger pavings, was combined with steel elements, wooden decking and brick open spaces,



Hans Hollein, Museum of Vulcanology, Clermont-Ferrand, France, 2005
Architecture of the underground, looking down into the museum from ground level.

worked in with grassed lawns and mounds. Materiality was clearly conceived and expressed.

A number of the later schemes reviewed in this issue demonstrate similarities with Hasegawa's groundbreaking project; for example, Gustafson and Porter's urban redefinition of Singapore. And the completely landlocked Museum of Vulcanology, by Hans Hollein, in northeastern France,⁴ expounds a philosophy of building a landscape concept on site, where the key elements are located underground. But as Hollein has always said: 'Alles ist architektur'. This building is nothing if not architecture. He also explored well the ramifications of such deep engagement with the site in previous projects, such as the Museum Abteiberg in Mönchengladbach, Germany (1980) and the proposed Guggenheim Museum in Salzburg, Austria (1985).

In 1993, Juhani Pallasmaa, at Aleksanterinkatu (the famous street in the centre of Helsinki), activated this small interstitial site with his own structural inventiveness using new installations, again focusing on their materiality to infuse a degree of poetics into a wind-blown pedestrian space between high blocks.⁵ For a very much more expansive urban space, that designed by Dixon and Jones for London's Exhibition Road ('a key cultural 'entrepôt' adjacent to the Victoria and Albert Museum), there can be no limit, other than the constraints of civic bureaucracies, to the insertion of a wholly different, vehicle-free urban perspective where people can actually jog and walk unimpeded. In a similar mode but on a far smaller scale at Whiteinch Cross, Glasgow Green (1999), Gross.Max coordinated installations of varying materials with carefully judged tree planting⁶ and secluded seating areas.

The urban spaces of Bogotá remain endemically detrimental to normal urban living criteria, and as purely temporary shelters have lasted for decades.

The most dramatic case of the expanded field itself where site and non-site mediate the urban topography is expressed in Peter Eisenman's masterly design for the extensive range of cultural and arts facilities for the historic city of Santiago de Compostela in Spain. Eisenman, who has for many years experimented with orthogonal grid-planning, overlaid the whole site with an undulating carpet thrown over the various functions below, like a new landscape. The non-site characteristics are elegantly exemplified by this wrap of fully grounded digital renderings formulated as an extensive sanctuary for those it welcomes. A project such as this draws together all the preoccupations of contemporary architects, which have tended to be less easily resolved than those of contemporary landscape architects, in this new procedure of transition.

In all of the schemes above, the realm of architectural engagement was conditioned by the realisation that landscape design and architecture are no longer inhibited by outmoded

site contextualities. A way had been opened by contemporary artists and sculptors to liberate space, in terms of an 'expanded field'. As early as 1970 Robert Morris effectively redefined minimalist sculpture in his *Notes on Sculpture II*, in which he 'disposed once and for all with the object as such varying conditions of light and spatial context'.⁷ Site-specifics, as it became known, was equally relevant to architecture and landscape, in both public and private spaces, pursuing a clear minimalism. What was surprising was the amount of time it took for such concepts from art to take root in the associated areas of architecture and of landscape. It was in the same year, too, that Robert Smithson created his Spiral Jetty project in Utah (which actually disappeared owing to variations in the water regime locally, and then equally miraculously reappeared in the bewildering climatic context of the new century).

Sculptors as such resented the onset of minimalism since the majority still wanted to produce works that were wholly

Peter Eisenman Architects, City of Culture, Santiago de Compostela, Spain, 1999-

For this planned City of Culture, Eisenman designed an undulating, shrouded landscape, creating for the complex a new yet coherent morphology that is entirely complementary to the existing historic city.





Robert Smithson, Spiral Jetty, Great Salt Lake, Utah, 1970

This seminal 'site/non-site' installation sculpture in the bereft landscape of the Great Salt Lake exemplified Smithson's groundbreaking realisations of the late 1960s. Dramatically, in the ensuing decades, it actually disappeared below the water surface owing to microclimatic changes in the Great Salt Lake area, but then in 2005 suddenly re-emerged from the water as the lake level again subsided. Smithson may not have anticipated this almost apocryphal occurrence, but it was timely given global preoccupations with climate change and its effects today.

engaged with context. By contrast, site-specific works as well as land art and earthworks, by refusing object 'status', spread out the minimalist involvement with site, and as can now be observed operated more and more effectively as ideological frontrunners for both architecture and landscape. 'Not-architecture' coalesced with 'not-landscape'. A quaternary model of opposites was derived (following earlier binary, Klein group oppositions)⁸ combining site and non-site, succinctly exemplified, as it turned out, by Smithson's Spiral Jetty. An axiomatic structure had emerged. The expansion of the field was permanent.

One of the reasons why all this took time to be accepted by landscape designers was their detachment as a profession. Even more so and equally out on a limb, some architects also had difficulty in abandoning the objective of the site-specific 'signature' building. After all, success for architects has

primarily been measured by the landmark building. In addition, the wave of confusion as to what constituted 'Postmodernism' complicated developments. There were, of course, different Postmodernisms: for example, 'Neo-Con' Postmodernism (which still sputters) was really Anti-Modernist. This was also the dilemma of architects and landscape designers, in what now, in retrospect, reads as a wholly detached field of theory. But of course it was not, or should not have been so.

For the professions of landscape architects and architects, despite pioneering teaching and research at the University of Pennsylvania Graduate School of Fine Arts and the development of a wide-ranging landscape curriculum by the late Ian McHarg, by John Dixon-Hunt and, lately, by James Corner, few schools made the transformation that was required. It is only in the past decade that talent from the such schools, chiefly in the US, has begun to take effect in new practice.



Dixon and Jones Architects, Exhibition Road, London, 2005/06

The project shows how a busy traffic thoroughfare can be diverted into a potential cultural role of major significance.

This issue of *AD* specifically recognises the precedent of such groundbreaking adjustments in art theory, and so to architectural and landscape theory, which engendered the transformation whereby architecture has become readable as landscape, or as non-landscape, as building becomes non-site: site indeed materialises as the work per se. Viewing the work of Bernard Lassus, as described by Michel Conan, and taking in Gross.Max's image on this cover, a contrasting parody emerges of the larger predicament, containing the just perceptible figures of both Mies van der Rohe and Le Corbusier, stumbling in the landscape undergrowth like discarded souls – which is just where unreconstructed

Modernism left society. Lassus and Peter Cook emerge as longstanding frontrunners in the process of re-envisioning the future of landscape design in both the urban and the rural contexts, which today have become inseparable.

In terms of praxis, the two in-depth case studies included in the issue – the current work of Kathryn Gustafson and Neil Porter in Beirut and now proposed for Singapore, and Florian Beigel and Philip Christou in Leipzig and Korea – indicate how the application of this ethos in landscapes of varying narratives, both archaeological and botanical, pursues this quarternary set of objectives, the tapestry of both futures and pasts.

Juhani Pallasmaa's key essay articulates the ways in which architects and landscape designers analyse the pretext for architecture as a median in remembered landscape, and draws out the creative initiatives that persist throughout the visual arts as linkages, so refuting once and for all the separation and superiority of such a domain once assumed by architects for themselves.

Grahame Shane's work on the recombinant city landscape, as described in his article, has far-reaching consequences. He takes up the issue of the American regional cityscape where compressed patches have become rhizomatic assemblages of highly contrasting urban fragments and landscape parcels, the North American city remaining still a patchwork of landscape scenarios and codes – the automobile being itself the device that recodifies the urban-rural relationship. Shane seeks out James Corner's key role, as successor to Ian McHarg at the University of Pennsylvania, and thus of Patrick Geddes, whose ecological research early in the 20th century separated out rural and urban regional systems by layers, a process that was in turn computerised by McHarg. Shane concludes that landscapes were created as a scenographic element in plotting marketing locations in the global media ecology, rather than structurally engaging in a ecological process.

Following up this clear appraisal, Lorens Holm and Paul Guzzardo assess the potential for a digitalisation and re-formulation of the site/non-site parameters in the prevailing urban/rural scenario. They use the metaphor of the Mississippian lost or abandoned city of Cahokin, seen like a laser/net narrative creation for today. The consequent focus on the defoliation of rural cultures and global warming

epitomises, to the authors, a 'style' of today, and accepts the end-result possibility of environmental death. Holm and Guzzardo anticipate a 'digital future landscape terrain', utilising laser/net technology, as a synthesis for a new awareness. Technology is harnessed to good effect, to protect and reformulate landscape ecologies.

But disasters are already upon us. One catastrophe has threatened (but physically also narrowly veered away) Gustafson and Porter's Shoreline plan for the sea edge to the historic core of Beirut City. This threat was entirely man-made. The second catastrophe addressed, with great foreboding but in mind of a future recovery, is described by Felipe Correa: the case of New Orleans. After a long pause (the human consequences were exacerbated by a protracted history of social and physical neglect of 'The Big Easy'), measures are at last being put in place. But meantime, as with the early city of Cahokin, the mystery is how half the population has literally vanished upstate and beyond. Also included in the issue is a short, illustrated eye-witness summary of the after effects of the hurricane by a student, which brings the experience on site for all to recognise in its severity. Is this a paradigm for a new global effect – the disintegration of hope?

The twin surveys of US design and that in Europe by Jayne Merkel and Lucy Bullivant provide at last some encouragement for the 21st century. Landscape designers, architects, engineers and ecologists are increasingly working together to define and implement new solutions, working on the front line.

One thing here is certain, that pretext, context and subtext have all transmogrified, and architects and landscape designers, like the visual artists who have been the pathfinders and scouts for this enterprise, need to seek wholly different solutions. The surveys here offer new, divergent directions, yet both fields are suffused with their own poetics, as Pallasmaa has urged. Poetry is alive and well and the poetics are not least evident in the major new international projects referred to above, the chief abiding hope for salvation in the laser/net world of today.

Notes

1. Dieter Kienast, in Udo Weilacher, *Between Landscape Architecture and Land Art*, Birkhauser (Basel), 1999, pp 152–4.
2. John Dixon Hunt, 'Introduction' in *ibid*, pp 6–7.
3. Michael Spens, *Modern Landscape*, Phaidon (London), 2003, pp 48–51.
4. *Ibid*, pp 92–7.
5. *Ibid*, pp 187–91.
6. *Ibid*, pp 192–7.
7. See Hal Foster, Rosalind Kraus, Yve-Alain Bois and Benjamin Buchloh, *Art Since 1900*, Thames & Hudson (London), 2004, pp 358 and 540–2.
8. *Ibid*, pp 543–4.

Text © 2007 John Wiley & Sons Ltd. Images: p 6 © DigitalGlobe, exclusive distributed for Europe by Telespazio; p 7 © Studio Hollein/Sina Baniahmad; p 8 © courtesy of Eisenman Architects; p 9 © Estate of Robertson Smithson/DACS, London/VAGA, New York, 2007. Image courtesy James Cohan Gallery, New York. Collection: DIA Center for the Arts, New York. Photo Gianfranco Gorgoni; p 10 © English Heritage. NMR; p 11 © Gross.Max



Gross.Max, Whiteinch Cross, Glasgow, Scotland, 1999

A drawn overview of the scheme showing the correlation of various elements. Eelco Hooftman of Gross.Max here placed great importance on the weaving together, in a tight urban environment, of hard and soft landscape elements.



From Mound to Sponge

How Peter Cook Explores Landscape Buildings

While his fellow Archigram designers were hooked into new technologies, Peter Cook was heading his own private investigation into landscape. **Michael Spens** traces Cook's preoccupation with site from the aptly named Mound of 1964 through to his Sponge City earthscape of 1974. The project continues with Cook's recent Oslo Patch.

Peter Cook, Sponge City, 1974

Sponge City, otherwise known as 'the Sponge Building', provided a dramatic and radical intervention in architectural debate when it was first presented by Cook in 1975 at 'Art Net', his architecture gallery in London. The project turned on their heads previous assumptions about the pre-eminence of buildings over the landscape field.



Oslo Patch

Peter Cook



The historical trail blazed by the Archigram group (Peter Cook, Ron Herron, Dennis Crompton, David Green and Warren Chalk, plus Michael Webb) through the 1960s and 1970s was duly recognised and honoured in 2004 by the award of the RIBA Gold Medal of that year. However, Peter Cook has also pursued, perhaps as a separate vein of intellectual therapy or maybe of inspiration, his own trail of engagement with buildings in the landscape, running parallel to the great Archigram arc in the sky. Though extremely interesting, this work has seldom been exposed to a public dazzled by the instant Walking Cities, such as Ron Herron's Cities Moving and Cook's Plug-in City (both 1964), as well as Dennis Crompton's Computer City (1965). But where was the actual landscape, Cook seems uniquely, and privately, to have asked?

Somewhat hidden from posterity, there emerged from Cook a project simply entitled Mound (1964). Cook here followed a clear brief, to sink the building into the ground, as a multi-use centre, covered with grass banks. The brief included 'open space', designated external high-up recreational space with a coffee shop, plaza, shopping malls, a cinema/auditorium, *ad infinitum* as the grass grew overhead. It was, of course, plugged into a monorail, with a station on level 5, and was inherently as inward looking as the Archigram projects had been extrovert and attention seeking. But this was not the mood of the time, however advanced and prescient of contemporary trends the scheme has turned out to be.

His Sponge City project (1974) was another attempt at the philosophy of the building as landscape, or the building as enveloped by natural site coverage. This was presented more dramatically, and exhibited at the privately sponsored 'Art Net' centre (1975) in central London, which Cook developed largely due to his chagrin at not being appointed director of the Institute of Contemporary Arts. Six panels, each 5 metres

(16 feet) long and 2 metres (6.5 feet) high were conjoined in a blaze of coloured relief. Sponge City was, of course, influenced by Cook's teachings during the 1970s at the Architectural Association, where students such as Will Alsop, influenced by Cedric Price, and later by Alvin Boyarsky, were beginning to search out a more 'organic' community than had been portrayed by the mechanistic Archigram dreams now of a decade earlier.

Sponge City represented a dramatic new intervention by Cook in contemporary thinking about cities and their fragments. However prescient and predictive of the directions that land-site-building might follow over the next 30 years, it was constructed in the realisation of Cook's own theories, anticipating first and foremost community living, up to seven storeys high, nestling in a lush and accommodating earthscape. What Cook defined as 'the Sponge condition' was clearly articulated in plan, with a skin, orifices, 'gunge' openings, areas of elasticity and an articulate inner core structure with elevators and a 'latch-on' arrangement between hard-core elements and soft sponge surrounds designed to incorporate 'nests' with the latch-on. Two high mounds were integrated within the 'Sponge', overlapping and incorporating remnant arched colonnades (possibly for historical memory traces) and quasi-classical fenestration. The elevation also included a collage, descriptive of 'lifestyles' and realised electronically in billboard form.

No other late 20th-century design exercise better opened up the potential of 'site/non-site' – by then a main area of interest for artists such as Robert Smithson. Sponge City was an environmental projection that was also quite clearly divergent from conventional thinking – even tangential beyond the pure Archigram mode – in which Cook was exploring and forecasting the many possible ways in which

The Oslo Patch investigates a new way in which a large tract of railway yards and busy railway lines can be inhabited. The location is close to downtown, but rather barren. Behind it lie some inner areas of mixed-use; the other side is almost at the edge of the fjord.

A key interpretation is the avoidance of the boring formula of draping the whole thing with a deck. Rather, there is a lacework of waving strips of housing, allowing a wide variety of drapes, parasites and add-ons. Interlaced with these are a series of vegetated and partially vegetated strips. On other axes are other strips of walkway. Underneath all of this – yet largely exposed – are the rail tracks themselves.

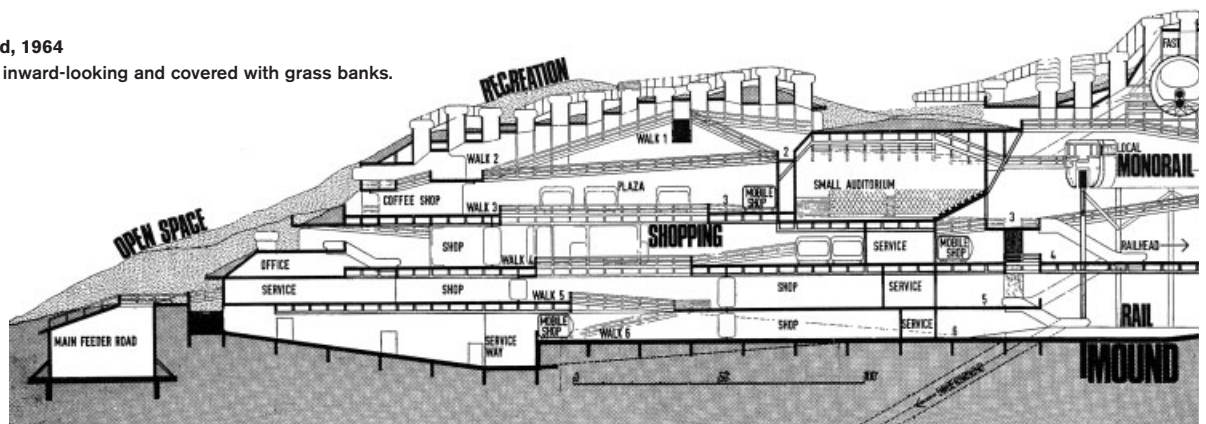
The whole is thus a complex series of layered strips. A canal is brought in under cover into an ‘arcade’ condition. Above are special high-intensity student dwellings. A small sports and music stadium is located within the system. Much of the vegetation works itself up the sides of the housing buildings.

The drawn project parallels a long section through the site and a ‘collage-cartoon’ strip that identifies a series of inspirations from, and references to, Oslo – inflatables, flags, sports, snow, bridges – based on my experience of the city since 1968.



Peter Cook, Mound, 1964

A multi-use centre, inward-looking and covered with grass banks.



cities could be absorbed within the natural environment. Landscape was here represented as a growing, enfolding aspect of urban expansion, an absorbent city conurbation, rather than something appropriated by the city.

In 2004 Sponge City re-emerged, at the Design Museum in London, as the climax to a major Archigram exhibition. Here Cook pointed clearly to an environment of a totally built but growing landscape, forecasting, this time in the 21st century, the ways in which cities, or fragments of cities, will in future be absorbed into the proactive, recombinant landscape. As he wrote recently:

‘The new architecture celebrates the fold-over of contrived surface with grasped surface. The new sensibility is toward terrain rather than patches or pockets. There is even a search for peace without escape – difficult for one to imagine amongst the chatter of the old city. ... For me it becomes even more intriguing if we pull the vegetal towards the artificial and the fertile towards the urban but in the end ... to find the magic of a place discovered, now that’s architecture.’¹

Cook’s prognosis takes society along an irreversible course: firstly, focusing on the ways people relate landscape and architecture; secondly, developing these strategies in terms of ‘making place’; and finally, considering the inherent connections between nature and urbanism. This new thinking is evident in his proposal for the Oslo waterfront (The Patch), in which all of these preoccupations dramatically come together, making place for the capital city in a way hitherto never anticipated – the built elements displaying a strong and organically tectonic structure with an enigmatic shrouding of membrane.

Cook’s work in this area reveals that it is now time to plot the evolution of a relevant 21st-century preoccupation – the idea of conjoining landscape and architecture as a single, collusive environment. ▴

Note

1. In Catherine Spellman (ed), *Re-Envisioning Landscape/Architecture*, Actar (Barcelona), 2003.

Text © 2007 John Wiley & Sons Ltd. Images © Peter Cook



New Architectural Horizons

In recent years, the over-intellectualisation of architecture has detached it 'from its experiential, embodied and emotive ground'. Juhani Pallasmaa provides a template for architecture and landscape design that enables a stronger continuum between our outer and inner landscapes, drawing on historic and modern artistic inspirations alike.

Thinking is more interesting than knowing, but less interesting than seeing.

JW Goethe¹

Landscape as a Portrait

We tend to see our external physical landscape of life and our inner landscape of the mind as two distinct and separate categories. As designers we focus our aspirations and values on the visual qualities of our architectural landscape. Yet, the physical settings that we build constitute an uninterrupted continuum with our inner world. As the cultural geographer PF Lewis writes in his introduction in *Interpretation of Ordinary Landscapes*: 'Our human landscape is our unwitting autobiography, reflecting our tastes, our values, our aspirations, and even our fears, in tangible, visible form. We rarely think of landscape that way, and so the cultural record we have written in the landscape is liable to be more truthful than most autobiographies, because we are less self-conscious about how we describe ourselves.'²

Jorge Luis Borges gives a poetic formulation to this interaction between the world and the self: 'A man sets himself the task of portraying the world. Over the years he fills a given surface with images of provinces and kingdoms, mountains, bays, ships, islands, fish, rooms, instruments, heavenly bodies, horses and people. Shortly before he dies he discovers that this patient labyrinth of lines is a drawing of his own face.'³

We urgently need to understand that we do not live separately in physical and mental worlds – these two projections are completely fused into a singular existential reality. As we design and build physical structures, we are simultaneously and essentially creating mental structures and realities. Regrettably, we have not developed much understanding of and sensitivity for the interaction of our outer and inner landscapes.

Architecture: An Impure Discipline

The complexity of the phenomenon of architecture results from its 'impure' conceptual essence as a field of human endeavour. Architecture is simultaneously a practical and a

metaphysical act – a utilitarian and poetic, technological and artistic, economic and existential, collective and individual manifestation. I cannot, in fact, name a discipline possessing a more complex and essentially more conflicting grounding in the lived reality and human intentionality. Architecture is essentially a form of philosophising by means of its characteristics: space, matter, structure, scale and light, horizon and gravity. Architecture responds to existing demands and desires at the same time so that it creates its own reality and criteria – it is both the end and the means. Moreover, authentic architecture surpasses all consciously set aims and, consequently, is always a gift of imagination and desire, willpower and foresight.

The Multiplicity of Theoretical Approaches

Over the past few decades, numerous theoretical frameworks originating in various fields of scientific enquiry have been applied to the analyses of architecture: perceptual and gestalt psychologies; anthropological and literary structuralisms; sociological and linguistic theories; analytical, existential, phenomenological and deconstructionist philosophies; and, more recently, cognitive and neurosciences, to name the most obvious. We have to admit that our discipline of architecture does not possess a theory of its own – architecture is always explained through theories that have arisen outside its own realm. In the first and the most influential theoretical treatise in the history of Western architecture, Vitruvius acknowledged already in the first century BC the breadth of the architect's discipline and the consequent interactions with numerous skills and areas of knowledge: 'Let him (the architect) be educated, skilful with the pencil, instructed in geometry, know much history, have followed the philosophers with attention, understand music, have some knowledge of medicine, know the opinions of the jurists and be acquainted with astronomy and the theory of heavens.'⁴ Vitruvius provides careful reasons why the architect needs to master each of these fields of knowledge. Philosophy, for example, 'makes an architect high-minded and not self-assuming, but rather renders him courteous, just and honest without avariciousness'⁵

Giorgione, *The Tempest*, c 1508

Giorgione reveals a site/non-site panorama occupying the middle ground, but leading the eye of the viewer right out of the painting, with the figures almost floating in the foreground, somehow detached from the storm-bound scene beyond.

The Frenzy of Theorising

In our time, however, theoretical and verbal explanations of buildings have often seemed more important than their actual design, and intellectual constructs more important than the material and sensuous encounter of the built works. The uncritical application of various scientific theories to the field of architecture has often caused more confusion than a genuine understanding of its specific essence. The over-intellectual focus of these approaches has detached architectural discourse from its experiential, embodied and emotive ground – intellectualisation has pushed aside the common sense of architecture. The interpretation of architecture as a system of language, for example, with given operational rules and meanings, gave support to the heresy of Postmodernist architecture. The view of architectural theory as a prescriptive or instrumental precondition for design should be regarded altogether with suspicion. I, for one, seek a dialectical tension and interaction between theory and design practice instead of a causal interdependence.

The sheer complexity of any architectural task calls for an embodied manner of working and a total introjection – to use a psychoanalytical notion – of the task. The real architect works through his or her entire personality instead of manipulating pieces of pre-existing knowledge or verbal rationalisations. An architectural or artistic task is encountered rather than intellectually resolved. In fact, in genuine creative work, knowledge and prior experience has to be forgotten. The great Basque sculptor Eduardo Chillida – an artist who illustrated Martin Heidegger's book *Die Kunst und der Raum* (1969), by the way – once said to me in conversation: 'I have never had any use for things I have known before I start my work.'⁶ Joseph Brodsky, the Nobel poet, shares this view in saying: 'In reality (in art and, I would think, science) experience and the accompanying expertise are the maker's worst enemies.'⁷

Architecture as a Pure Rationality

The seminal artistic question of the past decades has been 'What is art?' The general orientation of the arts since the late 1960s has been to be increasingly entangled, in fact identified, with their own theories. The task of architecture has also become a concern since the late 1960s, first through the leftist critique, which saw architecture primarily as an unjust use of power, redistribution of resources and social manipulation. The present condition of excessive intellectualisation reflects the collapse of the social role of architecture and the escalation of complexities and frustrations in design practice. The current uncertainties concern the very social and human role of architecture as well as its boundaries as an art form.

With these observations an opposition emerges: architecture as a subconscious and direct projection of the architect's personality and existential experience, on the one hand, and as an application of disciplinary knowledge on the other. This is also the inherent dualism of architectural education.

Science and Art

The relation between scientific and artistic knowledge, or instrumental knowledge and existential wisdom, requires some consideration in this survey. The scholarly and literary work of the unorthodox French philosopher Gaston Bachelard, who has been known to the architectural profession since his influential book *The Poetics of Space* was first published in French in 1958, mediates between the worlds of scientific and artistic thinking. Through penetrating philosophical studies of the ancient elements – earth, fire, water and air, as well as dreams, daydreams and imagination – Bachelard suggests that poetic imagination, or 'poetic chemistry',⁸ as he says, is closely related to prescientific thinking and an animistic understanding of the world. In *The Philosophy of No: A Philosophy of the New Scientific Mind*, written in 1940⁹ during the period when his interest was shifting from scientific phenomena to poetic imagery (*The Psychoanalysis of Fire* was published two years earlier), Bachelard describes the historical development of scientific thought as a set of progressively more rationalised transitions from animism through realism, positivism, rationalism and complex rationalism to dialectical rationalism. 'The philosophical evolution of a special piece of scientific knowledge is a movement through all these doctrines in the order indicated,' he argues.¹⁰

Animated Images

Significantly, Bachelard holds that artistic thinking seems to proceed in the opposite direction – pursuing conceptualisations and expression, but passing through the rational and realist attitudes towards a mythical and animistic understanding of the world. Science and art, therefore, seem to glide past each other, moving in opposite directions.

In addition to animating the world, the artistic imagination seeks imagery able to express the entire complexity of human existential experience through singular condensed images. This paradoxical task is achieved through poeticised images, ones that are experienced and lived rather than rationally understood. Giorgio Morandi's tiny still lifes are a stunning example of the capacity of humble artistic images to become all-encompassing metaphysical statements. A work of art or architecture is not a symbol that represents or indirectly portrays something outside itself – it is a real mental image object, a complete microcosm that places itself directly in our existential experience and consciousness.

Although I am here underlining the difference between scientific and artistic inquiry, I do not believe that science and art are antithetical or hostile to each other. The two modes of knowing simply look at the world and human life with different eyes, foci and aspirations. Stimulating views have also been written about the similarities of the scientific and the poetic imagination, as well as the significance of aesthetic pleasure and embodiment for both practices.



Edward Hopper, *Second Storey Sunlight*, 1960

Artistic and architectural works are at the same time both specific and universal. Here, the figures and their setting are fully intertwined. Landscape, house and human figures are charged with a sense of mystery, drama and anticipation.

The Power of Poetic Logic

The logically inconceivable task of architecture to integrate irreconcilable opposites is fundamental and necessary. In fulfilment of this, the essential aims of architecture are bound to be mediation and reconciliation: the essence of an authentic architectural work is the embodiment of mediation and reconciliation. Architecture negotiates between differing categories and oppositions. Architecture is conceivable in this contradictory task only through understanding any design as a poetic manifestation – poetic imagery is capable of overcoming contradictions of logic through its polyvalent and synthetic imagery. As Alvar Aalto once wrote: ‘In every case [of creative work] one must achieve the simultaneous solution of opposites. ... Nearly every design task involves tens, often hundreds, sometimes thousands of different contradictory elements, which are forced into a functional harmony only by man’s will. This harmony cannot be achieved by any other means than those of art.’¹¹

The Architecture of Painting

Speaking of the evolution of Modern architecture, Aalto often said: ‘But it all began in painting.’ In 1947 he wrote: ‘abstract art forms have brought impulses to the architecture of our time, although indirectly, but this fact cannot be denied. On the other hand, architecture has provided sources for abstract art. These two art forms have alternately influenced each other. There we are – the arts do have a common root even in our time.’¹²

Painting is close to the realm of architecture, particularly because architectural issues are so often – or I should say, unavoidably – part of the subject matter of painting, regardless of whether we are looking at the representational or abstract. In fact, this distinction is altogether highly questionable, because all meaningful art is bound to be representational in the existential sense.

Late medieval and early Renaissance paintings are particularly inspiring for an architect because of the constant presence of architecture as a subject matter. The early



Giovanni Bellini, *The Madonna of the Meadow*, c 1500

Architecture and landscape are 'the constant presence' in this typical example of the Renaissance figure in 'ground'. The ground is, however, highly detailed, with minor but ominous traces of discordant potential, such as the trees distorted by the wind, and nearby a watching black rook. The buildings in the rear ground are medieval and defensive rather than agrarian or even domestic, as one might expect. The innocence and humanity of the key figures is nonetheless reassuring.

painters' interest in architecture seems to be related with the process of the differentiation of the world and individual consciousness, the birth of the first personal pronoun 'I'. The smallest of details suffices to create the experience of architectural space: a framed opening or the mere edge of a wall provides an architectural setting. The innocence and humanity of this painterly architecture, the similarity of the human and the architectural figure, is most comforting, touching and inspiring – this is a truly therapeutic architecture. The best lessons in domesticity and the essence of home are 17th-century Dutch paintings. In these paintings, buildings are presented almost as human figures – the mirrored images of the house and the human body were introduced into modern thought by the psychologist and analyst CG Jung and have been expressed by countless artists.

I cannot think of a more inspiring and illuminating lesson in architecture than that offered by early Renaissance paintings. If I could ever design a single building with the tenderness of Giotto's, Fra Angelico's or Piero della Francesca's houses, I would feel that I had reached the very purpose of my life.

The interactions between Modern art and Modern architecture are well known and acknowledged, but I have not yet seen an architecture inspired by JMW Turner, Claude Monet, Pierre Bonnard or Marc Rothko, for example. Painting and other art forms have surveyed dimensions of human emotion and spirit unknown to architects, whose art conventionally tends to respond to rationalised normality. The work of numerous contemporary artists – Robert Smithson, Gordon Matta-Clark, Michael Heizer, Donald Judd, Robert Irwin, Jannis Kounellis, Wolfgang Leib, Ann Hamilton, James Turrell

and James Carpenter, among others – is closely related with the essential issues of architecture. These are all artists whose works have inspired architects and will continue to do so.

We can also study principles of artistic thinking and making in the writings of many of these artists. Henry Moore, Richard Serra, Donald Judd, Agnes Martin, James Turrell, all of whom write perceptively on their own work, have been meaningful for me. Artists tend to write more directly and sincerely of their work than architects, who frequently cast an intellectualised smoke screen across their writings.

The Architecture of Cinema

In its inherent abstractness, music has historically been regarded as the art form closest to architecture. Cinema is, however, even closer to architecture than music, not solely because of its temporal and spatial structure, but fundamentally because both architecture and cinema articulate lived space. These two art forms create and mediate comprehensive images of life. In the same way that buildings and cities create and preserve images of culture and particular ways of life, cinema projects the cultural archaeology of both the time of its making and the era that it depicts. Both forms of art define dimensions and essences of existential space – they both create experiential scenes for life situations.

Film directors create pure poetic architecture, which arises directly from our shared mental images of dwelling and domesticity as well as the eroticism or fear of space. Directors such as Andrey Tarkovsky and Michelangelo Antonioni have created a moving architecture of memory, longing and melancholy, one that assures us that the art form of architecture is also capable of addressing our entire emotional range, from grief to ecstasy.

Buildings are mental instruments, not simply aestheticised shelters. The essence of architecture is essentially beyond architecture. The poet Jean Tardieu asks: 'Let us assume a wall: what takes place behind it?'¹³ but we architects rarely bother to imagine what happens behind the walls we have erected.

As we read a poem, we internalise it, and we become the poem. As Brodsky puts it: 'A poem, as it were, tells the reader, "Be like me".'¹⁴ When I have read a book and return it back to its place on the bookshelf, the book, in fact, remains in me. If it is a great book, it has become part of my soul and my body. The Czech writer Bohumil Hrabal gives a vivid description of this act of reading: 'When I read, I don't really read; I pop a beautiful sentence in my mouth and suck it like a fruit drop or I sip it like a liqueur until the thought dissolves in me like alcohol, infusing my brain and heart and coursing on through the veins to the root of each blood vessel.'¹⁵ In the same way, paintings, films and buildings become part of us. Artistic works originate in the body of the maker and they return back to the human body as they are being experienced.

The Dualistic Essence of Architecture

My response to the question of whether architecture is or is not an art form is determined: architecture is an artistic

expression and it is not an art, simultaneously. Architecture is an art in its essence as a spatial and material metaphor of human existence, but it is not an art form in its second nature as an instrumental artefact of utility and rationality. This duality is the very essence of the art of architecture. This dual existence takes place on two separate levels of consciousness, or aspiration, in the same way that any artistic work has its existence simultaneously as a material, disciplinary and concrete execution, on the one hand, and as a spiritual, unconsciously conceived and perceived imagery, which carries us to the world of dreams, desire and fear, on the other. Architecture can be understood only through this very duality. 'A painter can paint square wheels on a cannon to express the futility of war. A sculptor can carve the same square wheels. But an architect must use round wheels,' as Louis Kahn once said.¹⁶

Ontological Ground

The art form of architecture is born from the purposeful confrontation and occupation of space. It begins by the act of naming the nameless and through perceiving formless space as a distinct figure and specific place. I wish to emphasise the adjective 'purposeful' – utilitarian purposefulness is a constitutive condition of architecture. The task of architecture, however, lies as much in the need for metaphysical grounding for human thought and experience as the provision of shelter from a raging storm.

Architecture as Collaboration

Architecture, as with all artistic work, is essentially the product of collaboration. Collaboration occurs in the obvious and practical sense of the word, such as in the interaction with numerous professionals, workmen and craftsmen, but collaboration occurs as well with other artists, architects and



Andrey Tarkovsky, 'Mirror' (film still), 1975

This shows the old family house in which the director had spent much of his youth. To meet the architecture of memory accurately, Tarkovsky had the house painstakingly reconstructed (it had been destroyed by fire – another memory). In his films he sought to address the entire emotional range of man, ranging from grief to ecstasy.

landscape architects, not only one's contemporaries and the living, but perhaps more importantly with predecessors who have been dead for decades or centuries. Any authentic work is set into the timeless tradition of artistic works and the work is meaningful only if it presents itself humbly to this tradition and becomes part of that continuum. Countless works made at all times, but particularly today, are too ignorant, disrespectful and arrogant to be accepted as constituents of the esteemed institution of tradition.

Aestheticisation

The Modern Movement arrived occasionally at architecture's boundary as the consequence of aestheticisation, seeing architecture as a pure art. Particularly in our time, however, the process of aestheticisation has produced projects and buildings that have moved outside the territory of architecture entirely and turned into objects of art – frequently poor art, at that.

Current philosophical discourse has reintroduced the issue of beauty and ethics. The writings of Elaine Scarry, such as her small, elegant book *On Beauty and Being Just*, exemplify this new orientation of ethics.¹⁷ I fully agree with Scarry's argument for the primacy of aesthetic judgement – an idea that has been also condensed into powerful formulations by Joseph Brodsky: 'Man is an aesthetic being before becoming an ethical being,'¹⁸ and: 'Aesthetics is the mother of ethics.'¹⁹ The poet even makes a thought-provoking statement of the evolutionary role of beauty: 'The purpose of evolution, believe it or not, is beauty, which survives it all and generates truth simply by being a fusion of the mental and the sensual.'²⁰

At the same time that we see the constitutive value of aesthetic aspiration and judgement, we should be critical of the dubious practice of aestheticisation. In our consumer culture, aestheticisation has turned into the canniest strategy



Michelangelo Antonioni, *Autostrada Landscape*, from 'Cronaca di un amore', 1961
Here the director sought to convey the alienation of the road, reinforced by the two massive beverage mock-ups for advertising that create a bleak and contrasting scene for the love-torn participants.

of manipulation: violence, human suffering and inequality are aestheticised today as well as politics and war. Indeed, our very lives are turning into aestheticised products that we consume as nonchalantly as the newest material products of fashion.

Beauty is absolutely an inseparable part of the notion of art, but it has a complex nature. Joseph Brodsky even dares to criticise Ezra Pound for his tendency to aim directly and solely at beauty: 'The *Cantos*, too, left me cold, the main error was the old one: questing after beauty. For someone with such a long record of residence in Italy, it was odd that he hadn't realized that beauty can't be targeted, that it is always a by-product of other, often very ordinary pursuits.'²¹

In our craft of architecture, also, seductive beauty and aesthetic appeal have regrettably turned into a conscious and explicit aim. In the very same manner as in poetry, enchanting and touching beauty in architecture is a result of other concerns: a desire for simplicity, precision or truthfulness, and especially for the experience of life and of being human in the middle of other human beings. Every great building opens a view into the essence of the human condition and, most importantly, to an idealised and better world. This was the message of Alvar Aalto in his address to Swedish architects in 1957: 'Architecture has a second thought ... the idea of creating a Paradise. That is the only purpose of our buildings ... we wish to build a Paradise on earth for people.'²²

Synthetic Landscape

In one of his earliest essays, Alvar Aalto praises the image of an Italian town at the back of Andrea Mantegna's painting *Christ in the Garden* (1460), and describes it as a 'synthetic landscape' or 'an architect's vision of the landscape'.²³ The idea of a man-made synthetic landscape, an architectural microcosm, was, in fact, the guiding idea throughout Aalto's life, and all his buildings can be viewed as man-made microcosms steeped in their landscape settings.

The architectural profession at large might do better if we began to think of our buildings as microcosms and synthetic landscapes instead of seeing them as aestheticised objects. Architecture in our time has been concerned with landscape merely as a formal and visual counterpoint, or a sounding board for architectural forms. Today, however, buildings are increasingly beginning to be understood as processes that unavoidably go through phases of functional, technical and cultural change as well as processes of wear and deterioration. The fundamentally time-bound dynamic and open-ended nature of landscape architecture can provide meaningful lessons for a 'weak' or 'fragile' architecture that acknowledges vulnerability instead of obsessively fighting against time and change as architecture traditionally has done.²⁴

The inevitable and overdue ecological perspective, a conscious and controlled interaction of nature's systems and human lifestyles and constructions also calls for strategies that have been essential ingredients of landscape architecture. The nature-architecture relationship must by necessity be expanded



Is there a Paradise? Andy Goldsworthy, Dandelion flowers pinned with thorns to wind-bent willowherb stalks, laid in a ring, held above bluebells with forked sticks, Yorkshire Sculpture Park, West Bretton, UK, 1987
Goldsworthy here epitomises the possibility of the existence of Paradise via the natural beauty of his representation, its temporality, and the complexity of its structure. 'We wish to build a Paradise on earth for people.' – Alvar Aalto in 'The Paradise Idea of Architects', 1957. See note 22.

beyond aesthetic considerations to acknowledge the reality of physical and biological processes. New areas of research, such as bionics and biomimicry in areas that range from material sciences to the development of novel computers and medical cures, are all early examples of the necessary integration of natural and man-made systems beyond visual assimilation and aesthetic inspiration. Here the study of zoology, and molecular chemistry as well as the philosophy of landscape architecture can offer significant stimuli for us architects. ▽

This essay is an abbreviated version of a lecture delivered at the Association of Collegiate Schools of Architecture (ACSA) International Conference, Helsinki, August 2003.

Notes

1. Source of the quote unidentified. The author received it from Steven Holl in the early 1990s.
2. Peirce F Lewis, 'Axioms for reading the landscape', in DW Meinig (ed), *The Interpretation of Ordinary Landscapes*, Oxford University Press (New York), 1979.
3. Jorge Luis Borges, 'Epilogue from the Maker', *Selected Poems*, Penguin Books (New York and London), 2000, p 143.
4. Vitruvius (Marcus Vitruvius Pollio), *The Ten Books on Architecture* (De Architectura Libri Decem), Dover Publications, Inc (New York), 1960, pp 5–6.
5. *Ibid*, p 8.
6. Dinner conversation between the sculptor and the writer in Helsinki, 1987.
7. Joseph Brodsky, 'A cat's meow', *On Grief and Reason*, Farrar, Strauss and Giroux (New York), 1995, p 302.
8. Gaston Bachelard, *Water and Dreams: An Essay on the Imagination of Matter*, The Pegasus Foundation (Dallas, TX), 1983, p 46.
9. Gaston Bachelard, *The Philosophy of No: A Philosophy of the New Scientific Mind*, The Orion Press (New York), 1968.
10. *Ibid*, p 16.

11. Alvar Aalto, 'Taide ja tekniikka' [Art and Technology], lecture, Academy of Finland, 3 October 1955, in Göran Schildt, *Alvar Aalto: Luonnoksia*, Otava (Helsinki), 1972, pp 87–8 (trans Juhani Pallasmaa).
12. Kirmo Mikkola, *Aalto*, Gummerus (Jyväskylä), 1985, pp 42–5. The origin of the quote is unidentified (trans Juhani Pallasmaa).
13. As quoted in Georges Perec, *Tiloja avaruuksia* [Espaces d'espaces], Lohi-Kirjat (Helsinki), 1992, p 72.
14. Joseph Brodsky, 'An immodest proposal' in *On Grief and Reason*, op cit, p 206.
15. Bohumil Hrabal, *Too Loud a Solitude*, Harcourt, Inc (San Diego, New York, London), 1990, p 1.
16. Louis Kahn, 'Form and design' (1960), as published in Louis I Kahn and Alessandro Latour, *Writings, Lectures, Interviews*, Rizzoli (New York), 1991, p 116.
17. Elaine Scarry, *On Beauty and Being Just*, Princeton University Press (Princeton, NJ), 1999.
18. Brodsky, 'An immodest proposal', op cit, p 208.
19. *Ibid*.
20. *Ibid*, p 207.
21. Joseph Brodsky, *Watermark*, Penguin Books (London), 1992, p 70.
22. Alvar Aalto, 'Arkkitehtien paratiisijätus' [The Paradise Idea of Architects], lecture given in Malmö, Sweden, in 1957, in Göran Schildt, op cit, pp 101–02.
23. Alvar Aalto, presumably a manuscript for a book on the art of town planning that he was planning to write. Published in Göran Schildt (ed), *Alvar Aalto in His Own Words*, Otava (Helsinki), 1997, p 174.
24. For a discussion of the idea of a 'fragile architecture', see: Juhani Pallasmaa, 'Hapticity and time', in Juhani Pallasmaa and Peter MacKeith (eds), *Encounters: Architectural Essays*, Rakennustieto Oy (Helsinki), 2005, pp 320–33.

Text © 2007 John Wiley & Sons Ltd. Images: p 16 © Galleria dell' Accademia, Venice, Italy/Cameraphoto Arte Venezia/The Bridgeman Art Library; p 19 © Whitney Museum of American Art, New York; purchase, with funds from the Friends of the Whitney Museum of American Art 60.54. Photo by Steven Sloman; p 20 © 2001 National Gallery, London. All rights reserved; p 21 © Andrey Tarkovsky and Olga Surkova 1986; p 22 © Movie Magazine Ltd 1968; p 23 © Yorkshire Sculpture Park



Recombinant Landscapes in the American City



Richard Rogers, SHoP and Ken Smith Landscape Architect, Peck Slip, NYC Planning Department East River Waterfront Study, 2005
 Reconditioning downtown for new residential use. Peck Slip, a large, paved, industrial waterfront plaza in downtown New York, becomes a park for new local residents in Ken Smith's landscape design.

How are urban actors, such as landscape designers, community groups, developers and local politicians, actively restructuring their environments to meet the challenges of the American city in the new global context? Grahame Shane outlines the approaches to landscape that have been emerging since the mid-20th century and are set to recombine urban assemblages whether they are located in historic city centres, postindustrial waterfronts or suburban sprawl.

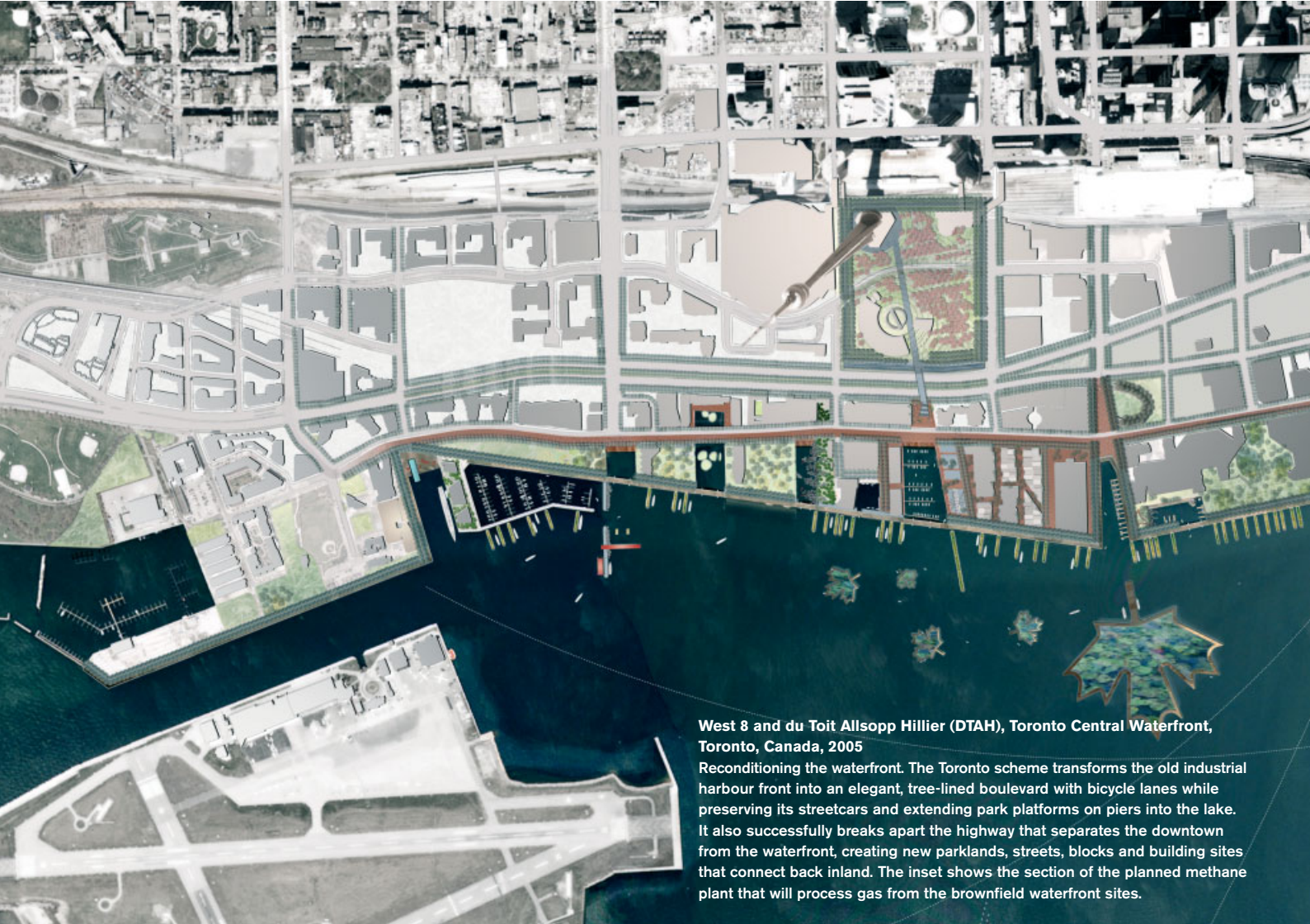
Leo Marx's *The Machine in the Garden* (1964) describes America's shift from an abundant paradise of natural resources to a dispersed pattern of industry across small-town and rural America before the age of mass production and the development of the modern metropolis. American cities now face the challenge of deindustrialisation, shrinking cities, the increasing scarcity of energy, global warming and relatively little population growth.

The original enclaves at the core of American cities have faced particular problems, becoming unsuccessful business districts that must be re-equipped and redesigned for a new residential life. The old waterfronts of coastal cities at river estuaries that once served as essential portals for trade and industry are now being transformed into parks, armatures for leisure and pleasure activities. And the mountains, valleys, forests and fields of the hinterlands of these cities that once provided raw materials and agricultural products have now become essential components of a multicentred, networked city, often encompassing a huge territory with many millions of occupants.

As energy becomes more expensive, city form in the American landscape will mutate once again. What might this new recombinant urban landscape look like as urban actors begin to restructure their environment to meet the challenge of the contemporary Network City?

Recombinant Landscapes in the Historic City

Like their European counterparts, American landscape professionals have played an important role in the recoding of historic city streets as new urban attractors, successfully competing with suburban malls and megacentres. The prominent American mall designer Victor Gruen tried this strategy in the 1950s, but was unsuccessful – for example at Rochester Plaza (1956) in upstate New York. However, there was a huge qualitative leap from Gruen's impoverished, pedestrianised main street to Lawrence Halprin's landscape cascading down through Ghirardelli Square warehouse complex, San Francisco (1962–5). And Benjamin Thompson's Quincy Market (1976) in Boston, the first downtown festival mall, pushed this logic further. Cooper Eckstadt's design for



West 8 and du Toit Allsopp Hillier (DTAH), Toronto Central Waterfront, Toronto, Canada, 2005

Reconditioning the waterfront. The Toronto scheme transforms the old industrial harbour front into an elegant, tree-lined boulevard with bicycle lanes while preserving its streetcars and extending park platforms on piers into the lake. It also successfully breaks apart the highway that separates the downtown from the waterfront, creating new parklands, streets, blocks and building sites that connect back inland. The inset shows the section of the planned methane plant that will process gas from the brownfield waterfront sites.

new landscaped streets in Battery Park City (1978) drew on the New York tradition of Olmsted and Vaux's picturesque Central Park and Brooklyn's Esplanade. In Battery Park, landscape architect Lawrence Olin created a new, Retro-Modern street hybrid: his pedestrianised esplanade was a huge commercial success and set in motion the recoding of the New York industrial waterfront.

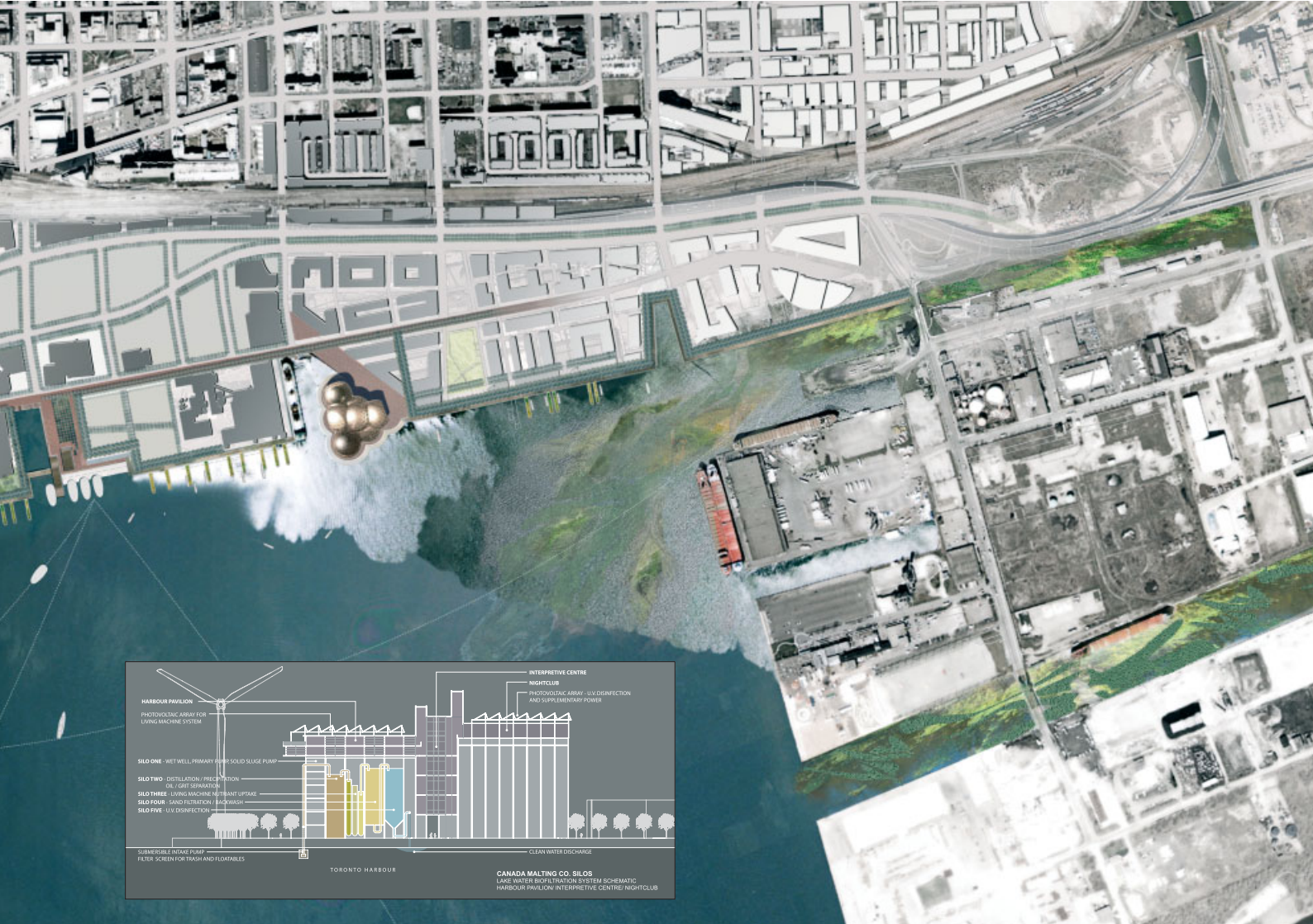
Historic America downtowns now represent tiny patches within a much larger regional landscape, with many, such as Detroit, struggling to survive as a result of disinvestment in their centres and vast, automobile-based, peripheral expansion beyond their city limits. But there have been some spectacular landscaped comebacks, as in downtown Los Angeles, given up for dead by Reyner Banham in 1971. Here, the Pei, Cobb, Fried Library Tower (1990) looms over Halprin's cascading Bunker Hill (Spanish) Steps (1990) that follow a curving waterfall descending from the reconditioned LA public library gardens. The steps lead down to the South Hope Street armature of the 'New Downtown' (originally to be landscaped by Halprin). Nearby, on Bunker Hill, at the Civic Center, where the surrounding empty office towers have been converted to residential use, Melinda Taylor and Lawrence Reed Moline will design both the widened sidewalks of the tree-lined Grand

Avenue in front of Frank Gehry's Disney Hall (2003) and also the western garden terraces behind, overlooking the Pacific.

On the East Coast in downtown Providence, Rhode Island, a similar landscaped transformation is taking place. The city uncovered the previously buried Woonasquatucket River to create an attractive canyon of landscaped terraces going down to the riverside, WaterPlace (1994), which hosts the WaterFire festival (a free public arts event with torches and riverboats held several times a month between May and October). This public re-imagining of the activities of the city centre as a 'festival place' led to further investment, as industrial lofts and office blocks changed to artists' and then residential uses, making the downtown area appear safe and attractive for the enormous Providence Place Mall (1999) beside the river, the AmTrak station and the I-90 East Coast highway.

Recombinant Landscapes in the Postindustrial Machine City

Many American cities are reconstructing their historic business-district enclaves to cater for new residential uses, adding new paths through complex three-dimensional patches of landscaped amenities as commuters rebel against long commutes and high oil prices. In the 1990s, inner-city armatures of secondary centres, like North Michigan Avenue,



Chicago, showed how a standard industrial grid street could be converted into an attractive consumer paradise, a flower-and tree-lined boulevard of high-density, mixed-use towers (part office, part apartments, part hotel, with malls and department stores in their bases). Midtown New York has such a mixed-use, rhizomatic, three-dimensional armature along Park Avenue, including the Rockefeller Center roof gardens and pedestrianised streets (from the 1930s), and Trump Tower (1983) with its waterfall, public roof garden and connection to the bamboo-filled atrium of the IBM Building (1983). This mixed-use, three-dimensional pattern is spreading back to downtown New York, where many empty office skyscrapers have become residential. Here, Richard Rogers and SHoP, with landscape architect Ken Smith, will transform the dreary underside of the raised Roosevelt Highway into a stretched, linear urban park armature beside the East River.

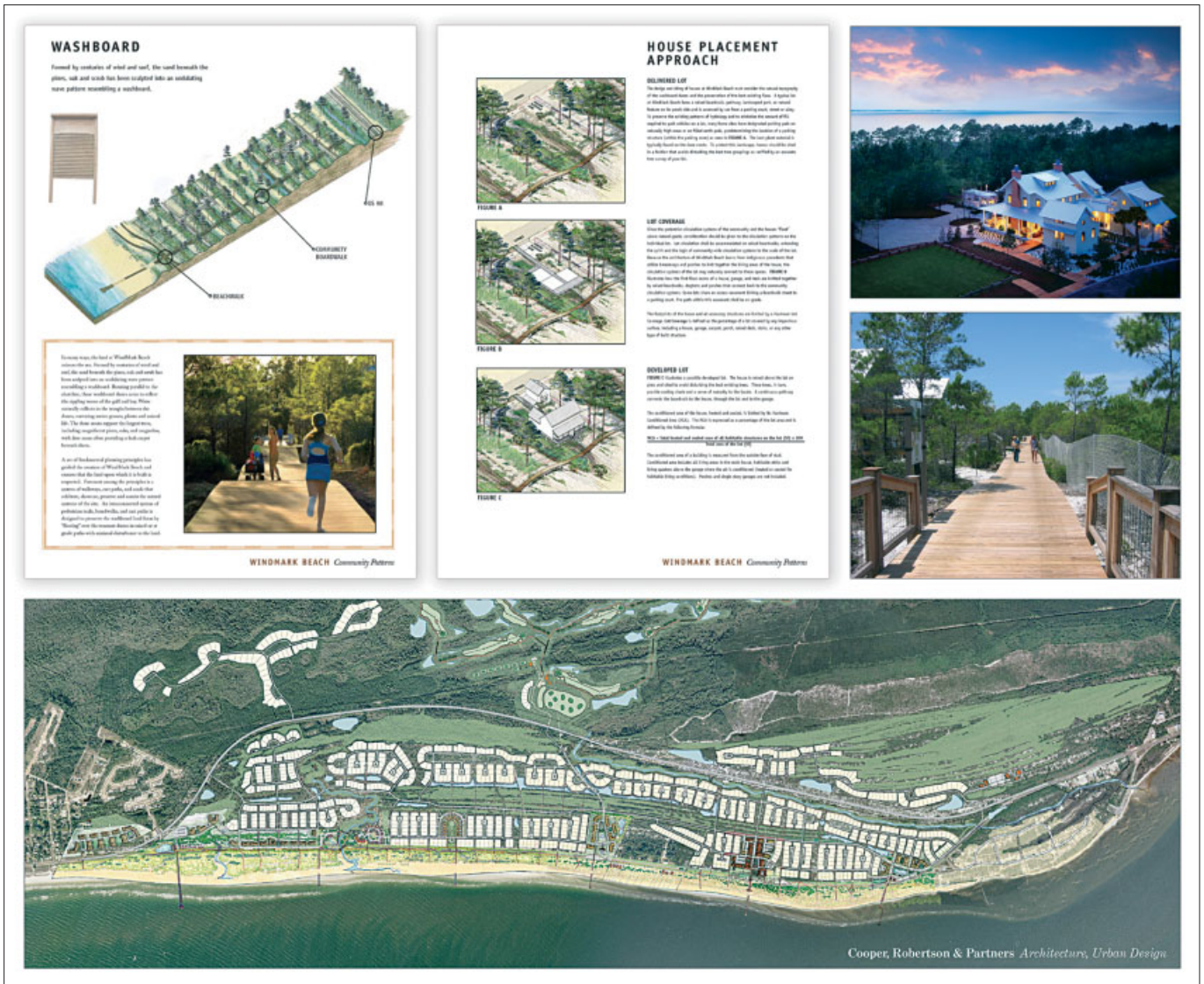
The recoding of the docks as linear waterfront park armatures has offered many American cities the opportunity to rediscover their buried heritage, creating new landscaped networks. Portland, Oregon, began its waterfront park in 1974 by tearing up the Eastbank Freeway. In New York, community activists defeated the proposed Westway (1975) in court for ecological reasons in 1985. Quennell Rothschild & Partners (in

a joint venture with Mathews-Nielsen), then designed the 22-hectare (55-acre) linear Hudson River Park with 15 piers, which was proposed in 1988 and finally approved in 1998. In this project, each pier is treated separately as a platform for different events, while the long boulevard and parallel park armature is a stretched variation of Battery Park's pedestrian esplanade. Further north, Thomas Balsley designed Riverside Park South (1992) to link to Olmsted's Riverside Park.

In San Francisco, a waterfront, palm-lined grand boulevard armature leading to the Ferry Building (with its farmers' market) replaced the 1960s Embarcadero Freeway after the Loma Prieta earthquake of 1989. Cardinal-Hardy redesigned Montreal's Vieux-Port industrial waterfront as a park in 1990/92. And in the mid-1990s Chan Krieger designed a new linear Rose Kennedy Park in Boston, interspersed with building sites, to cover the Big Dig (completed 2005).¹

The linear waterfront armature landscape list could easily be extended; for example, Adriaan Geuze and West 8 have recently won the competition for the new Toronto waterfront.

Few American cities have had the political will or administrative skill to plan the coordination of the emerging residential downtown enclaves and waterfront park armatures as a network, as in Vancouver's consultative

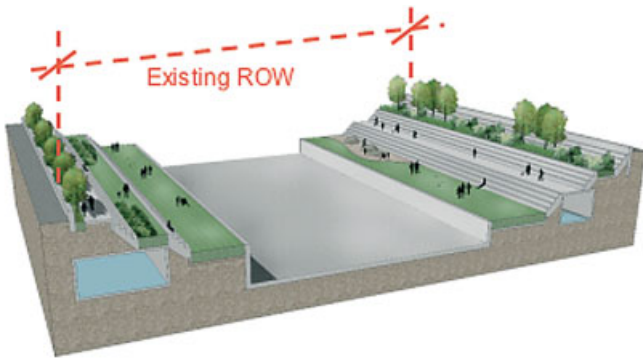


Cooper, Robertson & Partners, Coastal resort community, WindMark Beach, Florida, due for completion 2015
Cooper, Robertson & Partners' ecologically sensitive masterplan for a large coastal resort community at WindMark Beach preserves the local dunes, wetlands and marshes and relocates a local highway away from the beach. Employing planning principles derived from the boardwalk communities along the Fire Island National Seashore (New York) and Radburn (New Jersey), individual house plots face on to raised boardwalks and have preservation zones to save existing flora. Houses are raised on piers to protect nearby wetland ecologies and to allow existing patterns of hydrology to remain. Vehicles approach from parking courts located at the rear of plots. Paths lead back from the beach into the neighbourhoods and surrounding wetlands that will be preserved as parks.

CityPlan 1996. Here, planners linked the central enclave and waterfront armatures to eight planned high-density suburban subcentres using regional public transport and bicycle paths (all set within a green belt boundary). Nor can many American cities match Vancouver's switch from a predominantly automobile city to 40 per cent bike-commuting, with bus, subway, rail, ferry and foot traffic also cutting down cars. The Canadian city has also pioneered a 'smart growth' regional planning approach that highlights the local watershed, and protects the Rocky Mountains forests and the archipelago of islands that make up the city region, using green belts. The Economist Intelligence Unit has consistently rated Vancouver

among the top five most liveable cities in the world (it was number one in 2005). Only Portland, Vancouver's American neighbour, comes close with its Calthorpe Associates' 1990 Metro Vision 2040 plan for a network of transport oriented development (TOD) corridors set within a green belt, with dense development clustering around stations along new and old railway lines.²

Recombinant Landscapes in the Network City
Recombinant landscapes play a role in the reuse of downtowns as landscaped residential districts, in the reconditioning of waterfronts or old industrial areas, and in



Mia Lehrer + Associates and the City of Los Angeles Planning Department, Los Angeles Downtown River Revitalisation, 2006

The City of Los Angeles Planning Department undertook a two-year-long consultative process to build on local pressure groups' plans to revitalise the entire length of the LA River within the city's boundaries, utilising funds earmarked by the state. Three large new state parks are proposed along the river around the downtown on old railway yards, including the re-creation of lost wetlands. The downtown riverbed will be stepped to make an inhabitable landscape during the dry season, with large ducts hidden in the section to carry spring flood run-off. The commercial redevelopment of the surrounding land as office and residential blocks will help fund the project.

suburban networks. Although American cities appear chaotic in contrast to their Canadian counterparts, their suburban format is based on an underlying, self-organising system of giant enclaves of recombinant landscape patches. Global corporations have learnt how to manipulate these patches as attractors to direct the paths of pedestrians or drivers, using spectacular forms of landscaping for marketing purposes. Walt Disney demonstrated the power of this approach in the Anaheim Disneyland enclave in 1954, with its themed main street entry armature and variously styled landscape enclaves (Tomorrow Land, Frontier Land, and so on), attracting 12 million people annually. At Disney World, begun in 1967, Disney demonstrated that the same spectacular landscaping and marketing strategy could be applied at a global scale, this time set within the specially created, tax-exempt, 10,118-hectare (25,000-acre) Reedy Creek Improvement District, Florida.³

From the outset, Disney World was masterplanned as a multicellular collection of thematic, attractor patches. The first Magic Kingdom patch (1971) included a replica of the Anaheim Disneyland. The second included Disney's Experimental Planned Community of Tomorrow (EPCOT, 1982), where the global, multicellular thematic was driven home by the arrangement of various representative streets and landscapes (from, for example, Japan, France and England) around a central lake. A Bucky Fuller dome housing the ATT Pavilion, then a global communications giant, towered over the lake, seen from and observing all points. EPCOT provided a model of the global Network City and the role of landscape in masking its machinery. The simulacrum became a huge, global success, and is now the largest single employer in the US with 58,000 'cast members' hosting 42 million 'guests'. Disney's Celebration (1996), a 2,024-hectare (5,000-acre) suburban new town designed by Cooper, Robertson & Partners and Robert AM Stern, piggybacked on this success.⁴

It is necessary to briefly note here the proliferation of enormous, masterplanned and landscaped corporate new-town assemblages like Celebration since the 1990s. There is Cooper, Robertson & Partners' ecologically sensitive project for the St Joe Towns & Resorts company's vast Florida landholdings (2005-06), and Eckbo, Dean, Austin Williams (EDAW) made new-town plans for the 1,900-hectare (4,700-acre) Stapleton Air Force Base in Denver, Colorado (2001). Ken Smith's team's winning entry for the similar-sized El Toro Air Force Base in Irvine, California, included the creation of the Orange County Great Park (2006) as a vast 'Central Park' for the surrounding new town. Many of these projects, like Celebration, include bicycle paths and lanes for golf carts as alternative means of transport. Peachtree, outside Atlanta, has 9,000 registered golf carts for street use.

An early example of these giant assemblages is the 404-hectare (1,000-acre) Playa Vista (1989) new town initially planned by 'New Urbanist' pioneers Duany and Platter-Zyberk for Maguire Thomas Partners on Howard Hughes' private airport beside the Los Angeles River. However, the project has run into complex methane problems, as Hughes used city



Cooper Carry, Mizner Park, Boca Raton, Florida, 1991

With the support of the Boca Raton City Council, Cooper Carry converted Florida's Boca Raton Mall, a failing dumbbell mall from the 1950s, into the elegant Mizner Park. The council banned all other new commercial development downtown. One of the original department stores was retained and remodelled as an art gallery and cultural centre, while the 183-metre (600-foot) armature of the original mall and other department stores were demolished to make way for a new, landscaped town square. This palm-lined square gave the city a new civic image, creating a mixed-use residential, commercial and cultural complex, a hybrid development that succeeded despite the reconditioning of the nearby Town Center Mall (1979) that had initiated the earlier mall's decline.

garbage to fill the wetlands. Opposition groups have since produced beautiful plans to uncover the Los Angeles River with restored wetlands and new public parks, plans that have ultimately led the City of Los Angeles Planning Department to propose 'greening' the entire LA River basin in 2006 with Mia Lehrer as landscape consultant.⁵

As foreseen by Disney at EPCOT, such spectacular, landscaped corporate enclaves have become the global standard of development. The story of the associated commercial subcentres is well known. Designers shifted from single-armature open-air malls to interior, multilevel, air-conditioned extravaganzas, ending in huge megamalls with four or more armatures. More than 40 million people

annually visit the artificial, interior, phantasmagorical, undulating landscape of the Camp Snoopy theme park at the centre of the Mall of America (Jerde Associates, 1992). Developers have also transformed some older dumbbell malls into landscaped urban spectacles. Florida's Boca Raton Mall from the 1950s became the elegant, palm-lined Mizner Park, a landscaped town square surrounded by housing above stores and an art museum (Cooper Carry, 1991). Designers reconditioned even small malls in wealthy suburbs with sidewalks, streets, trees, plantings, cafés and cinemas, as in Florida's Winter Park Village (Dover, Kohl and Partners, 1997). The 2002 Los Angeles Forum for Architecture & Urban Design 'Dead Malls' competition produced even more imaginative

plans for 'ecological retailing nodes'. And Stoner Meek Architecture & Urban Design turned the abandoned Vallejo Plaza Mall in California into a wind farm, a bowling green, a small golf range and a bird sanctuary set among the islands in the retention pond that partially replaced the parking lot (some islands were leased to a car dealership!).⁶

Rhizomatic Assemblages in the Network City

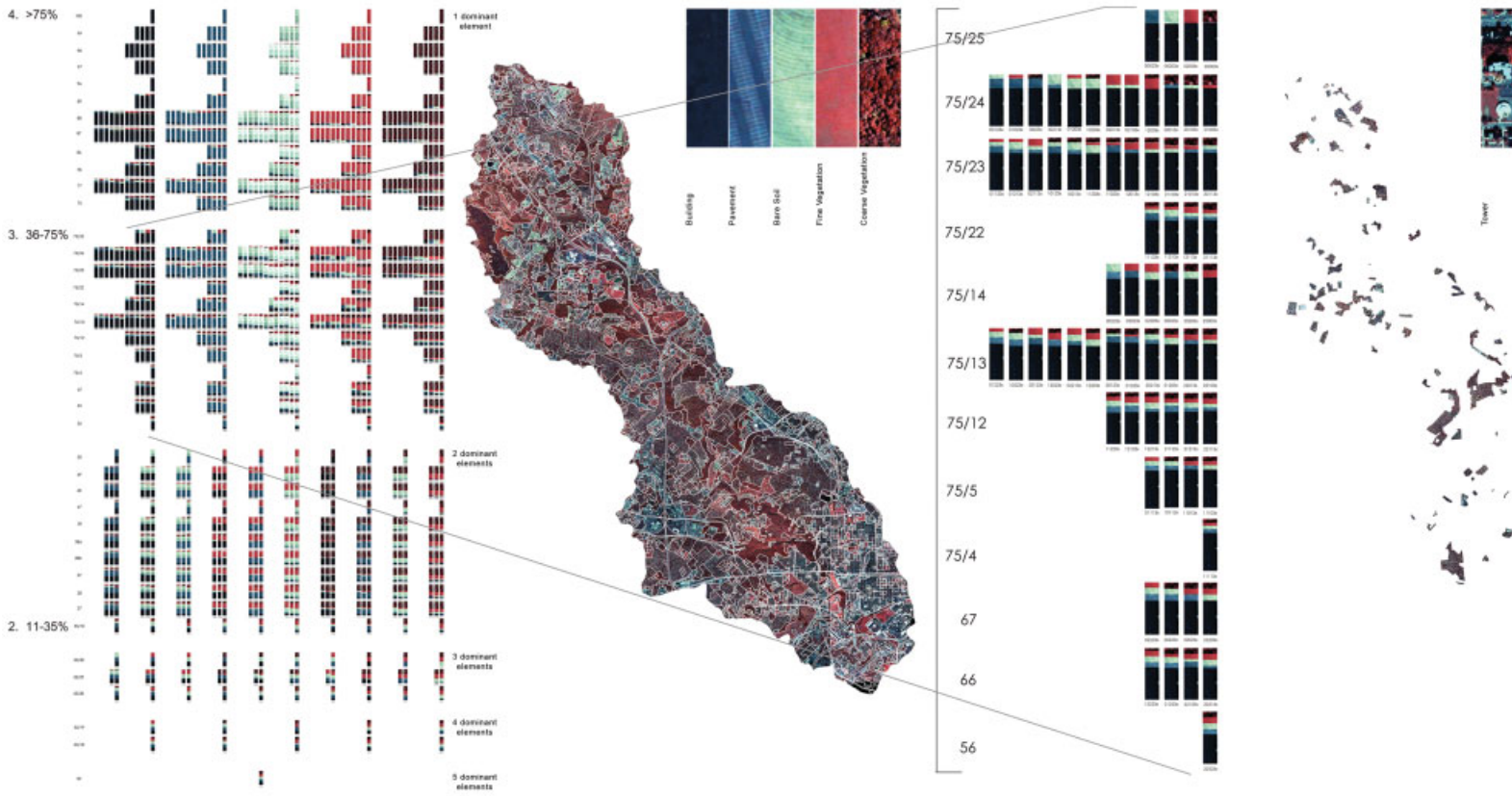
As the 'Dead Malls' competition suggests, there are many creative opportunities for new rhizomatic assemblages and urban landscape recombinations in the Network City unforeseen by Disney. Small bottom-up landscape initiatives by citizens take on a new interest, instead of top-down investments. The tiny gardens created by volunteer gardeners on vacant plots in abandoned inner-city neighbourhoods in the 1960s and 1970s, for example, provided the impetus for

the New York City Park Department's Green Thumb legalisation initiative (1995). These 600 small-scale landscape attractors served poor local neighbourhoods deprived of parks, drawing pedestrian traffic to their doors. Other small-scale, temporary landscape structures could have a similar rhizomatic effect. Small-scale antique flea markets on city car parks or vacant plots, green or farmers' markets featuring local organic produce, temporary community street fairs, seasonal carnivals, flower markets, sidewalk Christmas-tree sellers and mobile fruit and vegetable carts have all contributed to a green, 'performative urbanism' that transforms the city for a short time. Robert Smithson played with this idea of the short-life mobile attractor that travelled through the city in his proposal for a miniature Central Park on a barge, cruising back and forth off the shore of Manhattan, which was recently re-created by the Whitney Museum.⁷



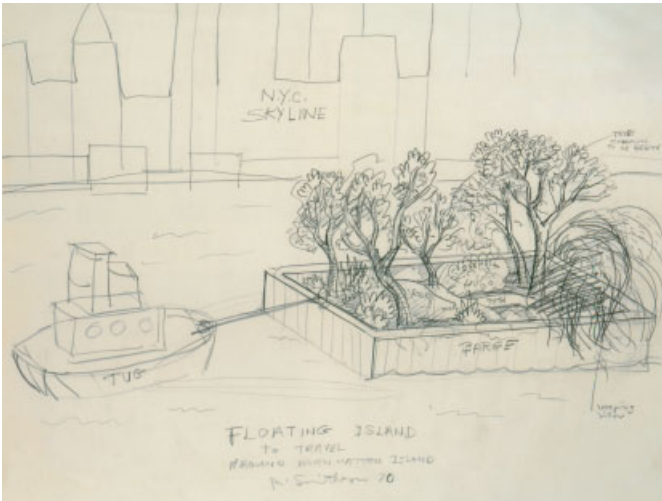
Stoner Meek Architecture & Urban Design, Pell Mall, Vallejo Plaza, Vallejo, California, 2002-03

In the 2002 Los Angeles Forum for Architecture & Urban Design 'Dead Malls' competition, one of the prize-winning entries by Stoner Meek Architecture & Urban Design of San Francisco proposed turning the abandoned Vallejo Plaza Mall into an 'ecological retailing node'. The mall building was taken apart except for a few fragments that were retained as isolated pavilions in a new, ecological landscape of windmills on a wind farm, a bowling green, a small golf range and a bird sanctuary set among the islands in the retention pond that partially replaced the parking lot. A franchise sold eco-cars from some of the islands reached by bridges.



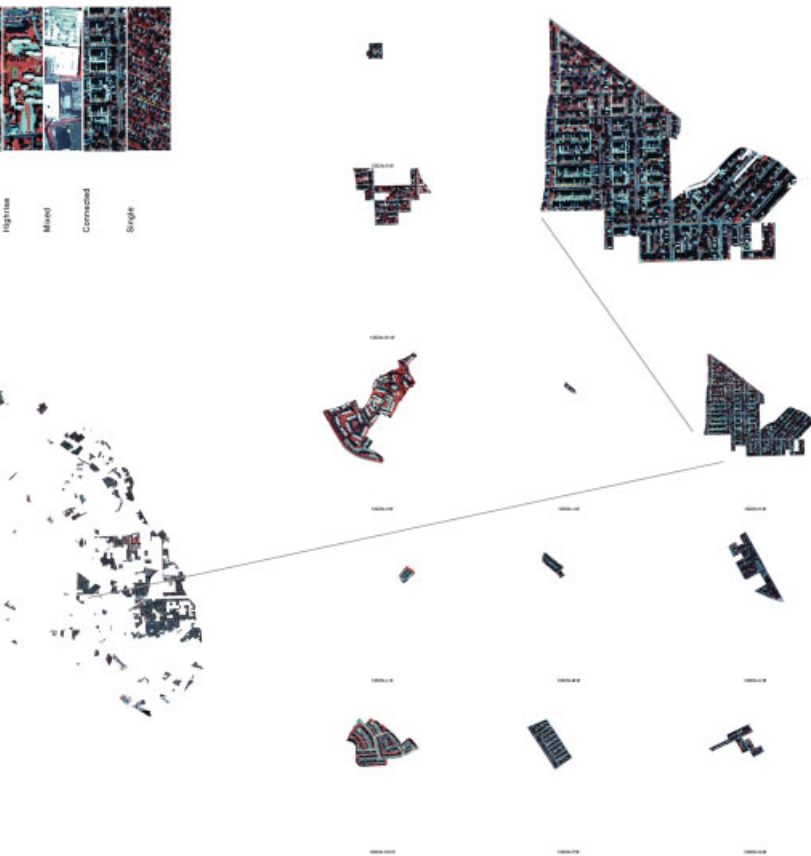
Brian McGrath and Victoria Marshall, Urban Patches, Baltimore EcoSystem Study, 2006

As part of the Baltimore Ecosystem Study, Brian McGrath and Victoria Marshall developed an innovative system for identifying the activities of various urban actors on different urban performance 'surfaces' in the Baltimore Watershed. The surfaces are categorised as patches made up of various percentages of fine vegetation (grass, agriculture), coarse vegetation (trees), bare soil, pavement (tarmac) and buildings (with various densities). Patches of one, two, three, four and five mixes were identified in the study using remote-sensing devices and up-close observation. With this observational tool, urban actors can choose to alter the mixture in their patch to achieve a better environment.



Robert Smithson, Floating Island, 1970, realised in 2005

In 1970, Robert Smithson, the pioneering land artist, proposed creating a floating 'Central Park' that would move around Manhattan on a barge. This project highlighted Smithson's appreciation of Central Park both as an artificial landscape, created by man and Olmsted, as a symbolic counterpoint to the dense city. As landscape comes to play a more prominent role as a symbolic intermediary in the remaking of American cities, the Whitney Museum realised Smithson's project for the portable, urban landscape that floated around the city as a spectacular 'performance' piece in the summer of 2005.



Time and seasons play their part in programming the shifting performative urbanism of urban actors, providing space for both everyday preoccupations and spectacular events. Jim Corner, the theorist and leading practitioner of the Landscape Urbanist movement, sees urban actors opening up new public spaces for performative urbanism on ‘commons’ – shared space that can be freely inhabited by multiple actors for various events and programmes. These commons can often be formed in leftover spaces and those created by industrial shrinkage. Corner also computerised the layered analytical approach of Ian McHarg, his predecessor and teacher at the University of Pennsylvania, who adapted Patrick Geddes’ ecological reading of the city in its landscape, separating out each system in its own layer. Within this layered matrix, the shrinking and shifting of American cities appeared as clear patterns, opening opportunities for rhizomatic intervention in the interstices between the sequential assemblages.⁸

Besides short-term performative cycles, Corner and his firm Field Operations also work on long ecological cycles, remediating brownfields and reconstructing damaged ecologies. The Toronto Downsview Canadian Air Force Base Conversion competition (2000) was won by Bruce Mau, Rem Koolhaas and OMA with their Tree City entry, beating teams led by Field Operations and Bernard Tschumi. However, all three entries shared a performative urbanism approach pioneered by Cedric Price and Archigram in the 1960s and creatively reconfigured by Tschumi and Koolhaas in their 1982 Parc de la Villette competition entries. Field Operations’ winning entry in 2003 for the 898-hectare (2,220-acre) Fresh Kills Landfill competition demonstrated the flexibility and power of this layered, performative systems approach (with its multiple feedback loops). The practice planned the succession of flora and fauna, as well as the small-scale performative uses of the park, over the 40-year duration required to remediate the soil of New York City’s giant garbage dump, with its huge methane management system that fuels a small power station.⁹

The long-term Baltimore Ecosystem Study (BES), funded by the US National Science Foundation, takes this approach even further, investigating the impact of human settlement over time on one tributary of the Baltimore Harbor ecosystem that cuts across the old city core, the abandoned inner-city slums and then into the wealthy suburbs surrounding a huge forest reserve, established in the early 20th century by the Olmsted Brothers. The multidisciplinary team, led by Steward Pickett of the Institute of Eco-Systems Studies, includes hydrologists, urban forestry experts, urban sociologists and economists, experts in public health, urban historians and urban designers (led by Brian McGrath of Columbia University), and focuses on the impact of the stream beds on urban morphology and urban abandonment patterns. BES uses remote-sensing data and up-close sociological approaches to monitor the impact of human settlement patterns on the urban forest and also promises to provide, in the long term, a precise urban model for measuring the human impact on the

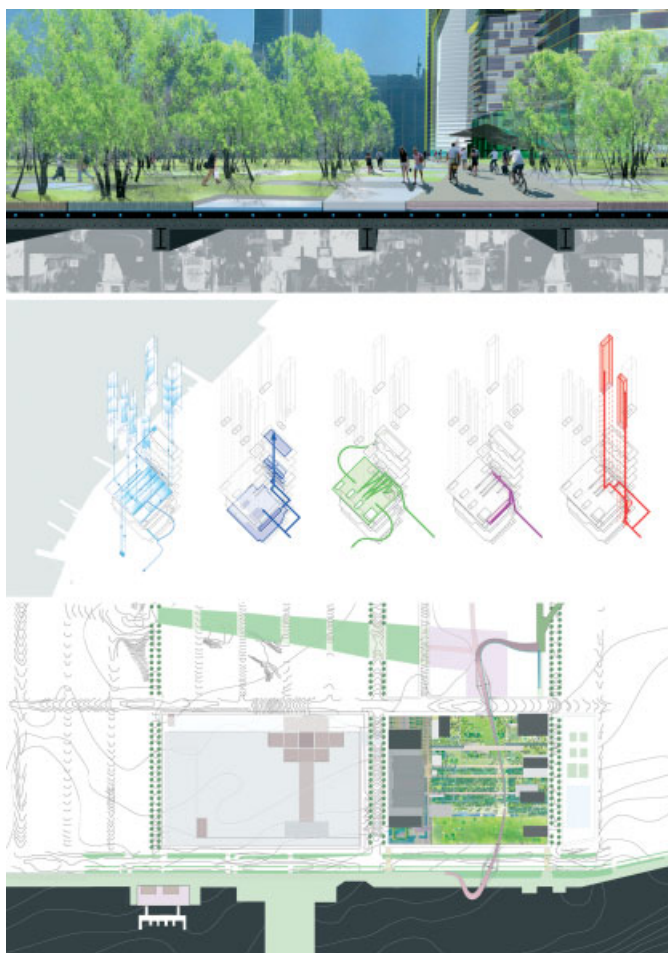


Farmers’ Market, Broadway and 114th Street, New York

Ben Benepe founded the Green Market Organization when he got permission to form the temporary Union Square Green Market in 1976. The market is now open three days a week and attracts 200 local farmers and their produce from around New York State. The Union Square neighbourhood houses many restaurants that specialise in cooking this fresh local produce. The Green Market Organization also now sponsors farmers’ markets throughout New York, including this one at 114th Street and Broadway. New York has also legalised other such bottom-up local initiatives like the High Line Park in Chelsea and the 600 Green Thumb pocket parks scattered across the city in poorer areas (saved from being sold off privately by actress Bette Midler in the mid-1990s).

forest in terms of human carbon production, forest uptake and run-offs into the estuary.

The flexibility of the performative urbanism approach has also allowed landscape urbanists to creatively engage the reprogramming of the city section. The 2006 'Green Towers' show at New York's Skyscraper Museum showed how difficult it is to make such big buildings sustainable. High-density nodes are ecological in terms of transport and communication costs, but even 'green towers' like Norman Foster's NYC Hearst Building, which received the US government's Gold 'LEED' (Leadership in Energy and Ecological Design) Award, can never be fully autonomous. Green roofs, solar collectors and wind generators are all features that can help, as can reducing waste-water flows and capturing storm-water run-off (for example, the Hearst Building's spectacular 9-metre/30-foot high 'Icefall' cascading interior waterfall in its atrium, designed in conjunction with Jamie Carpenter and Jim Garland of Fluidity, uses waste water).¹⁰



Victoria Marshall and Meta Brunzema, Blue Roof, Westside Yards, New York, 2005 'Greening' the city in three dimensions. In Victoria Marshall (landscape) and architect Meta Brunzema's unrealised project, rhizomatic paths of people, activities and water structure a complex three-dimensional ascent through a 'green atrium' up on to the Blue Roof, which connects to the end of the High Line and bridges across to the Hudson River Park.

Corner and Field Operations, with Diller Scofidio + Renfro, have shown how the three-dimensional landscaped city of the future might work in their winning design for the New York High Line (2004), a 2.4-kilometre (1½-mile) long, elevated, abandoned railway line, which thanks to private group Friends of the High Line has now been designated as a public park.

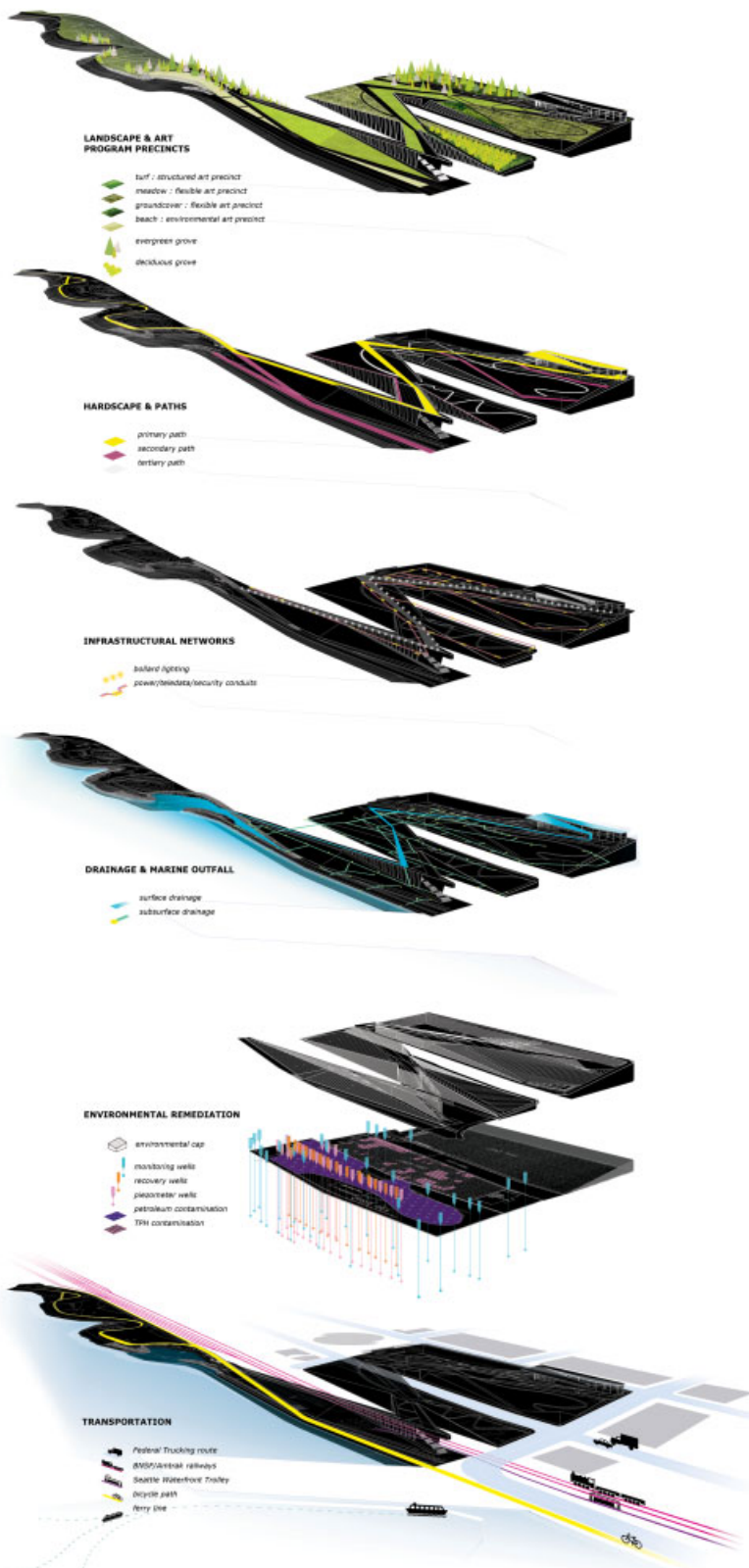
This linear armature, wending its way through the city, demonstrates the three-dimensional potential of landscape urbanism and performative urbanism to inhabit the city section and exploit opportunities to create new open spaces. The approach might tie into green roofs in dense urban settings, to begin to make a three-dimensional park system that links into the bases of skyscrapers, as imagined at Rockefeller Center in the 1930s. Victoria Marshall and Meta Brunzema's unbuilt Blue Roof project (2005) for the Westside Yards, New York, showed how a new formal landscape of water and vegetation channels could recapture rain water from surrounding buildings and also link to the High Line, at the same time providing a three-dimensional performative descent with the water running through an atrium inside the exhibition centre below to ground level.

The Weiss/Manfredi partnership's beautifully conceived design for the Seattle Art Museum's 3.4-hectare (8.5-acre) terraced sculpture park (2005) also demonstrates the three-dimensional urban potential of this layered, rhizomatic approach in building a series of platforms and ramps between the various infrastructure systems, highway and railway, descending to the waterfront in a cascading system of pathways. While the performative aspects of the design are limited to the display of sculpture and the support of art events, the recombinant structure of the design could easily be transferred elsewhere in the city section to colonise green roofs or other empty surfaces, as in the case of Field Operations' High Line. Both projects featured in the Museum of Modern Art's first landscape show, 'Groundswell', in 2005.¹¹

Recombinant Landscapes and a New Hybridity in the Network City

In the hybrid Network City, local innovative urban actors have become involved in complex, public-private partnerships. The problem facing recombinant landscape urbanists as they tackle the reconditioning of the city is the creation of the new commons in the interstices of the three-dimensional matrix of private property. Owners may not want the liability of a recombinant, performative, green urban park on their unused rooftops. Cities need highly motivated urban actors like the well-financed, bottom-up Friends of the High Line to advocate for the new urban commons. Such actors, as in the New York case, may create strange new public-private alliances and zoning variances in their recombinant quests.

The overall impact of recombinant urban landscape projects is to empower a new localism and modern hybridity in the global city. Americans can live and work in the new downtown enclaves in reconditioned skyscrapers, or in the landscaped armatures of boulevards and waterfronts, and in



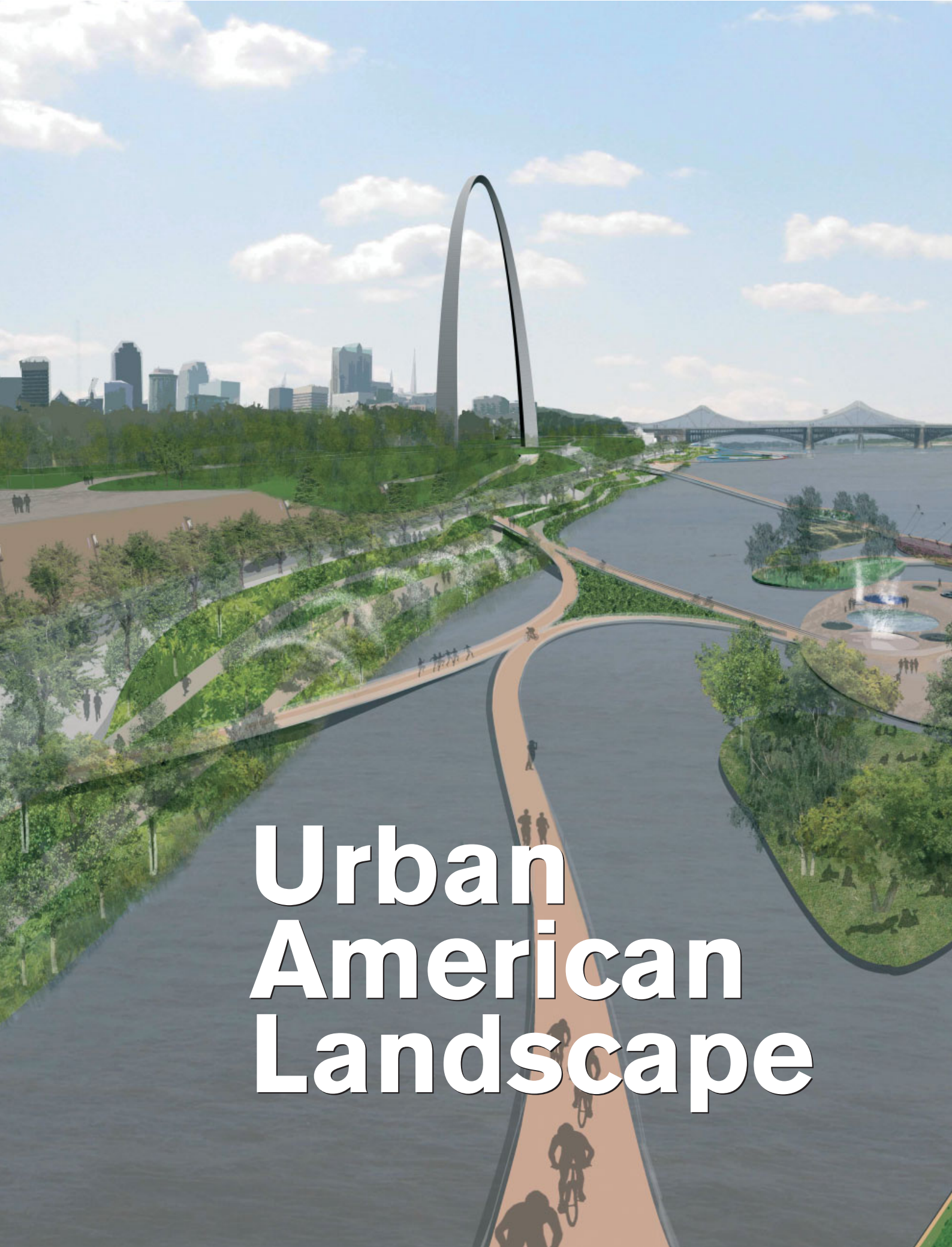
Weiss/Manfredi, Seattle Waterfront Sculpture Park, Seattle, Washington, 2005
 A performative urbanism approach to 'greening' the city in three dimensions. A series of paths and terraces structures a rhizomatic path for pedestrians, punctuated by pavilions and displays, over highways and railway tracks down to the seashore. Beneath the path a network of pipes removes methane pollution from the brownfield site and provides services for the ramps as settings for art installations and performance spaces.

the large, corporate, suburban landscaped patches. Recombinant urban landscapes are the key to a new flexibility and will allow American cities to adapt rapidly to the changing energy situation. The result will be multicentred, heterotopic, mixed-use Network Cities that include local ecology, urban parks and agriculture. Δ

Notes

1. The contract to bury the I-93 raised highway (1959) in downtown Boston (the Big Dig) was the largest civil contract ever let in American history. Started in 1991, the tunnels of the buried highway system opened in December 2003, five years behind schedule and \$12 billion over budget. On 10 July 2006, panels of the highway tunnel concrete ceiling system fell on the roadway killing a driver, causing the temporary closure of the system. The investigation is ongoing. Associated Press, 'Boston's "Big Dig" opens to public', *MSNBC*, 20 December 2003. For details of the evolving new park designs see http://www.boston.com/beyond_bigdig/.
2. Architect Peter Calthorpe advocated the development of compact, public transit-based 'urban villages' in the early 1970s, describing this pattern of development as 'smart growth'. He applied these ideas in the Portland Metro Vision 2040 plan (1990). See Peter Calthorpe and William Fulton, *The Regional City*, Island Press (Washington, DC), 2001, pp 139–50.
3. Beth Dunlap, *Building a Dream: The Art of Disney Architecture*, Harry N Abrams (New York), 1996, pp 24–54.
4. Ibid, pp 55–61. See also Karal Ann Marling, 'Imagineering the Disney Theme Parks', in Karal Ann Marling (ed), *Designing Disney's Theme Parks: The Architecture of Reassurance*, Flammarion (New York and Paris), 1997, pp 148–56.
5. For Playa Vista, see Martha Groves and Roger Vincent, 'LA's Urban Model: After years of setbacks and controversy, Playa Vista is officially open. Planners are studying it as an experiment in high-density housing', *Los Angeles Times*, 18 October 2003, and for methane see Martha Groves, 'Playa Vista Buyers Will Test Capability of Methane Shield: Critics call high-tech safeguards unproven. Courts back experts who devised system', *Los Angeles Times*, 6 January 2003. For Los Angeles River Revitalization Master Plan see <http://www.larivermp.org/index.htm>, accessed 14 October 2006.
6. For Mall of America, see John Jerde Partnership International, *You Are Here Now*, Phaidon (London), 1999, pp 98–107, and for the Stoner Meek project see Warren Techentin, *Dead Malls*, Los Angeles Forum for Architecture & Urban Design (Los Angeles), 2005, p 37.
7. Eugenie Tsai (ed), *Robert Smithson*, University of California Press (Berkeley, CA), 2004, and for images and press release see http://www.robertsmithson.com/ex_events/ex_events.htm, accessed 14 November 2006.
8. See James Corner, 'Terra Fluxus', in Charles Waldheim (ed), *The Landscape Urbanism Reader*, Princeton Architectural Press (New York), 2006, pp 022–033.
9. For Field Operations' Fresh Kills Park, Staten Island, see http://www.nyc.gov/html/dcp/html/fkl/fkl_index.shtml, accessed 14 October 2006.
10. For Green Skyscrapers, see http://www.skyscraper.org/EXHIBITIONS/GREEN_TOWERS/gt_main.htm, accessed 14 October 2006, and for the Hearst Building waterfall etc see <http://www.hearstcorp.com/tower/>, accessed 14 October 2006.
11. For Weiss/Manfredi, see Peter Reed, *Groundswell: Constructing the Contemporary Landscape*, MoMA (New York), 2005, pp 11–123, and online at <http://www.moma.org/exhibitions/2004/groundswell.html>, accessed 14 October 2006. For High Line, New York, see <http://www.thehighline.org/>, accessed 14 October 2006.

Text © 2007 John Wiley & Sons Ltd. Images: pp 24–5 © Ken Smith Landscape Architect; pp 26–7 © West 8 Urban Design & Landscape Architecture; p 28 © Reprinted by permission of the St Joe Company, WindMark Beach, Florida; p 29 © City of Los Angeles Bureau of Engineering; p 30 © Courtesy Wikipedia, Elfgyu personal photo released to public domain; p 31 © Los Angeles Forum for Architecture & Urban Design; pp 32–3(t) © Brian McGrath; p 32(b) © Estate of Robert Smithson/DACS, London/VAGA, New York 2007. Images courtesy Estate of Robert Smithson, James Cohan Gallery, New York; p 33(b) © David Grahame Shane; p 34 © Victoria Marshall and Meta Brunzema; p 35 © Courtesy Weiss/Manfredi



Urban American Landscape

Landscape architecture has emerged from the deep sleep it entered during the Modernist period and remained in for most of the 20th century. Now, valued because of the environmental movement, stimulated by collaborations with architects and artists, and presented with opportunities to transform abandoned industrial sites, landscape architects are enthusiastically producing new kinds of parks on brownfields, along waterfronts, even on rooftops and in garbage dumps. Jayne Merkel here looks at ways the designed landscape is creating outdoor public space in a country where it has not always been valued.



It is not easy for Europeans, who tend to spend their time on visits to the US in cities, to understand how profoundly Thomas Jefferson's desire for every citizen to have 'forty acres and a mule' affected the country he helped found. The agrarian ideal runs deep in America, where most people live on the fringes of cities and rarely visit places where people actually encounter one another face to face on streets and in parks.

Although a central green, used for farming and as a meeting place, was a dominant feature of early colonial towns, the American cities that grew up later, as most did, have very little open public space. Older Eastern cities and most of those in the Midwest have some large, late 19th- and early 20th-century parks that are often connected by green 'parkways' – verdant roadways between them that attempted to turn the whole city, visually at least, into a 'park'. But the automobiles that the parkways were built to serve soon led people out of the cities and into the suburbs, and most of the green space that was cultivated from the middle of the 20th century until its end was strictly private, in the form of 'yards' – small plots covered with grass surrounding single-family houses.

In recent years, however, some of the children from families that had fled dense urban areas mid-century have been drifting back to the cities, if only temporarily, as 'loft living' has become fashionable, the number of single-person households has grown and commuting time has increased. Now the challenge for landscape architects is to help make urban areas habitable enough that they stay.

This is certainly what Diana Balmori is trying to do. 'Landscape architecture is a discipline that has been asleep at the wheel for a long time,' she says. 'It has woken up now because there is an interdependence with architecture, which the ecological movement has made necessary.' Balmori thinks the scale of current projects is helping the discipline flourish. 'When the Modern Movement was in its heyday, the scale was too large (that of urban design) or too small (of little urban parks). Today there are middle-sized projects of a mile or mile and a half, such as the High Line in New York and the St Louis waterfront' – which she is redesigning.

Ken Smith, who is creating the 545-hectare (1,347-acre) Orange County Great Park in California, attributes the new energy in landscape architecture partly to artists, such as Robert Smithson and Michael Heizer, who worked outside on a landscape scale in the the 1960s and 1970s to break out of the gallery system. 'There is also another postminimal strain – people who were interested in cultural and social issues,' he says, noting that a lot of the urban 'vacant lots

Balmori Associates and HOK Planning Group, St Louis Waterfront, St Louis, Missouri, Illinois, 2006–

Hoping to attract people to the riverfront and encourage development up and down it – as well as across the Mississippi River in Illinois – the City of St Louis, non-profit Great Rivers Greenway District, National Park Service, Metro transportation system and Downtown Now organised a competition from which this scheme emerged as the winner. It consists of a whole series of floating islands and walkways along a 1,219-metre (4,000-foot) long shore, with integrated bicycle and pedestrian paths, a terraced riverwalk, event areas for large gatherings and docking for riverboats.



Patricia Johanson, Fair Park Lagoon, Dallas, Texas, 1981

This once environmentally degraded lagoon became a functioning ecosystem when the artist created new concrete edges and bridges shaped like native plants. She planted bulrushes, wild rice and tall grasses that root in shallow water along the shoreline to provide shelter and food for small animals and birds and, further out, added water lilies and irises surrounded by a causeway shaped like the tip of the fern. Paths for people are based on the twisted roots of the delta duck-potato; thinner stems rise out of the water to provide perches for birds. Leaf-like elements towards the centre of the lagoon form safe islands for animals; other 'leaves' along the shore create step seating and overlooks.

turned into “community gardens” were initiated by artists as a kind of guerilla act.’

Patricia Johanson’s land and water sculptures, such as the Fair Park Lagoon in Dallas (1981), were particularly prescient since they restored the ecological balance while transforming watery edges into usable places shaped like the flora and fauna around them. Johanson, who proposed sculptural solutions to environmental problems as early as 1969, is an artist with a degree in architecture (earned in order to help get her projects built). But there were other landscape architects at that time, such as Lawrence Halprin in San Francisco and Richard Haag in Seattle, who also did lively, usable, transformative urban projects that foreshadow those being done today. Haag converted a brownfield site long before the term was in popular usage.

Today, abandoned industrial sites are the most likely places for public works of landscape architecture, and they take a bizarre variety of forms from waterfronts and railroad beds to mines and factories. In New York City, the 2.4-kilometre (1½-mile) elevated High Line railroad track which stopped carrying freight 26 years ago, and the 898-hectare (2,220-acre) Fresh Kills landfill on Staten Island – a massive pile of garbage that rises to 69 metres (225 feet) at some points and is visible from the moon – are both being transformed by James Corner’s Field Operations.

The Fresh Kills site – an intertidal marsh into which 150 million tons of refuse, mostly household waste, was dumped for over half a century – managed to grow forests, create a nesting area for herons, and host migrating birds anyway, though it

often emitted foul odours. In 2001, plans for its conversion to a park had been made, a competition held, and closing begun, when events on 11 September forced it to reopen to accommodate debris from the World Trade Center tragedy, giving new ironic meaning to its name, which had actually come from the Fresh Kills Estuary. Finally, however, design development has begun, construction will start next year, and the first \$150 million phase of the project will open in 2008.

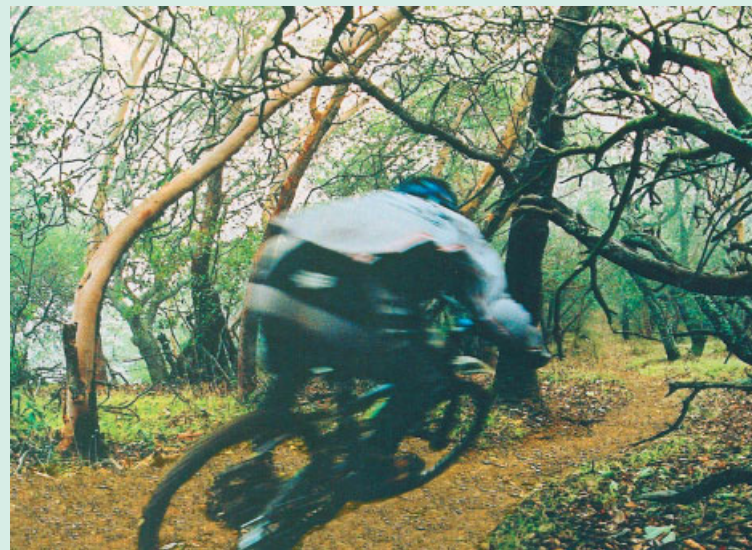
Service roads will be turned into public thoroughfares, easing traffic congestion on Staten Island and making the park accessible by car. A gateway flanked by wind turbines will lead to four landfill mounds, each capped and transformed into a different landscape. The one on the north will have a rounded peak with meadows, but there will also be woods, secluded island nesting areas, marshes with an interpretive centre, and a memorial garden to those whose remains lie within the land. There will be ball fields, boating and fishing, picnic spots, horse trails and a great lawn for events. The Point will have a dock for a ferry from Manhattan’s Battery Park with a promenade of restaurants, art installations and outdoor markets at the water’s edge. Corner calls the whole place a ‘Lifescape’ that will transform suburban Staten Island from ‘a backyard bypass in a larger and more vital metropolis’ into ‘a nature-lifestyle island, a big spread of lush vegetation, open space, birds, mammals and amphibians – an expansive network of greenways, recreational areas and restored habitat reserves.’

The High Line’s less charged history will be more visibly preserved when it is turned into an open-air walkway two



Field Operations (James Corner), Lifescape Park at the Fresh Kills landfill, Staten Island, New York, 2001 competition, construction of first phase due for completion 2008

Above and right: This new ecological and recreational park will be created on top of one of the biggest garbage dumps in the world, which is said to be visible from the moon. The plan for the new park draws on the fact that woods and nesting areas managed to develop even when the landfill was active. It will add a whole series of wetlands and natural habitats interspersed with places for boating, cycling, ball games and outdoor concerts.



Field Operations (James Corner) with Diller Scofidio + Renfro Architects, The High Line, New York, 2004–

Left: Using a flexible modular paving system that integrates walkways, seating, planting and drainage, the designers are trying to preserve the character of the old overgrown elevated railroad while creating a new aerial urban promenade that will allow pedestrians to walk 22 blocks without crossing a street, encountering recreational facilities and new gardens as well as established greenery in this unusual ecosystem where the average soil is only 23–48 centimetres (9–19 inches) deep. The planting designs were created by Piet Oudolf.



flights up extending for 22 city blocks from hip Gansevoort Street in the Meat Packing District, through the Chelsea art gallery area, to the garment district and Convention Center in midtown. Field Operations won this commission with Diller Scofidio + Renfro Architects whose principal, Rick Scofidio, says: 'I never thought I'd say this, but I see my job here as saving the High Line from architecture.' Corner also believes that his job is to maintain its tough industrial character and the stark, almost-surreal landscape of wild meadow grasses, wildflowers, weeds and gravel, while adding cultivated gardens with vividly coloured fields and birch trees as well as recreational facilities, such as a swimming pool and food halls. While some of the old railroad tracks and ties will be removed, others will be restored to recall the High Line's past.

A new, flexible, modular system of concrete planks will be installed in parallel bands to create pedestrian walkways of different widths that meander back and forth, accommodating gardens and other things along the way and 'peeling up' to form an amphitheatre in one area and seating in others. At the southern end, a grand staircase and elevators will lead up to

the High Line and a new museum for the Whitney Museum, which has decided to build its addition by Renzo Piano here instead of on the Upper East Side. The \$84.25 million in city and federal funds already allocated is only the starting point, but there is so much interest from developers who see the High Line as a catalyst for new housing, hotels and other commercial ventures that its raw industrial character may be hard to maintain. Already Frank Gehry's IAC Building straddles the High Line at 18th Street.

Balmori is working on an even stranger site in Long Island City, Queens, just across the East River from Manhattan – one that is already fully developed. She is creating gardens (or at least plantings) on top of small industrial buildings that are still used for industry. She began her work there when Gratz Industries, a manufacturer of metal furniture including Mies chairs, became interested in a small experimental green roof she had done for Earthpledge, an ecological organisation in Manhattan, and she is continuing because the area contains the largest collection in the city of small industrial, flat-roofed 'pancake buildings' – enough of them that she will be able to



Balmori Associates, Green Roofs, Long Island City, Queens, New York, 2002–25

By covering the roofs of the large plate, flat-roofed 'pancake' buildings in the Long Island City area across the East River from Manhattan, Diana Balmori expects to reduce temperatures, filter the air, maximise carbon dioxide, clean rain water, delay its entrance to sewers after storms, and absorb 90 per cent of the solar energy. The programme also calls for 'greening' the acres of railyards in the area.



Ken Smith, Richard Rogers and SHoP, East River Esplanade, New York, 2007– The east side of the southern tip of Manhattan, along the East River, is lined with big empty piers and cut off from the streets around Wall Street by the ugly, elevated FDR Drive. This plan intends to make the area useful and festive by creating a series of indoor–outdoor pavilions under the roadway, using it as a sun shelter, roof and framework for lighting. The designers want to maintain the ‘rough edges’ of the site in the new pavilions and renovated piers that will house a variety of activities along this two-mile stretch of waterfront overlooking the new Brooklyn Bridge Park.

cover 1.08 million square metres (11.7 million square feet), or 55 per cent of the area, with plantings (the rest is taken up with roads, houses, small mixed-use buildings, churches and parking lots). The plants on top of the buildings, to be cultivated over a 20-year period, will eventually equal Brooklyn’s FL Olmsted 213-hectare (526-acre) Prospect Park in their effect on the area. They will make the temperatures go down, filter the air, maximise carbon dioxide, absorb and clean rain water delaying it from going into the sewer lines during storms, and prevent extreme temperatures on the roof, therefore doubling the life of the roof and absorbing 90 per cent of the solar energy. Still, what Balmori likes best about the new rooftop world of green is the fact that it can create new public spaces – places for people to congregate in the city.

New roofing systems created in Germany and France make planted roofs even more reliable than most regular ones, and some plants such as fleshy sedum survive with nothing but watering the first year. Only a block away from the

scientifically monitored 1,022-square-metre (11,000-square-foot) project for Gratz, Balmori is doing a 3,251-square-metre (35,000-square-foot) modular GreenTech roof for Silvercup Studios, the largest independent film and television facility in the northeast, which is planning a 557,418-square-metre (6 million-square-foot) mixed-use expansion designed by Richard Rogers on its 2.4-hectare (6-acre) waterfront site. That riverfront will be designed by the Olin Partnership of Philadelphia with a variety of spaces for active and passive recreation.

Across the East River and a few miles south, Ken Smith is creating a 5.6-kilometre (3½-mile) esplanade at the southern tip of Manhattan with Richard Rogers and SHoP of New York. It will consist of a series of indoor-outdoor ‘pavilions’ under the elevated FDR Drive and on a series of piers.

Underused waterfronts all around New York – and the rest of the nation – are being turned into parks and recreation areas. New York, which grew up on a cluster of islands and peninsulas, got a head start 20 years ago when Battery Park

City, a new mixed-used neighbourhood west of Wall Street, was created on landfill. Now its western edge along the Hudson River is a virtual museum of waterside parks. Eventually the parkland will line the whole western edge of Manhattan.

One of the most interesting so far is Michael Van Valkenburgh's 0.8-hectare (2-acre) Tear Drop Park of 1999–2004, which was designed with artists Ann Hamilton and Michael Mercil. Inspired by the rocky geology of the Hudson River Valley and surrounded by high-rise apartment buildings, the park's children's play spaces are made out of 3,000 tons of imported bluestone, interspersed with winding paths and a miniature marsh. At its heart, a massive layered-stone 'ice wall' has dripping wet surfaces in summer and is covered with shimmering ice in the winter – 'a choreography of unfinished natural materials that assertively represents, rather than merely attempts to simulate, nature in an urban setting,' as the designers put it.

Now Van Valkenburgh, who is based in Cambridge, Massachusetts, is working on the much larger and more visible 2-kilometre (1¹/₃-mile) long, 34-hectare (85-acre) Brooklyn Bridge Park, which has spectacular views of



Michael Van Valkenburgh Associates, Ann Hamilton, Michael Mercil and the Battery Park City Authority, Tear Drop Park, Battery Park City, New York, 2004

Inspired by the dramatic geology and woodland ecology of the Hudson River Valley, this verdant children's play area surrounded by high-rise apartment buildings has a sandy play space with a water feature and a slide, integrated into the bluestone rock formations and connected by winding paths. There are shaded areas, prospects for views, a tilted lawn placed to take advantage of the sunniest area of the site and a massive layered-stone 'ice wall' which is dripping wet in the summer and covered with ice in the winter





Michael Van Valkenburgh Associates, Brooklyn Bridge Park, Brooklyn, New York, 2006-
 This project will transform the old industrial Brooklyn waterfront into a new park with wildscape, landscape gardens and varying edges on the water where the rectilinear form of the pier structures will be preserved and combined with floating walkways, tidal marshes and a safewater zone for kayaking. Entrances to the park, to be called 'urban junctions', at the three major entry points will be the economic engines for maintaining the park, surrounded by new developers' housing.

Manhattan from the old industrial waterfront in Brooklyn. The landscape architect's job is much more difficult here, not only because parts of the site are isolated from active areas of the city, but also because its other parts are adjacent to the elegant historic Brooklyn Heights neighbourhood, where residents have been trying to get a park built for 20 years but some Brooklyn neighbourhood groups are sceptical of plans for private development around the new park and have even instituted lawsuits to stop it.

The problem is that in our increasingly privatised society there is no government funding for park maintenance, even in places like the Brooklyn Bridge Park where the city and

state have contributed \$150 million for design and construction. The Hudson River Park, being built in stages on the west side of Manhattan, is the first park in the state that will have to depend solely on commercial entities within its boundaries for maintenance and operation. Now the practice is becoming commonplace.

The Brooklyn Bridge Park will be maintained, at an estimated cost of \$15.2 million a year, by developers who have been given tax abatements for the purpose. Plans call for new high-rise apartments, a hotel and other enterprises near the park entrances, so Brooklyn Heights residents fear the park will become the private preserve of tenants in the



Ken Smith, Mary Miss, Enrique Norten, Steven Handel and Mia Lehrer, Orange County Great Park, Irvine, California, 2006– This new park on the site of an abandoned Marine Corps airfield will re-create a natural canyon with cool, semi-arid air, shaded with palm trees. There will also be hiking trails, bicycle paths and a variety of other recreational facilities as well as a botanical garden, national archive of the West, and a public library in an area where there are few public parks.

new buildings. The new park actually has plenty of facilities – promenades, boat docks, ball courts, a little beach, a 4-hectare (10-acre) safe water zone for kayaking, an extensive new cultivated and natural green landscape. It will meet the water with floating walkways and tidal marshes that will contrast with the massive bridges and elevated highway nearby. But the political connections of one of the developers have aroused suspicion, which is not uncommon when there is new development in established neighbourhoods. And there is always the possibility of conflict of interest with privatisation.

In Irvine, California, south of Los Angeles, where Ken Smith is designing the Orange County Great Park on a former Marine Corps airfield, only 545 hectares (1,347 acres) of the 1,902-hectare (4,700-acre) air station will be devoted to parkland. The rest was sold to the Lennar Corporation, a developer who is creating new neighbourhoods around the park with access to it. Here, to sell the idea of the park to the

community, the designers have put up a huge orange hot-air balloon – the idea of the artist Mary Miss who is working with Smith on the park. It has a gondola that holds 25 to 30 people, so that classes of schoolchildren and tourists can go up and see the park being built. ‘It’s our visitors centre, and the converse of that is that wherever you are in Orange County, you can see the balloon,’ Smith points out.

Working with Miss, architect Enrique Norten, the restoration ecologist Steven Handel, and LA landscape architect Mia Lehrer, Smith brings the same witty sense of wonder to this enormous project that he has to many smaller ones in New York. But he is dead serious about the environmental mission of the park. ‘In Orange County, everyone depends on cars, though people actually do spend a lot of time outside and at the beach,’ he says. ‘They did a lot of surveys out there and what people were really concerned about was sustainability. But when you ask them, they don’t really know what it is. They mention economy, ecology,

community – and health. We’re talking about a model made up of concentric circles, with the person at the centre, because on a personal level people know what health is.’ Smith and his colleagues plan to get people out of their cars as soon as they enter the park. There will be orange bicycles that they can use and just leave somewhere for someone else – ‘the Zip Car idea’. For larger distances there will be golf carts that people can secure with a credit card. The idea is to encourage natural locomotion to explore a man-made environment based on the restoration of natural elements.

The designers are creating a 4-kilometre (2½-mile) long canyon 21metres (70 feet) below ground. ‘The natural canyons in the West are oases, semi-arid, cool and shaded with palm trees. They have been a place of retreat for Californians,’ Smith explains. There will also be a botanical garden, a national archive of the West and a public library in the park.

Smith says that some people have teased him about the arrogance of the name ‘Great Park’, but he points out that when New York’s Central Park was created it was anything but central. ‘It was way up there. New York wasn’t nice then,

and the reformers saw parks as ways of dealing with the health crisis. When Olmsted was thinking about Central Park, what people needed was respite. They worked six- to seven-day weeks, with their bodies. I’ve been thinking about what a 21st-century park should be. Today we don’t have much physical activity. We have an obesity epidemic, so you don’t produce a park in traditional form. We need those bikes.’

Since landscape architecture is suddenly able to play a real role in educating the public, it is a good thing that most new parks are being created by teams composed of people from different disciplines. In Santa Fe, Ken Smith is working with Mary Miss and architect Frederic Schwartz on a new 5.3-hectare (13-acre), \$7.5 million park on an old downtown railyard site. The park will have a restaurant, cottonwood bosque, circular arbour, children’s play area, picnic grove, rail gardens, performance terraces and an open field, all watered by 400-year-old Acequia Madre, an ancient irrigation ditch.

At Queens Plaza in New York, where several lines of elevated trains intersect with a tangle of subways, roads, sidewalks and stores, Margie Ruddick/WRT landscape



Ken Smith, Mary Miss and Frederic Schwartz, Santa Fe Railyard Park, Santa Fe, New Mexico, 2007

This new park, tree-lined promenade and plaza on the old downtown railyard site, paid for by the Trust for Public Land and the City of Santa Fe, will have a restaurant, cottonwood bosque, circular arbour, children’s play area, picnic grove, rail gardens, performance terraces and an open field. The water for all these facilities will come from the 400-year-old Acequia Madre, an irrigation ditch on the site.





Margie Ruddick/WRT landscape architects, Marpillero Pollack Architects (MPA) and Leni Schwendinger, Queens Plaza, Queens, New York, due for completion 2009

Opposite and above: This project will reorganise a confusing fragmented site where several elevated trains, subways and roadways collide with residential neighbourhoods and commercial services by adding new seating, lighting shelters, pathways, hydrology and plantings that will create a sense of place

architects is working with Marpillero Pollack Architects (MPA) and lighting artist Leni Schwendinger. They are adding new lighting, seating, shelter, paths, water and plants to tie everything together and create a sense of place. MPA is also doing a number of small urban interventions, such as landscapes around libraries and recreation areas at housing projects. And Diana Balmori has formed a partnership with her Yale teaching colleague, architect Joel Sanders, to do projects that cross traditional interdisciplinary lines.

Balmori believes that landscape now has better tools to communicate with the public at large than was the case in the past. She thinks models, which can represent buildings effectively, are poor tools for landscape, especially the kind she wants to create. 'It is really space at a bigger scale than architecture. We are using dot matrix so that we can dissolve the objects more in order to talk about space. I want to dissolve the landscape so that it becomes what is contained, not the container.' She also likes to use animation because 'whatever you do in the landscape is changing constantly'.

The system of floating islands Balmori has designed for the St Louis waterfront, near Eero Saarinen's Gateway Arch will change not only with the seasons but with the movement of the river itself. The project is intended to extend the park where the arch is located up and down the river, connect it

with the land across the Mississippi River in Illinois, and create places for gatherings and active recreation, such as a skating rink, restaurant and excursion boats, as well as pedestrian access to the river. It also resurrects history, if unwittingly. After proposing the floating islands, which resemble some of Johanson's works, Balmori saw some of the drawings Saarinen had submitted to win the competition over half a century ago that her colleagues had resurrected at Yale, and in one of those unpublished, unknown drawings there were walkways and islands like those she had envisioned.

History plays a different role in landscape architecture than in building or even urban design. As Smith notes, it is a long-term enterprise: 'When a piece of architecture is completed, it begins its decline. When a piece of landscape architecture is done, it is just beginning. It takes time to grow a landscape.' **▷**

Text © 2007 John Wiley & Sons Ltd. Images: pp 36-7 & 40 © Balmori Associates; p 38 © Patricia Johanson; p 39(t&c) © Field Operations; p 39(b) © Joel Sternfeld 2000; pp 41 & 44-5 © Ken Smith Landscape Architect; pp 42(t) & 43(t&c) © Michael Van Valkenburgh Associates; p 42(b) © Michael Van Valkenburgh Associates, photo Paul Whar; p 43(b) © Michael Van Valkenburgh Associates, photo Stan Ries; pp 46-7 © City of New York Department of City Planning and New York City Economic Development Corporation. All rights reserved

Toronto Waterfront Revitalisation



Sean Stanwick, the co-author with Jennifer Flores of a new defining book on Toronto – *Design City Toronto*, published by John Wiley & Sons – describes how West 8 and Canadian practice du Toit Allsopp Hillier (DTAH) are reviving the city's engagement with its waterfront. Could the lakeshore scheme be aspiring to a new waterside on a par with those of its North American neighbours such as New York and Chicago?



The fabric of Toronto is literally changing daily. With the city in the midst of a burgeoning architectural renaissance, a number of international star architects, including Frank Gehry and Daniel Libeskind, have landed to create an exceptional collection of fashionable iconic works. Of course the addition of contemporary architecture is an important element in reshaping any city's urban fabric. But what is important is also what is happening in between those dramatic architectural moments, in the continuous space of the city.

Collectively, Toronto is by and large an enlightened metropolis that recognises the value of quality public space. With this in mind, the fires are lit yet again on its ongoing waterfront revitalisation initiative. With the selection of the competition-winning scheme by Rotterdam landscape architect Adriaan Geuze of West 8, in a joint venture with local architects du Toit Allsopp Hillier (DTAH), the stretch of lakefront at the city core is poised to be infused with a lively mix of recreational and pedestrian amenities, cultural facilities and private condominiums.

Toronto's civic awareness of its waterfront can be traced back to the city's founder, John Graves Simcoe, who in 1793 advocated the preservation of the water's edge for the benefit of all citizens. The name Toronto is actually a Native American term for 'trees in the water', though it is often mistakenly translated as 'meeting place'. Once home to shipbuilding and military operations, some remnants of the city's heritage still remain, including the former Tip Top Tailors Building, Toronto's most significant Art Deco structure now repurposed as premium lofts.

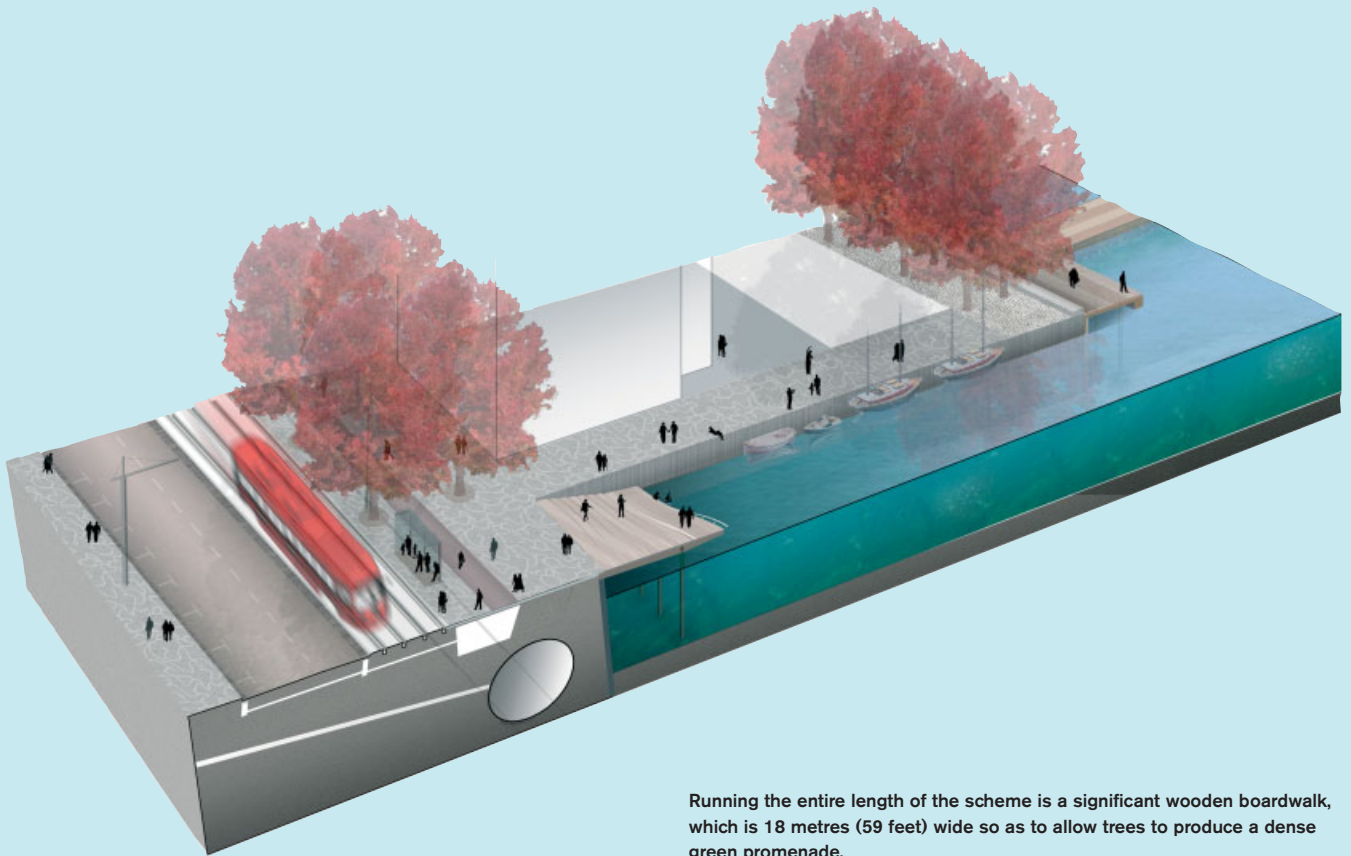
Large-scale urban planning began in earnest in the late 1970s. Yet with only a few isolated spurts – such as the recent Music Garden which interprets in landscape Bach's 'First Suite for Unaccompanied Cello' and was co-designed by landscape



West 8 and du Toit Allsopp Hillier (DTAH), Waterfront Revitalisation Initiative, Toronto, Canada, 2006

A floating bioremediation reef in the form of the iconic maple leaf adds a touch of folly to the scheme.

Speaking the vernacular of the Canadian north, the scheme features several heavy timber bridges that run the length of the boardwalk and provide a continuous pathway along the water's edge.



Running the entire length of the scheme is a significant wooden boardwalk, which is 18 metres (59 feet) wide so as to allow trees to produce a dense green promenade.



The existing Queens Quay Boulevard will be pedestrian focused with its southern lanes reconfigured as an animated granite esplanade.

To re-create what Geuze affectionately calls the city's 'green foot', the designers envision multiple rows of maple trees to celebrate the original summer greenery and autumn colour spectacle of the waterfront.





Not all development is parallel to the water's edge. At the intersection with the major northward avenues, several designed elements celebrate the city's 'lines of culture':

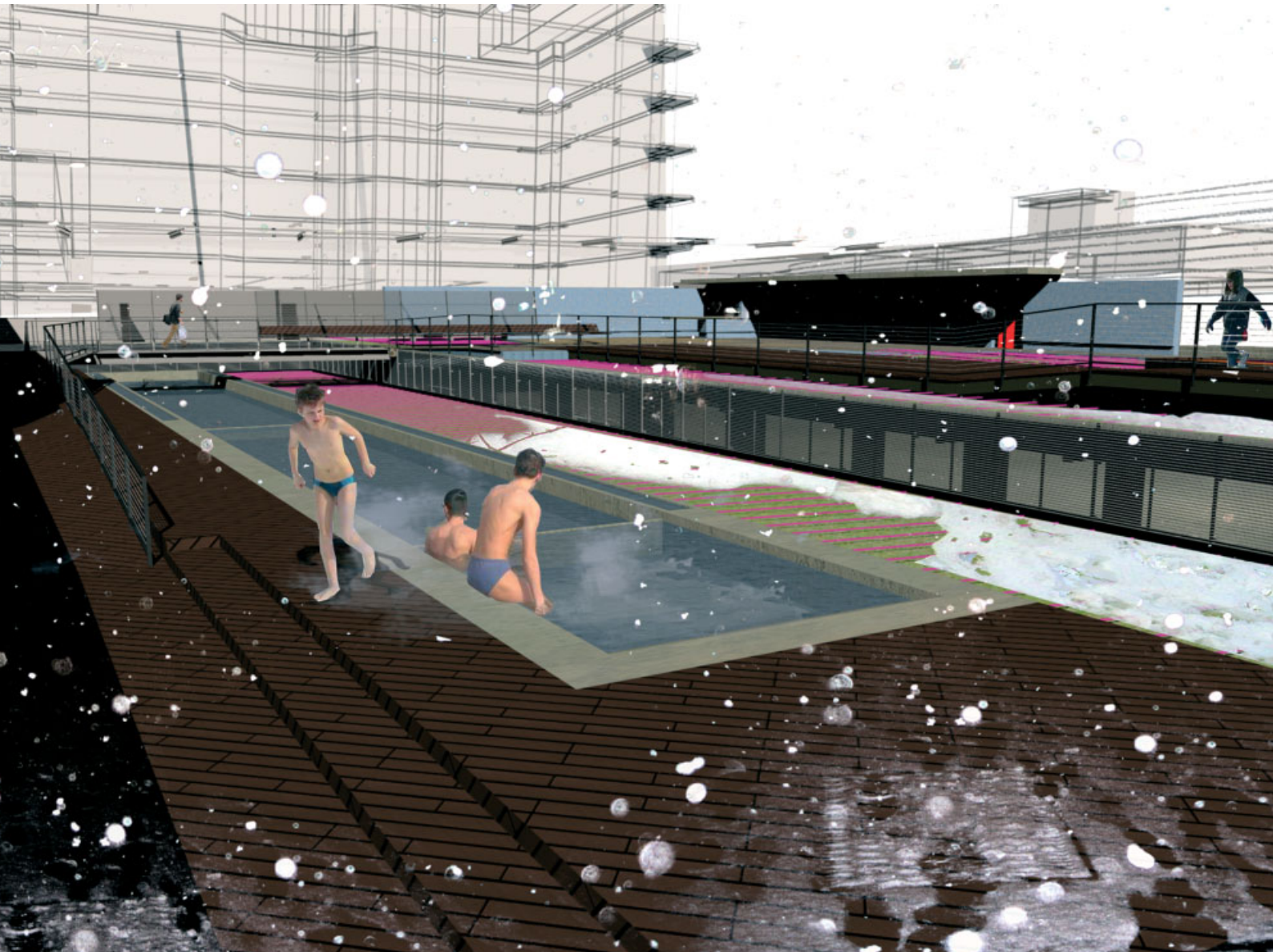
designer Julie Moir Messervy and musician Yo-Yo Ma – a cohesive waterfront design strategy has consistently failed to materialise. The intent of the West 8 scheme is to create continuous public connections to the city. Running the length of the waterfront is the 'public row', an 18-metre (59-foot) wide wooden and maple-treed boardwalk with seven undulating heavy timber bridges that leap over the existing slipheads. The bridges give pedestrians uninterrupted access along the water's edge, but more importantly they speak the vernacular of the heavy timber railway bridges that once dominated the Canadian north.

The major parallel artery of Queens Quay Boulevard will be devoted equally to the pedestrian and cars. Reduced from four lanes to two, the southern lanes will be configured as an animated granite esplanade connecting new landscaped moments (such as the Rees Shoreline, reshaped as the rocky Canadian Shield) to the already successful Queens Quay Terminal. But the notion of connection does not solely run parallel to the water's edge. Celebrating the city's 'lines of culture', several signature moments are created at the foot of major northward boulevards. The most whimsical is at the base of University Avenue, where a floating bioremediation reef in the form of the iconic maple leaf will tip its hat to Queen's Park, the city's political seat. Additionally, the boardwalk will connect to the extensive Martin Goodman ravine trail system and tie into the West Donlands community, a new mixed-use development for 100,000 people on reclaimed brownlands at the mouth of the Don River.

What West 8 also does is force the city to deal with another festering legacy: the Gardiner Expressway, an elevated highway that severs the city core from the water's edge. No doubt Toronto is somewhat timid when it comes to large-scale urban design projects, so the suggestion of demolishing the

elevated expressway and replacing it with a Champs Élysées-style boulevard will certainly take some strong political will to enact. While the initial budget of \$20 million falls short, there are urban precedents such as Boston and its equivalent 'Big Dig' initiative – a multibillion-dollar megaproject to reroute and bury the city's central traffic artery. If, however, removing the Gardiner is a nonstarter, Geuze has not left the city wanting as the team also plans to plant thousands of new maple trees to re-establish the original summer greenery and autumn colour spectacle of the waterfront – or as Geuze calls it, the city's 'green foot'.

Throughout its history, Toronto has shown some commitment to urban parks. One notable example is Cloud Gardens, a small urban park in the financial core that features a cluster of trees, a crescent lawn and a small greenhouse that re-creates the damp conditions of the coastal mountain ecology. But the waterfront has unfortunately been plagued by promises, spurts and perpetual disputes over land ownership. Hopefully, Geuze's design will have the teeth to finally become a reality. The timing could certainly not be better given the recent wave of civic exuberance and private patronage sweeping through the city. If nothing else, the project has proved itself as legitimate, as some of the most innovative designers, including London's Foster and Partners and New York's Tod Williams and Billie Tsien, responded to the original competition call. Ultimately, the West 8 scheme addresses many of the same urban issues that plague cities also facing lakefront challenges, but the bigger civic issue still remains: will the city deliver on its promise and create a great waterfront on a par with those of Chicago or New York, or will our new lakeshore vision dry up yet again? **Δ**



Operationalising Patch Dynamics

Victoria Marshall and Brian McGrath have developed and transferred the ecological model of 'patch dynamics' to urban landscape design. It is an approach that stresses the resilient, flexible and adaptable nature of cities, interacting with a 'notion of disturbance ecology rather than a benign nature'. Here they apply their design approach to Hoboken, on the New Jersey Gold Coast, which, only a hop and a skip from Manhattan, directly across the Hudson from the Financial District, remains culturally and economically diverse.

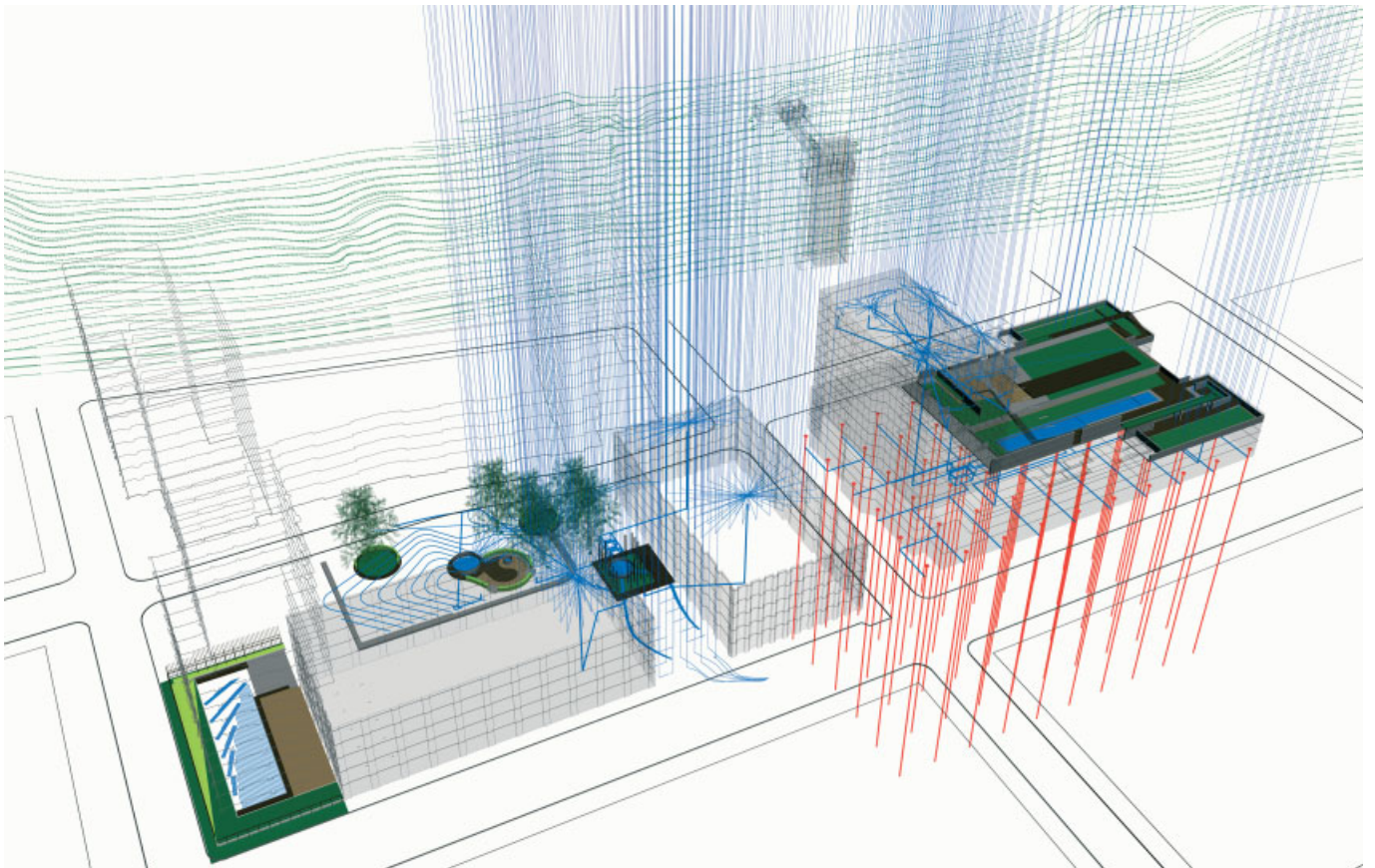
Turbulent and Responsive Environments

Ignoring the chill in the air and the official end of the summer season, the kids on the 16th floor immersed themselves in the rooftop thermal bath until late November. Most autumnal swimmers noted that the neighbourhood groundwater temperature-signature reinforced their own observations: swimming lasted a few weeks longer this year. Networked into geothermal piles, the roof-garden swimming fountain offers water temperatures distinct from ambient air. Set by the buried meadow-mat, a legacy of the marshy history of the neighbourhood, it affords exposure of the area's concealed watershed.

Sunset stretched the shadow of the Palisades on to the parking lot as the crowd waited for the first film of the summer to begin. The creative folks once again gradually emerged from their studios. A remnant industrial concrete slab is recycled as the garden's surface facing the big screen. Gathering unobstructed south and west sunlight, its reflective

heat is mitigated by an etching of mini runnels of rain run-off. Through the toes of the visitors these mini streams are an immediate request that even the smallest bit of water be negotiated as a public actor in the emergent urban watershed.

When Hoboken's backstreets flood, the easiest way to get from the light-rail station is via a crown-of-the-road zigzag, skirting the block-long reflecting pools held by the street kerbs. This navigational detour extends long after the downpour ends, as the Hudson Estuary's tide needs to recede before the neighbourhood can drain. Two roof gardens and two fountains offer horizontal and vertical volumes for water storage to mitigate this water surplus. The gardens are embedded with varying material surfaces for multiple recreation opportunities, whereas the fountains are contained within a compacted and sealed surface for dining, play and commerce. When the rise in sea level increases the duration and frequency of the flood, these upper and lower surfaces afford reprogramming by the next generation of owners and stewards.



TILL (Victoria Marshall, Brian McGrath, Mateo Pinto, Phanat Xanamane), Monroe Center for the Arts Watershed and Energy Management Plan Phase One, 2006

The roof garden is part of a networked system of public spaces including the mixed-use complex's front and back yards. Two slowly percolating fountains, elm trees and hammocks dominate the main public space, while a temporary garden located on a future construction site serves restaurant diners, informal picnics and night-time cinema events.

TILL, Thermal Rooftop Fountain, Monroe Center for the Arts, Hoboken, New Jersey, 2006

Connecting to groundwater temperature by geothermal piles, and rain water through retention vaults, this resident amenity garden offers a microclimate that extends the seasons and brings climate-change awareness to its high-rise condo-caretakers.



TILL, Monroe Center for the Arts Watershed and Energy Management Plan Phase One, 2006

This temporary garden at the foot of the Palisades has a vegetated screen wall, a restaurant terrace, lawn, and a fountain made by scoring the industrial concrete floor with tiny rivulets. Other artefacts from the industrial structures are reused as benches. On summer evenings this space is used for outdoor film screenings.

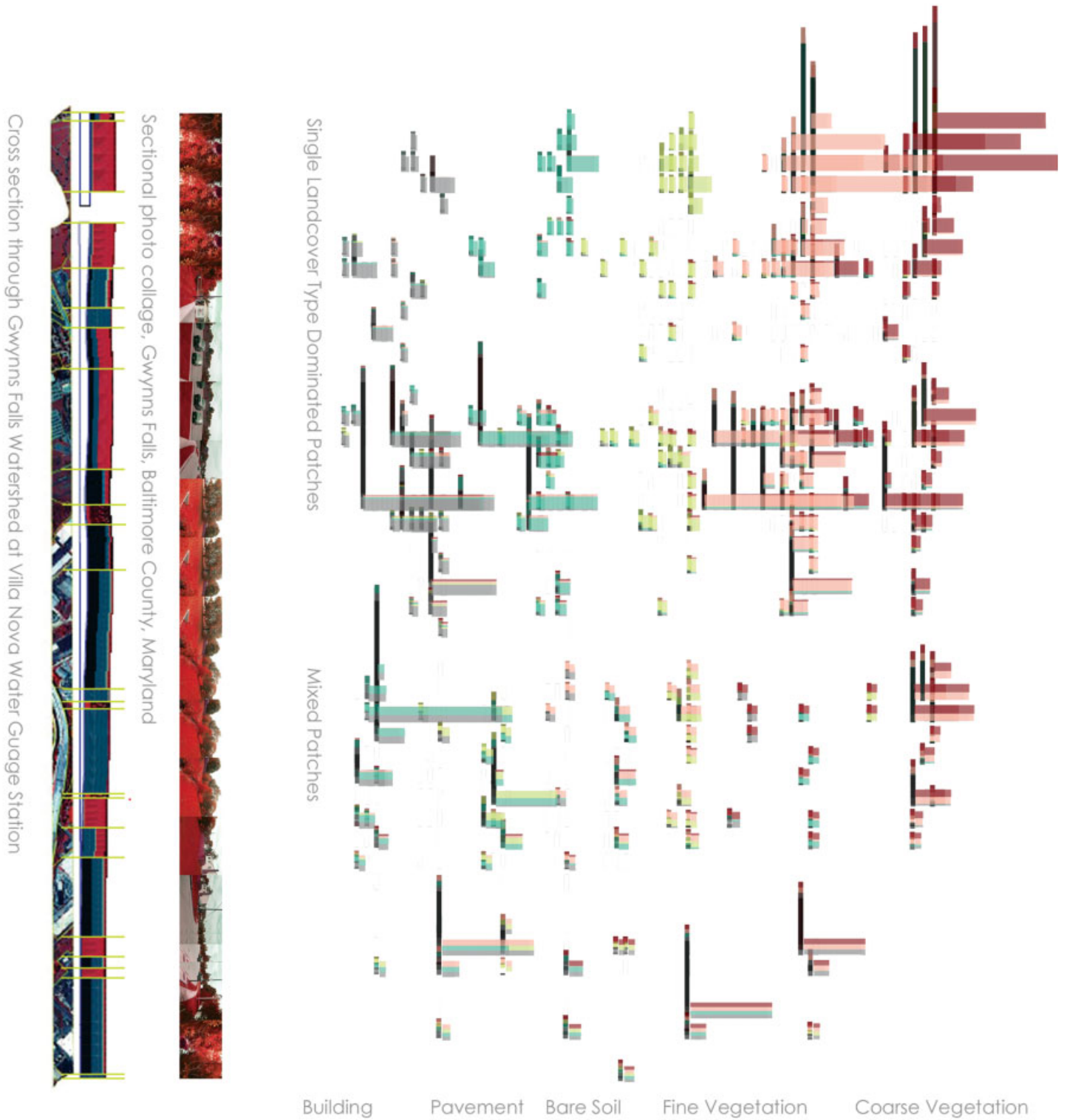
Unlike rural immigrant populations who carry with them knowledge of how to reinvent their urban environment, lifestyles are marketed to intracity suburban refugees. The Hoboken West Coast watershed offers a lifestyle based on the urban ecosystem approach, where the highest- and best-use development practices are joined with a belief that urban development can help connect people more directly to natural resources. For most new migrants, a change of address requires only a minor adjustment due to the repetition and recombination of familiar urban elements such as strips, malls and downtown leisure and cultural districts. The integration of responsive environments into amenities aims to offer greater transparency, legibility and agency into the consumer development model. Development is not just a process of addition, but rather reveals the multiple hidden sites and time scales that would allow new residents to process, in the time they have available, all the information necessary to effectively interact with the complex dynamics of the urban system as a whole.

Patch Dynamics and Resiliency

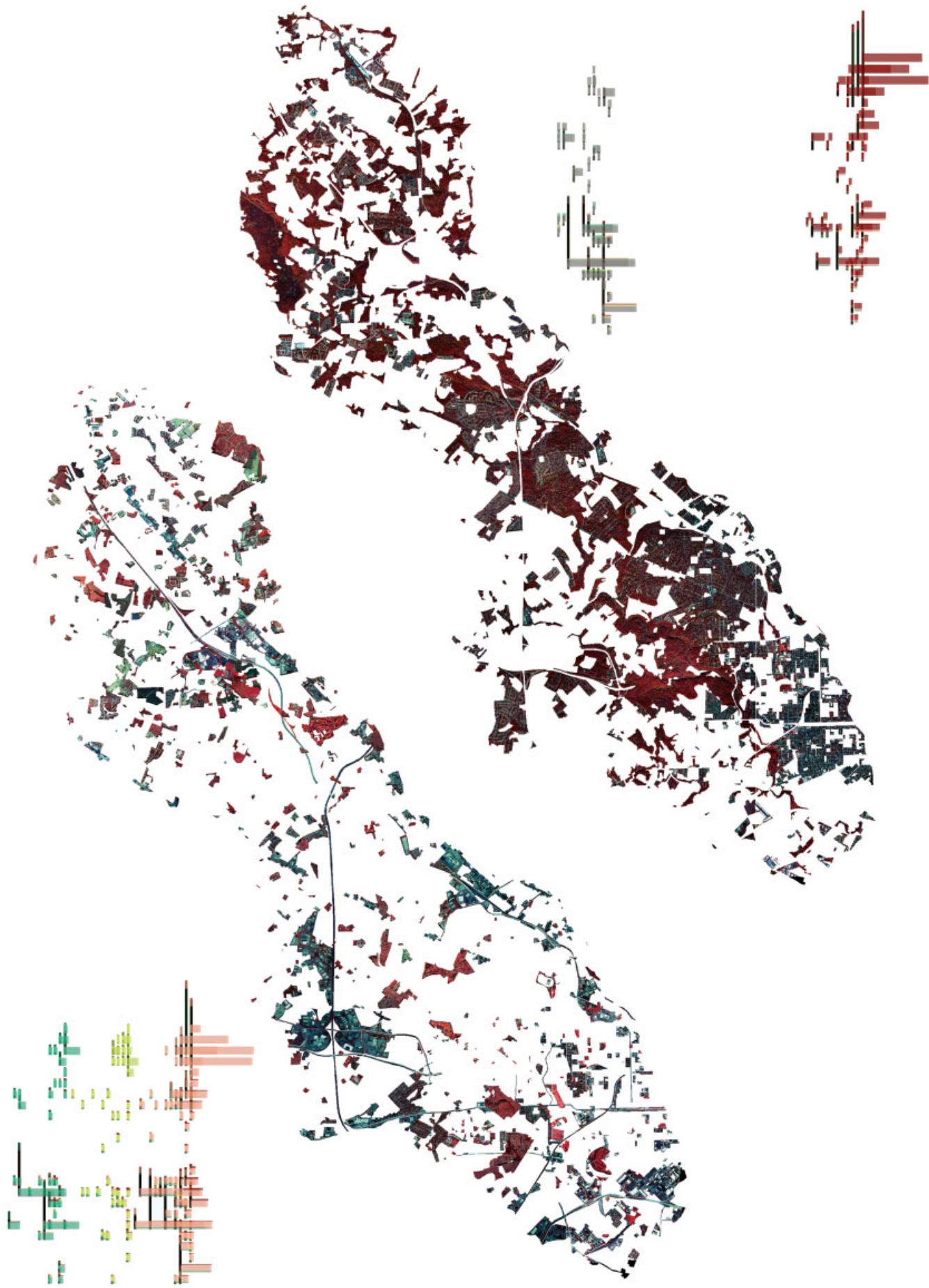
Patch dynamics is a core concept in contemporary ecosystem science that seeks to explain complex systems within which biological components – including humans – interact with

physical environments over time.¹ Scientists develop models based on theoretical frameworks within physical limits in order to test core concepts, such as at the Hubbard Brook experimental forest in New Hampshire, where small watersheds on nearly impervious granite slopes have been monitored for the past 40 years.² This process of monitoring small watersheds has been transferred to urban models in the Baltimore Ecosystem Study (BES), a long-term ecological research project funded by the US National Science Foundation. By transferring ecosystem science concepts and models to cities, the researchers sought out the translation expertise of designers.

Urban patch dynamics models involve the identification of patch areas based on distinct land-cover compositions. Defined by patch boundaries, these land-cover signatures modulate the flows of people, information, materials, water and nutrients. Patch dynamics is the operation between these patches in time, and as an urban design model it is a way of understanding the heterogeneity of the contemporary urban landscape. The BES patch dynamic approach overlapped with current work in modelling the temporal patterns of phase change in urban design,³ and an interdisciplinary team was created to develop a patch dynamic urban design model based on both the small watershed and human ecosystem frameworks. Working with plant scientists Steward TA Pickett



urban-interface (Brian McGrath, Victoria Marshall, Phanat Xanamane) with plant scientists Stewart TA Pickett and Mary L Cadenasso, **Patch Signature Mixing Matrix, Baltimore Ecosystem Study, Baltimore, Maryland, 2006**
 HERCULES (High Resolution Classification for Urban Landscapes and Environmental Systems) classifies the physical structure of land-cover patches in Baltimore's Gwynns Falls Watershed, and is based on the various possible combinations of different percentages of five land-cover types. The numerical prevalence of patch classes results in a distinctive signature. The left margin of the drawing shows a section of the various patch classes to illustrate how patches modulate flows.



and Mary L Cadenasso, and social ecologists, this is a land-cover rather than land-use urban design model, focused on the city of flows and cycles – people, information, energy, water and nutrients – and marked by extreme heterogeneity in built and vegetated forms.

The understanding of time and scale in the ecological model of sustainability is misguided. Van Der Leeuw and Aschan-Leygonie state: “The noble ambition of those proclaiming a sustainable development seems difficult to realize, and is a long-term project which necessarily implies a general change in prevailing attitudes at all levels in most societies, the individual and the governmental level, as well as all levels in-between.”⁴ Unlike the ecological model of sustainability and even adaptation that presumes social systems are the dominant dynamic, the urban ecosystem approach stresses the reciprocity between the social and the natural dynamics, and underlies the importance of change as a means of survival. According to Holling: “[Resilience is] the capacity of a system to absorb and utilize or even benefit from perturbations and changes that attain it, and so to persist without a qualitative change in the system’s structure.”⁵ The important concept here is to change the drifting location of our understanding of where design has agency.

In a resiliency framework, Van Der Leeuw and Aschan-Leygonie continue: “There are two – closely related – aspects of “resilience” that we must consider. The first concerns the behavior of a system, due to the structure of its attributes and the interactions between them, due to voluntary management or depending both on the inherent characteristics of the system and on human effort. The other aspect concerns the perception of perturbations and change, and notably of unexpected or even unforeseeable future events.”⁶ The patch dynamics city must therefore develop within a notion of disturbance ecology rather than a benign nature. Cities must be resilient, flexible and adaptable with bottom-up systems of monitoring flows and developing new surface-management tools.

Urban Grain and Flows

Hoboken was once an island in the Hudson River. Its western slope modulated a shifting tidal wetland terminating in a small stream at the base of the Palisades. An early lithograph reveals a commuter boardwalk linking the island to Patterson Plank Road at the top of the Palisades cliff. Industrial landfill coupled Hoboken to the mainland, and more recently its extended shoreline, the New Jersey Gold Coast, has been further interconnected by a north-south light-rail transit spur paralleling the Hudson rather than crossing to Manhattan. The shallow backwater territories housed

industrial uses and government housing projects with residential dwellings occupying the higher ground to the east. A decrease in industrial production, and proximity to Manhattan, is repopulating the former tidal wetland as a new residential neighbourhood. Older residents enjoyed 19th-century parks anchored by schools or churches and now newer parks and private landscapes are linked to shopping centres or are on shipping piers.

The former industrial complex of Monroe Center became a creative catchment for Hoboken artists as the city was gentrified by Manhattan commuters. This social flux is placed in proximity to the retention of water flows to create the possibility of new socio-natural relationships. Such turbulent patches and flows are located in an anomalous territory where hybrid land uses and land-covers offered a challenge to existing planning categories. Unable to fit the graded classification categories of metropolitan, suburban, fringe, rural or environmentally sensitive, the New Jersey Office of Smart Growth gave the linear city stretching from Bayonne to the George Washington Bridge its own special designation: the Urban Complex. Embedded along the ridge between the Hudson and the Hackensack rivers, the urban complex is laced with geological, topographical, industrial and social legacies. With sea levels rising, lowland and upland dynamics will increase in complexity as the oily manufacturing heritage floats to the surface and railway commuter interconnectivity continues to diversify this densely inhabited, multicentred territory.

The New Regional Landscape

The design and management tools of masterplanning, zoning and land-use controls grew out of the productivity and health needs of the industrial city a century ago. The ecological city demands new design and management tools. Also, our image of the city in relation to nature is changing. The old city model of a dense city centre ringed by green suburbs, agricultural land and a wilderness fringe is no longer operative. The contemporary city in both automobile- and agricultural-oriented societies tends to be much patchier with spots of high density scattered throughout a low-density urban/nature matrix. There is no longer a gradient from city to nature, but instead a heterogeneous mix of buildings and vegetation – both coarse and fine – pavement, soil and surface water. The ecologically managed and designed city is beginning to respond to current trends in urbanisation and globalisation, such as emergent and self-organised structures, informal urban settlements, loosely regulated edge cities or regenerated older centres driven by new lifestyle choices.

urban-interface, Thick City/Thin City, Baltimore Ecosystem Study, 2006

Using the patch signature chart to analyse the Gwynns Falls Watershed, coarse vegetated and built dominated patches constitute the bulk of the thick city. Fine vegetation, pavement and bare soil dominated patches constitute the thin city, with transit routes linking the dense city of forests and buildings.

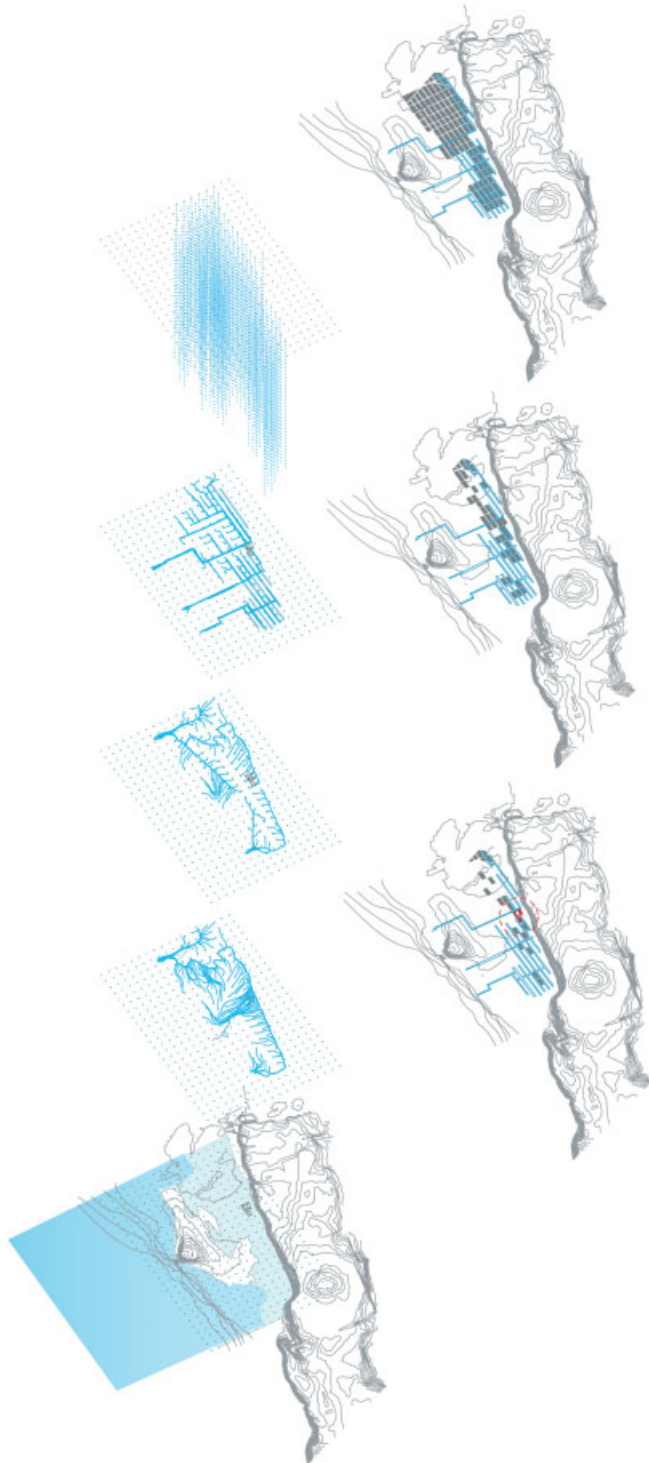


urban-interface, Megalopolis Now, Boston/Washington urbanised corridor, 2006

Forty million people inhabit the East Coast Megalopolis, a vast hardwood forest structured by watersheds. Across the Hudson River from Manhattan, the New Jersey Urban Complex – a large, densely populated conurbation, stretches along and under the ridge of the Palisades. The Gwynns Falls Watershed, a 168-square-kilometre (65-square-mile) subwatershed, meets the Patapsco River and Chesapeake Bay near downtown Baltimore, and is home to 250,000 people and 24 distinct commercial centres.

TILL, Three Water Flows, Existing Patches and Projected Patch Change, Hoboken, 2006

Monroe Center sits in the former tidal-fed marshland at the base of the Palisades. A new light-rail line is creating a new waterfront for Hoboken, in marked contrast to the gentrified Hudson River waterfront that faces Manhattan. Here brownfields and public-housing projects face the sheer cliff of the Palisades with its immigrant neighbourhoods above, with the New Jersey Meadowlands, and the rest of the continent, beyond.



The inhabited hardwood forest of the American East Coast Megalopolis connects the Hoboken Urban Complex and the Baltimore Gwynns Falls Watershed. Gwynns Falls, the study area for the BES, stretches from dense enclaves surrounded by highways and farms to partially vacated urban neighbourhoods. A vast strip parallels the Gwynns Falls Stream Valley crossing the old city boundary, the ring road, and new exurban spurs. Hoboken's Urban Complex follows a narrow ridgeline parallel to Manhattan, draining into the New Jersey Meadowlands and the Hackensack River to the west and the Hudson River Estuary to the east. These two kinds of urban landscape transects – ridge and valley – are repeated countless along the Atlantic seaboard, and their design and management are dictating how the 40 million inhabitants of the megalopolis manage the new challenges of the 21st century. **D**

Notes

1. STA Pickett and ML Cadenasso, 'Meaning, model and metaphor of patch dynamics', in Brian McGrath and Victoria Marshall, *Patch Dynamics*, Princeton Architectural Press (New York), in press.
2. Brian McGrath, *Transparent Cities*, Sites Books (New York), 1994. *Manhattan Timeformations*, 2000, www.skyscraper.org/timeformations.
3. GE Likens and FH Bormann, *Biogeochemistry of a Forested Ecosystem*, Springer-Verlag (New York), 1995.
4. SE Van der Leeuw and C Aschan-Leygonie, *A Long Term Perspective on Resilience in Socio-Natural System Resilience Workshop Paper*, 2000, p 8.
5. CS Holling, 'Resilience and stability of ecological systems', *Annual Review of Ecology and Systematics*, Vol 4, 1973, pp 1–23.
6. Van der Leeuw and Aschan-Leygonie, op cit, p 9.

Text © 2007 John Wiley & Sons Ltd. Images: pp 52-4 & 59 © Victoria Marshall; pp 55-8 © urban-interface.com

Recent Works by Bernard Lassus



At the forefront of innovative French landscape design, Bernard Lassus has developed a uniquely modern ethos. Working in the context of a multicultural society, he sets out to create 'rational approaches that anchor the lives of men and women in nature and history'. Michel Conan describes how this is played out in his projects for the new town area of Sarcelles, the landscaping of the French motorways and in the gardens of an international headquarters in Boulogne-Billancourt, near Paris.

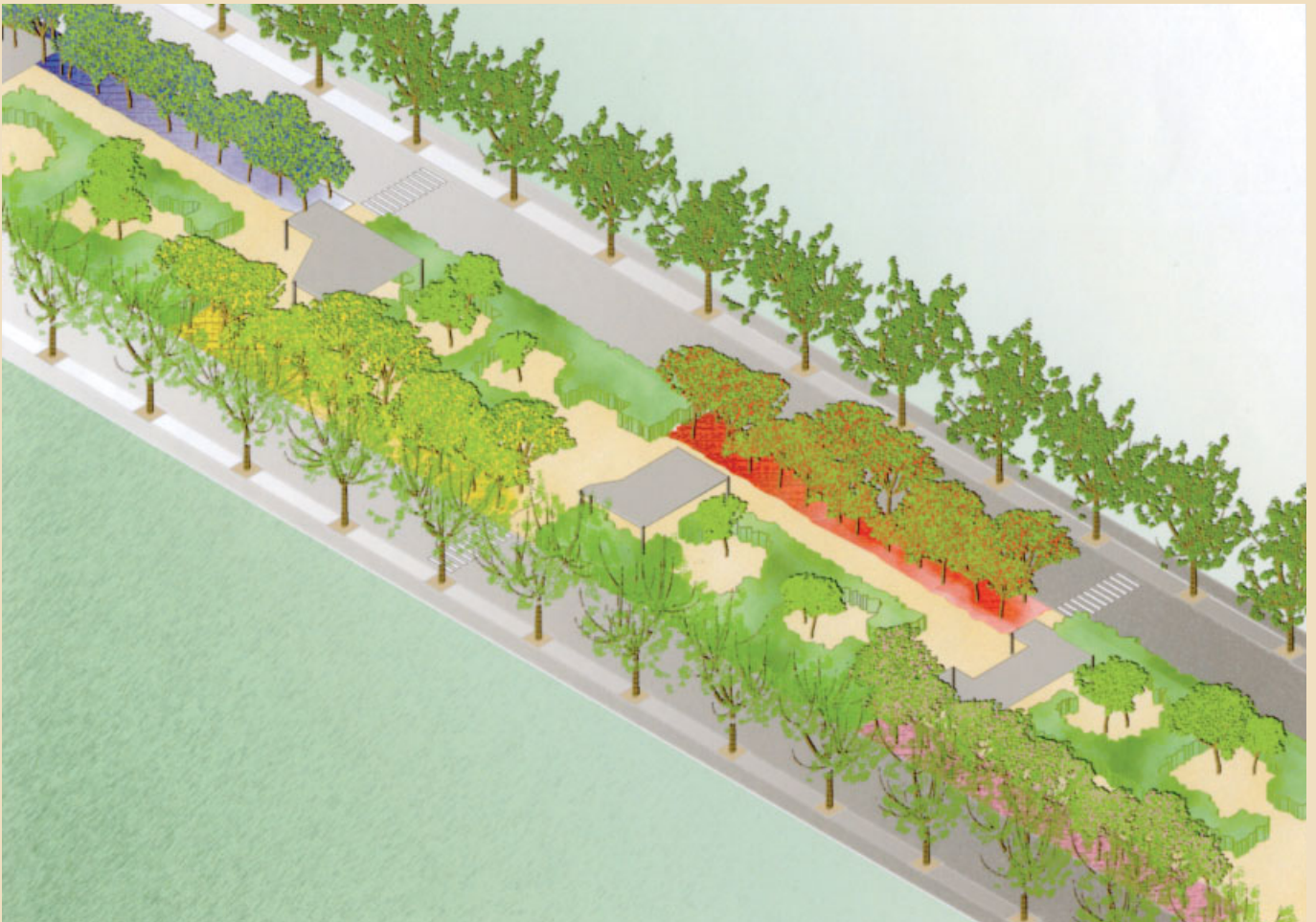
Bernard Lassus works to defend and illustrate a new modernity for the 21st century. While Modernist artists are members of an avant-garde and produce blueprints for a modern world, Lassus sees the artist as one among many actors who search for a modern ethos. Within a multicultural environment he strives to develop rational approaches that anchor the lives of men and women in nature and history, while also making room for individual agency. Thus his own work belongs to several distinctive series of experiments involving housing, city planning, public parks, motorways and private gardens, to name some of the domains to which he has contributed in recent years.

A Landscape Approach for the City of Sarcelles

In 2000, Philippe Panerai – the newly appointed city planner at Sarcelles, near Paris – called upon Lassus to propose a landscape design that would unite the community in both a

practical and a symbolic sense. Sarcelles has attracted a great deal of public attention since its rural landscape became the site for a housing project of 8,000 apartments, increasing its population from 9,000 in 1954 to 52,000 in 1970. Such enormous growth turned the city into a symbol of the hopes, fears, achievements and failures of modern housing policies in France. It also divided the community into two parts, the large-scale housing project physically isolated from the rest of the city and governed by a housing manager rather than by the elected mayor.

Lassus proposed making the community's links to nature highly visible. He transformed a large field area, still under cultivation, into a living museum of farming, and uncovered and opened to the sky the Little Rosne Creek that had once run through the community. For the length of the reconstructed natural banks of the valley he designed a bicycle and pedestrian pathway that leads from existing ponds

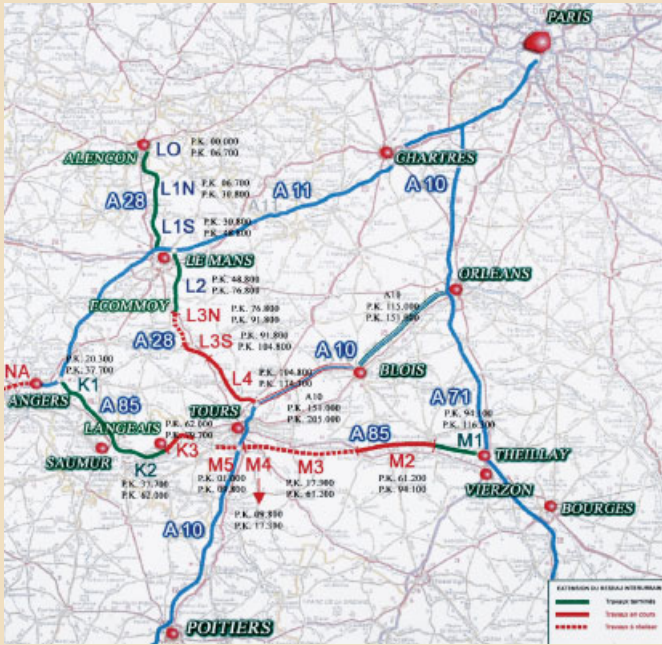


Bernard Lassus, Project for a citywide landscaping of Sarcelles/Planting scheme for the citywide Park Alley, France, 2000

The proposed Park Alley would become the major pedestrian avenue through the city, transforming it into an imaginary park. It would present a large path meandering between tree alignments planted on coloured ground echoing the colours of the leaves, fruits or flowers.

Bernard Lassus, Colouring of the warehouses, Bordeaux Harbour, France, 2004

Inauguration of the warehouses showing how colour can bring a sense of difference and community to a large group of industrial buildings.



Bernard Lassus, motorway landscapes, Loire Valley, France, 2005
 This excerpt from the French national scheme for motorway construction shows in green, continuous and dotted red lines motorway landscapes by Lassus that are already finished, under construction and at the project stage.



Landscape of the bypass of the city of Puy en Velay as it skirts along Polignac (1996), showing how the motorway becomes part of the rural landscape as seen from the medieval city in Auvergne, and the city a landscape to be seen and desired from the motorway.

in the northwest to the ‘Park of the Meadows (extending) under the City’. The pathway clearly establishes his primary intention: to give local inhabitants the chance to imagine the landscape as a valley covered by meadows prior to the construction of its villages and housing.

This constructed perspective is not a representation of the past, but rather a stepping stone towards visualising the history of the city’s growth. The heterogeneity of the city landscape – with its agricultural fields, industrial sector, original village, loose urban sprawl, sports fields, garden plots and large modern residential area – gives rise in a thousand places in France to dreams of village harmony or of utopian Modernism. But for Sarcelles, Lassus wanted to

make this heterogeneity into a testimony to history, attracting attention and curiosity without imposing any line of interpretation. Thus he suggested highlighting the distinctive character of the traditional village by offering a colour scheme for the facades of its houses. Again, this is not intended to re-create an image of the past, but – exactly as he did for the warehouses on Bordeaux’s harbour – to highlight differences within the community.

Imaginary encounters with the history of the local landscape provide a sense of belonging to a place, but they do not unite the city as a whole. Lassus noted the large number of gardens and trees in Sarcelles and created a network of park-like pathways, turning the community into a distinctive park, its entrances, highly designed *grandes allées* and other promenades giving the impression they are the result of private initiatives. The municipal government was invited to increase the number of streets, with tree alignments matching the tree species found in the neighbouring gardens, as if private planting had spilled out over the streetscape. Planting would be avoided in some areas, thus allowing glimpses of exceptional trees in private gardens.

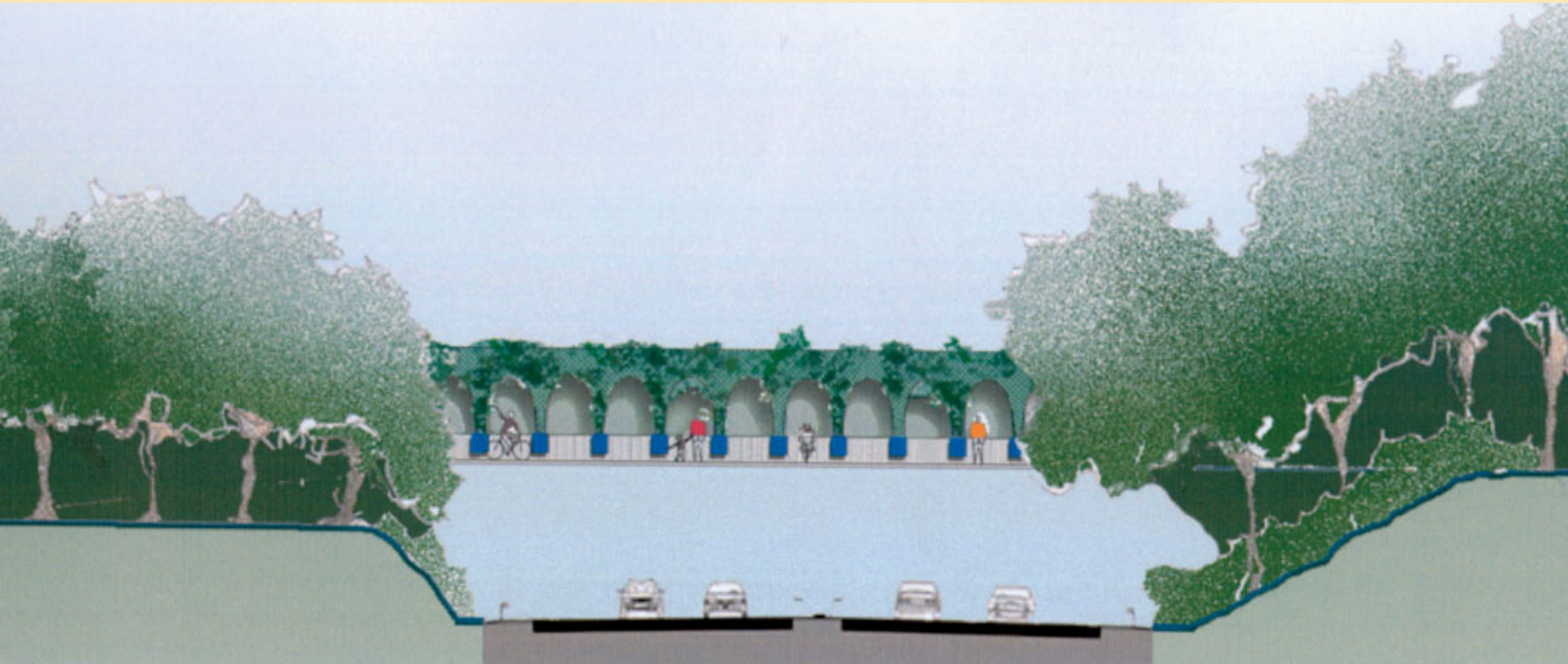
Landscape the French Motorways

Lassus sees the landscape artist as a creator of locales in which a greater number of individuals will be able to engage creatively – as workers, engineers, elected representatives, city inhabitants, or in any other capacity. He is one of the very few artists who have renewed motorway design in the 20th century. Over the last 10 years he has devoted much of his energy to the development and implementation of a new set of design principles, refusing to limit the activity of landscape design to cosmetic improvements to civil engineering sites. His works dwarf the largest Earthworks projects and promote a new ethic of motorway design that allows neighbouring farmers to contribute to the design and maintenance of the motorway landscape.

For Lassus, shaping the land is the main contribution of landscape architecture to motorway design. Thanks to the computer programs he has helped create, civil engineering landforms can now reside in perfect continuity with existing contour lines, and the finished product invites automobile passengers to take tantalising glimpses of the landscape at wide angles and away from traffic. He has also worked closely with the bulldozer drivers on site, helping them to develop their skills in shaping landforms. Lastly, he sought to make the motorways fit snugly into the landscape, become a source of pride for their neighbours and invite motorists to rediscover their region.

The Suspended Gardens of Boulogne-Billancourt

In 2001, the chairman of the multinational Colas Corporation invited Lassus to create gardens for his newly built international headquarters in Boulogne-Billancourt, near Paris. The brief was to design terrace gardens that required no maintenance. Another challenge was that, under the influence



The overpasses in the Solognote forest on motorway A85 between Angers and Tours (1993–7) were designed and planted to minimise disruption by the motorway of forest paths used by wildlife.

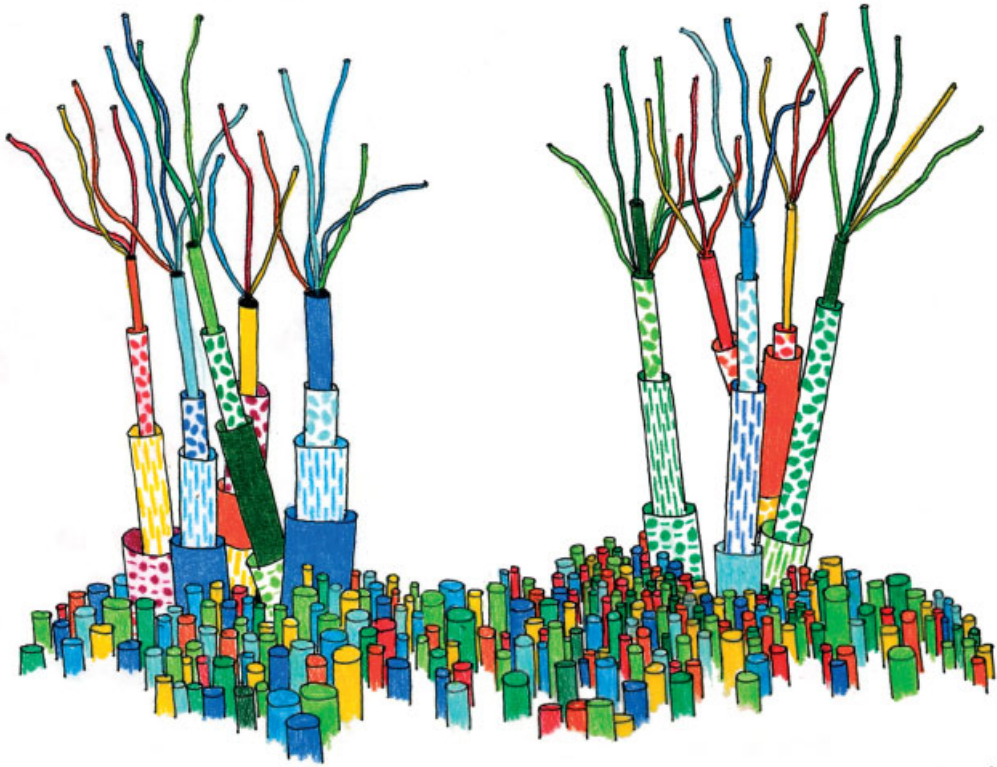
of local residents who had failed in their attempts to prevent the construction of this Modernist building by Pierre Riboulet, the municipality now demanded that the white building be transformed into a verdant hill.

The Colas Building was separated from its neighbours by a small municipal playground. Lassus proposed enlarging the playground in the direction of the building, and softening the contrast between the two areas by redesigning the playground's hedges and using the same pattern to frame the long cruise-ship gangways along the building – an arrangement that hid the reception terrace behind the trees in the playground. In addition, a colourful flower parterre was planted on a service area that was visible from some of the neighbouring apartments.

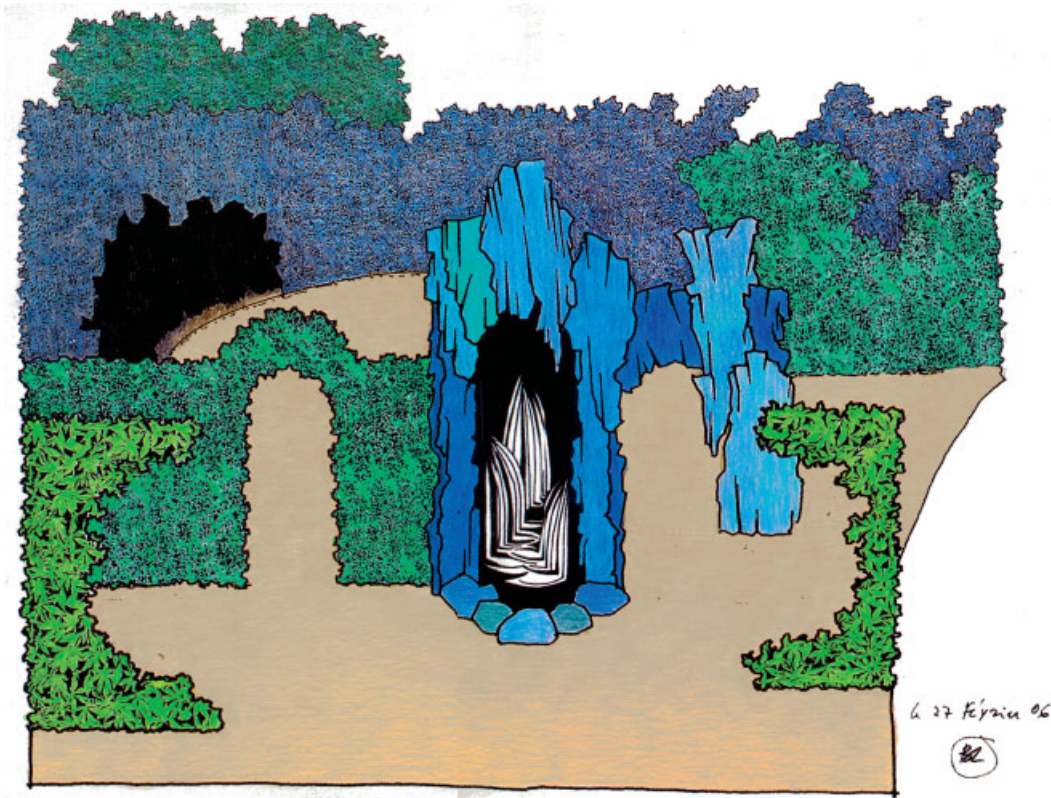
As a result of Lassus's changes, the local residents began to adopt a new attitude towards the corporation and to

develop an interest in its engagement with Modernist architecture and contemporary garden art. The lower terrace was designed to receive large groups of guests attending conferences or events organised by the corporation. Lassus transformed this space into a green room in a *bosquet* animated by a fountain. And to invite guests to participate in debates about nature and modernity, he made an abstract rock cascade out of wood, abstract hedges and trees out of perforated metal slabs, and abstract flowers out of painted enamel. He also gave the owner the chance to play with the seasons by changing the trees at will.¹

The great success of the Garden of Seasons among its visitors encouraged the chairman to ask Lassus to take on another project in the autumn of 2006, this time to create two zero-maintenance gardens on the upper terraces of the corporation's neighbouring office building. The main terrace –



View of the upper terrace of the old office building at the Colas Corporation, presenting the winter view of the orchard with trees in a meadow as it could be shown at the CEO's request.



Bernard Lassus, *The (expanded) Garden of Seasons*, Colas Corporation, 2006
View of the lower terrace of the old office building at the Colas Corporation, showing the Grotto on the stage of the Théâtre de Verdure.



Bernard Lassus, The Garden of Seasons, Colas Corporation, Boulogne-Billancourt, France, 2002
The garden on the lower terrace of Riboulet's building as seen from the Exhibition Hall at the Colas Corporation.

accessible only for security purposes – extends in front of the chairman's office on the seventh floor and, just above the office, the second terrace in front of the board's meeting room provides space for board members to relax and gaze at the main terrace below. Given this vantage point, Lassus decided to pursue his exploration of garden abstraction, and proposed turning the main terrace into an abstracted baroque garden theatre (the *Théâtre de Verdure*), the sole performer being a picturesque garden grotto sheltering a minimalist fountain – all made from perforated metallic slabs. The allusion to Versailles with its *bosquets* and the grotto of Apollo, a few miles away from the building, is transparent and intriguing. Yet this garden theatre points beyond Modernism. Its artificial grotto engages in a dialogue with Noguchi's stone sculptures, and its fountain of neon tubes interacts with Dan Flavin's installations. These aesthetic exchanges raise questions about change and continuity in French gardens, materials and technologies, arts and patronage.

Members of the board will discover this garden from the upper terrace beyond the abstract foreground of a colorful orchard and flowery meadow, which contrary to the main

theatrical garden terrace will be open to seasonal changes at the CEO's request. To enhance the conceptual contrast between the fixity of time on the lower terrace and the passing of time on its upper counterpart, Lassus has introduced a very strong visual contrast between the two spaces. On the lower terrace the hedges, topiary trees, and even the rocks of the fountain appear flattened, as if at a great distance from the viewer, while on the upper terrace the highly tactile presence of trees, fruits and flowers underscores their proximity. Such a vivid experience of aerial perspective stimulates board members to philosophise about change through time, tradition versus modernity, and art versus nature. **D**

Note

1. For a more detailed presentation of this project, see Michel Conan, 'The Garden of Seasons by Bernard Lassus: Coming to terms with a de-centered world', in *Contemporary Garden Aesthetics, Creations and Interpretations*, Dumbarton Oaks Colloquium on the History of Landscape Architecture XXIX, Dumbarton Oaks & Harvard University, Washington DC, in press.

Text © 2007 John Wiley & Sons Ltd. Images: pp 60-4 © Bernard Lassus; p 65 © Michel Conan

Deep Explorations into Site/Non-Site

The Work of Gustafson Porter

Light and water are generally regarded as the signature elements of Kathryn Gustafson's work. Michael Spens highlights here how in recent projects with London-based partner Neil Porter, Gustafson has also developed a particular sensitivity to the specifics of site and context. This has led to strong narrative interpretations that are most apparent in the use of memory and history in their two projects for Beirut and their evocation of natural ecosystems in the Gardens by the Bay for Singapore.



Kathryn Gustafson's practices today include architect and landscape architect Neil Porter and Mary Bowman in London, Sylvie Farges in Paris, and landscape architects Jennifer Guthrie and Shannon Nichol in Seattle as working partners. Gustafson graduated from the École Nationale Supérieure du Paysage in Versailles, France, in 1979, and first established her practice in Paris. She defines herself fundamentally as an artist as much as a landscape designer. It has been said that she uses landscape as a medium, with figured terrain, activated by light and water, to produce a new narrative and commentary that is both site specific and far reaching. As such she is at the forefront of contemporary landscape architectural practice.

One of Gustafson's earliest site-specific schemes (in 1991) was that for Square Rachmaninov (as it has now been renamed) at the Quartier de l'Évangile in Paris. Here she revealed her skill at amending 'explicit' geometries in creating a park structure that was harmonised with a long 'canal' linking divergent elements such as a partial bosco (a small wood) and a squeezed ellipse, with usable and user-friendly elements. These include a playground and a grand lawn, circumscribed elegantly yet functionally by seating steps that automatically indicate a communal area. Gustafson had here breached existing conventions regarding geometrical, constraining layouts, and had literally liberated the site, as well as its users.

A more recent parkland is Gustafson Porter's Cultuurpark Westergasfabriek on the Haarlemmerweg, Amsterdam, which she completed with Porter in 2004, on a site previously inhabited by a gas plant. At the same time it became possible on what was essentially a brownfield site to retain 'hotspots', as part of the decontamination programme, which avoided the wholesale removal of all soils from the site. The

masterplan for the project, entitled *Changement*, focused on a major axial canal that provided a kind of skewer along which various public uses could be orchestrated. The success of this scheme enabled Gustafson and Porter to open their London office (Gustafson Porter), and take on new work internationally – for example, in Beirut and Singapore.

The practice's current project, at Swiss Cottage in London, exemplifies on a relatively small scale Gustafson's approach to site. Here, careful investigation of the contour variations by sectional analysis is coupled with an interactive water feature, in which a 'rippling sheet' is created through water emitted by jets that courses naturally down a granite-based plane to form a shallow pool. Lush vegetation defines this event, again creating a sanctuary distinct from the broader public gardens. The whole project literally sings when the water is flowing.

The work of Gustafson and her partners has had a continuing impact on the inherited concept of the nature of landscape design, characterised by some 35 projects around the world, many of which have literally redefined the very nature of landscape itself. Their projects encompass especial qualities of water and light wherever possible, together with an assiduous concern for the particular narrative to be discovered about or around particular sites. Their work is certainly in no way formulaic, but is bespoke to the urban or rural landscape in which it will be grounded.

Beirut is a city with a turbulent past. Following the conflict of August 2006, when thousands of shells and missiles showered down upon the civilian population of southern Beirut and south Lebanon, all reconstruction of the historic core, upon which Gustafson and Porter had been working, came to a halt. Fortunately, their site was spared immediate physical damage.

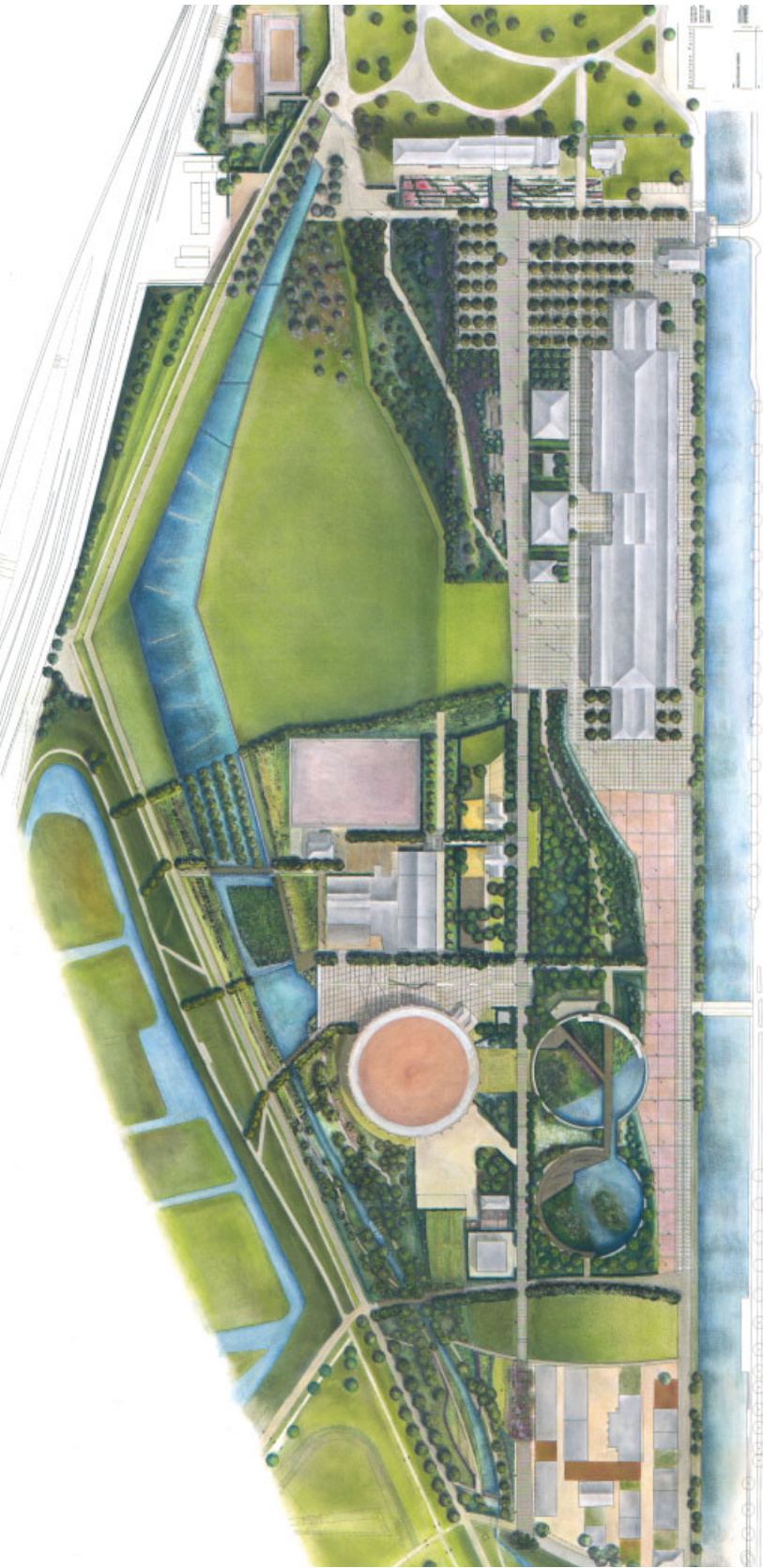


Gustafson Porter, Cultuurpark Westergasfabriek, Haarlemmerweg, Amsterdam, 2004

Left: The long ramp running through the site. Right: The masterly use of water, a Gustafson trademark.

Gustafson Porter, Hadiqat As-Samah (Garden of Forgiveness), Beirut, Lebanon, 1999–

Overview of the model incorporating explicit 'traces' of previous civilisations and their religious shrines and routes via archaeological remnants and existing places of worship. The new water gardens and planted layouts are also shown.



Gustafson Porter, Cultuurpark Westergasfabriek, Haarlemmerweg, Amsterdam, 2004
The site layout.

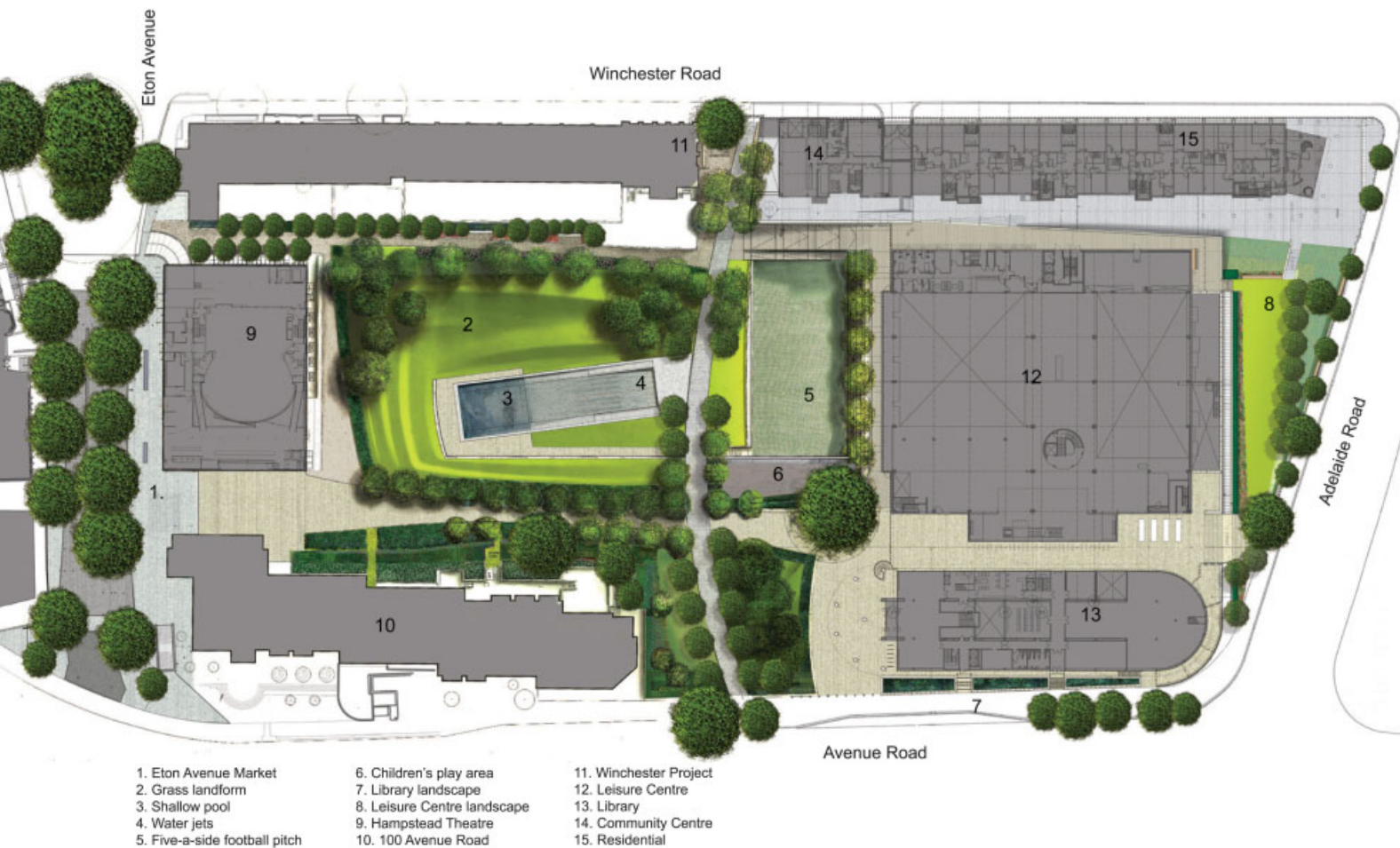


Aerial photo of the site showing the extent of this central urban park site. Note also the skilful and delicate handling of the trees on site.

The practice's projects in Beirut – their early design for the beautiful Hadiqat As-Samah/Garden of Forgiveness (1999), and the subsequent Shoreline Walk (2003), both currently under construction – offer a shaft of light for this rich and exotic city firmly and also realistically directed at the future.

The motivating force behind the Hadiqat As-Samah project was its founder Alexandra Asseily and Solidere (the Lebanese Company for the Development and Reconstruction of Beirut Central District). Asseily maintains (despite the recent debilitating and brutal conflict to the south of Beirut) that 'forgiveness is a liberating act that gives humans the capacity for peace'. Wisely, to make progress without delay, the design team excluded themselves from the pressing religious and sectarian issues of the region to try to identify a common ground. The starting point was the Lebanese commitment to their own country and its stupendously beautiful, but hard-won, terrain.

The entire Hadiqat As-Samah site was deeply layered in terms of the traces of previous civilisations. In the design competition, others sought the easy way out, by 'floating over' or framing up such remnants, which were construed as obstacles to development. Gustafson Porter did the opposite.



Gustafson Porter, Swiss Cottage Open Space, London, 2006

Landscape masterplan clearly showing how Gustafson Porter has woven together trees, park elements and water to create a haven from the nearby traffic nodes that is fully accessible to pedestrians.

Their scheme included the overlaying of two conceptual approaches: the materiality of place (that is, the regional landscape) and a firm engagement and interaction with the past as well as the present. They promptly hired an archaeologist as part of the team, so setting a design agenda that fully recognised the ancient remains that had been excavated 5 metres (16 feet) below ground – a process that revealed a richness of texture and content, from its medieval foundations up through its Roman street grid and the retaining walls of the Hellenistic period that ran along the immovable contours of bedrock. As a result, no less than three mosques, three cathedrals, and the Mary (Nourieh) shrine (visited by both Muslim and Christian females in turn) emerged, looming over the deep traces of Lebanon’s history. This initial excavation meant that the fragile zones to the southwest could be protected, but in other areas to the north the past was reinterred, preserving the archaeology and allowing for new garden layouts.

This is not a memorial garden, yet the initial, motivating concept shared by both the clients and the designers was ‘the idea of Lebanon’s journey from a fragile puzzle shattered by

war to a country gaining unity and peace under the will of its people’. These ideals still hold today, and are more relevant than ever, though badly impaired, not least of all in the collective mind of the communities that sought to build a new future for Lebanon. The Hadiqat As-Samah garden is thus a source of major healing for all. No singular, prioritised view is forced upon visitors – sectional variation is used to manipulate light and shade creating an overwhelming impression of serenity and even of the sublime.

In 2002, Gustafson Porter was commissioned by Solidere to develop a concept design for the landscape of Beirut’s Old Shoreline Walk. A year later they were invited to proceed to design development. The underlying principles of the concept design were retained. A dynamic, evolving, linear experience runs along the path of the Old Shoreline Walk, leading through a series of new open spaces (four squares: All Saints Square, Shoreline Gardens, Zeytoun Square and Satiyeh Garden) that evoke memories of the old city that have been forgotten or destroyed, yet all set within the framework of a modern city space. The old shoreline had become submerged and lost, reducing the urban fabric and its meaning. The new

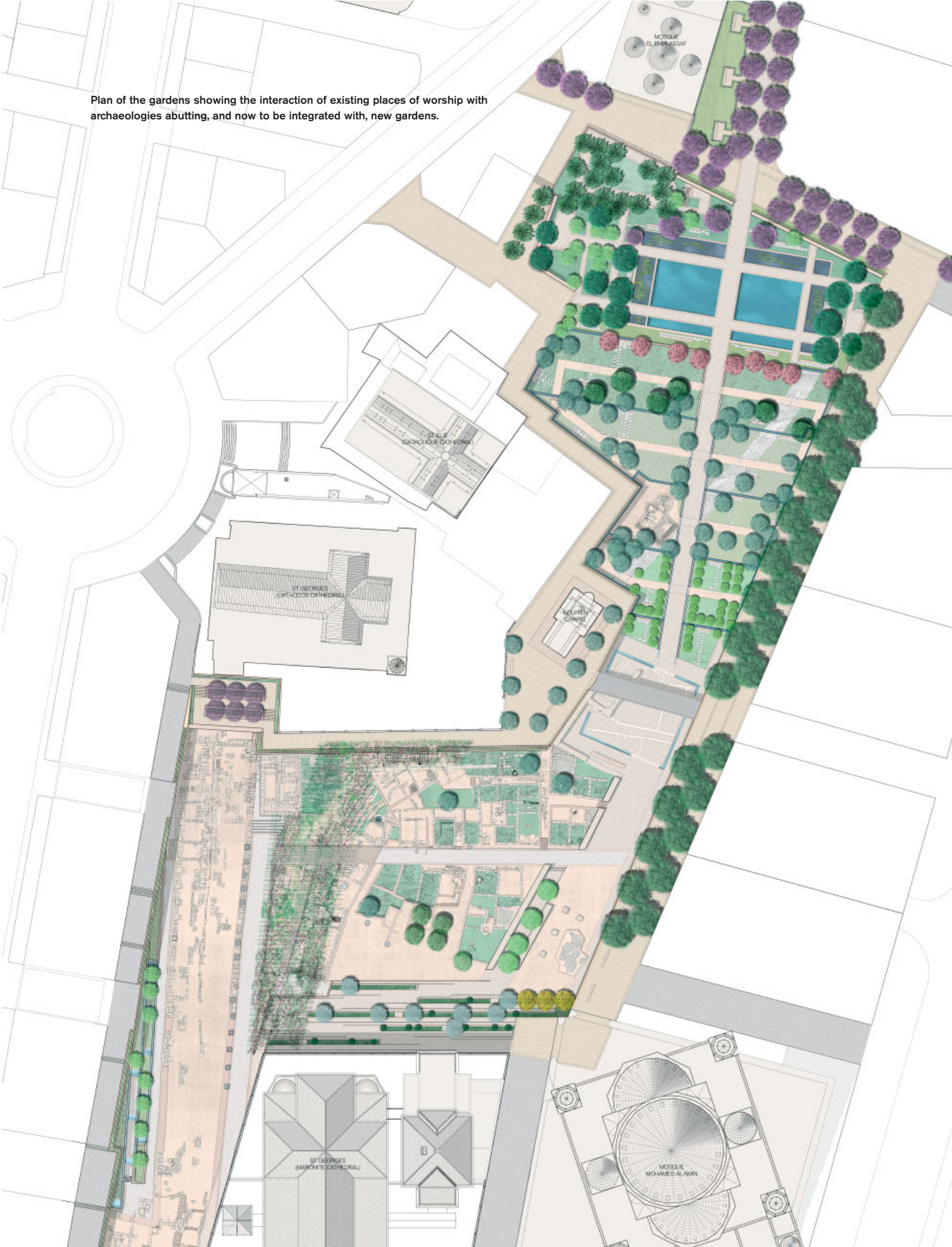


Gustafson Porter, Hadiqat As-Samah (Garden of Forgiveness), Beirut, 1999–
The proposed 'placement' of pools and new plantings.



The archaeological layering as expressly revealed and duly incorporated in the planned garden and pool overlays.

Plan of the gardens showing the interaction of existing places of worship with archaeologies abutting, and now to be integrated with, new gardens.





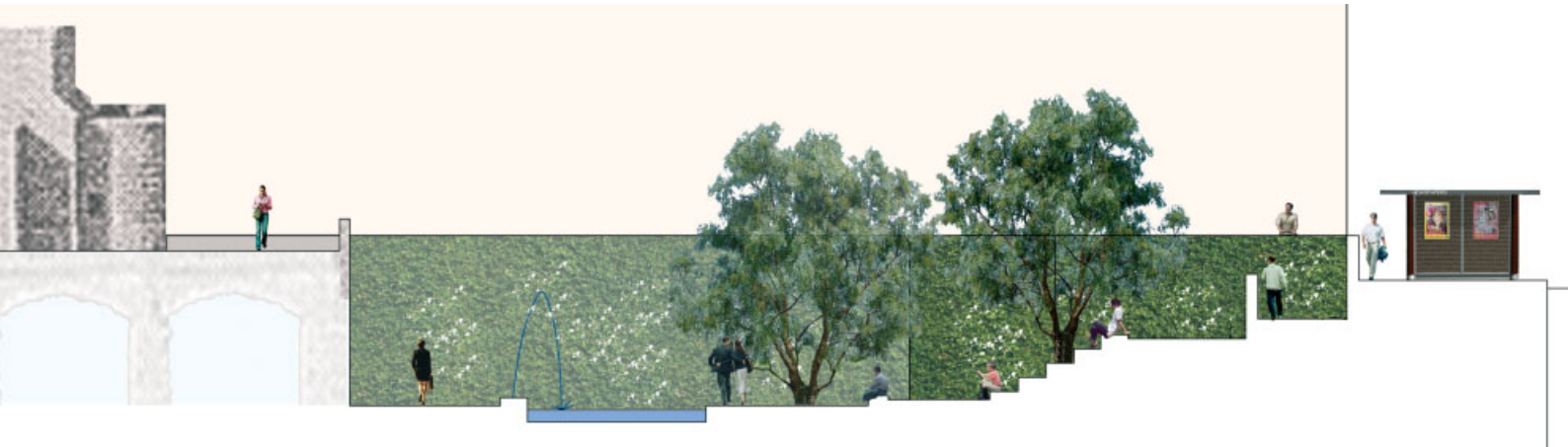
Gustafson Porter, Shoreline Walk, Beirut, Lebanon, 2003–
The Shoreline Walk reveals the engagement of tree planting and water.



The shade 'pavilions' are planned around the actual plateau, and take the form of contemporary curved structures.



Masterplan. All Saints Square is shown top left, and a tree-lined avenue leads to the Shoreline Gardens.

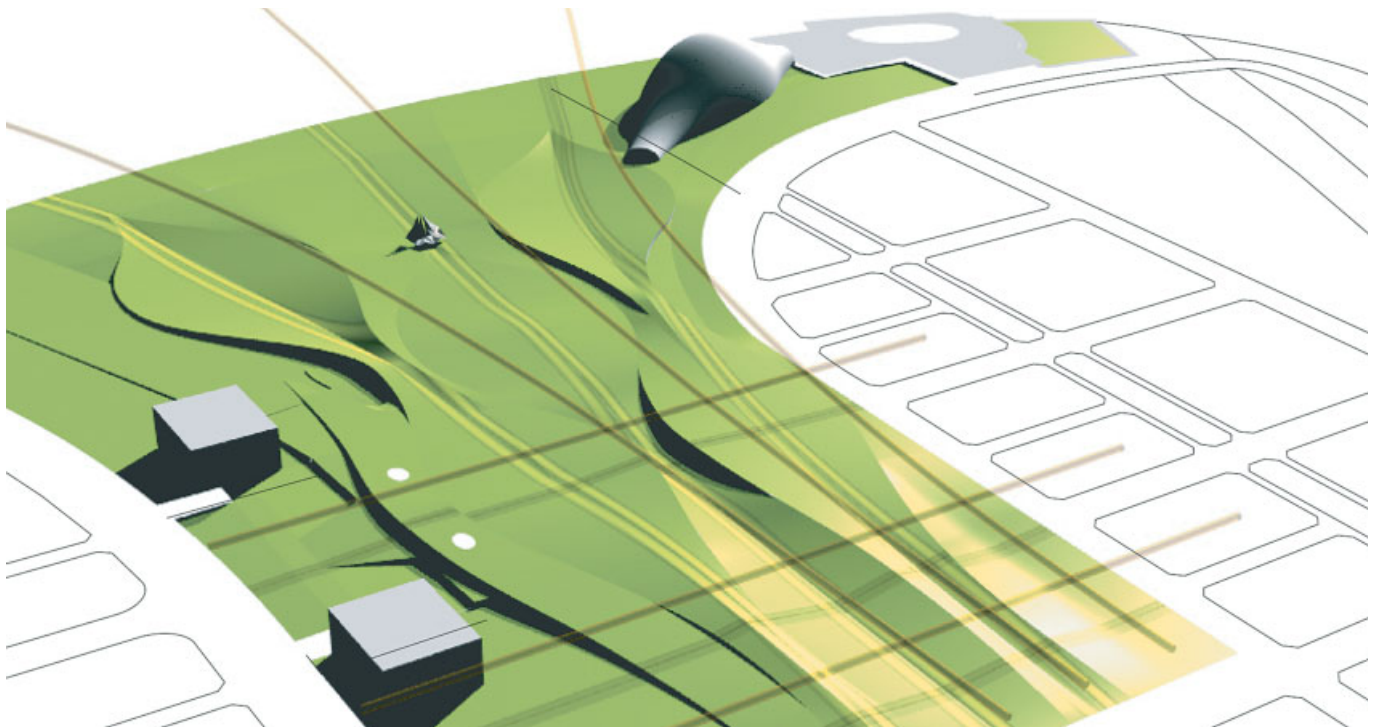


Section D-D, showing the level changes in All Saints Square.





Gustafson Porter, Gardens by the Bay, Singapore, 2006
Skyline view of the business district of Singapore and the waterline.



Rendered image showing the fluent forms of the leaf grid.

line, marked by a continuous line of white limestone and accompanied by a wide pedestrian promenade lined by an avenue of royal cuban palms, is intended to reawaken such aspects of the buried city fabric as well as connecting the new squares, stimulating the cultural meaning of the city centre.

The connectivity of the city is also emphasised by the enlightened tree planting and implemented further by carefully contrived lighting. At All Saints Square (originally a space on the edge of a headland occupied by All Saints Church), an intimate space has been created, lowered down to the original ground level adjacent to the church. Views are thus channelled upwards towards the sky, and the space is enclosed by soft, green textured walls. The square is terraced in black granite with large white benches that evoke the crashing of waves against the headland. At street level, a raised route linking the Shoreline Walk with the corniche (re-created after its wartime destruction), allows direct passage through the space, enhanced by views into the gardens below.

The Shoreline Gardens are on the site of the historic Avenue des Francais, Beirut's original corniche. In the Santiyeh Gardens, a former medieval cemetery, the concept of an urban green oasis has been developed as a contemporary Arabic Paradise Garden. Water wells up within moulded stone plinths that act as a sombre counterpoint to the surrounding contemporary lush planting before cascading down to a more open public plaza. Situated south of the Shoreline Walk, Zeytoun Square is a key link to the surrounding city, and will become a celebration of modern Beirut that will host cultural events.

The effects of force majeure may dictate that it is a long time before Gustafson Porter's ongoing programme for Beirut's Shoreline Walk is fully realised. However, the projects are clear evidence of the deep commitment of the professionals involved to match the aspirations of their clients.

In September 2006, the practice was announced as a joint winner of a competition to design one of three garden areas on Singapore's waterfront, part of the Gardens by the Bay urban redefinition of the city. The redefinition is to be achieved by re-conceiving the entire idiom of the city, as a city within a garden. While Singapore has become a global leader in expansion and innovation, the pressures that have impacted on the central business district have forced a major revision of where Singapore is going, and indeed where it will not. Its maritime history as a great port has left the waterfront exposed to environmental blight and decay, and it is now time to capitalise on its potential, as has been the case in cities such as Sydney, Vancouver, Boston, San Francisco and Shanghai (all of which have had a head start in recasting their identities).

There is clear recognition of a new phenomenon in the 21st-century city – the yearning of the population, and of visitors, for recreational activities such as museums and science centres as an accompaniment to the highly proactive nature of the business district, characterised by its growth of the so-called knowledge-economy industries. Urban connectivity is also a key issue, as a response to expanding mobility within the city core. It was not hard for Gustafson

Porter to envisage the potential of Singapore in such a way. But the emergent landscape needs to be based on the cultivation of recognised ecosystems. The architects' solid understanding of landscape systems incorporates a ready familiarity with the time frames imposed by urban development, as well as the need to incorporate new infrastructures without marginalising potential recreational growth. The detail of the landscape design, from planting schemes and 'groundforms' to the whole waterfront structure, is key to the future pattern of Singapore life.

Gardens by the Bay, as proposed by Gustafson Porter, emerged as a richly textured, multilayered environment, allowing a subtle interweaving of numerous meshes and networks of paths and activity nodes. The surrounding apartment blocks and offices have to be closely interlinked with such systems, not cut off. The three waterfront gardens are linked together to form a coherent, well-codified circuitry, yet each is different and clearly readable as such. Gustafson Porter recognises that such differentiation can be a result of the manipulation of light and shade, breeze patterns and natural drainage channels expressed in an environmentally pleasing manner.

It could be said that Singapore has, over the past century, already achieved the status of a 'garden city'. But the pressure is now on to create a garden *containing* the city – a very different delineation. Points of arrival, departure or re-entry here become critical in terms of the landscape design. And it is this landscape language, the vernacular of the new form, which must be clearly developed.

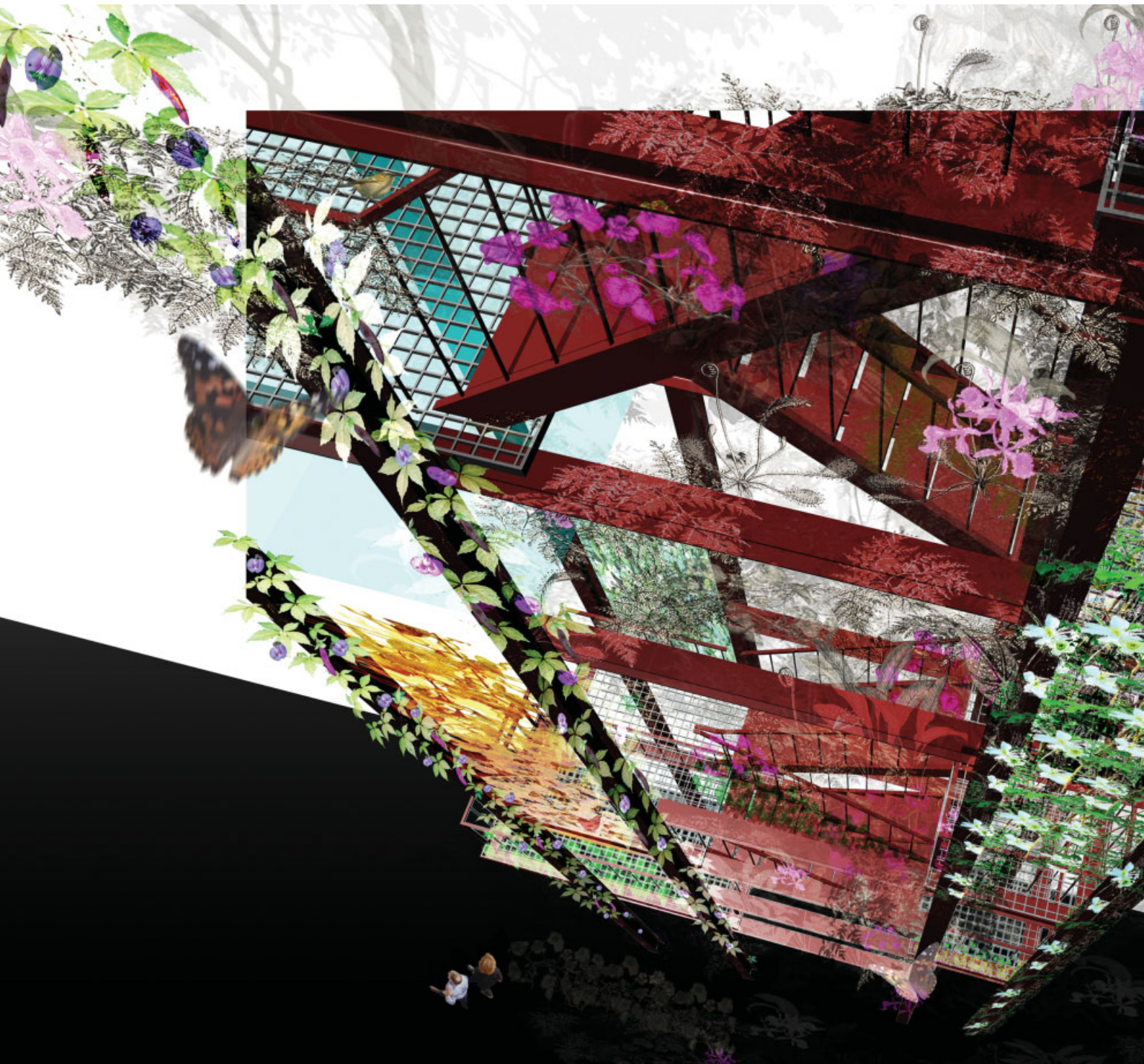
Based on the emblematic landform of 'tropical leaves', the landscape features here offer two hierarchies. The palm leaf throws its fronds outwards from Marina South to Marinas East and Central, drawing their shorelines together, and so emphasising the bay. The three undulating leaves of Marina South are then collaged over its surface, establishing a three-dimensional hierarchy and a distinctive layering. At Marina East, terraces have been created to characterise the whole feature. The Gardens by the Bay have the potential to become a kind of horticultural paradise of enduring beauty. Rice paddies, pools of water chestnut and lotus run down to the water's edge.

As with many of Gustafson's landscape projects, in the Singapore proposal water plays a critical and central part. Natural drainage is carefully monitored and directed, with water channels and rills, cascades and waterfalls running to the actual edges of the 'leaf forms'. As she has shown in many other schemes, water provides a stimulating and refreshing sound, running over a variety of textured surfaces and changes of level.

With both Beirut and Singapore, Gustafson Porter is literally transforming the contemporary image of what landscaping is all about. This could be the salvation of many more urban knots and seemingly unresolvable dilemmas. **Δ**

'Activating Nature'

The Magic Realism of Contemporary Landscape Architecture in Europe

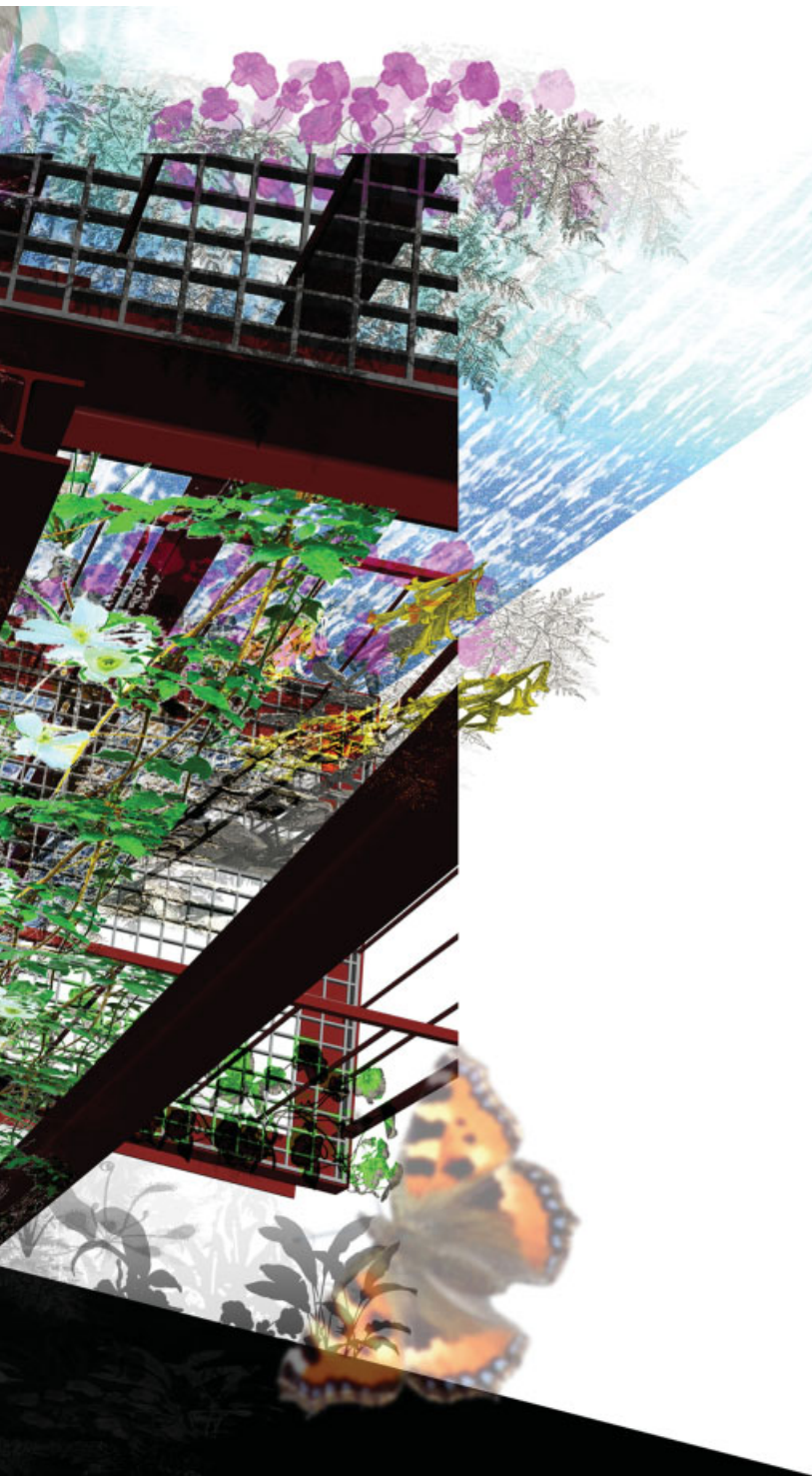


The redefinition of European cities has created new opportunities for the greening of public urban spaces. **Lucy Bullivant** describes how three young practices in particular – **West 8, Gross.Max and Mosbach Paysagistes** – are leading the way with their highly dynamic and inventive narrative approaches to history, culture and the emergent city.

In recent years, landscape architecture in public spaces has undergone a remarkable ascendancy. In Europe, the metamorphosis of cities' identities has been triggered by the expansion of commercially driven activities. Economic change has enabled urban parks and gardens, building/public amenity landscapes and former industrial areas in remedial intensive care to undergo transformation and be thrown open to the tumultuous footfall of the wider public everywhere. Landscape architecture, previously seen as synonymous with garden design as a small-scale afterthought, is now an urban commodity in the eyes of commercial developers, almost as attractive as coffee bars on every street corner.

Public and private clients in European cities large and small are increasingly keen on the idea that landscaped improvements to the urban fabric lie in revealing what is already there and creating legibility, rather than imposing an alien form of picturesque. Many European cities, apart from a few that are shrinking, are rapidly becoming more multicultural, and in response there has been a paradigm shift by professional landscape architects and urban designers towards a multiple and flexible informal use of space by a wide range of user groups.

Allowing for spontaneous behaviour, intimacy, playfulness and exploration rather than its constraint through reproduction of past historical styles, the new European landscape architecture is urbanist through and through. Its commitment is to the creation of visual landmarks, but also spaces that are inviting to allcomers. Landscape architecture's former reliance on picturesque or, indeed, Modernist tactics of old has evolved into a more hybrid, narrative form of urban design expression. Most landscape architects in Europe are not polemicists, but the injection of narrative and art-based



Gross. Max, Bullring, Birmingham, 2003

The informal character of the limestone steps and terraces acts as a magnet for the public to use the new shopping centre.

Gross. Max, Vertical garden, London, 2005

View of the vertical garden created with artist Mark Dion near Tower Bridge.



Collage of the Garden for a Plant Collector, from the Gross.Max competition book.

techniques into contemporary landscapes is an activist antidote to the slippage in meaning of urban places. Detached from industrial history, and being overlaid by the nonplaces of retail, the junk spaces they spawn when commercialism becomes the sole motor for their development needs a holistic landscape urbanism to bring a sense of direction.

Defining a sense of place in a contemporary European context is an activity that the younger generation of landscape architects have leverage to carry out at a fundamental level. They do not do spur-of-the-moment 'guerrilla gardening' (although the London-based movement of the same name has made rapid headway, and recently received an award for the 'greening' of Elephant and Castle from Southwark Council). Rather, their work is developer-sanctioned aesthetic activism, and in activating nature they



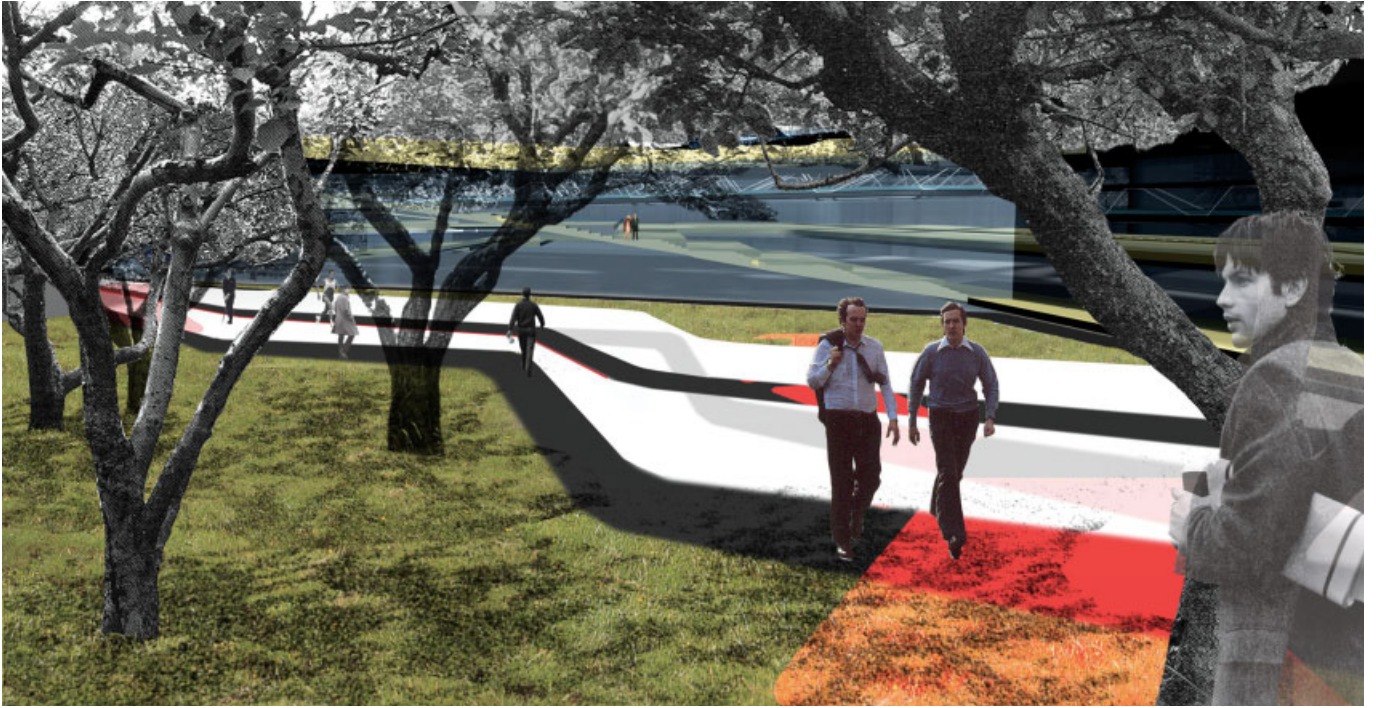
Gross. Max, Garden for a Plant Collector at the House for an Art Lover, Glasgow, Scotland, 2005–
View of the Garden for a Plant Collector at dusk.

are commanding the strongest, yet most aggravated, force there is – bar the markets – to play a leading role in contemporary society.

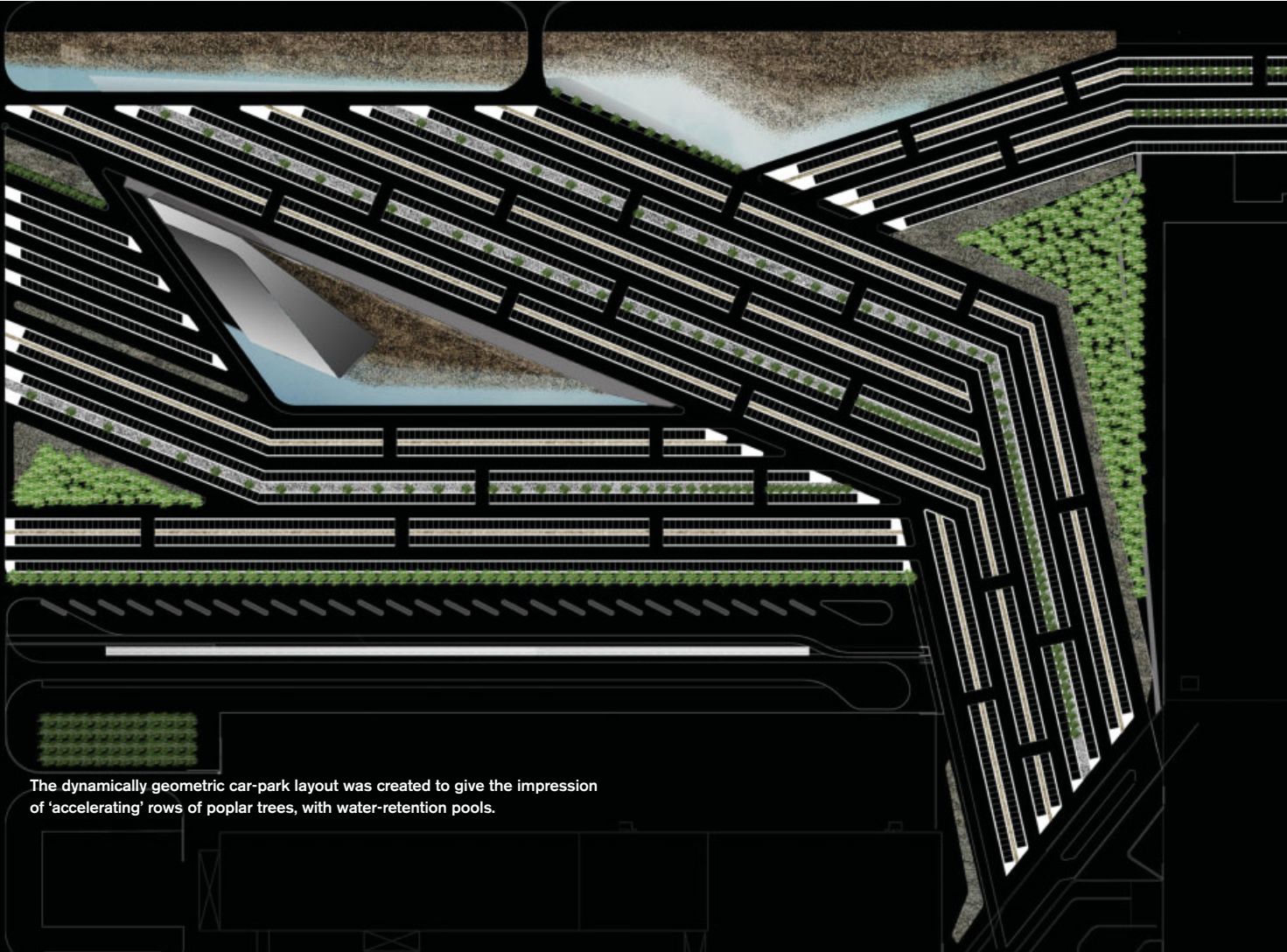
Added to this, recent climate change in Europe (the green open spaces of London’s parks were reduced to scorched earth as the city went Mediterranean in the summer of 2006, and world-standard UK wine-growing became a hot prospect for the future) has not only prompted future opportunities for radical changes in the ways buildings are constituted, as ecosystems. It has also led to urban environmental novelties such as urban (Paris) and tropical indoor (Berlin) beaches, and year-round indoor ski slopes with ‘real snow’ (Scotland).

For the Edinburgh-based landscape architecture practice Gross.Max, narrative is a vital component of contemporary landscapes. ‘We like extremes, otherwise the whole world

becomes lookalike,’ says Eelco Hooftman, who founded the practice with Bridget Baines in the Scottish capital in 1995. The firm first attracted public attention for its informal landscaping of the Bullring, Birmingham’s central shopping area, in 2003, and has since completed schemes for Zaha Hadid’s BMW plant in Leipzig, Germany, and the public spaces at the refurbished Royal Festival Hall in London. Though as yet still relatively unknown even within the architectural world, Gross.Max has injected an optimistic breeze of fresh air and exuberance into UK urban design. For the architects’ proposed environment for the House for an Art Lover, Glasgow, an unbuilt MacKintosh project that a Glaswegian group recently determined to make real for the first time, they presented the client with a book of computer-generated imagery focused on Des Esseintes, the fictional protagonist of JK Huysmans’



Zaha Hadid Architects and Gross.Max, BMW Leipzig, Germany, 2005
Courtyard with a grove of apple trees.



The dynamically geometric car-park layout was created to give the impression of 'accelerating' rows of poplar trees, with water-retention pools.



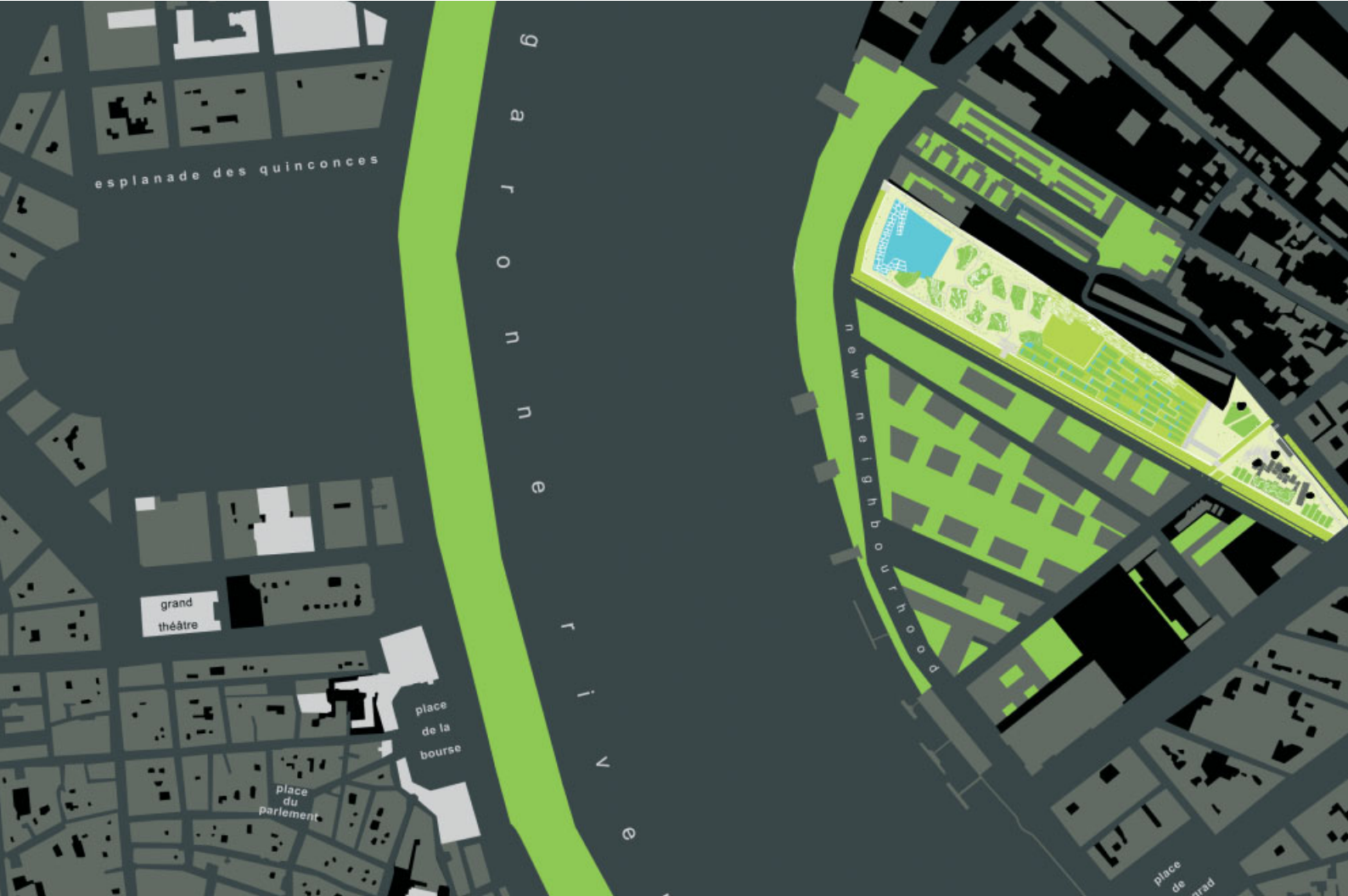
Gross. Max, Rottenrow Gardens, Strathclyde University, Glasgow, 2003
Aerial view of the public garden.



The central core of the public garden has become a popular urban location.



Gross.Max, Royal Botanic Garden, Edinburgh, Scotland, 2003-
View from the Edinburgh Gateway centre towards the new biodiversity garden.



Mosbach Paysagistes, Le Jardin Botanique de Bordeaux (Botanical Garden of Bordeaux): stage 1 (garden), 2001–02; stage 2 (museum and greenhouses), 2004–05

On a site adjacent to Bordeaux's Garonne River, on its left bank, the thin wedge (600 x 70 metres/1,969 x 230 feet) of botanic gardens is in the centre of an urban redevelopment project by Dominique Perrault. The brief was to create a botanic garden exhibiting the particular characteristics of the natural and cultural character of the Aquitaine bioregion, something Mosbach Paysagistes has fused as a powerful dialectic in the form of a public landscape.

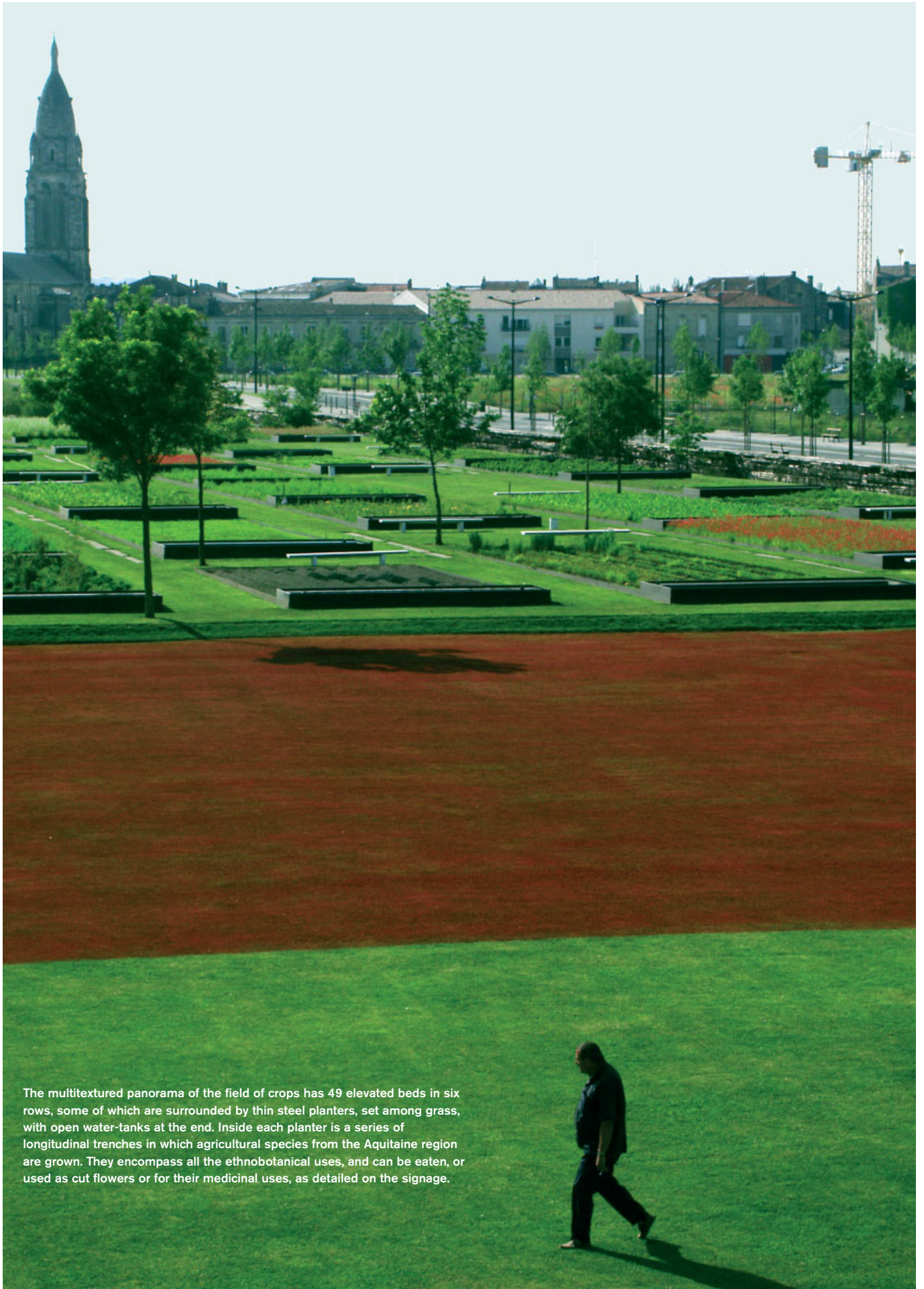
decadent novel *Against Nature* (1903) and a plant lover who tends a glasshouse of rare specimens. The 150-page book bursts with proposals for 'a heterotopia of plants blurring the boundary between the natural and the artificial'.

Hooftman wants landscape architecture to return to experimentation on the level it reached in 17th- and 18th-century Britain, radically reshaping nature according to fashion and taste as dandies, hermits and poets were liable to do. Such a revival, he feels, is especially necessary after a period grossly lacking in landscape design creativity at the end of the late 20th century, when it became a mere afterthought tacked on to the end of the construction process. Smaller cultural projects, such as the House for an Art Lover and the vertical garden against a blank wall near Tower Bridge in London the practice is completing for the American artist Mark Dion, offer valuable opportunities to intervene in the public realm.

Landscape design as the 'physical and rational manipulation of an objectified reality' is already intrinsic to Dutch urban design, borne of the need to create comprehensive and efficient use through polders and dykes of

land below sea level. 'In the Netherlands there is the idea that you can make land, make nature, which explains our grassroots politics,' says Hooftman. 'We are about a new picturesque.' Pressing him on what that is, he answers that: 'It's just the old, reinvented. We still believe in aesthetics.' Which explains the kinship between Gross.Max and Zaha Hadid, for whose intensely wrought aesthetics Gross.Max has completed a number of successful landscape schemes. For her new 200-hectare (494-acre) BMW site in Leipzig, its landscape architecture, inspired by agricultural landscapes, combines a response to the radical nature of Hadid's architecture, functional use of the site and ecological considerations. A row of 'accelerating trees' planted increasingly close together along the side of the car park provides orientation and a dynamism to this normally mundane environment.

Hooftman believes that landscape architecture can serve as a testing ground for urbanism. Society's colonisation of landscape is a complex phenomenon, and now the bigger developers are coming to see art and architecture as a commodity, which encourages a contextual approach to



The multitextured panorama of the field of crops has 49 elevated beds in six rows, some of which are surrounded by thin steel planters, set among grass, with open water-tanks at the end. Inside each planter is a series of longitudinal trenches in which agricultural species from the Aquitaine region are grown. They encompass all the ethnobotanical uses, and can be eaten, or used as cut flowers or for their medicinal uses, as detailed on the signage.



Mosbach Paysagistes, Le Jardin Botanique de Bordeaux (Botanical Garden of Bordeaux): stage 1 (garden), 2001-02; stage 2 (museum and greenhouses), 2004-05
The environmental gallery is a series of mounds that are elevated simulations of the geomorphological strata and soil profiles of the Aquitaine region in two rows, representing the two banks of the river, with the five mounds of clay, gravel and sandstone to the north representing the right bank.

flourish. This is evident in the design of a number of new urban parks, for example, making them characterful yet culturally porous urban additions rather than merely generic backdrops to buildings. Gross.Max's terraced Rottenrow Gardens, for Glasgow's Strathclyde University, fulfils this role, functioning as the outdoor social centre of the university for students and staff, and a hub in a network of routes linking the campus.


In France, a radical reinvention of the hitherto largely hermetic archetypal typology of the botanic garden was undertaken in 2002 by Catherine Mosbach, of Mosbach Paysagistes, for the district of Bordeaux on the right bank of the Garonne River. Instead of creating a hermetic garden or a public park, Mosbach has forged a new hybrid of urban parkland overlaying the historic grid of the agricultural land of the La Bastide district here and the old downtown area on the left bank. Her design includes a water garden, an environmental 'gallery' of botanic and agricultural landscapes laid out in a field of wide strips the public is free to wander through and study – the ecological part of the project – and an ethnobotanic field of crops on long irrigated strips of land. A fourth element is a neighbourhood garden for new housing.

The first is a geometric space planted with aquatic species set above the adjacent road. The gallery is an overly artificial cross section of the Aquitaine Basin region's natural classifications – sand dune, water and dry meadows, oak woodlands, heath and limestone – yet they bring the reality of the region to this urban site. Botanic gardens mostly try to

outdo each other with exotic species, but this one plays a different game, promoting landscape as cultural heritage. Mosbach describes her vision as a philosophical rather than an ecological one, using natural flows to draw human movement.

Her largest urban project to date has been a new 7-kilometre (4¹/₃-mile) long walkway along the canal of St Denis from La Villette to the island of St Denis in Paris, and she is currently developing the park for the Louvre's new regional museum at Lens in Nord-Pas-de-Calais (a group of nine buildings) on a 20-hectare (40-acre) site, together with Japanese architects SANAA and New York museum designers Imrey Culbert. An open relationship between the museum, nature and the landscape will be achieved through a circuit taking visitors out of the buildings and along glazed paths winding through a clearing. Jack Lang, the former French Minister of Culture, has described the scheme as 'a project that starts from the earth and reaches for the stars'.

Dutch urban designers and landscape architects West 8, led by founder Adriaan Geuze, established its reputation in the 1990s with projects at home – the Rotterdam Schouwburgplein and, more recently, the Borneo Sporenburg docklands development in Amsterdam. The best known of the younger generation of landscape architects, the practice, in stepping aside from the age-old opposition between city and nature in favour of their fusion, has a disciplined, context-based methodology. This underlies a frequently surreal, heterogeneous and often humorously tongue-in-cheek



The water garden is an irregular grid of basins separated by paved walkways.



West 8, Luxury Village, Moscow, Russia, 2004–06

The 500-metre (1,640-foot) long street uses Dutch clay bricks, a paving material rarely seen in Russia.

approach: ‘Public space must reinforce a city’s existing spirit,’ says Geuze. Palm trees grow from lamp posts, concrete is given an illusory, ‘wild’ nature, watercourses loosely suggest Leonardo da Vinci’s canal system, and the design of public parks is given a music- or dance-like syncopation. No distinction is made between urbanism, landscaping, architecture and botany, whatever the scale, from street furniture to squares, parks and urban masterplans.

Geuze is inspired by the potential mobility of landscape. The passage from Shakespeare’s *Macbeth* that describes Birnam Wood moving appeals to him; thus winning such a large and – when it is realised in 2010 – transformational European urban scheme as the Parque Lineal del Manzanares in Madrid in autumn 2005 gave him a real frisson. With the M30 freeway being taken underground, West 8, working with local architects Burgos & Garrido Arquitectos, Porras & La Casta Arquitectos and Rubio & Alvarez-Sala Arquitectos, will transform the 80-hectare (198-acre) valley on the Rio Manzanares over the next four years into a vital site of mediation for the city, at a cost of 6 billion euros. Brandishing the slogan ‘Mas rio – mas Madrid’ (More river – more Madrid), this will reorient the city towards the river, with a park with five illusionistically designed water streams, and a boulevard of pine trees that connects almost all of Madrid’s parks, creating a new green ‘spine’.

In typically deft West 8 mode, the Madrid design employs more than a touch of magic realism, each stream representing a certain mood – ‘The River of Passion’ and ‘The Creek of Moonlight’ are just two – and distinguished by its own kind of

vegetation and materials. A spectacular grass-covered land bridge will connect the historic Royal Garden and the Casa de Campo (the former royal hunting grounds). And not only will a group of former slaughterhouses be converted into the Centro del Artes, a new district created from scratch for culture and arts, but 22 new bridges will bring both sides of the city closer together than ever before.

Despite West 8’s enormous international credibility and track record in creating new communities that are profoundly contemporary yet not Disneyfied – for example, the Borneo Sporenburg docklands and, in the UK, the Chiswick Business Park – ‘in England clients didn’t want to recognise that we worked between architecture and urban design’, Geuze observed in 2005. This narrow-minded attitude has clearly shifted since then. The architects’ masterplanning role in Stratford is advancing (but shrouded in secrecy at the client’s request), and winning the competition for Jubilee Gardens on London’s South Bank promises to provide a conclusively creative yet practical statement for this heavily contested riverside site. Organic, lush and green, with softly undulating hills and ‘a botanical ambience’ the area has previously lacked, it will have fluid paths, and prime lookout points framing panoramic views of the Thames, the London skyline and the South Bank, as well as intimate spaces to relax. At night, the lighting scheme will subtly animate and play with the new ‘weaving landscape’.

For Luxury Village, a pedestrian shopping street in a new urban development in the forests just outside Moscow, West 8 had the audacity to use Dutch clay bricks, and especially

custom-cut bricks, a paving material rarely seen in Russia. The 500-metre (1,640-foot) street is laid with two intertwined patterns, the second in two colours cutting through the first. The street surface is perforated in several places by pockets in which pine trees are planted along with seasonal flowers. Pine trees can not only withstand the severe temperatures in Moscow, but create a visual connection between this most cosmopolitan street lined with Prada, Gucci, Rolls-Royce and Yves Saint Laurent and the birch pine forest surrounding it.

While such a prestige project has opened West 8's markets to luxury developments (and one wonders about the prospects of a future hermetic world of gated communities landscaped by the practice), the sheer heterogeneous range of the architects' work will avoid typecasting. Winning the Waterfront Innovative Design competition in Toronto, a highly public project, represents the side of the practice's work that reclaims the water's edge of cities. An 18-metre (59-foot) promenade with a wooden boardwalk, floating 'finger' piers and a series of bridges transforms Queen's Quay, described as the city's Achilles Heel, into a space 'where the city kisses the lake'. In an almost unprecedented performance, in the summer of 2006 West 8 realised a prototypical chunk of the boulevard at 1:1 scale for a long weekend to see how people reacted, adding 'a Bike de Triomphe' constructed from old bicycles.

The work of West 8, Gross.Max and Mosbach Paysagistes demonstrates that younger landscape architects are taking a wider social responsibility in response to complex urban needs for redefinition of space, whether it is industrial in origin or public areas around new buildings. They are working in a context of privatised land-use yet the huge pressure for



The brick paving of the Luxury Village is perforated in several places with round tree areas called 'pockets', containing pine trees also found in the surrounding birch pine forest.

cities to redefine their identities is opening up new opportunities for creativity concerning the design and role of green spaces. One facet of urban identity that has become topical is the concept of integrating the countryside into the fabric of the city in order to create a common habitat. This has been discussed but rarely implemented in Europe. There are fears in a relatively small country like the UK that urban growth is bringing a tarmacking over of the countryside, and that a sense of synergy between the urban and the rural is lacking. The traditional European urban scenario has been that whenever the city has grown in size, nature and agriculture have disappeared as the urban has become two opposing and ever more entrenched concepts. A rural (rural-urban) hybrid, working with a territory's agricultural origins, not denying it, typifies the Sociópolis urban scheme for the outskirts of Valencia, led by Vicente Guallart, which integrates the *huerta*, or market garden, into a new residential community alongside public amenities.

Wider interest in the three practices discussed above has clearly been fostered in part by the effervescent yet relatively highbrow public celebration of nature and 'bio-visions' of the biannual Bundesgartenschau (Federal Garden Exhibition). This event – part exhibition, part trade fair – has opened minds to potential synergies between urban design and landscape architecture. The last event, attended by 3 million people over 165 days, was staged in Munich. Its focus straddling leisure and culture complements a larger push in Germany towards integrated developments harmonising economic, local leisure and ecological requirements, including the preservation and use of open spaces in an ecologically interconnected system.

An example of this is Berlin's development as a European urban district. Potsdam, which is over a thousand years old, is set, island-like, in a landscape of parks and lakes, much of them the legacy of the Prussian kings from 1657 who created palaces and gardens there. A UNESCO-protected site, its urban development adheres to three principles: the integration of former military bases now being converted to civilian use; emphasising the park and garden character of the town while maintaining its world cultural heritage; and integrating its varied environments into a historically formed, mixed-use system. Here, the Dutch landscape architects B+B (Bakker en Bleeker) have transformed a former Russian training camp dating from the DDR era into the Waldpark Potsdam.

The programmatic possibilities arising across European countries in this postindustrial era require nothing less than a holistic narrative approach to history, culture and the future identity of the city. The strategies of West 8, Gross.Max and Mosbach Paysagistes show immense lucidity and intellectual leadership – and more than a dose of humour – when it comes to the complex issues of nature and urban culture, and their combined potential as sustaining forces. **D**

Text © 2007 John Wiley & Sons Ltd. Images: pp 76-81 © Gross.Max; p 81(tl) © Gross.Max, photo Peter Iain Campbell; pp 82-3 & 85 © ADAGP, Paris and DACS, London 2007; p 84 © BMA APPA; pp 86-7 © courtesy of West 8

Landscapes of the Second Nature

Emptiness as a Non-Site Space



For Florian Beigel and Philip Christou of the Architecture Research Unit (ARU), based at London Metropolitan University, an experimental project in Leipzig proved formative in the gestation of ideas for a much larger-scale project in South Korea. The Paju Book City near Seoul is nothing less than a city of publishers, encompassing production houses, printers, warehouses and editorial offices on a wetland site surrounded by mountains. Michael Spens describes this remarkable project here and finds its only conceivable precedent in the narrative-based poetics of place evoked by Italo Calvino in the fable of *Invisible Cities*.¹

Architecture Research Unit, Paju Book City, near Seoul, South Korea, 1999–
View of Paju looking from the Simhak Mountain to the Han River in 1999 before construction began.





Architecture Research Unit, Second Nature Landscape, Cospuden, Leipzig, Germany, ongoing

Urban design plan from June 1998 showing, left to right: the public wetland next to the lake; new 'lake villas' and 'longhouses' in blue-grey on a new territory forming a straight edge to the wetland; and the new village repair strategy in the old town, with buildings of historic importance in black.

The recent work of Beigel and Christou has developed through the research they carried out for an experimental project for a site in eastern Germany, at Cospuden, close to Leipzig. The purpose of the Second Nature Landscape project was to lay out a carpet of specifically landscape terrain, as a kind of generator of form, so providing the basis for an emergent architectural landscape – laying out the rug, but not the picnic.

Research was carried out into the evident natural and occupational memory traces offered by the landscape, ranging from its geological origins, through prehistoric times and primitive 17th-century flood preventive schemes and the 18th-century manor house and estate that developed, to the despoliation of all this as a result of large-scale coal-mining operations. Now the rug contains an overlay of incipient ecological measures. The deep scars of the open-cast mining are being flooded, which over the next 30 years will permit the formation of a postindustrial city on a recreational lake – a city of dreams.

In a purely landscape reclamation context one is reminded of Geoffrey Jellicoe's 50-year-long project for the Hope Cement Works in Derbyshire, England, in the Peak District there. But ambitions at Leipzig embrace a whole city scheme. The extreme horizontality of the new landscape opens many possibilities, which Beigel and Christou have envisioned and to which the Leipzig authorities have given their support.

The site stretches over a 50-kilometre (31-mile) radius south of Leipzig and will eventually be transformed into a post-industrial, recreational, city lake landscape. The Cospuden project has become a prototype design for the meanings of the new lakes and for the different ways the city is approaching its new lake shores – the revalidation of so-called 'emptied sites' in the words of ARU.

A long, straight lake includes promenades and the retention of the straight edges of the coal-dust protection forests planted at right angles to the dams. The plan designated the soft lake shore as a wilderness and the straight shore as the new urban terrain, having a hard edge.

This is, as a whole, an ecological terrain which has now become an urban wetland, but it is crossed with care by a timber jetty. The wetland acts as a catchment field, part of a surface-water management strategy in which the relatively unclean surface water flowing down the sloping suburban territories towards the new lake is retained separately from the clear groundwater of the lake itself.

The project as a whole could be described as a landscape-scale architectural infrastructure that will provide a spatial framework for buildings in the future.

The city's gods, according to some people, live in the depths, in the black lake that feeds the underground stream.

Italo Calvino²

While working on this venture, Beigel and Christou had time to think and perhaps to reconsider the landscape-generating role that as architects they found themselves developing, and



The mining landscape at Cospuden, transformed into a mining memory landscape as a framework for development.

were shortly invited to visit Seoul, close to which a remarkable concept had been envisioned – ‘Paju Book City’. Along the edge of the Han River northwest of the South Korean capital, Seoul, before a distant prospect of mountains and close to the sea, the architects realised that here was a client that possessed a clear, if not fully defined vision of what a 21st-century technologically based city might comprise.

When a man rides for a long time through wild regions he feels the desire for a city.

... Isidora is the city of his dreams: with one difference. The dreamed of city contained him as a young man; he arrives at Isidora in his old age ... Desires are already memories.

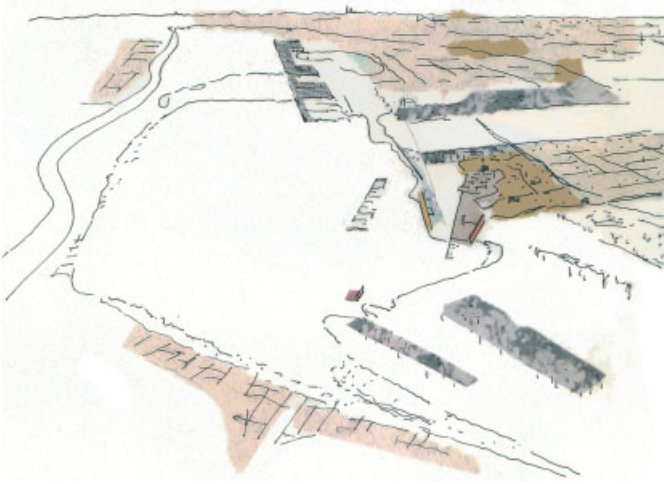
Italo Calvino³

In the spring of 1999, Florian Beigel and ARU were commissioned to design the urban landscape plan of Paju Book City. The ARU plan was used as the basis of the Paju

Design Guide, produced in August 1999 by a team comprising the architects Seung H-Sang (co-ordinator), Florian Beigel, Min Hyun-sik, Kim Jong Kyu and Kim Young-joon. A range of architectural typologies emerged. One extended below the defining Freedom Expressway (formerly the Ja Yoo motorway and today also a major 10-metre/32-foot high flood barrier along the east bank of the river). Called Highway Shadow, this was to contain mostly mass-production facilities such as print shops, publishing houses and factories, buildings, restricted to two storeys, that would have green roofs and would not exceed the height of the highway. Another architectural type was dubbed Bookshelf units – a series of ‘chopped volumes’, yet giving the working inhabitants unrestricted views of the Han River and the Simhak Mountain. Other poetic concepts included Stone units, with massive forms akin to geological rock, and a ‘Canal Loft’ running out rhythmic lines along the length of the waterway. An Urban Island would be recognised from the roads surrounding all four sides of the site. This



Structures on the new harbour ramp. The platforms emphasise the horizontality of the new landscape of lake and shore.



Early design sketch of the lake looking north, showing wetlands and allotments on the left side of the lake, new 'urban forests' as long strips perpendicular to the lake edge, the new straight lake edge on the right side of the lake, and the new town edge to the lake with ramping harbour.



The Cospuden mining excavation process has uncovered 50 million years of geological history. This aerial photograph shows how the process has turned the area into an apocalyptic morass of waste and water.

mass was then to be fragmented by alleyways for easy pedestrian access. Thus an infrastructural framework was created overall to play host to human settlements, themselves unconstrained by urgent time-framing.

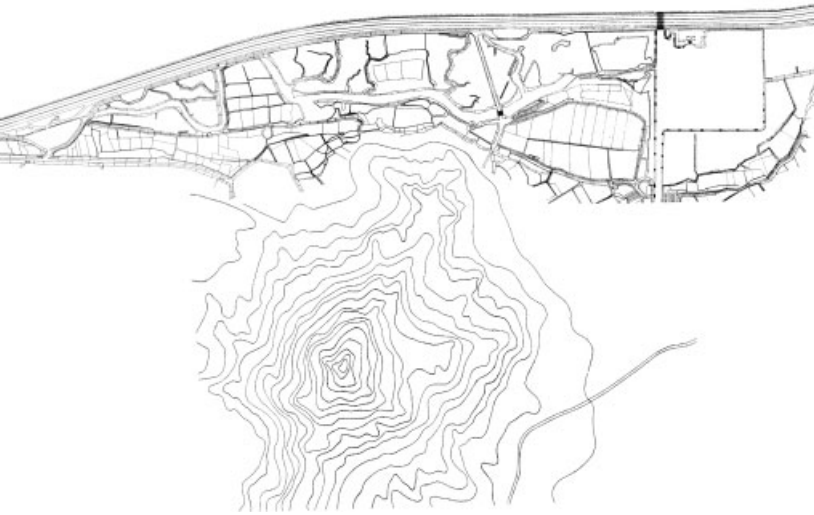
ARU's architecture here includes completed buildings of an exemplary quality. Beigel's ethos has been to conceive buildings of a clear, tectonic, but simple profile, which respect the existing and reclaimed landscape. As demonstrated by their Stone units, and already realised offices for the Youl Hwa Dang Publishing House, which act as a bridge across the wetlands, this allows definitive aspects of the architecture to relate naturally to the site terrain and ecology, as well as to distant views.

One of ARU's major breakthroughs at Paju Book City has been a recognition of the high ecological value of the residual wetlands that characterise the original site. These were, according to an outmoded plan, to be filled in and gravelled over. However, Beigel's defining decision was to reverse this implementation, and so to save the natural ecology of reeds and grasses that could now take the form of the 'picnic' on the rug. According to ARU: 'It is necessary to tread carefully in this delicate land, in a way a giraffe would walk through high grass.' Essentially, the architects therefore prepared a plan of 'where not to fill the land'. This aspect of the overall plan remains but, as Beigel says, is always at risk of despoliation by commercial or governmental bodies, though some progress in enlightening such bodies has been made.

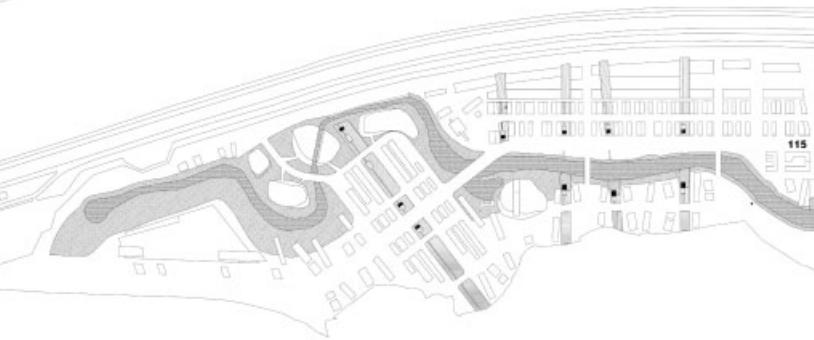
By autumn 2000, when architects were starting to be commissioned to realise individual buildings according to the Paju Design Guide, Mr Yi Ki Ung, President of the Youl Hwa Dang Publishing House, commissioned Florian Beigel and ARU, London, in collaboration with Kim Jong Kyu and MARU, Seoul, to design his own building. This building was to act as a prototype, a built demonstration of the urban concepts in the Paju Design Guide. The building is best described as a cluster of studio houses around courtyards, or 'madangs'. The principle of 'a house of good rooms' (in Beigel's words) was followed, whereby one goes from room to room. This is not a house with an open plan, or of corridors and separate rooms, it is a house of rooms without corridors. But this clarity also reflects the way the city is laid out, allowing for an unusual degree of coherence through each and every scale of living and moving. The colours of the studio houses, their walls and bookshelves are painted consistently in a palette similar to that developed by the Italian painter Giorgio Morandi – soft and subtle, with equal emphasis placed on the spaces between elements (houses, rooms, shelves) as on the solid or transparent volumes. One of the walls of every room in the studio houses is a wall of light, created using light-diffusing materials.

Turning again to the landscape form, Beigel found that the site reflects a strong north-south linearity, as read from the Han River's long, but wide, impact on the land itself. This is emphasised by the Simhak Mountain in Paju, which seems to guard the city. It was this linearity that generated the whole concept of the book city, as a kind of built landscape text. It is also hoped that the Freedom Highway, which connects Paju City to the centre of Seoul, will one day become the direct connection to North Korea. The land and flood plain of the Han River was the site of extremely bloody battles during the Korean War, thus the highway has more than just a topographical significance.

Paju Book City, in Beigel's words, is conceived as a territory of coexistence: 'We called it urban wetland. In more general terms we call it a "citylandscape". Paju Book City will be neither a city nor will it be a built-up landscape. It will be both. In this way it will be a classical example for the contemporary urban condition. It is not a landscape design project, and it is not an urban design project. It is an



Architecture Research Unit, Paju Book City, Seoul, South Korea, 1999–
 Time traces of the site at Paju (drawn in 1999). Small fields and drainage channels have been constructed by farmers illegally using the wetland between the motorway and the mountain.



The architects meticulously surveyed the reed-bed extensions and growth pattern.



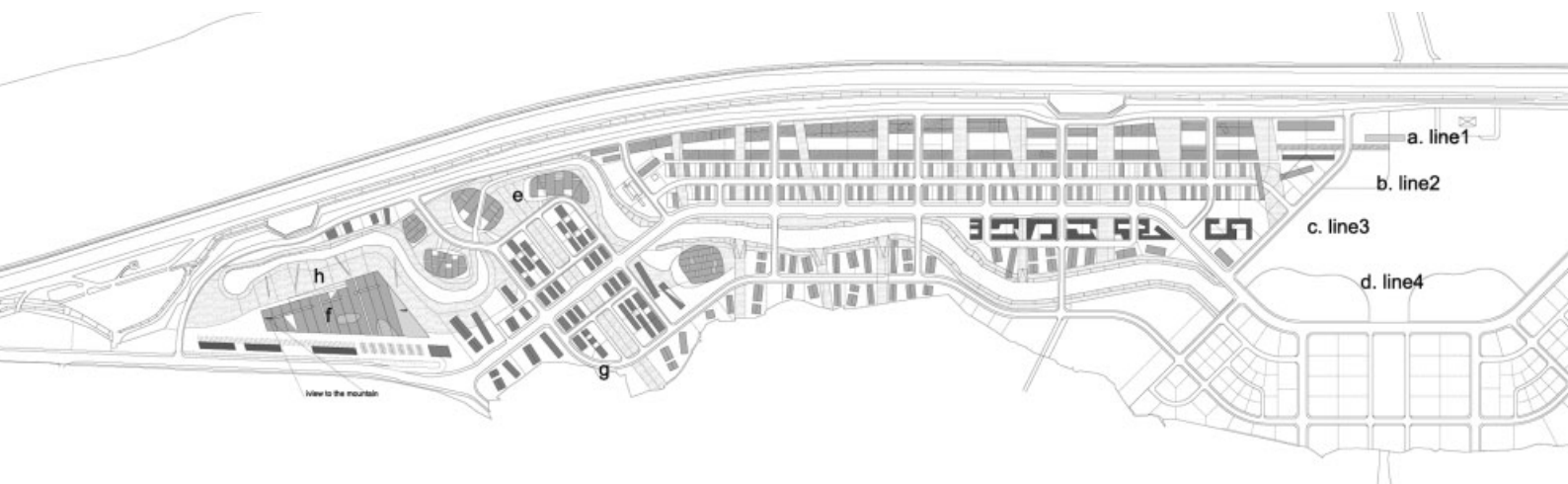
Sketch of the mountain wetland with a large sloping book storage and distribution building.



- Paju Book City Phase 01 Urban Landscape Design Plan, 'Paju Landscape Script'.** The road plan was previously determined by others.
- a. Highway shadows: Factories partially with grass roofs (height 8 metres) similar to the 'Freedom Highway', shown by the long curved lines next to the factory buildings.
 - b. Bookshelf units: publishing houses. Street buildings with car parking in courtyards (height 8 metres). Riverview buildings above, naturally ventilated (height 7 metres).
 - c. Spine units: publishing houses. High-density buildings with courtyards (height 15 metres).
 - d. Canal lofts: canal wharf buildings. Publishing houses with oblique views of canal, with shallow pitched roofs. Building height less than 15 metres where possible. Parking in every other interval space.
 - e. Wetland stones: publishing houses in the wetland (two-storey buildings).
 - f. Central storage and distribution facility.
 - g. Urban island buildings with wetlands gardens/atria (height 15 metres).
 - h. Canal/biotope territories with surface water management system. Building height less than 15 metres where possible. Parking in every other interval space.



View from a bridge over the wetland at Paju Book City looking north.

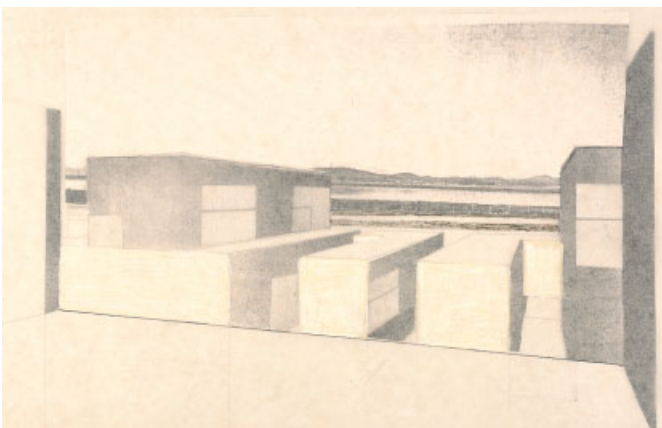




ARU design model of Paju landscape script including mountain, long urban structures, drainage channel, motorway embankment and river.



Sketch layout by Beigel showing the Stone units inserted into the existing wetland area as conceived for the purpose of creating a distinctive group of office buildings. These were to be closely related to the existing watercourses of the immediate wetland area, linked by connecting bridges.



Sketch of the view from the horizon strata of the 'bookshelf'-type buildings from which one can see over the motorway to the river and to the mountains on the horizon. The ground strata of this type consist of courtyard buildings communicating with the street.



The Youl Hwa Dang Publishing House at Paju Book City looking towards the Han River.



The Youl Hwa Dang Publishing House at Paju Book City. East elevation.



View of the Youl Hwa Dang Publishing House along Bookmaker Street.

infrastructural architectural project at the large scale, just as the table is at the small scale of architecture. Paju is a vague territory at the periphery of the city, a bit eerie, attractively enigmatic. It has a certain wilderness, artificial and natural, and one gets the feeling one should tread carefully here and not do too much. Our method involves taking a step back and reading the history of these sites, suspending judgment.'

As seen in plan, Paju has, curiously, the form of a reclining female, possibly in traditional Korean dress, containing within her head folds the 'built collective memory' that focuses outward on the wide floodplain of the Han River at the base of the Simhak Mountain, as if she is lying in a meadow: the mountain protects.

Part of the narrative here is today based on the valued existence of extensive wetlands. These are now conserved, and run between buildings emphasising the natural coexistence of nature and the man-made – an urban wetland where the reed beds have survived.

There are now four long urban structures here, which pick up the traces of the landscape running parallel to the Han River. The Highway Shadow buildings lining the inner side of the Freedom Expressway establish what is, in effect, a long chain of goods yards restricted, as mentioned earlier, to two storeys in height. The four-storey buildings of the publishing houses look across and over the numerous two-storey storage and service units. Thus great care has been taken to preserve and respect the overall texture of the landscape. One cannot imagine such a book city springing up in England, say at Hatfield or Harlow. It is altogether something born of global aspirations, but deeply rooted in the Korean soil.

Though it is painstakingly regimented, the city's life flows calmly like the motion of the celestial bodies and it acquires the inevitability of phenomena not subject to human caprice. In praising Andria's citizens for their productive industry and their spiritual ease, I was

led to say: I can well understand how you, feeling yourselves part of an unchanging heaven, cogs in a meticulous clockwork, take care not to make the slightest change in your city and your habits. Andria is the only city I know where it is best to remain motionless in time.

They looked at one another dumbfounded. 'But why, whoever said such a thing?'

And they led me to visit a suspended street recently opened over a bamboo grove.

Italo Calvino⁴

In developing Paju, the ethos of the Beigel and Christou team has remained phlegmatically realistic, even optimistic. The time frame is protracted, yet it was crucial to establish the first buildings and define the topology to maintain the principle of a sustainable community. Of fundamental significance in the architects' philosophy is their interpretation of the Korean idea of 'emptiness' as a positive design characteristic, which relates directly to the construct of site/non-site as developed from the 1970s onwards that is re-energising landscape thinking today. ▢

Notes

1. Italo Calvino, *Invisible Cities*, Martin Secker and Warburg (London), 1974. Trans W Weaver.

2. *Ibid*, p 20.

3. *Ibid*, p 8.

4. *Ibid*, p 150.

Text © 2007 John Wiley & Sons Ltd. Images © Philip Christou: pp 88-9 & 91 photos Philip Christou; p 90 drawing Architecture Research Unit; p 92 photo Daniel Mallo Martinez, February 2000; 93(t) drawing Philip Christou; p 93(b) photo Marion Wenzel, 1985; p 94(tl) drawing Chi Won Park, Architecture Research Unit, 1999; p 94(cl) drawing Architecture Research Unit; p 94(bl) drawing Florian Beigel; pp 94-5(t) © Philip Christou, September 2006; p95(b) drawing by Architecture Research Unit, July 1999; p 96(tl) model Architecture Research Unit; p 96(bl) drawing Florian Beigel, June 1999; p 96(tr) drawing Florian Beigel, May 1999; pp 96(b) & 97 photos Jonathan Lovekin, April 2004

City in Suspension

New Orleans and the Construction of Ground



Underfoot, obscured from view, ground is the most fundamental material of construction and the urban landscape. As New Orleans has proved, we forget it at our peril. Shaped by the mound, the levee and most recently the pump, the ground of the Crescent City was neglected and overlooked even in areas of new development. Felipe Correa describes how, in the aftermath of Hurricane Katrina, the thorough re-evaluation of the city's ground is a prerequisite to urban reorganisation.



Delaminations of water catchment, flood plain and settlement in the Lower Mississippi River Basin.

A sectional cut through New Orleans easily distinguishes all of the different fragments and membranes that in summation construct the city's ground, and freshly reveals an intrinsic desire for parchedness. At its deepest level, the city contains a network of tubes and conduits that partially appropriate the old canal infrastructure. These are powered by 22 pump stations, which are continuously pumping excess water from the city over the levee and into the river and lake, keeping the city's water table artificially low. Above the drainage and sewerage infrastructure sits the city's primary road network. Capitalising on the old existing ridges – the Esplanade Ridge, Gentilly Ridge and Metairie Ridge in particular – the primary navigational system remains fairly constant in elevation, oscillating between 1.2 and 1.8 metres (4 to 6 feet) above sea level and establishing an extreme sectional difference with the lowest areas in the city of approximately 2.1 to 2.7 metres (7 to 9 feet).

Containment infrastructure follows. Composed primarily of levees and flood walls, this groundwork flanks the river and lake, rising twice as high as any natural formation. On the lake side, the levees crest at a height of approximately 1.8 metres (6 feet) above sea level. On the riverfront, the levee along with elevated platforms and the flood wall can go up to 6.7 metres (22 feet), creating a generous distance from the river current that flows above the level of the city but below the top of the dyke. High above the perceived ground, a system of freeways and elevated roads seems to be floating, delicately anchored by slim pylons that register the highest layer of infrastructure hovering at approximately 9 metres (30 feet) above sea level. On average, 12 metres (40 feet) is the sectional difference of the multiple forms of infrastructure that make up the ground of New Orleans, a city that at first sight appears as flat as a Midwestern plain.

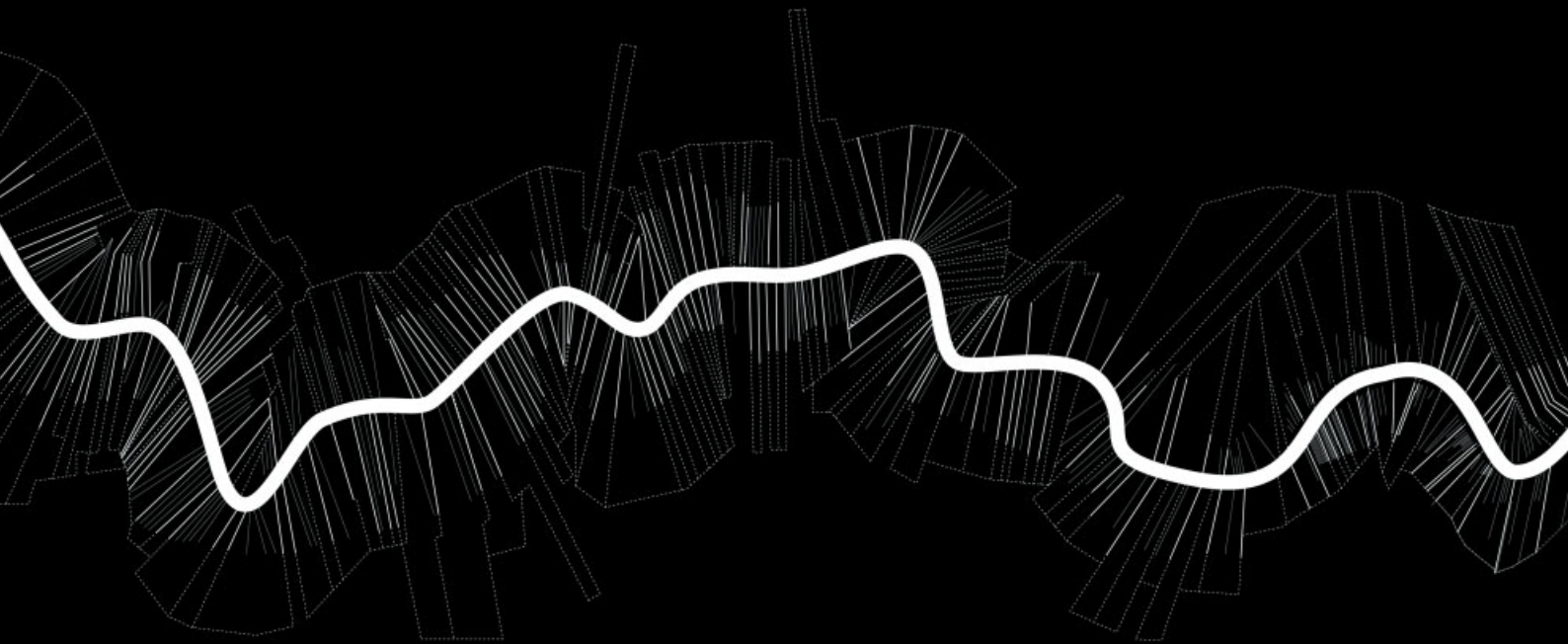
New Orleans can be conceptualised as a thick infrastructural field – one that has resulted from the amalgamation of discrete material fragments, the outcome of numerous constructs of ground that have been materialised

and deployed in the city throughout its history. These constructs, all different in scope, ambition and action, share one common aspiration: to form a ground independent from water, in a territory with an intrinsic desire to return to a liminal state that is neither water nor land, but an overmoist sludge where a city has been circumspectly placed in suspension. Primarily grounded by construction techniques favoured in soft lands, the city, which at first might be perceived as firm ground that keeps a distance from the river and lake, is actually an infrastructural *Île Flotant* in an unremitting state of unrest.

This ground, which has been in a constant formative process throughout centuries of settlement, has transmuted slowly from natural flood plain to an artificial system of conduits, allowing for a transition from a sectional understanding of ground into a horizontal mode of occupying it. The mound, the canal, the levee and, most recently, the mechanical pump have been the key shapers of ground in the Crescent City, moulding an imprint defined by the ubiquitous geometries of each.

Mounds: Nomadic Topographies

Initial settlers in the area subsisted mostly from fishing. Their specific patterns of inhabitation required a direct relationship with the fluctuations of the flood plain, resulting in nomadic settlements along the edges where fishing was most productive. Perhaps the most significant evidence of initial forms of ground construction can be seen through archaeological episodes. Mounds, found in the area between the Mississippi River and Lake Pontchartrain, were constructed from leftover shells and debris. The specific construction of these mounds still remains unclear, but the general attitude towards their immediate environment is evident – the need to manipulate the ground condition through vertical build-up in order to achieve a greater sectional difference with the wavering water levels. From



1 toise 6.39 feet 1.95 meters	1 fathom 6 feet 1.83 meters	1 braza 5.88 feet 1.81 meters			
1 perche 18.18 feet 5.55 meters	1 rod 16.5 feet 5.03 meters	1 cuerda 20.88 feet 6.36 meters			
1 arpent 82 feet 25.01 meters	1 chain 66 feet 20.12 meters				
French Units of Length	English Units of Length	Spanish Units of Length	4 to 6 arpents		

the start, settlers had to construct a unit of measure, qualitative and subjective at first, that would allow them to establish a relationship between the different entities in oscillation. This vertical build-up, which shifted in relation to the fishing cycles, was a first attempt to establish a differentiation between natural processes and the first imprints of human settlement.

Canals: Striated Topographies

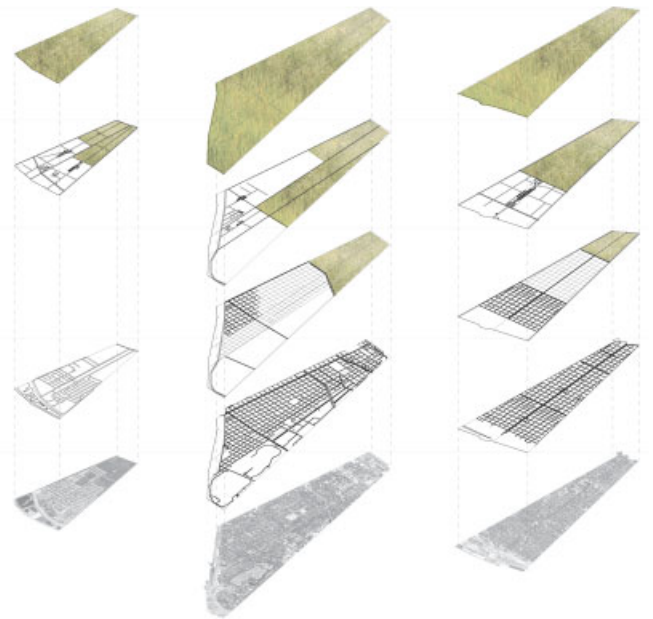
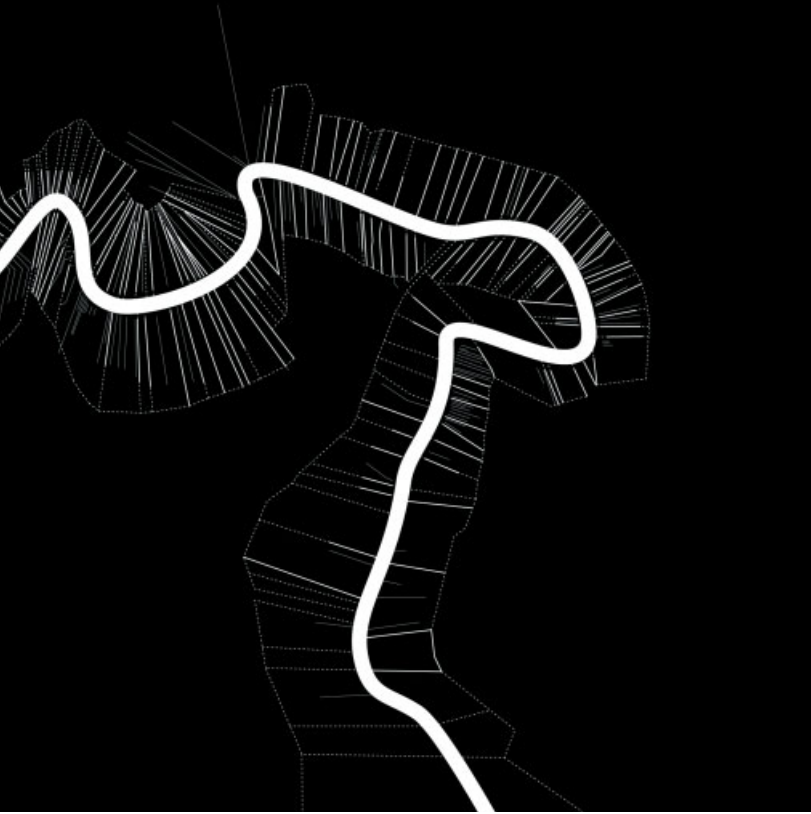
Upon the arrival of Pierre Le Moyne d'Iberville and his brother Jean-Baptiste Le Moyne de Bienville in the early 18th century, a new ideology about the way this territory could be handled began a slow, but steady, process of transformation. For the French, the biggest challenge in taming this territory entailed preparing ground suitable for agricultural production and, more importantly, finding a way to introduce the plantation model into this land. With this purpose, it was essential to develop surveying techniques and a parcel structure that would alter the swamp into the agricultural gold mine the French had envisioned. If initial settlers in the area had

established a vertical condition that allowed them to sectionally distance themselves from the flood plain, the new model aimed for a striation of the territory and lines that would serve as both geopolitical demarcations and drainage infrastructure. This provided a new horizontal skeleton that would induce an agile figure for the terrain, one better attuned to the new economy of lower Louisiana and one that provided confidence for the settlement of future outposts.

Levees: Contained Topographies

Through the development of the agricultural carpet, land stripped of original cane and vegetation became weaker and more prone to spillages and crevasses. The never inert strength of the water became an even more muscular antagonist in the relentless process of forming ground, at a point in time where the already permanent agricultural settlements were much too prosperous to simply pick up and go. The dilapidated state of the existing levees – sporadic and ill-constructed walls of soil and sand – put in place by individual landowners, combined with a need to further

Plantation lines defining the urban-agricultural morphology of the Lower Mississippi basin.



The fracturing process of agricultural fields as they transform into urban parcels.

extend the agricultural carpet towards lower marshes, catalysed another very precise construct of ground: one that superseded the striated configuration of drainage canals with the construction of massive levees that would systematically transform the flood plain into a single conduit, and contain most, if not all, of the water away from the claimed tract of land between the river and the lake.

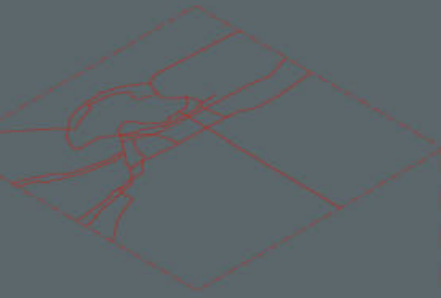
This newly contained landscape allowed for an intriguing process of urban fragmentation that was carefully layered over the 17th-century agricultural silhouette. The original plantation lines that for approximately a century served as drainage canals were systematically covered and transformed into navigational conduits that made up a maxi-grid that would carefully frame the urban block and parcel structure to come. A constant square block, similar in dimension, but not in grain, to that of the French Quarter, was systematically traced throughout the entire river bend, creating a new ground condition that negotiated between the idiosyncrasies of the tangential plantation lines and the regulatory rigour of the top-down grid.

Pumps: Mechanical Topographies

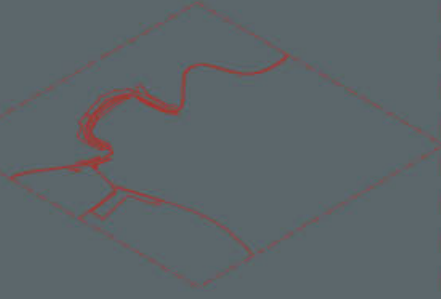
As New Orleans constantly transformed from an agricultural field into an urbanised mesh, the massive levees constructed along the river throughout the 18th century had shifted the natural water levels of the flood plain and forced them to rise. The city was pressured to build another set of levees flanking Lake Pontchartrain to prevent high lake tides from backing into the lower quarters of the city through the existing canals. This resulted in two artificial higher edges that allowed for a dry concave surface to be fully urbanised. Granted that this new infrastructure had proffered a much more secure ground for urban development, it also blocked all possibilities of removing rain-water overflow through existing canals. The new lake and river edges were too high for run-off to flow naturally into either body of water.

Local engineers worked for many years to conceive a mechanical system that would effectively drain water against gravity. The challenge was extreme. As the city's topography decreases as it moves away from the river, the strength of the pumping mechanism had to be gargantuan

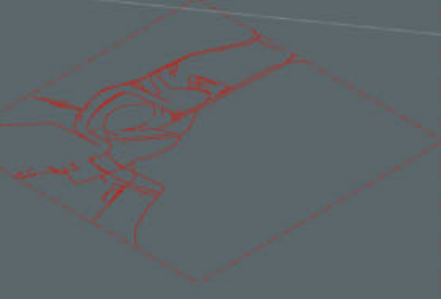




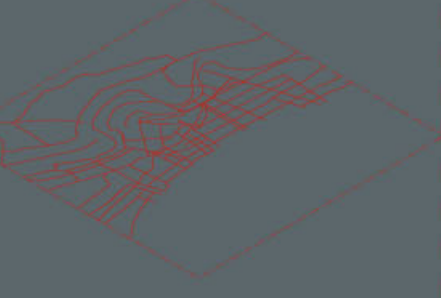
freeway infrastructure



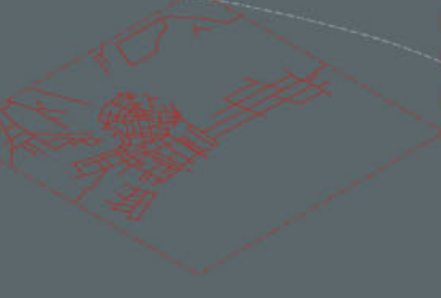
fluvial circulation



fluvial network



road network



pump/drainage network

in order for water to pour into the river, over the levees. The device invented by local engineer AB Wood in the early 1900s transformed New Orleans into a new mechanically choreographed ground, where dryness was the result of a simple mathematical equation.

If indeed this highly mechanical system had provided a controlled environment that was unprecedented in the history of New Orleans, perhaps future development took these implementations too much for granted. A thinly woven carpet with a generic suburban pattern colonised the lowest areas in the city. New development paid no attention to the highly delicate condition of ground and ignored all the axioms that effectively shaped the initial swathes along the riverfront. Topography was neglected even at the scale of individual buildings, where the raised first floor of the shotgun house had been substituted for sectionally mute ranch-style homes. A technologically overconfident city ignored the time-honoured sectional condition and its agency in shaping this terrain.

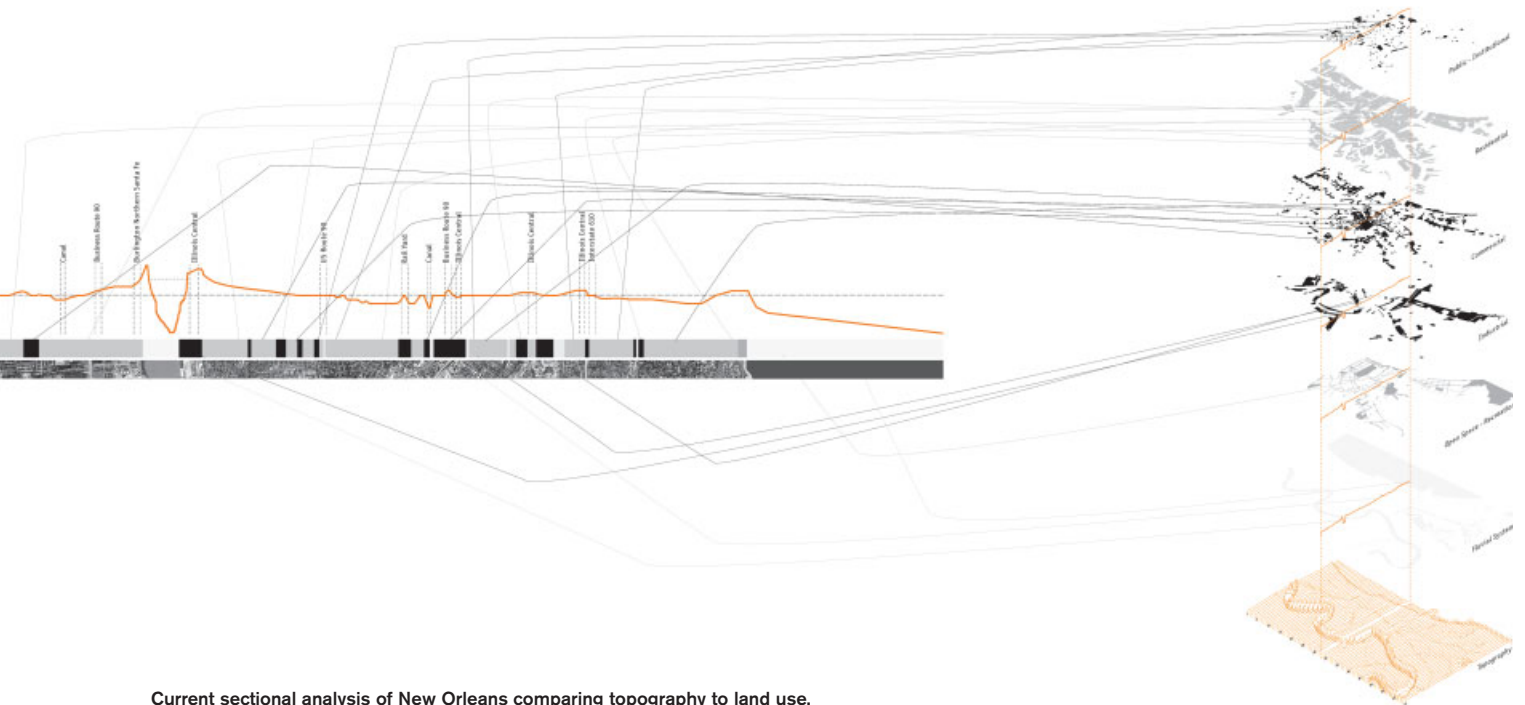
Speculations on a New Construct of Ground

A look at Hurricane Katrina through a more ample historical lens frames this recent devastating event less as an isolated tragedy and more as the result of a cyclical condition inherent to New Orleans. The threat of the storm and its occurrence has been ubiquitous to the city and a significant shaper of its distinct forms of urbanism. Hurricane Betsy in the 1960s, the floods of 1884 and 1927, among others, have been critical moments in the city’s history, and substantial views about how to engage this land have repeatedly emerged from such tragic events. The devastation brought by Katrina in August 2005 has raised a wide array of operative issues that must be tackled through the re-evaluation of the city’s ground and the conception of new organisational coalitions that could better respond to New Orleans’ current urban problematic and, at the same time, establish a revised attitude towards its unsubstantial soil and the infrastructure required to make it ground.

Throughout the 20th century, New Orleans has focused on securing a fixed and dry urban imprint through the use of extreme mechanisms. Until today, a relatively dry concave surface, the exact opposite of the original mound, had been artificially constructed through a well-choreographed system of levees, spillways and pumps. Katrina’s magnitude obliterated the secured urban imprint guaranteed by the gargantuan infrastructural initiatives of the last 200 years, and the city transmuted from established settlement to a new frontier zone that must be reinterpreted and repossessed.

The city’s quotidian infrastructural practices must be provisionally suspended to allow for the emergence of a new construct of ground. For one thing, the golden age of public works in the city has reached its built-in expiration date. The forms of containment still operative in the city were conceived

The amalgamation of infrastructure that makes up New Orleans’ current ground.



Current sectional analysis of New Orleans comparing topography to land use.



View of the city from the river.

for an era in which infrastructure was the backbone of development. Levees, drainage canals and pump stations that traditionally safeguarded the city's ground have been neglected for many decades, and the moment is ripe for devising new ways of negotiating differences between wet and dry.

The water's erasure of a large percentage of the urban carpet also hints at the potential of redefining the city's urban imprint and establishing diverse mechanisms to contract its thin, but overextended, dimensions. In the last 40 years, New Orleans has been subject to a massive decline in population. Not unlike many other American cities, many dwellers have migrated to adjacent suburbs bringing down the numbers from 630,000 inhabitants in the 1960s to approximately 480,000 today. This decrease in population can be directly contrasted to a considerable stretch in the urban carpet into

the lowest areas in the city. New Orleans' surface has grown from 260 square kilometres (100 square miles) in the 1960s to 466 square kilometres (180 square miles) today, infilling the newest areas in the city with thinned-out infrastructure, ill-dimensioned parcels and highly diluted grain.

In addition, port activities and warehouses that had colonised the highest swathe of land along the river edge have been subject to major shifts, freeing up a large percentage of prime land. The already reduced port operations lean towards more compact and compartmentalised cargo mechanisms that require less operating space and do not rely as much on adjacent storage areas. This has resulted in a long and fairly continuous tract of high land as well as a series of more discrete parcels adjacent to it, which could conceivably become available for development and provide a significant



View of the freeway infrastructure from the river.



An empty lot on high ground.

dry surface that could accommodate a large percentage of the programmes and uses that today are on the most liable areas.

Given today's situation, the primary task is to conceptualise an urban framework that is informed by the city's most intense pressure systems: physical, social, economic and environmental factors can define a working diagram for the reconfiguration of the obsolete infrastructural networks altered by the turbulent nature of the storm – one that can hint towards a process that goes beyond the casual patching of broken levees, and easily explores multiple relationships among the diverse oscillating figures currently at play in the city. In turn, this will provide an exploratory point of departure that allows for the possibility of coalition and contestation, and supply a reference point for the unfolding of a new construct of ground.

The possible sources for a tentative framework are infinite, and can come from a multitude of contradicting backgrounds. It is perhaps the city's time-honoured idea of using the section as an active mechanism that can drive the development of a well-attuned reconstruction process. New Orleans, the amalgamation of assorted constructs of ground, has resulted in a metropolis with a hyperartificial terrain condition where discrete stratifications have coalesced into a highly operative consolidated entity. It is perhaps in the recognition of this thick sectional field as something much more animate and operative than a mere historical palimpsest, that the greatest potential of reconstruction lies. It is through inventive representations and interpretations of this dynamic domain that we will be able to rethink relationships between the city and the much broader fluid environment that partially owns it, and finally conceive strategies that move beyond the sectionally mute development practices that have driven the urbanisation of New Orleans for the last 50 years. Δ

The preliminary research from which this essay is generated was conducted by Joan Busquets and Felipe Correa at the Harvard University Graduate School of Design during the 2004–05 academic year.

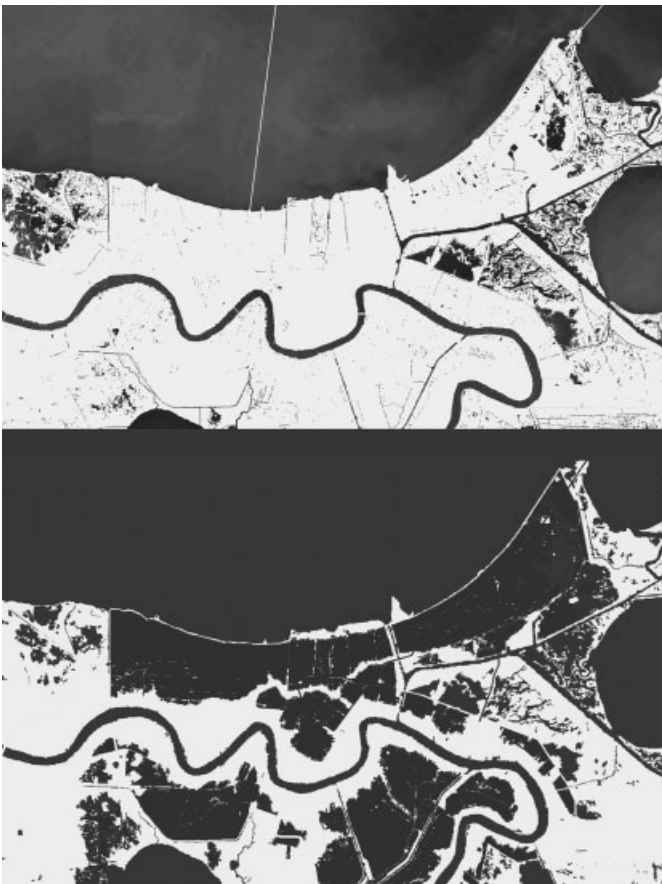


Diagram showing the city's urban imprint before and after Hurricane Katrina.

Text © 2007 John Wiley & Sons Ltd. Images © Felipe Correa

Impressions of New Orleans



In August 2005, 80 per cent of New Orleans was devastated by flood damage precipitated by Hurricane Katrina. Christiana Spens was on a college exchange in Memphis when the hurricane hit. Here she gives her impressions of the city in the wake of the storm.



One night in a sorority house at the University of Mississippi, where I was visiting a friend of a friend during my year in Memphis as an exchange student, I heard plans about a trip to New Orleans to help clean up the wreckage caused by Hurricane Katrina. I signed up and in March we set off on a road trip down to the Gulf Coast, into a place torn up by natural storms and left to rot by a disengaged government. The hurricane had blown by six months ago, and yet the place was still a sprawling mass of devastation, a chunk of a metropolis no more than broken asphalt and bent foundations. Probably the greatest shock was the sense of time halted, as if progression had died late last summer. When we arrived at the camp there was a lot of talk about the Book of Revelation, much preaching and blues of a fundamentalist kind, a whole lack of jazz. But a rhythm took hold subtly, with each beat of a brick laid down, each scrape of a dig, and the music began to play softly in the near-motionless air of New Orleans.

There is a Dead End sign that may as well be a street sign for the strip of devastation it represents. Even the palms are dead. Never before has 'cul-de-sac' seemed such a profoundly literal and depressing term.

It is early morning and we drive by this particular Dead End and a string of others. I sip 50 cent coffee as I see with the new clarity of daylight the wasteland in my midst.

There are structures, but no walls – broken bones but no flesh. Billboards and signs are gone, though iron frames remain, twisted, entangled in wires. I see a broken piano in a wild dry garden, its wood shattered. A boat balances in a dead tree. There are driveways but no houses; there are roads but no towns.

Slabs of concrete are hanging, dangling from electrical wires. We drive past absent facades, amber lights in lines from the street lights that are at last up again, but which illuminate not houses but their remains, or their altogether absence. We pass school buses wrecked and lying trashed, a limousine bathing in mud, and a house where only the wooden frame and a staircase remain, with scattered items such as faded ID cards, a kitchen knife coated in dry mud, broken glass, a typewriter. I wonder what town existed under the palm trees six months ago, when August was shining hot.

I go out driving, one day before dusk, and find a house where three white steps and a concrete floor remain. There is a memorial altar of a water-damaged photo album, a 1976 tennis trophy and silk flowers. We realise from one intact photo that a family of a couple and their teenage son must have died here.

Inside the square of concrete that marks the definition of the house are the remnants of the home. I step carefully over a microwave, tools, a toilet, a bath, cabinets, broken bureaus, plates, vases. On one table lies an open accounting book, and close by a book of local business cards for enterprises that no longer exist. A smashed telephone sits on the dusty ground amidst papers wrinkled by dried water, lying still in the motionless air. I notice an old record, one side bent but the label still visible – 'The Last Waltz'.



The lasting impression of New Orleans is that it still has spirit. One student comments on his impression of the trashed city: 'We went into one house and it was awful – there was alcohol everywhere!' There is a kind of Southern Comfort to this Revelation.

We stay in Elysian Fields for a while before receiving orders to clean up a cemetery close by – a smaller territory of this aptly named district. I cannot help but feel that the remnants

of New Orleans – its names and rum bottles, its jazz playing softly from the food tent – are playing a joke against their great abuser, Katrina. Like spirits in a graveyard, everything left in Elysian Fields laughs in the dark.

Text © 2007 John Wiley & Sons. Images: pp 106-7 © Christiana Spens; p 108(t) © Erich Schlegel/Dallas Morning News/CORBIS; p 108(b) © Ted Soqui/CORBIS

Is There a Digital Future Landscape Terrain?

Lorens Holm and Paul Guzzardo speculate on a future landscape enriched by digital culture. Rather than provide sanctuary or comfort zones in the event of global environmental collapse, laser\net is a model for exploring landscape terrains that establish 'agora'-like meeting places as a basis for electronic exchange and progression. Re-mix platforms thus become collaborative sites for all who seek to engage in this rurality.

Every conceivable object of Nature and Art will soon scale off its surfaces for us. Men will hunt all curious, beautiful grand objects, like they hunt cattle in South America, for their skins and leave the carcasses of little worth.

Oliver Wendell Holmes Sr, *Essay on Photography*, 1859

Landscape Lessons

Analogue came first. Then there was the digital. But before both there was landscape. Media and landscape go back a long way. The Cahokia Mounds (Mythographic Station or World Heritage Site) formed a city of earthwork platforms where urban development, communication and mythology converge. Occupied between 800 and 1400, it was the only city north of the Rio Grande, home to the Mississippian people, and to over 120 mounds. The biggest, Monk's Mound, is the largest-ever man-made earthen plaza. With a series of terraces, and at over 30 metres (98 feet) high, it rose above a cityscape with a population of 20,000. This media platform is where the arbiters of the Mississippian myths, the high priests, ran it all, and ran it into the ground. We do not know why this city collapsed and what happened to its residents, but it is speculated that it was due to unsustainable development, the overplanting and mismanagement of corn, rather than war.¹

This was how a media platform from our preliterate past was supposed to work: a communication node on top of an earthen pile. The Mississippians' myth cracked. We imagine it was a spectacular media collapse, one that walked shoulder to shoulder with ecological mis-step. Now undeterred and looking to the long view, the following is a brief on re-mythologising our landscape by inserting digital media into that terrain.

Setting the Brief

laser\net² explored narrative-building within the space of an interactive installation, and created a re-mix stage. Sound and visual images were pulled from an outside ecology: the big eye, the big mouse, the big boob. These are the props that seeped inside us.

Re-mix is resistance, representation as resistance, resistance to someone else's media spectacle. Re-mix is the way that media artists take 'culture' or the 'outside ecology' that is spewed out everywhere by everyone around us, from

university lecturers to those 'el globo' businesses: Disney, Apple, and so on. In a world that is always coming to us already emptied, stripped, re-mix breaks it up and circulates it again, and sends it back down the road to become our mythology. From numbing spectacle to a whispered voice, creativity is dependent upon, and cannot escape from, the media environment within which it works. Re-mix is the ecology, where media environment and natural environment converge. Re-mix is an aesthetic of reuse, an ecology of images in its most literal form, a sustainable development of sound and visual images. It is the brownfield site of visual/aural culture. We re-mythologise the landscape by sampling it (sampling the natural environment is different from sampling the media environment).

laser\net is a model for a kind of platform, a screen, upon which jane and joe look at each other. It divided one space with a two-sided screen. The left side saw the right side on the screen, and vice versa. As soon as jane understood she was looking at the projection of a space, she started to wave at the screen. She saw joe on the screen wave back. 'I see you seeing me' is the paradigm of subjectivity, the architecture of consciousness and its re-mix slippages. Why look at a projection of jane when you can see jane? The screen was deliciously redundant – as redundant as any art. This is the framework for any narrative. When you re-mix narrative, you insert yourself into the picture. Narrative becomes a vehicle for the identity of the speaker and listener. It becomes a feedback loop, in which the narrator sees and hears him- or herself. Voice changes: when joe sees jane see him (active), they quickly become a group seeing itself (reflexive). laser\net made clear the architecture of reflexivity born in any narrative environment.

And What the Alchemist Didn't Have

Will Alsop remarked that the countryside is now completely plumbed in. In an economy increasingly based on information transfer, we can live and work anywhere because we can transfer from anywhere. The ubiquity of services notwithstanding, there are huge differences between living/working in the country and the city, the biggest difference being – simply – the difference between country



and city. The narratives by which we fix ourselves within the coordinates of our desire are different.

What myth of landscape would the Cahokia Mounds speak to us if we could reanimate them? What are the narratives of the farmer in Fife, the hound hunter in Derby, the plantation manager in Argyll, the seaplane constable of the Highlands and Islands? Platforms are for modern-day tricksters and shamans to tell our stories and their vicissitudes, the story of our speaking landscape, the land that could speak for us to us, if only we could tell its stories. What are the narratives of the land? Digitize it.³

Collapse

We are today hemmed in by stories of environmental collapse. A recent issue of the journal *Nature* headlined 'Ecological complexity untangled: the architecture of ecosystem fragility'. A recent *Guardian* had a full page on water scarcity. Al Gore's documentary on global warming, *An Inconvenient Truth*, plays everywhere. If the ecosystem is an architecture, it ought to be possible to make its networks visible in ways that most people can understand. The asymmetric, intricate nested networks that link species into food chains ought to be made visible so that we can see how they shift and change when we insert ourselves into them.⁴

We all know the world is heating up, we all know we are losing our rural culture: yet we are incapable of doing anything about it. Most of us don't wake up in the morning and say

'Hmmm, I think I'll pave a few more acres today. I think I'll drive a few more species to extinction.' But we do it anyway. It is our 'style' – lifestyle that is. Remember the truth of jokes? Remember 'I love the smell of napalm in the morning'? The environment *will* be destroyed unless we find the platforms from which to mediate our stories about the landscape.

In 'The effectiveness of symbols' Lévi-Strauss describes how a shaman is called to attend to a difficult birth. He is called, not because he can, but because he cannot, offer medical assistance. The horizon of the shamans' science had not yet expanded to encompass what we recognise as natal care. This woman is in the hands of the larger order of nature. The role of the shaman – like the psychoanalyst – is to fix this event that they cannot otherwise understand into the coordinates of their symbolic universe, so that what was traumatic and frightening becomes assimilable and understandable.⁵

It may be that our fate is environmental death. The digital landscape may be our efflorescent Cahokia before the collapse. Like the shaman's myth, narrative explains my world to me so that I am able to bear what would otherwise be unbearable. A speaking land is about how we can create the narratives that allow us to understand our role in our own destruction, and by so doing, to take responsibility for it. The only way we can take pleasure in what we are doing to ourselves is to take responsibility for it. But we pretend not to know, and feel victimised by what is seemingly out of our control. This project for a future digital landscape terrain is





not therefore about averting disaster by reversing the path of unsustainable development (it is, after all, *our* market capitalism). It is about averting disaster by averting denial. We need the platforms to write our own stories about the landscape, so that we can begin to think about it. And if we could think about it, maybe we could do something about it.

The Love That Dares Not Speak Its Name

We never billed laser\|net as the prototype platform to ban numbness. It was a rough copy. We are suspicious of the capacity of spectacle to aestheticise reality so we can slumber in our private narcissisms. It must celebrate darkness (nowhere, it seems, do we allow country and city to get dark any more). But in this rough copy we know what we want. We want landscape terrains as agoras for synthesis and awareness. We want to foster participation and criticality. We propose re-mix platforms as the sites for collaborations between farmers, milkmen, managers, constables, contractors, builders, designers, artists, social scientists, even anyone with an interest in the land. We need a social science practice (what we did not have for laser\|net) that will survey rural vox popular with the same statistical rigour as we use for soap-sex-war, to incorporate vox in the re-mix platform. We need a future technology that will sensor the environment – imagine crop-dusting the land with microsensors – to monitor environmental shifts in food-chain ecology, in biodiversity, and make visible how these are effected by land

use. Without aestheticising them. Make the networks readable so that we can insert our stories into them, and so make them landscape stories. Let the landscape speak, let the landscape become the screen and platform for our stories. **Δ**

Notes

1. Cahokia is UNESCO World Heritage Site No 198. Stonehenge, another preliterate platform of mytho-astronomical significance, is Site 373. See http://whc.unesco.org/pg.cfm?cid=31&id_site=198
2. laser\|net was an installation commissioned by the Geddes Institute for Urban Research, University of Dundee, as part of its AHRC-funded interdisciplinary workshop 'Exploring the Digital City'. It was installed at Centrespace at DCA (Dundee Contemporary Arts). Designed and installed by a collaboration including Lorens Holm and Paul Guzzardo, and John Bell and Adam Covell, principals of FXV Ltd London.
3. We have borrowed 'speaking land' from Karen Forbes and Kathryn Findlay and Fieldwork, the design research unit founded by Findlay at the Dundee School of Architecture in 2005.
4. See 'Ecological complexity untangled: the architecture of ecosystem fragility', *Nature*, Vol 442, No 7100 (20 July 2006), including the following papers: Loreau *et al*, 'Biological diversity for policy-makers: diversity without representation'; Holt, 'Ecology: asymmetry and stability'; Montoya *et al*, 'Ecological networks and their fragility'; and Rooney *et al*, 'Structural asymmetry and the stability of diverse food webs'. See also John Vidal, 'Cost of shortage: civil unrest, mass migration and economic collapse', *Guardian*, 17 August 2006, p 25.
5. Claude Lévi-Strauss, *Structural Anthropology 1*, Penguin Books (London), 1993, trans Claire Jacobson and Brooke Grundfest.

Text © 2007 John Wiley & Sons Ltd. Images © Images and video stills by Lorens Holm and Paul Guzzardo



Contributors

Lucy Bullivant is an architectural curator, critic and author who works internationally. Her publications include *Responsive Environments: Architecture, Art and Design* (V&A Contemporary, 2006) and *Anglo Files: UK Architecture's Rising Generation* (Thames & Hudson, 2005). She writes for *Domus*, *The Plan*, *a+u* and *Indesign*, and was guest-editor of the *4dspace: Interactive Architecture* (2005) and *Home Front* (2003) issues of *AD*. She has curated exhibitions for the Milan Triennale, Vitra Design Museum and the British Council, and is consultant curator for the Science Museum.

Michel Conan is a sociologist, and is currently the director of Garden and Landscape Studies at Dumbarton Oaks. His research has focused on the cultural history of garden design, and publications include *Quarries of Crazannes by Bernard Lassus* (Spacemaker Press, 2004) and *Essais de Poétique des Jardins* (Olschki, 2004). He is also the editor of the last nine symposium volumes published at Dumbarton Oaks in the Colloquium Series on the History of Landscape Architecture (Harvard University Press).

Peter Cook currently leads the Olympics Design Group for the London Olympics 2012. An influential architect and teacher in Britain since the 1960s, his impact has been truly global. He was a tutor at the Architectural Association from 1964 to 1990, and is currently a professor of architecture at the Bartlett, University College, London, and at the Royal Academy of Arts. He was a director of ICA (1961–71) and Art Net, London (1972–9), and a visiting professor at UCLA (1968–9), and has also held several similar positions across Europe. He received the Royal Gold Medal for Architecture (RIBA, 2002), and the Commandeur, Ordre des Arts et Lettres France, 2002). He also led the pioneering Archigram Group from 1961 to 1976.

Felipe Correa is currently a design critic in urban design at the Harvard University Graduate School of Design where he teaches in the core urban design studio, as well as faculty research seminars on diverse topics in urbanism. Among his current research projects is 'Cities – 10 Lines: Approaches to City and Open Territory Design', a faculty research initiative in association with Joan Busquets that explores the most salient lines of work being deployed in the contemporary city. Correa received his BArch from Tulane University and a Master of Architecture and Urban Design from Harvard's GSD.

Paul Guzzardo is a lawyer and media activist, and a director of MediaARTS

Alliance. For the last 10 years he has used theatre and new media praxis to probe the consequences of emerging digital-information archives on the design and occupation of public space.

Lorens Holm is senior lecturer and director of the History/Theory programme at the School of Architecture, University of Dundee. He has taught at the Architectural Association, the Bartlett and the Mackintosh, and is a director of the Geddes Institute for Urban Research. His forthcoming book on architecture and psychoanalysis is entitled *Brunelleschi Lacan Le Corbusier: Constructing Subjectivity*.

Victoria Marshall is a landscape architect and urban designer, and founder of TILL, a resiliency based practice. She is adjunct assistant professor of architecture at Columbia University's Graduate School of Architecture Preservation and Planning, where she teaches urban design with a focus on the North East Megalopolis – translating the urban ecosystem approach to urban design models.

Brian McGrath is a co-founder of urban-interface, which explores socio-ecological change through urban designs and new media. His Manhattan Timeformations (2000) (www.skyscraper.org/timeformations) has received numerous awards from international arts, architecture, educational and science organisations. He recently completed an artists' residency and digital installation in New York City's World Financial Center, and is currently working with an interdisciplinary team on the Baltimore Ecosystem Study.

Jayne Merkel, a contributing editor and editorial board member of *AD*, is the author of *Eero Saarinen* (Phaidon Press, 2005). She also writes for *Architectural Record* and the *Architects Newspaper*, both in New York, and other publications. She was previously the editor of the New York AIA magazine, *Oculus*, and the architecture critic for the *Cincinnati Enquirer*. She has also taught writing and art history at various colleges and universities.

Juhani Pallasmaa has been practising architecture since the early 1960s and established Pallasmaa Architects in 1983. In addition to architectural design, he has been active in urban planning, product and graphic design. He has taught and lectured widely in Europe, North and South America, Africa and Asia, and published numerous

books and essays on the philosophies of architecture and art. He was previously a professor at the Helsinki University of Technology, director of the Museum of Finnish Architecture and rector of the Institute of Industrial Arts, Helsinki, and has also held visiting professorships at several universities in the US.

Grahame Shane received a Diploma in Architecture from the Architectural Association, a Master of Architecture in Urban Design from Cornell University, and a PhD in architectural and urban history from Cornell University. His book *Recombinant Urbanism: Conceptual Modeling in Architecture, Urban Design and City Theory* was published by Wiley-Academy in 2005.

Christiana Spens was educated in St Andrews, Scotland, and Hutchison School in Memphis, Tennessee. She currently works as a researcher, author and painter in London. In 2004/05 she went to Memphis on an English Speaking Union Scholarship. She has contributed to Studio International (www.studio-international.co.uk) and music journal *rockfeedback.com*. During her year in the US she travelled and worked in New Orleans with a group from the University of Mississippi to alleviate the devastation caused by Hurricane Katrina.

Michael Spens qualified as an architect at Cambridge University, and has received several design awards. He focuses on the engagement of architecture with landscape. Whilst researching Alvar Aalto, from 1993 he worked in support of a restoration programme for Aalto's Viipuri Library in Russia that involved professionals from Russia and Finland, and published *Viipuri Library 1927–1935: Alvar Aalto* (Academy Editions, 1994). Knighted by the President of Finland, in 2002 he became University Reader in Architecture at Dundee University. Other publications include *Landscape Transformed* (Academy Editions, 1996) and *Modern Landscape* (Phaidon, 2003), and he also contributes to *AD*, *Architectural Review*, *Architectural Research Quarterly* and *Topos* (Munich).

Sean Stanwick is an associate at Farrow Partnership Architects Inc in Toronto. With a particular interest in contemporary urban design, he is a frequent contributor to *AD*. He has written for numerous architectural journals worldwide, and recently co-authored *Wine by Design* (2005) and *Design City Toronto*, to be published by John Wiley & Sons in March 2007.

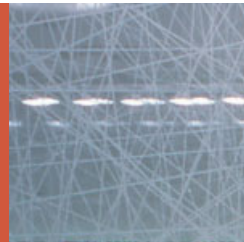
C O N T E N T S



114+

Interior Eye

Seoul's Interior Landscapes
Howard Watson



120+

Building Profile

Louise T Blouin Institute,
West London
Jeremy Melvin



126+

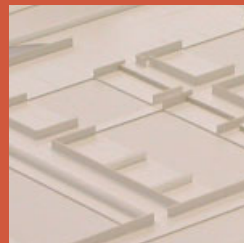
Practice Profile

The Tailored Home: Housebrand
Lorraine Fowlow

134+

Home Run

Dosson in Casier, Italy
Valentina Croci



140+

McLean's Nuggets

Will McLean

142+

Site Lines

Night Pilgrimage Chapel
Laura Moffatt

Seoul's Interior Landscapes



**Universal Design Studio, Lotte Department Store,
Seoul, South Korea, 2005–07**
A sculptured wall, made up of individual ceramic
tiles, runs along the length of the 50-metre (164-foot)
gallery space to create a sense of cohesion.

The shop floor of the department store has increasingly become a cluttered no-man's-land, no more than a space between competing branded concessions.

Howard Watson describes how at Lotte, a department store in Seoul, South Korea, Universal Design Studio has applied its subtle decorative design style – first launched internationally in the Stella McCartney stores – to unifying effect.

Following the acclaim of the Stella McCartney store designs, London-based Universal Design Studio was approached by Lotte to help redesign the interiors of its five-storey department store in the Myeongdong district of Seoul, South Korea. At the same time as understanding that a modern-day, upmarket department store must compete with boutiques while offering its own cohesive, curated and branded experience, the practice addressed one of the major problems that have long compromised department store interiors: how to explore the drama of a large space while resisting the visual monotony that beleaguers the genre and makes it the poor cousin of fashion retail design.

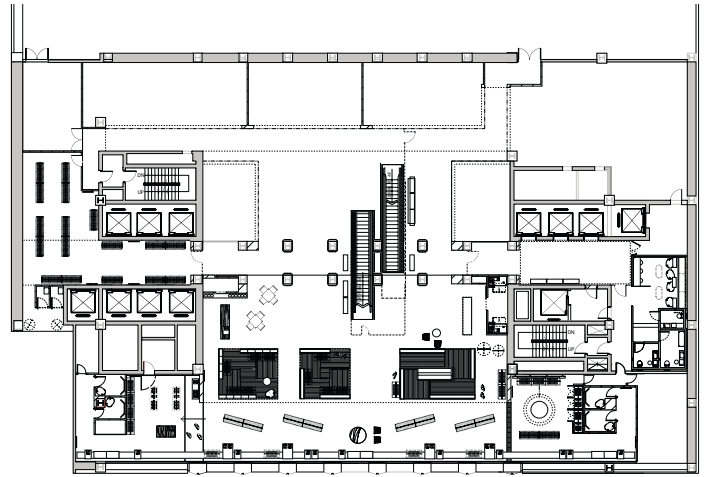
The collaboration with Lotte began in 2005 with the commission to redesign just half of the 1,000-square-metre (10,764-square-foot) fifth floor, but Universal's success in introducing a type of retail experience quite foreign to Korean fashionistas has led to the redesign of the third floor, completed in winter 2006, followed by the second half of the fifth floor, which is due for completion in spring 2007 and will include a café/restaurant area.

Fashion retail in Seoul is very brand led and, previously, Lotte had followed the established template of dividing the department store into brand-orientated boxes. The operations of Lotte are so diverse – it is as famous for its mineral water as it is for selling clothes – that it is virtually a 'non-brand': in contrast to Virgin, it successfully traverses genres by stepping back from a forceful, cross-sector identity. Consequently, the department store had little identity beyond the franchises it housed, and this suited the local retail mindset: wealthy Seoul shoppers expect branded boutiques rather than a desegregated, multibrand experience where they can graze. Unusually in an era where the motivation of much high-profile retail design is to create individual pockets of experience as a reaction against the homogenous whole, Universal Design Studio needed to break down the barriers and extend some idea of



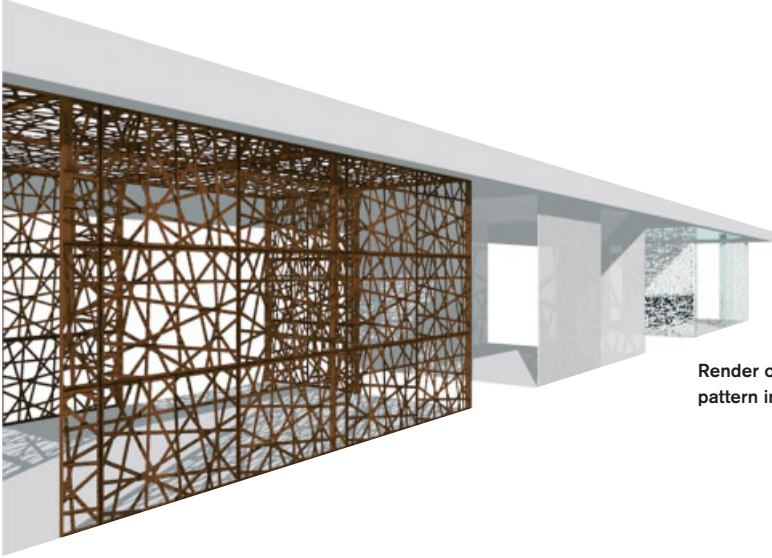
The design of the luxury accessories section on the third floor, completed in 2006, is highly geometric, with almost all elements based on a triangular form. The Corian shoe displays tilt up towards the customers.

Plan of the first phase of the fifth-floor development, with Universal Design Studio's new gallery, including three screened rooms, in the lower central section.

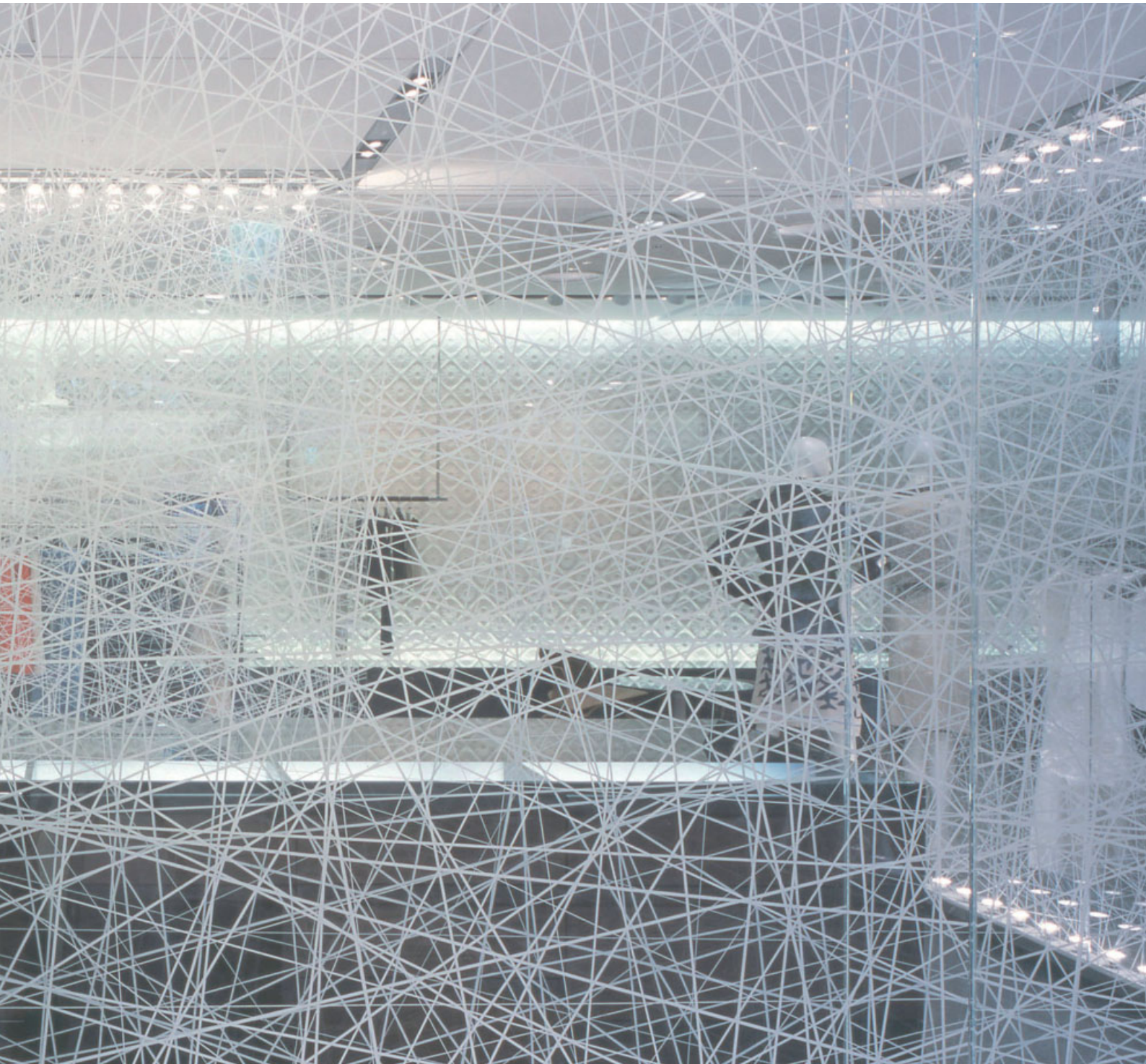


This spread and overleaf: Two of the 'rooms' in the fifth-floor gallery, with the same irregular, crisscross pattern used for very different effects.

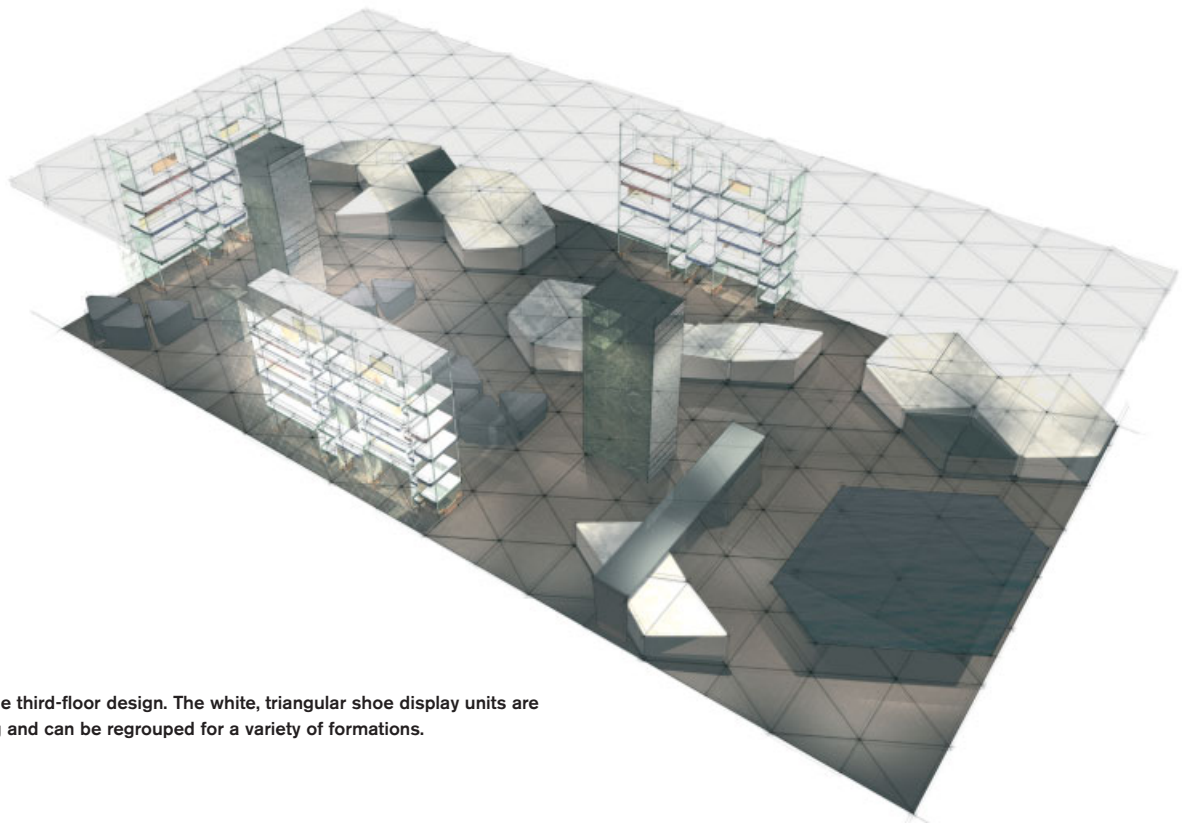




Render of the three types of screen, using the same cross-hatched pattern in different materials.







Render of the third-floor design. The white, triangular shoe display units are freestanding and can be regrouped for a variety of formations.

homogeneity into the fifth floor, creating a 'Lotte experience' beyond the women's luxury labels.

Jonathan Clarke, director of Universal, infused the concept with his preference for 'a space that was much more about curation', whereby an overarching intelligence actively places potentially diverse objects together to create a unique, layered environment. This approach was blended with Lotte's own desire for a design that combined 'elegance' and 'garden', which it called 'Eliden', a rather clunky composite of the two words.

Part of Universal's success is based on its creation of textured space through the use of pattern in a variety of materials and scales. This has been used to great effect in smaller retail spaces, but the breadth of the Lotte project allowed the idea to be taken further. The individual concession boxes were cleared out and replaced by three distinct areas, which nonetheless remain visually connected within a 50-metre (164-foot) long gallery. The same, irregular crisscross pattern emerges in a series of screens in different materials that delineate the three areas: fret-cut, black-lacquered timber; screenprinted glass; and fabric. Combining transparency and separation through the use of screens obviously draws upon oriental design and also satisfies a local cultural leaning towards physical privacy.

Adding to the overall cohesiveness is a timber floor and, running the entire length of the gallery, a wall of three-dimensional ceramic tiles, similar to those used in the McCartney design, but here drawing upon the traditional Korean interest in textiles and pattern-making. Display systems include perforated sheets of vertical glass (with the clothes hangers inserted into the holes), suspended rails and clear glass units.

The third-floor accessories department has also been redesigned by Universal. Again, the rabbit warren of concessions has been cleared out to create a dynamic, central space. Clarke used the privacy of screens once more, as 'accessories are highly personal', while also lending the space a feeling of transparency. The screens and the displays become one within floor-to-ceiling glass cases, inserted with underlit metal shelves. However, the most striking aspect of the display system is a series of low-level, triangular Corian units that can be placed together in different formations. The Corian surfaces are tilted to display shoes at an angle, and Clarke says this is a response to the fact that shoes are rarely displayed in the way that we usually see them. The triangular units pick up on the hard geometry of the design: regimented triangles also form the pattern of the flooring, the black Plexiglass ceiling and the screens. The masculinity is softened, though, by the shadow pattern of dappled leaves (inspired by the stained impression of leaves on pavements) visible through the top layer of Corian. Initially, further moderation was to be provided by columns clad in living moss, but this idea proved unworkable, giving way to a green marble.

On both floors, Universal has managed to create a balance between the identity of the store and the brands, using pattern and texture to offer a sense of event while also bringing a refreshing intelligence to product display. ▴

Howard Watson is an author, journalist and editor based in London. He is co-author, with Eleanor Curtis, of the new 2nd edition of *Fashion Retail*, Wiley-Academy, March 2007, isbn 0470066474, £34.99. See www.wiley.com. Previous books include *Bar Style* (2005), *The Design Mix: Bars, Cocktails and Style* (2006) and *Hotel Revolution: 21st-Century Hotel Design* (2005), also published by Wiley-Academy.

Text © 2007 John Wiley & Sons Ltd. Images © Universal Design Studio

Louise T Blouin Institute, West London

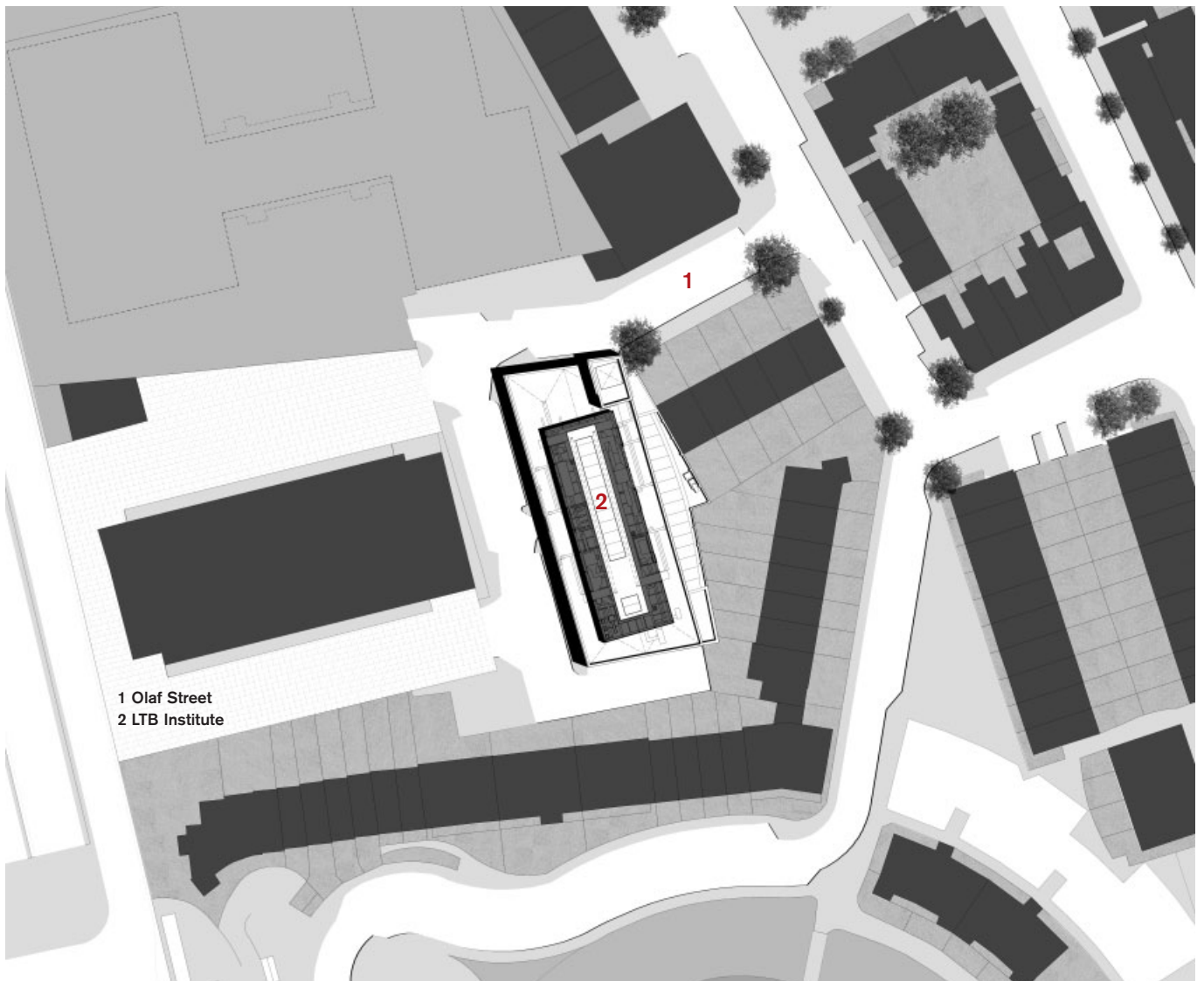


The borderlands of Notting Hill and Shepherd's Bush – at the very fringes of the Westway – have become the site of London's largest new privately owned artspace. A nonprofit foundation funded by Louise T Blouin MacBain, the Canadian CEO of a global media business and an arts philanthropist, the institute has been designed both as a home for the Blouin Foundation and as an effective showcase for the work of newly emerging and established artists. **Jeremy Melvin** describes how architects Borgos Dance have used the 'intriguing' exterior of an old coachbuilder's workshop to their advantage, in hewing out a 'compelling' new interior.

As long as some people want to make art and others want to experience it, there will be fervid debates about the best circumstances in which this experience should take place. If the only consensus is that there is no ideal or perfect way to appreciate art, the recent clutch of new, small-scale and sometimes specific venues in various locations in London's central fringe is very positive. In both design and curatorial ideas they can take risks that state-funded institutions like Tate, the South Bank and Covent Garden never can, rather as small shops provide an essential counterpart to large retailers. They are opportunities to see both different work and the same work in different circumstances, whether Bill Viola's installation at the Haunch of Venison, the Siobhan

Davies Dance Company in their new studios, or the James Turrell exhibition that launched the Louise T Blouin Foundation's programme.

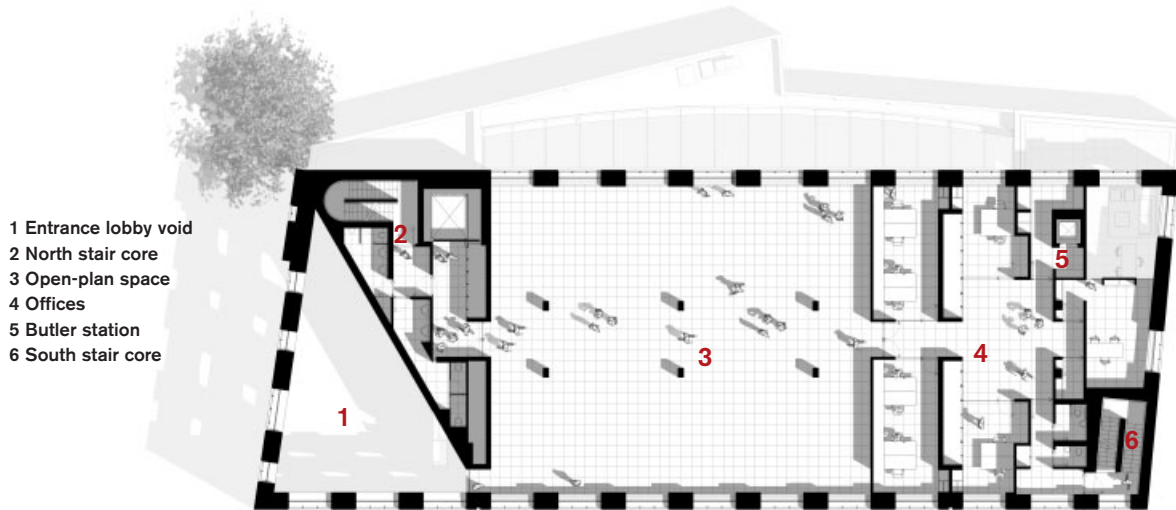
This institute, in a building converted according to the designs of Borgos Dance, is only a few blocks away from the stuccoed terraces of Notting Hill in west London. On the well-trodden route between home and work at Shepherd's Bush for senior BBC executives, it has seen a slow influx of creative activity. Chrysalis Records and Marino Testino's studios are nearby as the traditional industrial businesses have moved on or folded, and Monsoon Accessorize is moving to a new built headquarters next door to the institute in 2008. However creative they are, these organisations are essentially private



Borgos Dance, Louise T Blouin Institute, London, 2006

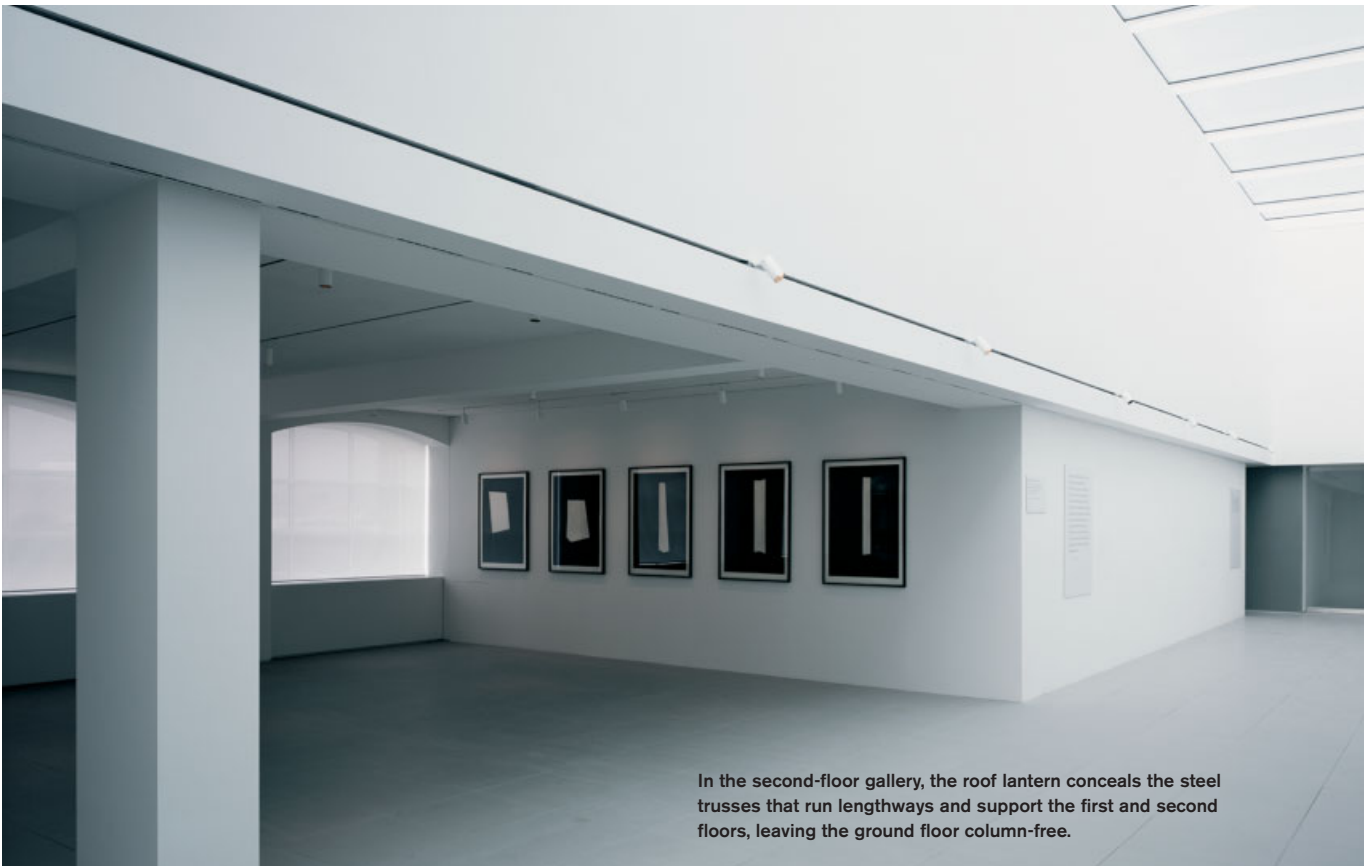
Site plan. The institute is in a formerly industrial area of west London, where residential communities are making a comeback, and not far from Notting Hill's stuccoed streets.

A former coachworks for luxury cars, the new design strips the building of its industrial essence.

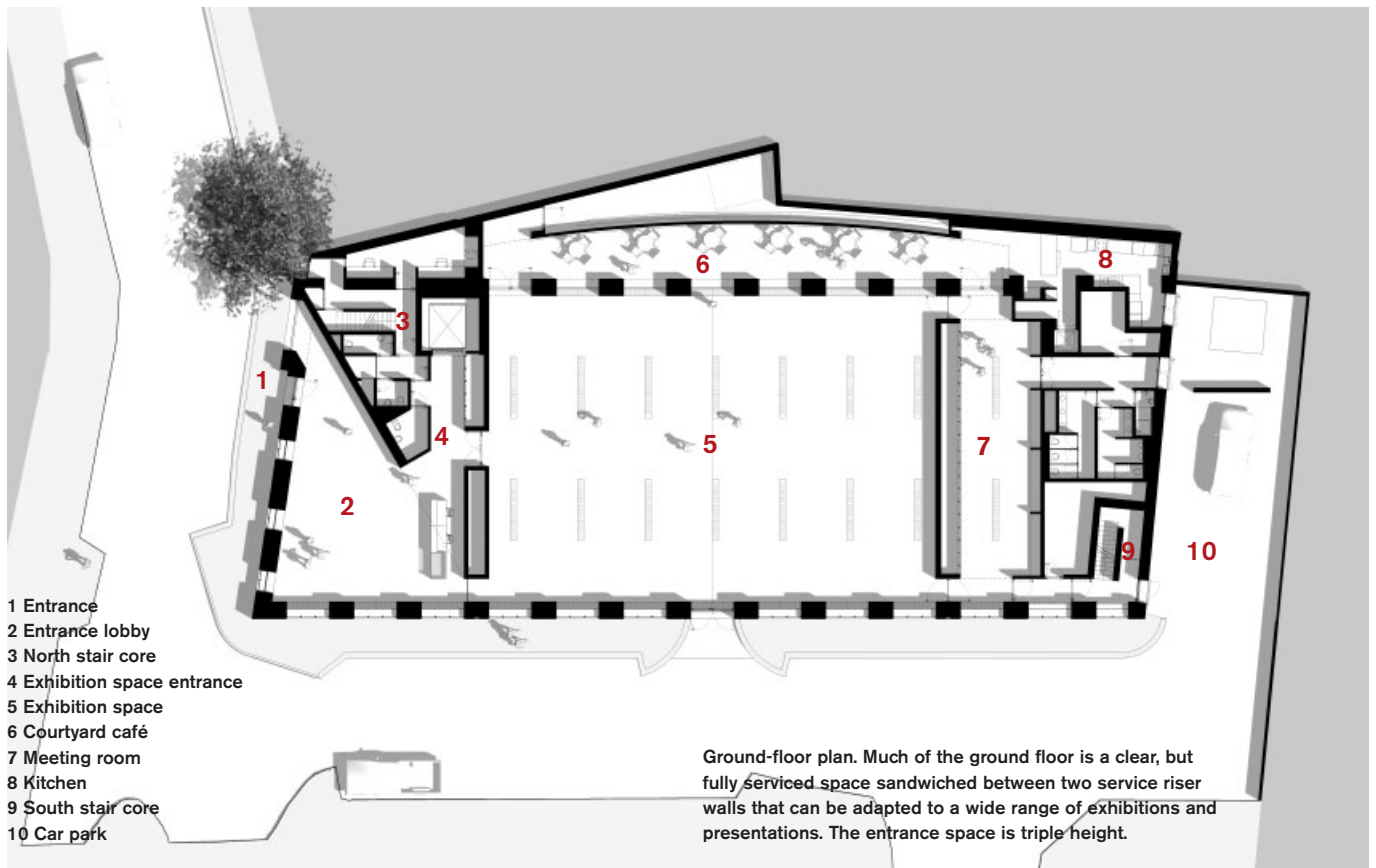
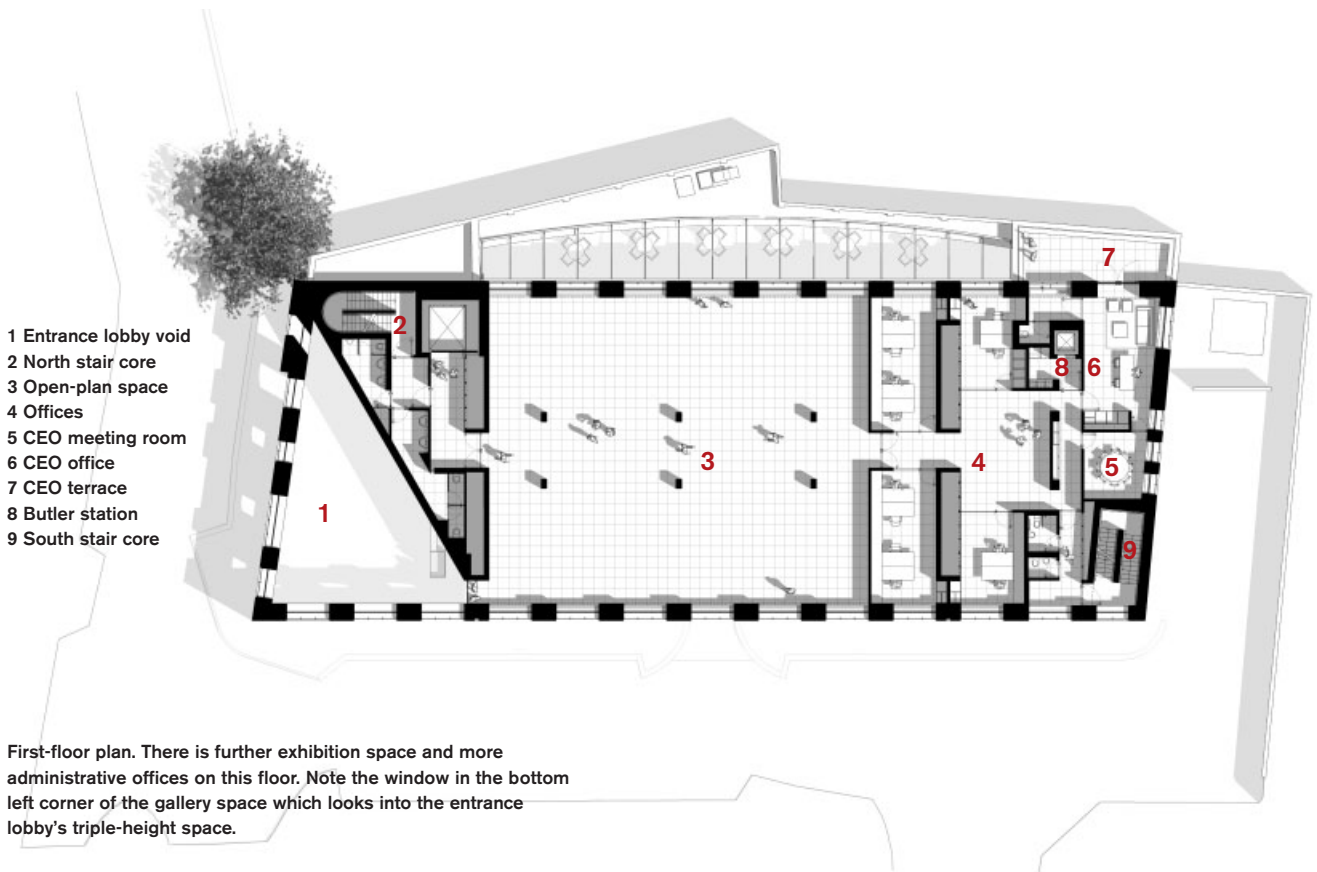


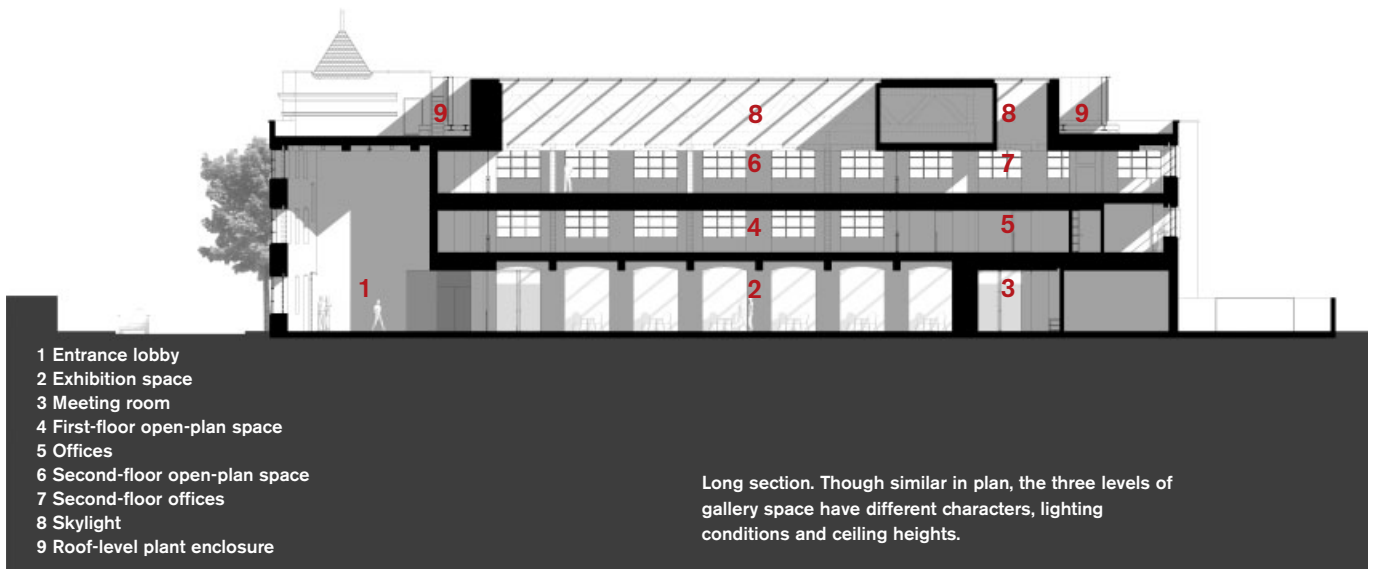
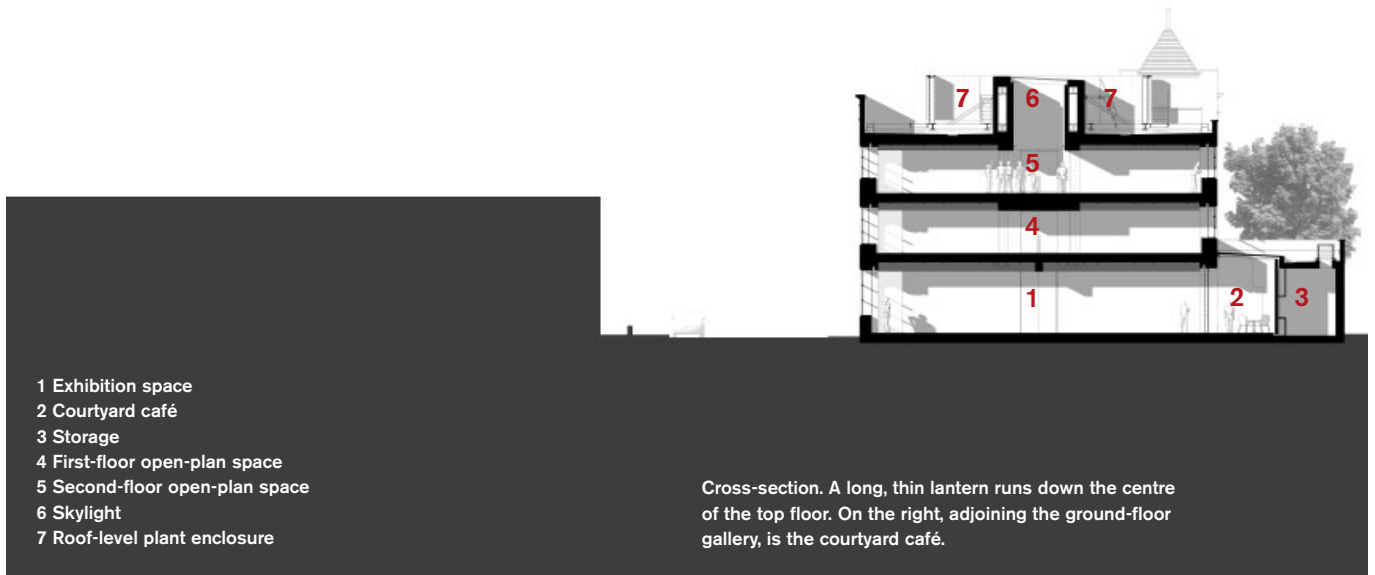
- 1 Entrance lobby void
- 2 North stair core
- 3 Open-plan space
- 4 Offices
- 5 Butler station
- 6 South stair core

Second-floor plan. Structural gymnastics give the exhibition space on this floor the possibility of top daylight.



In the second-floor gallery, the roof lantern conceals the steel trusses that run lengthways and support the first and second floors, leaving the ground floor column-free.





and not open to the public. The Blouin Institute, though entirely privately funded, is open to the public and not a commercial venture, and so adds a new dimension both to the character of the immediate area and to the possibilities for presenting art in London.

The institute draws both on the area's building stock and its changing character. Dating from the 1920s, the building originally housed a coachbuilder for luxury cars, but was converted into studios, workshops and offices in the 1980s in a way that compromised its utilitarian qualities, which are often appropriate for contemporary arts venues. Covering about 3,250 square metres (34,983 square feet) over three floors, enough of the original character remained, however, for Louise Blouin MacBain to spot its potential as a permanent London location for her art foundation when she saw it in 2004. She turned to Borgos Dance, who had designed several stands at international art fairs for her, to design the conversion.

As Simon Dance explains, the aim was not just to re-create the old coachbuilding workshops where Rolls-Royces, Bentleys and Daimlers were turned out to the specification of rich buyers, but also to intensify the buildings's essential character. On the outside the designers not only cleaned up the London stock brick facades, but also rationalised the openings, eliminating both later alterations and the abnormalities that practicality may have rendered necessary. A significant number of piers and arched windows were rebuilt, all in load-bearing masonry. The implication of an industrial building pared down to its essence and then transformed into 'what it really wants to be', as Louis Kahn might have said, is made explicit in the permanent lighting installation designed with James Turrell. This highlights the windows at night, turning the building into a beacon that the BBC executives can see from their Television Centre fortress across a cityscape that includes the motorway linking Shepherd's Bush with the Westway, the vast new White City shopping centre and a site on which Rem Koolhaas has designs.



The courtyard café lies outside the main wall, an escape from the intensity of an exhibition but also allowing views back into the gallery.

If the exterior is intriguing, the interior is compelling. Behind a full-height door in the northern wall is a triple-height entry space with a diagonal wall running from the door to the reception desk and a waiting area in the right angle of this triangle. White-painted and grey-floored, its texture comes from a multiplicity of light and shadow, and depending on the institute's programme sometimes includes displays. The main exhibition space lies behind the desk. Sandwiched between two deep walls, which contain the mechanical and electrical services, it is an essential part of the design strategy to keep the gallery space as open plan as possible.

This also called for some ingenious structural engineering from Arup. In the centre of the building, running parallel with its long axis, is a rooflight that brings daylight into the top floor. On either side are 27-metre (89-foot) long deep beams from which the top and first floors are hung, leaving column-free space on the ground floor of 465 square metres (5,005 square feet) and 4 metres (13 feet) high, with the loads brought to the ground on columns at either end of the beams. For its opening exhibition, the Turrell retrospective, it has been divided into a series of cellular spaces whose limits and shapes are called into question by Turrell's lightworks. In one, a deep-blue light seems to be a screen, but trying to touch it reveals that it is actually a space. Others play with the notion of the actual limits and shapes of spaces.

These effects obviously require the windows to be blanked out. Though this configuration shows one aspect of the window detailing, which includes blinds for filtering or blanking out daylight as well as artificial lighting, the possibility of being entirely open and daylit appeals to Dance as it shows off the architectural concept more clearly. The institute's remit, he explains, includes performances and film showings as well as exhibitions, implying a sense of interaction.



In the entrance lobby, the powerful, three-storey diagonal wall leads to the reception desk, which itself points towards the way into the gallery.

Central to this aim is a long, thin café, carved out of what was an irregular and derelict courtyard between the building and the site perimeter. A long, subtle curve conceals the irregularities and a store alongside the boundary, giving the illusion of space, while the ultra-clear glass gives the impression of being outside. The full-height openings in the original facade could potentially give views into the gallery. Even with such views blocked out, the café is a congenial space, and by breaking through the building's surface provides a restful and slightly detached area which recognises that looking at art can be physically and mentally demanding, but may also benefit from the possibility of refreshment and social contact. The offices are concealed behind the southern service wall on the first and second floors, with a meeting room below them on the ground floor.

In diagrammatic terms the design concept is simple, but it demands a high degree of technical skill to achieve such effects with deceptive ease. What is really impressive, though, is not the technology, but the concept, which shows a sensitivity to the area's history and future possibilities and to the experience of looking at art. In this sense, architecture and art are very close: the concept treats the building as a found object, but one that has inherent qualities that can speak to us precisely for its apparent ordinariness. What the design does is to find them, make them manifest, and use them as a subtle background to whatever display or event may take place within them. It will be interesting to see what happens as the institute's programme unfolds. **D**

The Tailored Home Housebrand



Loraine Fowlow describes how in Calgary, Alberta, Canada's fifth biggest city, John Brown has established Housebrand, a practice that is notable both for its innovative approach to residential design and for its adeptness in understanding its client base and the particular context of the Calgary housing market. The company has masterfully matched its own skills and services to customer demand in a way that is almost unprecedented within the architectural profession.

We need to build homes with care, not cookie cutters.

Housebrand's Tailored Home philosophy

John Brown and his unique form of residential design are transforming the rules of engagement for architects and clients while expanding the sustainability of established neighbourhoods. Housebrand expands the services of an architect beyond design to include property acquisition, construction and interior design. The result is a vertically integrated, one-stop shopping experience that makes the process of creating a new home in an established community less stressful and more cost effective.

After architectural and engineering studies at the universities of Manitoba and Texas, as well as Columbia University in New York, John Brown returned to his home town of Calgary to launch his own practice and a teaching career with the architecture programme at the University of Calgary's Faculty of Environmental Design. In addition to his architectural registration, he obtained his licence as a real-estate agent. In collaboration with principals Carina van Olm and Matthew North, his relatively normative practice has morphed within the last five years to become Housebrand, an innovative approach to residential design that has garnered national recognition from the Royal Architectural Institute of Canada in the form of the 2003 Award of Excellence for Innovation in Architecture. Brown also takes the firm's approach to audiences beyond Calgary, with publications and lectures aimed at both students and practising architects. The unique approach of Housebrand is nothing short of a complete renovation of the manner in which residential design and construction occurs – and its influence is spreading.

Within the typical North American city, housing accounts for the single largest land use, and constitutes the largest investment most people will ever make. Combined, these two facts delineate the enormous impact of housing on the design and construction industries, and yet fewer than 7 per cent of all houses constructed in North America involve the use of an architect. Therefore, architectural practice has little to no involvement in the primary, contemporary formation of North American cities – a fact that should be deeply troubling to the profession.

But the variables involved in this scenario include factors that lie beyond the profession itself; these include the process for land acquisition for residential purposes, the residential construction industry and municipal development practices, as well as the architect–client relationship. And it is these additional aspects to the process of residential construction and design that Housebrand has brought into the realm of the architects' consideration.

Calgary is the fifth largest metropolitan region in Canada with a population of 1,060,300 (2005), and the largest between

Toronto and Vancouver. Occupying an area of 721 square kilometres (278 square miles), it is mostly composed of postwar suburbs centred on the downtown core of high-rise development. Although the Calgary area is greater than the land areas of both Toronto and New York City, it is mostly made up of vast swathes of single-family dwellings. Suburban construction continues apace today, fuelled by the now consistently buoyant oil and gas industries, stretching the city's limits further into the countryside each year.

The normative context for new residential development in Calgary involves the purchase of large undeveloped areas by private development companies who either sell parcels to smaller developers or develop the entire area themselves. Although developers may include architects within their employment ranks, the process of buying a new house in one of these developments is more akin to purchasing a kitchen at Ikea than it is to hiring an architect. Focused more on the process of constructing and selling homes than on the product itself, the development industry has formulated a process that essentially bypasses meaningful involvement in design for the home buyer.

Should a buyer wish to purchase a home in an older, more established neighbourhood, closer to the city's core and with established amenities and mature landscaping, the options are limited. Existing homes can either be renovated, demolished or removed, raising the overall costs well beyond the base price normally found in a new suburban development. Often the value of the land in these neighbourhoods is far greater than the house itself. The additional costs of design and construction of either a renovation or new home on an established plot places this option beyond the means of many buyers, particularly young families. The normative renovated home option also brings further complications and costs in the form of plot purchase and bridge financing required to cover accommodation during time of construction.

Market research undertaken by Brown's firm in 2002 revealed that the average price at the time for a new suburban home was \$240,000, with 65 per cent of the Calgary housing market, new or used, in the price range between \$180,000 and \$375,000. An additional analysis uncovered the fact that 61 per cent of Calgary's existing housing stock is over 25 years old and therefore can reasonably be assumed to be in some need of upgrading.

Coupling the statistics of average new-home price range with the housing stock prime for renovation, the conclusion reached by the firm was that there was a potentially significant portion of the new-housing market that may be interested in the alternate choice of a desirable inner-city neighbourhood, as opposed to the distanced sterility of a new suburb. The detailed analysis concluded a possible annual



Front and back elevations.



Bungalow to Two-Storey, near central Calgary, 2006
 The renovation of this 232-square-metre (2,500-square-foot) home consisted of a second-floor addition to a 1945 bungalow located on the edge of the centre of the city. The main floor of the bungalow was converted to bedroom space, with the living areas located in a single loft space on the first floor. A band of glazing on the rear facade opens the first floor to a city view. The simple, sloped roof massing and metal siding is designed to create an emblematic silhouette on the ravine edge.

Original house.

market of 5,600 properties fitted within the parameters of average price range, plus eligible housing stock – a not inconsiderable potential. Specifically, young couples purchasing their first or second home, plus retirees interested in downsizing but still looking for the amenities of an established neighbourhood, were deemed to be the potentially strong market for a new approach to renovating existing homes.

The real attraction, however, of moving into this area was the possibility of offering this market segment architectural opportunities not currently available. In other words, to explore the potential of dramatically increasing that 7 per cent of the housing market not currently utilising the skills of an architect. Thus, the Tailored Home was born.

The development of the Tailored Home approach involved revisiting the architect–client relationship as well as streamlining the process, while maintaining the individual attention to client needs that architectural services usually offer. Although framed against the backdrop of the traditional architect–client relationship, Housebrand’s client involvement actually begins prior to the commencement of design proper. The process begins with discussions with clients focusing on the identification of needs, abilities and priorities. A target pro-forma is developed that allocates project funds to the base house purchase, the architectural improvements, and any required furnishings. The approach also includes the rule of thumb of not generally adding any square footage, as well as reusing only a portion of the original house. Therefore, finding the right house is extremely important to the success of the Tailored Home.

One stumbling block faced by many families who are interested in renovation is the task of finding the right location and property and arranging suitable financing. In addition to architectural and construction services, Housebrand also acts as real-estate agent and assists clients with finding an appropriate location as part of the Tailored Home process. Housebrand negotiates the purchase, and times initial occupancy for the construction start. Financing is arranged to include the purchase price of the house, the firm’s professional fees and cost of all anticipated improvements and the carrying costs required to allow the client to remain in their current home until completion of construction.

Beginning the process with the acquisition of the land itself, taking it through to designing the interior of the completed house and providing furnishings and fixtures was a logical development. The firm has transformed its traditional architectural office, located in downtown Calgary, into a publicly accessible demonstration centre, which serves four functions. As an exposition pavilion the centre is open for the general public to browse and discover the latest developments in residential design, as well as the option of redeveloping an inner-city property. As a showroom it is a place for potential clients to meet Housebrand sales staff and learn about the firm’s collection of residential products and comprehensive

set of services. For clients and staff it is a working studio environment in which design and specifications can be developed. Finally, the centre is used for free monthly public architectural lectures delivered by Brown.

The underlying key to making the Tailored Home approach work is solving the economics, and this includes locating savings that traditional suburban developers discovered long ago: for example, using similar detailing across projects and hiring the same tradespeople who are familiar with the firm’s approach and details, thereby saving time and money.

Other savings can be found in supplying furniture and fixtures, which actually contributes to the consistency of design quality across projects. Products carried by Housebrand include those by Canadian furniture company BENSEN, Canadian lighting company BOCCI, and US fireplace manufacturer VISION, and the firm also has its own custom-dyed carpet manufactured in New Zealand through a local supplier. Practice principals travel to trade shows in Paris, Milan, New York and Los Angeles and import furniture, tiles, plumbing fixtures and accessories that are unique to Housebrand. The firm also manufactures limited runs of its own products, such as mailboxes, beds, tables and assorted built-in furniture pieces.

Several custom homes each year, significantly larger and in a far higher price range, both feed the firm’s bottom line and provide a working laboratory and testing ground for the Tailored Homes in terms of design aspects such as details, materials, finishes and products. Housebrand, at present, produces approximately 40 Tailored Homes per year, but demand is far higher. The firm consciously sets a limit on the number in order to ensure sufficient attention and care for each project. The market for the Tailored Home is typically the young professional couple, as well as the empty nesters looking to downsize their accommodation. Calgary’s largest demographic at 25 per cent consists of 25- to 45-year-old, primarily university-educated professionals, with a median age of 35 – the lowest of Canada’s six largest cities. Half of these are aged 25 to 35, and this percentage is growing at a rate of 3 per cent per year. Therefore, the Tailored Home market is only growing as the city’s population continues to expand at a rapid rate.

The Tailored Homes design approach has evolved over the last few years, but really began with the primary belief that everyone deserves good design, as well as the opportunity to work with an architect towards fulfilling their residential aspirations. Therefore, the actual architectural approach to the Tailored Home is really the same as with a far more expensive, new custom home. The same uncompromising aesthetic is applied, but within a far more streamlined process of design and construction. Although Housebrand now regularly fields requests to open offices in other cities, the firm has, to date, refused to entertain the possibility, given the pointedly localised focus of its work. In order for the Tailored Home



Entry detail.

Bungalow to Loft, southwest Calgary, 2005

A postwar bungalow, the original 111-square-metre (1,200-square-foot) home and attached garage occupied an L-shaped plan. The renovation extended the living space into the original single-car garage, and added a double-attached garage in the corner of the L-plan. A single pitched roof was added over the entire structure. The original floor plan of the bungalow was opened up into a loft-style plan, and the exterior was refinished with a combination of stucco and cedar.



Front elevation.

Original front elevation.



Loft area.

Split-Level to Loft, southwest Calgary, 2004

This renovation of a split-level in a 1960s neighbourhood primarily involved removing walls in order to open up the main floor into a loft-like space, using furnishings, fittings and free-standing walls for space delineation. The kitchen and dining areas changed places, and the original oak flooring was matched and extended throughout the main floor. Creating a drywall bulkhead over the fireplace instead of a mantle, and massing a smaller amount of more expensive tile on the wall area below, is a stylish but cost-saving move. New dark-stained cherry cabinetry and composite granite counters contribute to the overall modern aesthetic throughout.



Living room.

concept to work as a process, designers must both understand and work within the limitations of local construction practices, climate, municipal code issues and politics, as well as materials and product availability. In other words, Italian marble will not be specified for a Tailored Home when there is a locally available stone. Likewise, understanding the normative local practices of the various construction trades helps enormously in ensuring the realistic achievement of design details. Thus in the interests of economics, many design decisions with the Tailored Home are actually driven by these local processes and constraints.

The professional approach adopted by Brown and Housebrand is really based on the desire to architecturally resist the normative new suburban development, and this, the firm's principals concluded, meant creating a design and construction process that was as easy for the Housebrand home buyer as the process for a typical suburban home.

With the dual goals of providing a residential architectural service that is as easy as that offered by suburban developers, and expanding the architectural development of established Calgary neighbourhoods, Housebrand is providing a meaningful alternative to the process of designing and renovating residential properties. The practice is also expanding the demographic that is able to hire an architect and engage in personalised design within a reasonable budget.

Loraine Fowlow is Associate Dean and Associate Professor of Architecture in the Faculty of Environmental Design at the University of Calgary, Canada. She is an award-winning writer with a focus on the area of the (in)authentic environment, and her writing on this subject has been presented in Oxford, Paris, Rio de Janeiro, Portugal and numerous American cities. She is co-author of the book *Wine by Design* (Wiley-Academy, 2005), and her work has appeared in the *Design Journal*, *Canadian Encyclopedia* and many other publications.

Text © 2007 John Wiley & Sons Ltd. Images © Housebrand Construction Ltd

Resumé

John L Brown

1980

BSc (Civil Engineering), University of Manitoba

1983

MArch, University of Texas

1984

MSc (Building Design), Columbia University

1984–5

Hellmuth Obata Kassabaum Architects, Dallas, Texas

1985

Professor of Architecture, Faculty of Environmental Design, University of Calgary

1985–6

Andrishak & Sturgess Architects, Calgary

1987

Founded Zeug Design

1990–3

Director, Architecture Programme, Faculty of Environmental Design, University of Calgary

1995

Founded Studio Z

Housebrand principals Matthew North, Carina van Olm and John Brown.

1997–2000

Co-director, Architecture Programme, Faculty of Environmental Design, University of Calgary

2000

Founded Housebrand

2002

Prairie Design Award, Alberta Association of Architects, for Housebrand's Millennium Landmark structure, Millennium Park, Calgary

2003

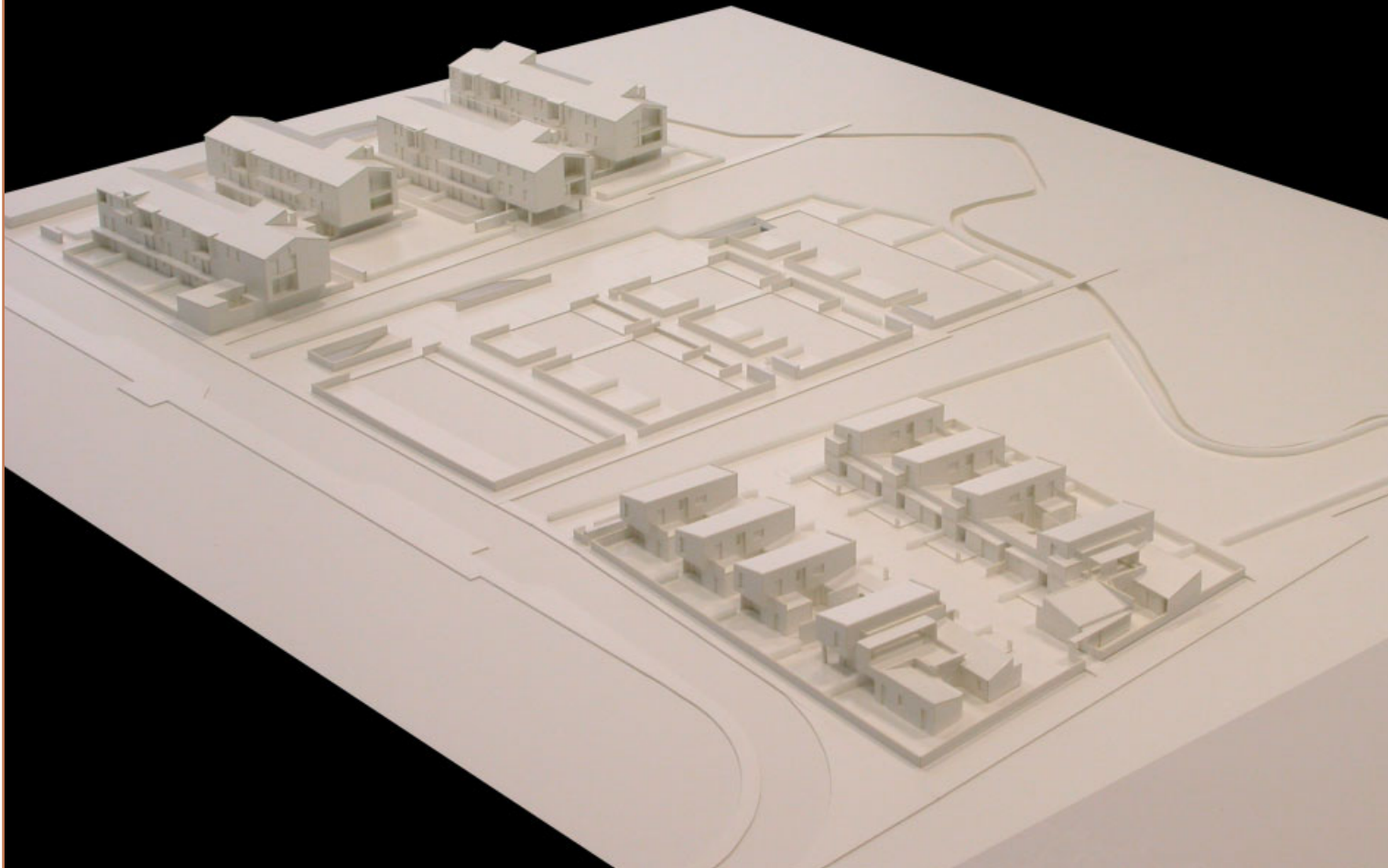
Award of Excellence for Innovation in Architecture, Royal Architectural Institute of Canada

2006

Prairie Design Award for the Housebrand's Rothney Astrophysical Observatory Visitor Centre, Calgary



Dosson in Casier, Italy



Valentina Croci describes a sensitive local housing scheme at Dosson in Casier, near Treviso in northeastern Italy, by Amaca Architetti Associati. Designed jointly with adjacent green spaces in a system integrating housing units and the countryside, it is a perceptive piece of urban planning that is as responsive to the natural landscape as the existing architecture.

At a time when architects' work is increasingly national, if not global, the designers of the housing units at Dosson in Casier are extraordinary for their determined locality. Amaca Architetti Associati is based in Treviso, in the Veneto region of northeastern Italy, only 4 kilometres (2½ miles) from the site of the housing scheme. This is how the architects have chosen to develop their practice.¹ Their work is primarily based within the Veneto, and their main interests are in housing and the relationship between architecture and the landscape. Their approach is one that is particularly relevant given the context within which they work.

In the Veneto, the natural landscape has become precious. A historic area that was once known as the terra firma, or agricultural base, of the Venetian Empire, it is now made up of a succession of tiny towns. These were built up primarily after the Second World War close to the thoroughfares and industrial areas that define the 'urbanised countryside'. Lacking a metropolitan centre, the area is neither truly rural nor urban. The Veneto can best be characterised as urban sprawl with low-density residential development, punctuated by a few breaths of open countryside.

The housing scheme at Dosson in Casier gave the Amaca studio the unique opportunity to configure a large plot of undeveloped land that had the virtues of overlooking a fairly open countryside and being located near a historic village. Featuring a church and a partially reconstructed 19th-century

village centre, Dosson in Casier also includes an 18th-century Venetian villa with a pretty north-facing garden. In 1998, Amaca (G Arch studio at the time) took part in a competition to build up the area, and in 2000 drafted an executive plan that included both configuring the residential area and connecting it to the main road network.

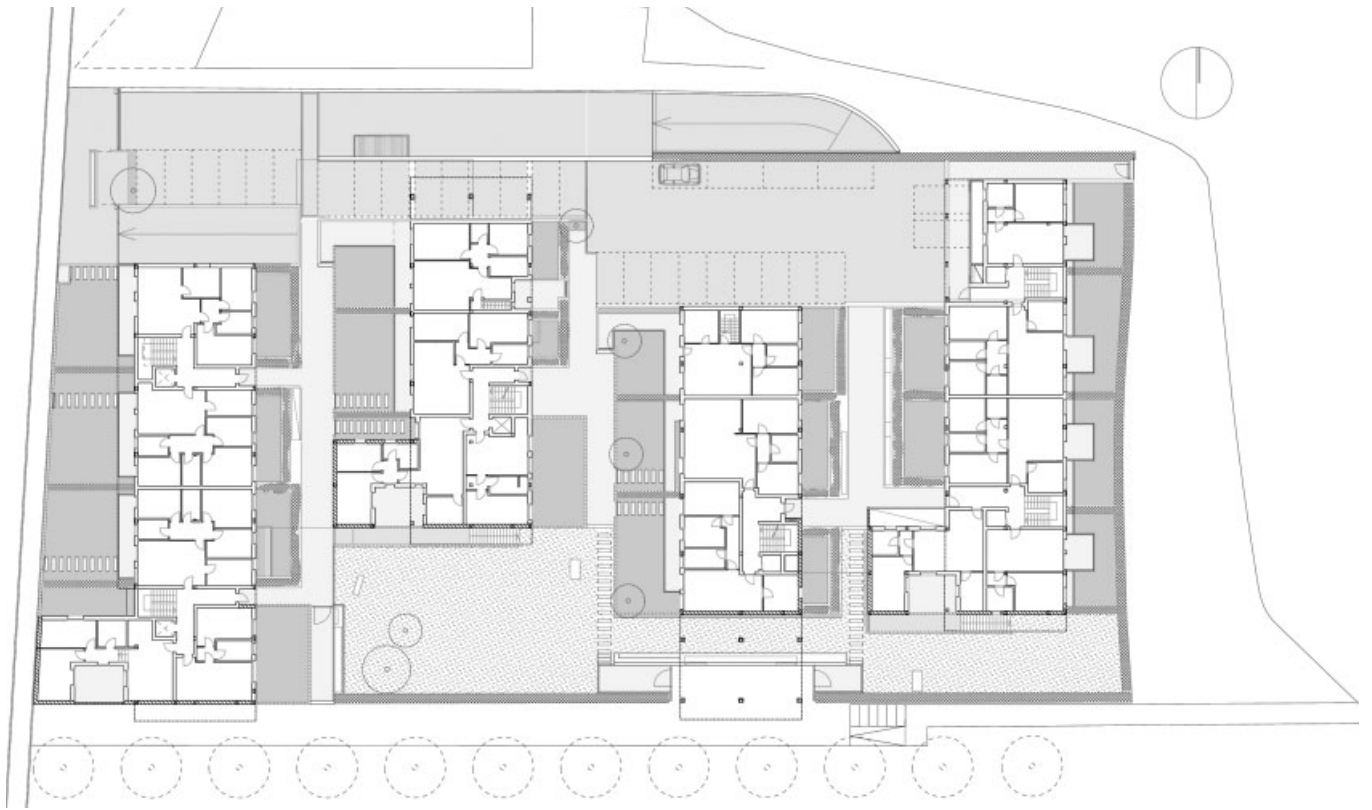
The project consists of three rows of residential blocks (the one in the middle is still under construction) placed parallel to one another and with declining residential density and height as they move towards the southern countryside. The block nearest to the village is subsidised residential housing, but all the blocks have been designed jointly with the adjacent green spaces in a system integrating housing and the countryside. Here, land development and housing development become one.

Differing from the previous development plan approved by the city planning department, in which it was intended to run a small waterway underground and build a road that would have cut the area diagonally from the centre of the village to the countryside, Amaca proposed moving the public road to the village to the west of the site and locating only private roads within the area, differentiating between vehicle and pedestrian paths. The new plan retains the waterway, which is important for the hydrogeological balance of the area, which is prone to flooding, and organises the southeast area, which includes an existing sports centre, so that it is accessible from the historic centre. However, the idea of running a public road to the west of the residential site was rejected in favour of a new 'green passage' between the sports centre and the three blocks that connect the countryside to the historic centre and the centre to the 18th-century villa's garden. This hierarchical organisation of the road network is important, and sets the project apart from the usual simple planning of residential developments.

Another aspect of the project that makes it stand out from the usual is the placing of the subsidised housing block near the historic centre, as this type of housing is usually placed outside of the centre because of its typically high density and lower value. In contrast, the idea here is to decrease residential density in the surrounding countryside. The subsidised housing scheme is made up of three residential units covering a total area of 8,050 square metres (86,649 square feet). Simple parallelepipeds, the three units have the unique feature of patio houses which appear as if 'inserted' in their bases. These single-storey volumes emerge from the ground floors of the parallelepipeds, unifying the units in a continuous front towards the pedestrian entrance. In addition, the staggering of the horizontal feature of the patios, coming out from the geometry of the parallelepipeds, creates shared green courtyards, all with different depths. The differentiation between the ground floors with patios and the parallelepipeds towering above is also highlighted by the use of



The project includes three rows of residential blocks, one of which is subsidised housing, with the heights and densities of the blocks decreasing towards the countryside. Within the scheme, pedestrian and vehicle entrances are differentiated. Contrary to usual practice, the high-density building is located near the historic centre.



The subsidised residential housing consists of staggered horizontal buildings with south-facing entrances. On the ground floor, single-storey volumes, emanating from the parallelepiped towering above, create a common facade and shared courtyards.



The ground floor of the subsidised buildings consists of projecting entrances and a continuous exposed-brick base that help to define a unified facade to the south.



On the first floor of the subsidised housing complex, the facades are screened by continuous terraces and projecting balconies on the upper storey that are overlooked by the living spaces. Sunbreakers are used to create more privacy.

different finishes for the walls: plaster for the horizontal buildings, and exposed brick for the patio houses. All the horizontal buildings face south for greater sun exposure, and offer views over the surrounding countryside.

Amaca's subsidised housing optimally differentiates, with just a few clever design elements, a residential type whose nature does not allow for much compositional creativity. For example, in order to increase privacy in the apartment blocks, the firm designed a series of sunbreakers that screen the continuous terraces overlooked by the living spaces. On the upper storeys, the terraces become balconies, varying the continuity of the facades, and some of the south-facing apartments feature small, covered roof terraces rising above the roof – a feature typical of Venetan architecture. Every apartment has its own character, avoiding the usual homogeneity of this kind of speculative building.

The layout of the row of residential buildings nearest the countryside is more complex. Here, two units of five terrace houses each cover 4,017 square metres (43,239 square feet). The first three houses of each unit have the same

distributional and volumetric layouts, with internal patios and gardens at the front connected by a small pergola-covered walkway. The layout of the fourth houses mirrors that of the first three, while the houses on the outer edges of each unit are single storey, with a patio that opens to the countryside.

For this residential complex, Amaca started out with a local scheme for the row house with a north-south arrangement, 3 to 4 metres (9.8 to 13 feet) of garden to the front, a 7-metre (23-foot) deep housing body and a back garden. This layout had the obvious problems of an introverted floor plan and limited privacy. However, the introduction of a small interior patio creates greater sun exposure and an intimate space screened by the sunbreakers on the windows of the houses opposite. The entrances were resolved by modulating the volumes of the facades, which are visually connected by an exposed-brick continuous base. The brick base also generates shared courtyards at the front of the buildings, where garage entrances alternate with the entrances to the houses, set in recessed niches. Likewise, in the subsidised building units, the first storey of the houses is a parallelepiped volume (the



In the complex next to the countryside, the view from the back gardens shows the compositional variation of the local scheme for row houses.

Dosson Housing	G 0-29%	F 30-39%	E 40%	D 41-49%	C 50-59%	B 60-69%	A 70-100%
QUALITATIVE							
Space-Interior					C		
Space-Exterior							A
Location						B	
Community						B	
QUANTITATIVE							
Construction Cost							A
Cost-rental/purchase						B	
Cost in use						B	
Sustainability			E				
AESTHETICS							
Good Design?						B	
Appeal					C		
Innovative?					C		

This table is based on an analytical method of success in contributing to a solution to housing need. The criteria are: Quality of life – does the project maintain or improve good basic standards? Quantitative factors – has the budget achieved the best it can? Aesthetics – does the building work visually?



The row of buildings facing the countryside consists of two units of five houses. The first three houses have the same floor plan, which is mirrored in the fourth house. The last house has a patio layout on a single floor that opens to the countryside. The ground floor adds some single-storey volumes that help define a small courtyard in front of the houses.



The two units of five houses that form the complex next to the countryside are unified by a continuous exposed-brick base, within which are set the garages and the entrances to the houses. A projecting structure, clad in copper, houses the stairs to the first floor.

bedrooms face on to this), and the ground floor is made up of low structures that contribute to defining the interior patio and the rear garden. The patio exposure is favoured by the proportions of the adjoining house's roof. The privacy of these spaces is guaranteed by full-height sunbreakers on the upper-storey windows of the adjoining house.

Minor variations in the use of materials help avoid homogeneity in the housing in this scheme. With limited resources (bricks, plaster and copper for the finishing elements), Amaca chose to use exposed brick, and blue for the window blinds rather than the green typical of the Istro-Venetian housing model. In the complex next to the countryside, a honeycomb window, set into the brick wall, was used to screen the ground-floor bathrooms and to avoid the common use of window awnings. The roof tiles are cement instead of brick, and the projecting volumes of the stairways are clad in copper to break up the monotony of the white plaster.

Amaca's housing units in Dosson in Casier demonstrate how it is possible to design effective compositional variations with limited financial resources, and show how small touches

can reinterpret traditional codes without departing too far from the geographic and cultural context in which the new buildings are set. The Dosson project is an example that speaks the local language and responds to the real problems of ordinary architectural practice in Italy. **Δ**

Translated by Miriam Hurley

Valentina Croci is a freelance journalist focusing on industrial design and architecture. She graduated from Venice University of Architecture (IUAV), and gained an MSc in architectural history from the Bartlett School of Architecture, London. She is currently a PhD student in product and communication design at the IUAV.

Note

1. Amaca Architetti Associati was founded in 2002 in Treviso. It is small studio with six employees, four of whom are partners: Monica Bosio, Martina Cafaro, Marco Ferrari and Carlo Zavan – all graduates of the Università di Architettura di Venezia (IUAV). Projects include the redevelopment of Piazza Indipendenza in Badoere, and theme-based itineraries in the Colli Berici.

Text © 2007 John Wiley & Sons Ltd. Images: pp 134-6 & 138 © Amaca Architetti Associati; p 137 © Alessandra Chemollo; p 139 © Francesco Castagna

McLean's Nuggets

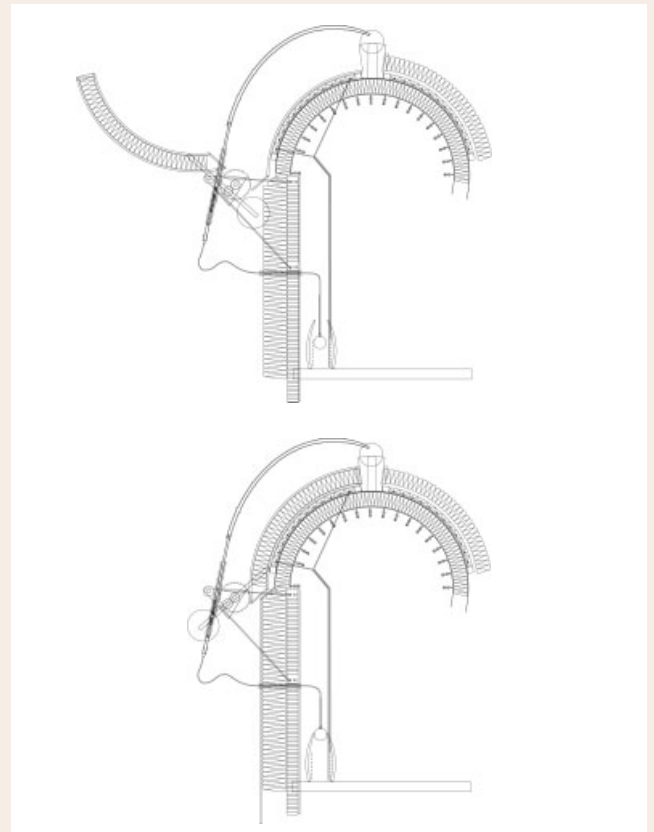
Learning from the Locals

The end of 2006 saw the publication of the Stern Review, the British government's long-awaited report on the economics of climate change. Solar panels and wind turbines go on sale in Europe's biggest DIY chain. A frenzy of excitement/opportunism grows around renewables strategies. Impending puritanical tax initiatives are mooted, ready to punish you for that big car or sun-seeking holiday via low-cost airlines, and the mayor of London considers outlawing the incandescent light bulb. Meanwhile, prominent environmental campaigner George Monbiot writes what seems a less than useful article about the nonbenefits of small-scale renewable power generation. In an article entitled 'Low-wattage thinking', in *New Scientist* magazine, he states: 'In almost all circumstances, micro wind turbines are a waste of time and money.' His chief concern appears to be that such homespun solutions are actually a distraction rather than a solution to our future energy needs.

Within the context of this mix-messaged environmental age, the usefulness of the comprehensive (I struggle to include the rather 'new-age' holistic) thinker/designer seems increasingly useful. John-Paul Frazer is able to span the unhelpful distinctions between architect and environmental designer. In an ongoing research and embryonic construction project, 'Mrittikalaya' (Abode of Earth), Frazer is proposing a new kind of highly tunable architecture situated in the extreme climate of the Thar Desert in Rajasthan, India. For six years he has undertaken a study of desert organisms, revealing a diverse range of extreme heat adaptation that can be harnessed in 'human technological or behavioural analogues such as seeking shade and shelter underground'. In a recent lecture at the University of Westminster, Frazer described this process as 'learning from the locals'. Like Bernard Rudofsky in his seminal book of 1964, *Architecture without Architects*, Frazer does not make a distinction between the evolved disposition of an organism and the evolved disposition of the artefacts of that organism. We have evidently as much to learn from local clothing, vernacular architecture and behaviour (customs) as we do from local flora and fauna, insect and animal life.

Working with Andy Ensor, Yonca Ersen and Jyrki Romo, Frazer has recently designed a two-bedroom house for a research scientist couple in this extreme environment, utilising some of his empirical research. The building is largely buried underground, using the temperature stability that a subterranean (below 3 metres/9²/₃ feet) environment can afford you: 27°C (80°F) in this instance,

which is considerably less than summer highs of 50°C (122°F) – (surface air temperature) – and considerably more than the freezing winter nights. Other design strategies include additional Shade-Scoop-Sails (or 'Chiks'), the 'fissured morphology' of the self-shading Cactus Render, a Wind-Scoop Tower with evaporative cooling 'Mist Chandelier', and a substantial network of Coolth storage tanks, cooled by a night-time radiative cooling system. This cooling system comprises a series of radiators on the roof, covered with deployable insulated petals, opened and closed by novel actuators/pistons made of bamboo and mustard oil mix. Add a Suck-Stack chimney over the central core of the building and the innovation of the inside-outside-rotating-thermal mass of the Eco-Orifice wall completes the new palette of environmental control mechanisms for the 'Sailable-restorative' architectures that John-Paul Frazer is so keen to promote.



John-Paul Frazer, Andy Ensor, Yonca Ersen and Jyrki Romo, Detail of a deployable insulated-petal actuator mechanism, Mrittikalaya project, Thar Desert, Rajasthan, India, 2006.

Social-Physiological Evolution: Thumbs Up, Sit Down and Shut Up

Self-styled cyber-feminist and technological futurologist Dr Sadie Plant first identified the Oya Yubi Sedai (the thumb generation) while researching the impact of hand-held technologies such as mobile phones and computers on the young. A report in the *Observer* newspaper (24 March 2002) stated that a 'physical mutation' had taken place in the under 25s, with the thumb replacing the index finger as the pre-eminent control digit. Meanwhile, in a less evolutionary body/mind development, the Police Authority in Lancashire, in partnership with the local Primary Care Trust, has been exploring a no-standing policy in Preston's pubs. The police are concerned that standing, 'vertical drinking' and its related physical interaction causes violence to flare up. Reported in the *New York Times* (28

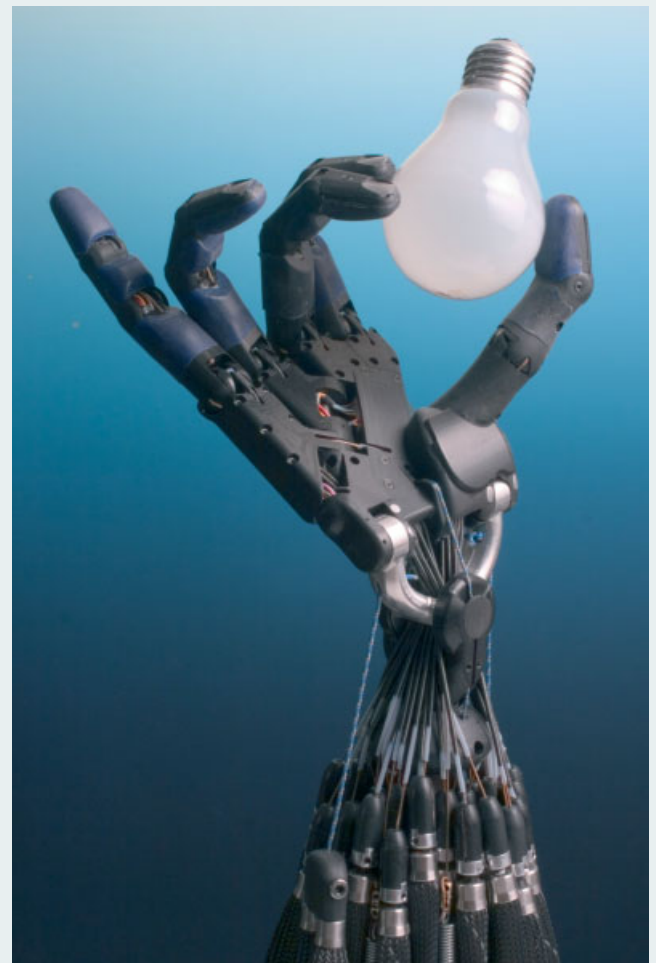
August 2006), Jack Turner questioned whether this new social control initiative could sober us up, citing several other failed experiments in design puritanism. One wonders how this legislated posture proposal might develop, with overexuberant gesticulation discouraged and the 'elbows up' pint-downing of the seasoned drinker outlawed due to health and safety concerns. Sadly, I must also report the slow demise of social whistling. Judith Eagle, writing in the *Guardian* (11 October 2006) asks: 'Why don't people whistle now?' Dr Stephen Juan, an anthropologist at the University of Sydney, cites two possible reasons: one, that popular music is less 'whistleable', and/or two (more plausibly) that the proliferation of portable music devices has (temporarily) curtailed our own mobile tune-making capabilities.

Robot Care: Robots Care

Writing in the *Guardian* newspaper (11 October 2006), Christopher Manthorp (operations manager for older people's services at Kent County Council) describes his disappointment with the future. In this fledgling 21st century he does not think that technology has serviced society with the kind of transformative potential that so much science fiction predicted. This, however, may be changing, especially with the increasing use of assistive technology (AT) in the care of the elderly. Presently consisting of clunky remote alarm systems indicating the patient's well-being, Manthorp speculates on a future where robots 'will stalk the Earth, gossiping gently to isolated older people while cleaning the carpets and making the tea'. This sentiment certainly resonates with Paul Judge's assertion that 'good technological design can make us all happier', given during the Royal Society of Arts 250th anniversary conference in 2004. 'Design must play a central role in ensuring that people will not be isolated or reduced by the technology revolution.' Richard Greenhill of the Shadow Robot Company (<http://www.shadowrobot.com>) has long believed in the social use of the robot and its associated technologies, arguing that the anthropomorphism of the Shadow Biped research project (no longer operational) is clearly justified by staircases and their mechanical negotiation. Likewise with their current research project, the Shadow Hand, which controls 24 degrees of freedom with 40 air muscles. It could certainly handle a cup of tea. ▽

'McLean's Nuggets' is an ongoing technical series inspired by Will McLean and Samantha Hardingham's enthusiasm for back issues of *AD*, as explicitly explored in Hardingham's *AD* issue *The 1970s is Here and Now* (March/April 2005).

Will McLean is joint coordinator of technical studies (with Peter Silver) in the Department of Architecture at the University of Westminster.



The Shadow Robot Company, Shadow Hand air-muscle-actuated robot hand with 24 degrees of freedom, 2006.

Text © 2007 John Wiley & Sons Ltd. Images: p 140 © John-Paul Frazer; p 141 © Richard Greenhill

Night Pilgrimage Chapel

Laura Moffatt describes how Gerold Wiederin's chapel in Locherboden, Austria, has been built as a focus for nocturnal Masses, giving architectural expression to a pilgrimage spot that was previously no more than a clearing in the forest.





The openness of Wiederin's design is engaging, evoking intimacy and seclusion. The strip lighting spreads an even light as well as marking out a simple cross.

Places of pilgrimage are often in far-flung rural locations, where the remoteness from civilisation or proximity to nature seem to contribute to the journeying, the arrival, and the *genius loci* of the place in question. One such site, at Locherboden in the Tyrolean Upper Inn Valley, owes its pilgrimage status to a miracle of the Virgin Mary in 1871. The number of Christians coming to this place for a pilgrimage that is walked by night six times a year has reached over 2,000. The apex where pilgrims would remain for a candle-lit service was once simply a clearing between trees and a rugged cave in the rocks. Now, at the end of the path leading up from the valley, a low open chapel sits at the foot of the caves, luminescent at night, deliberate and poised in its form.

The Austrian architect Gerold Wiederin, whose design was chosen as a result of a countrywide competition, did not seek to glorify or enhance the natural environment of the site, but simply to provide 'the framework for a religious observance in the midst of unformed nature'. Equally, the chapel does not shy away from a strong architectural statement, borrowing heavily from Modernist themes and incorporating a vivid piece of glasswork as its central motif.

Wiederin also follows a traditional cross formation as a structural element in the rectangular roof, with two intersecting tramlines of poured concrete beams stretching the length and breadth of the ceiling, visible both from within the chapel and from above it. One central bar of the cross is missing, relieving the symbol of an overobviousness (the beams can look merely functional), so that on the underside, where fluorescent strip lighting is set into the beams beneath semitransparent glass, one light is omitted and light from the coloured glasswork given priority.

Four square pillars, the floor, the furniture, the sacristy and the ceiling are all cast in exposed concrete connecting visually with the grey rocks and increasing the sense of

functionality and, with that, a kind of determination. The pillars' corners fall flush with those of the ceiling and there is an unarguable purity in the structure, like that of a Greek temple or a 1950s garage.

One step up raises the chapel from its grassy foundations and defines its boundary. The altar is centred, and only the lectern, set to one side, disrupts the symmetry of the chapel's other components, including the central glasswork by the artist Helmut Federle. Out of the clarity of Wiederin's geometry comes an explosion of fragmented glass, falling (or rising) in a riotous river of colour. Welded branches of iron support the stacked lumps of glass in green, blue, red and yellow, like factory leftovers, but none the less attractive for it. On pilgrimage nights the glass is backlit, and is as opulent to the distant gaze of gathered pilgrims as it is at close quarters.

With the cross set into the ceiling like an overseeing and protecting sign, Wiederin has also incorporated symbols for the Virgin Mary and the papal cross on the front of the concrete altar, deeply inscribed and handled with a sense of abstraction. The small sacristy, with doors at either side, is an essential adjunct where priests can gather and prepare, the baldachino effect ensuring they are at least sheltered from the elements during worship. The chapel is thus set, not unlike a theatre stage, for a nocturnal Mass in front of the pilgrims and between the woods, mountains, neighbouring churches and the aura of past miracles and saints.

Laura Moffatt is acting director of the Art and Christianity Enquiry and is currently studying the theology of 20th-century church architecture. She is co-author, with Edwin Heathcote, of *Contemporary Church Architecture*, Wiley-Academy, £39.99, isbn 0470031565, published in March 2007. See www.wiley.com.

Text © 2007 John Wiley & Sons Ltd. Images © Gerold Wiederin, photos Christian Kerez

Gerold Wiederin, Pilgrimage Chapel, Locherboden, Austria, 1997

Helmut Federle's glasswork is a brilliant slice of colour and irregularity, bringing the natural forms around the chapel into sharper focus and contrasting the otherwise organised geometry of Wiederin's structure.

Landscape Architecture: Site/Non-Site

Guest-edited by Michael Spens

Charting the latest advances in thinking and practice in 21st-century landscape, this edition of *AD* looks at the degree to which landscape architects and architects have rethought and redefined the parameters for the interaction of buildings, infrastructures and surrounding landscape. *Landscape Architecture: Site/Non-Site* defines key moves effected in the revision of landscape, using a compilation of some of the most current work in the field. Featured designers include: Diana Balmori, Florian Beigel and Philip Christou of the Architecture Research Unit (ARU), James Corner of Field Operations, Adriaan Geuze of West 8, Catherine Mosbach, Gross.Max, Bernard Lassus, Gustafson Porter, Ken Smith and Michael Van Valkenburgh. There are contributions from Lucy Bullivant, Michel Conan, Peter Cook, Brian McGrath and Victoria Marshall, Jayne Merkel, Juhani Pallasmaa and Grahame Shane.

AD+

Interior Eye Seoul's Interior Landscapes

Building Profile Louise T Blouin Institute, West London

Practice Profile The Tailored Home: Housebrand

Home Run Dosson in Casier, Italy

Site Lines Night Pilgrimage Chapel