INTERSTICES

A Journal of Architecture and Related Arts,
Expat: Places/Spaces/Baggage, Volume 9

Interstices: A Journal of Architecture and Related Arts is an open forum for the dissemination of architecture and thought. It is a non-profit journal published once a year. To remain independent, *Interstices* relies upon private support to fund its editorial production. Annual individual sponsorship is available from $100; corporate sponsorship from $1,000; and institutional sponsorship from $3,000. Sponsors will receive full acknowledgement of their contribution and a copy of each issue of *Interstices* for which they are a sponsor.

This issue is supported by

The School of Architecture and Planning, NICAI, The University of Auckland,
The School of Art and Design, AUT University (Institutional Sponsors);
Architectus (Corporate Sponsor); ASC Architects, Cheshire Architects,
JASMAX, Moller Architects and Pete Bossley Architects (Sponsors).

Editorial Advisory Board

Australia
Andrew Benjamin (Monash University)
Mirjana Lozanovska (Deakin University)
John Macarthur (University of Queensland)
Paul Walker (University of Melbourne)

Canada
Marco Frascari (Carlton University, Ottawa)

Germany
Michael Erlhoff and Uta Brandes (Köln International School of Design)

Italy
Nigel Ryan (Architect, Rome)

NZ
Mike Austin (Unitec Institute of Technology)
Laurence Simmons and Allan Smith (The University of Auckland)
Peter Wood (Victoria University of Wellington)

UAE
Bechir Kenzari (United Arab Emirates University)

UK
Nicholas Temple (University of Lincoln)
Anthony Hoete (American University in Beirut, What_Architecture, London)

USA
David Leatherbarrow (University of Pensylvania)
Jonathan Lamb (Vanderbilt University)
Mark Goulthorpe (MIT, deCoi Architects Paris)

Executive Editors:
A.-Chr. (Tina) Engels-Schwarzpaul, Ross Jenner

Issue Editors:
Julia Gatley (julia.gatley@auckland.ac.nz),
Carl Douglas (carl.douglas@aut.ac.nz)

Design and Layout:
Patricia Burgetsmaier
Cover design based on a detail from Carl Douglas, "Untitled Tower for Daniel" (2006)

Production:
Patricia Burgetsmaier, Julia Gatley, Carl Douglas, Ginny Sullivan

ISSN 1170-585X

This work is entitled to the full protection given by the Copyright Act 1962 to the holders of the copyright and reproduction of any substantial passage from the work except for the educational purposes therein specified is a breach of the copyright of the author and/or publisher. This copyright extends to all forms of photocopying and any storing of material in any kind of information retrieval system. All applications for reproduction in any form should be made to the editors.
Published by Enigma, Auckland, November 2008.

Print production by GEON. Auckland
The Editors invite submissions of articles, reports, book and project reviews, and translations.
All correspondence should be addressed to The Editors, Interstices, School of Art and Design, AUT University, Private Bag 92006, Auckland 1020, New Zealand.
Books for reviews and advertising should be forwarded to The Editors as above.

Contents

Introduction 4

Refereed Papers

David Beynon
Refusal of Home? Architecture Ex-*Patriota* 9

Tom Daniell
From Far East to Middle East: Revitalizing Metabolism 22

Deane Simpson
Nomadic Urbanism: The Senior Full-time Recreational Vehicle Community 34

Michael Findlay
So High You Can't Get Over It: Neo-classicism, Modernism and Colonial Practice in the Forming of a Twentieth-century Architectural Landmark 47

Robin Skinner
Further Investigations into an Authorship: Reassessing the Dixon Street Flats Archive 60

Non-refereed Papers, Images, Reviews & Interviews

Ruth Watson
Pattern Recognition 75

Justine Clark
Serendipity: Between Making a Magazine and Writing History 77

John Walsh
Places, Spaces, Baggage 85

Linda Tyler
Czechoslovakian Crystal in Pavlova Paradise: Vladimir Čačala, 1926-2007 87

Gay Sweely
An Architectural History of the Canterbury Hebrew Congregation 95

Rowan Fraser
Transnational World: Imagining an Afterspace 104

Simon Devitt & Julia Gatley
Finalists for the Inaugural Simon Devitt Prize for Photography 108

Andrew Barrie
Thomas Daniell, After the Crash (Book Review) 114

Tanja Poppelreuter
Christoph Schnoor, La Construction des Villes (Book Review) 116

Sarah Treadwell
Pulp Fictions and Interior Life (Exhibition Review) 118

Carl Douglas
[arc/sec] (Exhibition Review) 124

Andrew Barrie
Jun Aoki Interview (Transcript) 129

Bill McKay & Julia Gatley
Long Live the Modern 134

Contributors to this issue 136

Acknowledgements 139

Notes for contributors 140

[arc/sec]:
Reactive Architecture

St. Paul St Gallery
AUT University
12 September – 4 October 2008

Review by Carl Douglas

> Above all we must remember that nothing that exists or comes into being, lasts or passes can be thought of as entirely isolated, entirely unadulterated. One thing is always permeated, accompanied, covered, or enveloped by another; it produces effects and endures them. And when so many things work through one another, where are we to find what governs and what serves, what leads the way and what follows? (Johann von Goethe, in Hensel & Menges, 2006: 16).

New Zealand is geographically a small and isolated place; it is difficult to arrive at, and requires effort to leave. Isolation has attained the status of a cultural myth here: the image of architecture standing alone against a sublime landscape has proved remarkably durable. Maybe there is also a certain isolationism at work in our enthusiastic adoption of the detached experience of suburbia.

[arc/sec], a recent exhibition of environmentally-responsive architectural systems at AUT's St. Paul St Gallery, is premised on the value of interconnectedness instead of isolation. As Goethe recognized, few things make sense in isolation. In his morphological studies, he concluded that natural form could only be understood in the context of the forces which have given it shape. To understand something, we need to understand how it engages with everything else. Aligning with this view, each of the projects in *[arc/sec]* is conceived as a response to contextual forces: social, cultural and especially natural. They are understood in terms of formation rather than form, morphogenesis rather than morphology.

The exhibition is unabashedly high-tech, with almost every exhibit hooked up to a fat bundle of cables of some kind. An array of digital tools (projectors, CNC machines, laser-cutters, servo-motors, scripted modelling and software interfaces) are employed. Uwe Rieger, the impetus behind *[arc/sec]*, writes in his introduction to the catalogue (a basic document, but well-illustrated) that these tools have "redefined" not only the range of forms available for architecture, but its fabrication, its flexibility, sensitivity and capacity for communication as well. The intent is a long way from arbitrary blobbery, the exuberant and entertaining but ultimately expensive and unrewarding play of complex forms permitted by digital modelling. Blobs are now entirely unremarkable, if not yet ubiquitous in the built environment. In *[arc/sec]* digital tools are used to explore materiality and environmental processes, not simply experiment with form.

Many of the projects in this exhibition are in fact entirely agnostic regarding form. *arch[id]*, a project by Barrington Gohns, Fraser Horton, Julian Legg and Rayneil Singh (fourth-year students at The University of Auckland) hangs overhead like

Fig. 1

Fig.1: arch[id].
Photograph by Carl Douglas.

a skeletal reef glowing red in the darkened gallery (Fig. 1). Made from a kit of laser-cut perspex parts assembled into a flexible frame using Penrose tiling, the shape of the surface could be arbitrarily extended and is capable of flexing into a wide range of doubly-curved geometries. Mounted in this frame are pneumatic brushes which splay out and retract in delayed response to movement detected by an array of sensors. When a group of brushes burst into flower, the whole structure shudders momentarily, recalling similar installations by Philip Beesley (his *Hylozoic Soil*, similar in materiality and operation, has tendrils that coil and uncoil in response to the passage of observers).[1] Trailing from the back of the structure are tubes, like so many intravenous drips, connecting to a compressor hidden somewhere in the ceiling. The catalogue outlines one potential use of this technology as a "light modulating facade" for a residential tower at North Head (a large-scale gesture somewhat at odds with the fragile filigree structure on display in the gallery) (*[arc/sec]*, 2008: 22).

1. Hylozoic Soil (Montreal, 2007) can be seen at http://www.philipbeesley architect.com/ along with other examples of Beesley's intriguing work.

archi[id] seems to be closely modelled on *WideShut*, by XTH-berlin with Jannes Wurps and Kai Bergmann. Here too an extensible system of lightweight components acts as a dynamic filter and screen which responds to variations in light. Each module is an umbrella driven by a servo-motor connected to a light sensor. The umbrellas, onto each of which is projected an image of a daisy, wilt and retract when the light is interrupted and bloom again when the shadow has passed. There is a steampunk charm to the combination of the prim, even Victorian, parasol and the sci-fi control system. The phototropic screen was developed as a prototype for a low-energy skin, and in the catalogue it is shown providing an animated wrapping for an otherwise mundane laboratory building.

The socks-and-sandals sustainability of last century was dominated by the idea of minimizing environmental impact. Through ever-increasing efficiency it was hoped that eventually humans could exist without traces. This philosophy is coming under question. As environmental advocates McDonough and Braungart write, "Is our goal to starve ourselves? To deprive ourselves of our own culture, our own industries, our own presence on the planet, to aim for zero?" (2002: 90). Instead, in their book *Cradle to Cradle*, they call for rich and intelligent

Fig. 2: CitySail.
Photograph by Carl Douglas.

interactions with the environment, so that everything we produce or construct increases ecological and cultural richness. Could sustainability be re-imagined in terms of the delight of touch rather than the guilt of contamination?

Luka Hinse's *Carrera,* a slot-car track powered by gym cycles, could serve as a model for this kind of participation. The visible flow of energy from one place to another becomes a kind of haptic play. The body is directly engaged. In addition, the project starkly exposes the immeasurable irony of a society that displaces the exertions of travel into the parodic labour of the gym, fretting about energy-starvation while anxiously burning off an energy surplus.

The calculus of energy loss and gain is most explicitly addressed in *ZeroPlus*, "an international research initiative to design, build and monitor New Zealand's first Zero Energy House" (*[arc/sec]*, 2008: 24). *ZeroPlus* demonstrates that responsive architecture does not necessarily imply electronics and curvy surfaces. "We should not forget," says Rieger, "that dynamic reactive or sensitive architec-

ture has been around for thousands of years." (2008: 5) Vegetation is used as for climate control. The house, a simple box-and-deck arrangement enclosed by a light mesh outer envelope, is embedded in a massive hedge, which divides it into two residences, and acts as an environmental regulator.

CitySail, a collaboration between XTH-berlin and Duncan Lewis, is imagined as a slice of Auckland's leafy suburbs, reoriented as a vertical sail on the harbour (Fig. 2). Indebted to Richard Toy's view of Auckland as a water city, *CitySail* responds to the maritime climate by swivelling like a wind vane. Each apartment in *CitySail* has access to a sliver-shaped garden high above the water. As the self-stabilizing structure pivots, the garden is always kept sheltered from the wind. Like *ZeroPlus*, *CitySail* uses plant mass as a dynamic component; the vertically-stacked garden would change in appearance with the seasons.

A 1:25 investigation of this proposal occupies the centre of the main gallery. It is a wing-like assembly built by Rieger, Fraser Horton and Alexander Wright. The wing is a lightweight tensegrity structure; the tensile skin and the irregular network of hexagonal compression struts are mutually supporting. Counterbalanced by weights, the entire wing can be pivoted by hand, triggering changes in the imagery projected onto its surface.

ShippingLandscape also makes use of plants as living elements of construction. Another collaboration between XTH-berlin and Duncan Lewis, *ShippingLandscape* proposes a network of massive barges which gather and convey fresh water, using it to grow plants *en route*. The barges can be temporary supplements to coastal sites, or can become permanent parts of the landscape, catalysing changes of land-use. The *WideShut* system is used to mediate sunlight, and the layered construction accommodates dense masses of plant growth which envelop and protect a range of event, exhibition and hotel spaces. The principle is similar to Lewis' 1997 design for a summer house in Angers, France, where the bulk of the residence is vegetal (Baird, 2000: 232-33).

Cunningly-aligned projections allow the large model to be seen gliding through waterways, and pulling alongside the shore. The model is constructed of fine mesh, which allows the projections to work volumetrically; the materiality of the skin appears to shift as the projections play out the patterns of seasonal growth and temporal variation.

Projected images are everywhere in *[arc/sec]*. Moving through the gallery, there is always the glint of a ceiling-mounted projector hard at work. Rieger says we occupy an edge between the virtual and the real, writing that "Reactive Architecture integrates data as a new building material", and that there is a "fusion of digital media and physical reality" (2008: 5). This edge-condition, the flickering back and forth between the virtual and the real, seems to express a desire to dissolve the concrete presence of matter, to render material ephemeral, fleeting, even if only in the rarefied space of the gallery. Architecture in *[arc/sec]* is concerned with the permanence of impermanence. Architecture exists in time, as Rieger signals by evoking in the exhibition title the idea of an architecture measured by the second.

There is a sense of belatedness about the arrival of this exhibition. This form of experimental systems-based research has been commonplace in schools of architecture in Europe and the United States for some years now. Arguably the foremost amongst these is the Architectural Association in London, where the

Design Research Lab run by Michael Hensel and Achim Menges has served as a think-tank, generating a string of books and research projects.[2] Hensel (who was recently in this part of the world, speaking at *Critical Visions,* the 2008 conference of the Royal Australian Institute of Architects) is at pains to assert the absolute practicality of the systems under development. With Menges, he writes:

> While plan organisation, envelope form, and fittings and finishes may have become more varied, material and building systems are not being critically reviewed; they are still geared towards established types and mono-functionality, while uniformity prevails in the interior climate and condition zoning. Architecture thus remains 'Neufertised' – as does our social environment. (Hensel & Menges, 2006: 18)

In the AA DRL, emphasis is placed on the production of systems, tools and processes, rather than hypothetical acts of architectural virtuosity. The work is analytical and experimental. Virtual models and physical prototypes are used to empirically test ideas rather than represent them. Rather than treating universities as places to rehearse or simulate that ill-defined bogey, the 'real world', this form of work uses them as laboratories for speculation.

The work collected in *[arc/sec]* shares many of these premises. It is hoped that this exhibition marks an increased commitment to these areas of architectural research. There is good reason to believe they will flourish here: themes of ephemerality and contingency have a long history in New Zealand architectural discourse. Goethe's description of a world where everything is "permeated, accompanied, covered, or enveloped" perhaps has a particular resonance in our strange and rich ecosystem.

It is noteworthy that in spite of the undeniably high-tech bent of *[arc/sec]*, the exhibition makes reference to some of the most basic, even primitive forms of shelter: the nest, the hedge, the umbrella, the bird's wing, the shade of a tree. *[arc/sec]* reconnects to elemental reactive forms of architecture. Architecture, as *[arc/sec]* presents it, is not simply a cause or an effect, but an environmental participant: both catalyst and reactant, stage and performer.

2. The progress of this ongoing research can best be tracked by looking at the series of issues of *Architectural Design* which have been guest-edited by Hensel & Menges, two with Michael Weinstock (2004; 2006; 2008).

References

[arc/sec]: Reactive Architecture (2008). Auckland: St. Paul St Gallery.

Baird, I. (Ed.) (2000). *10 X 10*. New York: Phaidon.

Hensel, M. & Menges, A. (2006). Morpho-Ecologies. Towards an Inclusive Discourse on Heterogeneous Architectures. In M. Hensel & A. Menges (Eds.), *Morpho-Ecologies* (pp. 16-60). London: Architectural Association.

Hensel, M., & Menges, A. (2008). *Versatility and Vicissitude*. London: Wiley-Academy.

Hensel, M., Menges, A. & Weinstock, M. (2004). *Emergence: Morphogenetic Design Strategies*. Chichester: Wiley-Academy.

Hensel, M., Menges, A. & Weinstock, M. (2006). *Techniques and Technologies in Morphogenetic Design*. London: Wiley-Academy.

McDonough, W. & Braungart, M. (2002). *Cradle to Cradle.* New York: North Point Press.

Rieger, U. (2008). [arc/sec]: Architecture per Second. In *[arc/sec]*, pp. 4-5.