

FIGURE 1

THE 'FRIED EGG' LAND FORM OF COCKATOO ISLAND: THE SANDSTONE WAS CARVED, TUNNELED AND REDEPOSITED TO MAKE WAY FOR INDUSTRY

SOFT RESPONSES TO A HARD PLACE

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Jutting out from the inner stretches of Sydney Harbour where the waters narrow down to the mouth of Parramatta River, Cockatoo Island presents a stark contrast to the well tended villas arrayed on the opposite banks of the Harbour - an industrial graveyard situated amidst the city's up-market suburbs. A throwback to Sydney's brutal colonial history, the island may not quite rank alongside San Francisco's Alcatraz in infamy, but the parallels are inescapable. Also formerly an island prison, the unlucky convicts were supposedly deterred from swimming across the relatively narrow waters by the presence of sharks attracted to the waste thrown into the harbour from a nearby abattoir. Briefly converted to a reformatory and industrial school for girls, the character of the former penal settlement is said to have rubbed off onto the new inhabitants, dooming "... hopes for transformation."¹ Converted back into an overflow prison for another two decades, the island found a new and more appropriate maritime role at the beginning of the twentieth century as a ship-building and repair centre - a role which acquired special significance through two world wars.

It was during this period, when Cockatoo Island was transformed into "...one of Australia's great industrial sites,"² that the physical shape of the island was also totally transformed to accommodate its new purpose. Great chunks of the rocky island were quarried and used as landfill to extend the perimeter and create a flatter landscape more amenable to industrial uses. The result is a drastically altered land mass looking much like a fried egg, with what remains of the original high ground in the centre where the original prison garrison was based, surrounded by a flat apron, where most of the industrial buildings were placed, the abandoned remnants of which still remain (Figure 1). Drilled into

and sometimes right through the central mass itself are numerous man-made cavities and tunnels, once used for storage or circulation, so that the rocky centre resembles in part a giant piece of Swiss cheese.

Now a designated conservation area under the public guardianship of the recently formed Sydney Harbour Federation Trust, Cockatoo Island awaits its next rebirth. But as what? Aside from proposals to revive part of the dry docks as a scaled down shipyard, together with "...the creation of a landmark harbour attraction" and various guided walks,³ plans for the island's future remain sketchy – an irresistible magnet for would-be entrepreneurs, conservationists, and now, bands of eager architecture students. Already the subject of occasional individual graduate projects, the role of the island as architectural test-bed and laboratory acquired new impetus with the arrival of a group of University of Sydney students, who, with the active support of the Trust,⁴ descended on the island accompanied by their tutors and visiting architects for a brief but hectic two weeks of collective brain storming in August 2006.

Condensed into a dizzyingly short period of intensive creative production, academic projects of this kind can be risky ventures, hovering for most of their time between great promise and disappointment. At their best, however, against all the odds they can sometimes crystallize significant movements and currents in a way that more structured and leisurely projects might not. So it was with the Urban Islands Studio. For one thing, an international outlook – 'de rigueur' these days for any self-respecting architectural exercise – was built into the project with the participation of innovative young architects from different parts of the world: Jaime Rouillon from Costa Rica; Lisa Iwamoto and Craig Scott of IwamotoScott, California; Satoru Yamashiro and Jin Hidaka of Responsive Environment, Japan, and Henri Praeger, from Germany.

These participants led four groups of students, focusing on different aspects or parts of the island. For all the diverse origins and interests of the tutors, however, a common approach – at least to this writer's eyes – quickly emerged amongst the different groups. The international outlook, for example, manifested itself in an unselfconscious use of both digital and more conventional media, with which all

tutors and students appeared at ease, bolstered by an equally confident disregard for disciplinary boundaries. The latter was most effectively demonstrated in the two-part *Soft Inversions* installation created by the RE Studio led by Yamashiro and Hidaka, whose Tokyo based group, Responsive Environment, styles itself as an interdisciplinary unit merging architecture, image-making, music, dance and design. Mounted in the enormous space of the former Turbine Hall, the largest industrial structure remaining on the island, the installation consisted of the introduction of two basic elements, water and light, each of which could only be appreciated at different times of the day. First, the vast floor of the hall was flooded in daytime with a thin layer of water, just sufficient to transform the surface into a giant mirror, reflecting the roof of the hall and visually doubling the size of the space (Figure 2). This was followed in the evening by the insertion of row upon row of small candles into the shallow water in straight lines down the full length of the darkened hall, so that they seemed to stretch into infinity – an awesome sight, which left many observers stunned into silence.

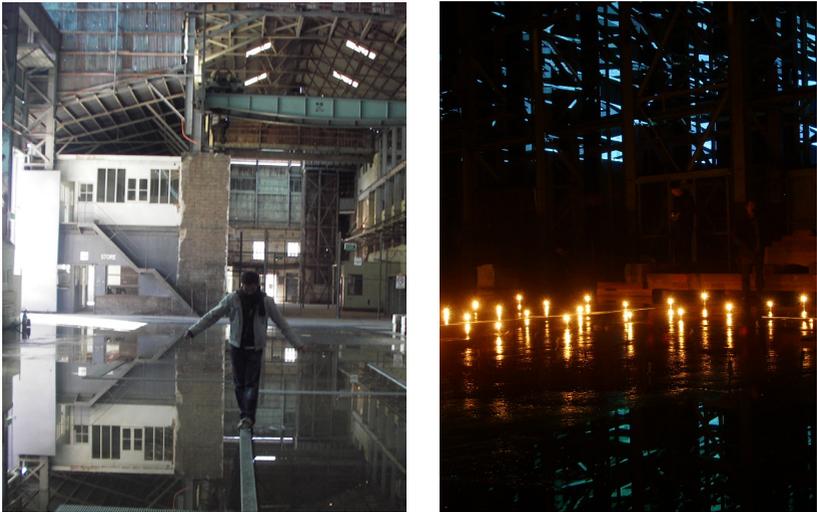


FIGURE 2

'SOFT INVERSIONS': A TWO-PART INSTALLATION THAT USED A THIN LAYER OF WATER TO DOUBLE THE PERCEPTUAL HEIGHT OF THE TURBINE HALL IN BOTH DAY AND NIGHT

The magical combination of these simple but powerful elements with minimal and only temporary disturbance to the existing structure also seemed to capture the general spirit of most, if not all of the other works, many of which might also equally well be described as installations, rather than architecture, with all its connotations of durability and completeness. A whole group of students, for example, focussed on the narrow space between the Turbine Hall and the adjacent cliff, the face of which is pockmarked with the cavities of silos (man-made underground storage spaces originally carved by hand into the rock from the surface by convicts) exposed when the rock was cut back to make room for the huge shed. One such proposal involved the casting of vertical moving bands of light onto the cliff face at night along the full length of the space, literally illuminating the drastic manipulation of the island's natural features. Another, slightly more substantial proposal, involved the insertion of a suspended bridge cum circulation corridor linking the Turbine Hall to the silos, some of which would be joined together so that visitors might walk down through these hollowed out spaces from the ground above, across to the Hall. Twisting its way along and across the narrow void like a giant snake, the exposed skeleton of the bridge, each member of which was different to the next, could only have been designed with digital techniques, and was treated as much as a work of art as a piece of structural engineering (Figure 3). However, like most of the other works, it too could be removed at some future point with little impact upon the existing structure or cliff.

There were, of course, exceptions to these temporary interventions. One ambitious student proposed converting one of the two dry docks for cultural uses, inserting a small theatre and exhibition spaces into the great basin, the roof of which took the form of a monumental ramp connecting the upper and lower levels. Another, recognizably 'architectural' transformation, involved the conversion of one of the industrial structures on the central plateau into a museum of the island's history. One of the more obvious but necessary facilities which will doubtless eventually be realized somewhere on the island, the proposal was enlivened by the insertion of a new curved enclosure into the centre of the structure penetrating and unifying the different floor levels, not dissimilar in form from the upturned hull of a ship, the frames for which were once manufactured in the same building. However,

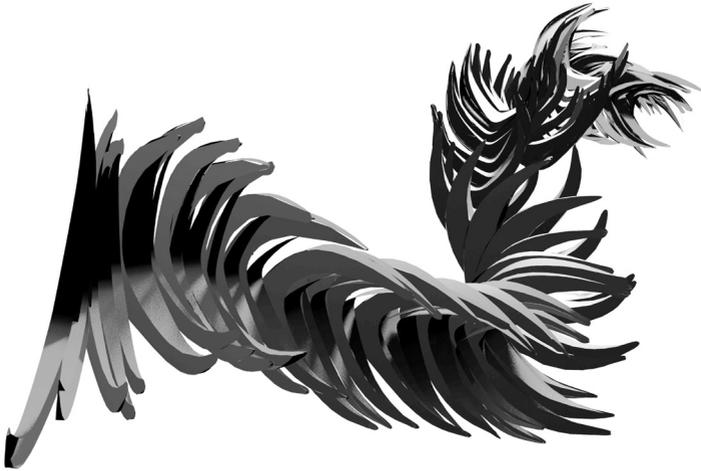


FIGURE 3

A PROPOSAL FOR A SUSPENDED CORRIDOR LINKING THE TURBINE HALL AND EMBEDDED SANDSTONE SILOS, BY NATALIE MINASIAN

as with most students' proposals, both projects were treated as separate works, with little or no relation to any wider schema, except that which the students had gleaned from the Trust's own plans.

Clearly, it could be argued that the fragmentary and tentative nature of these projects was simply a consequence of the limited time span and resources available, and that both tutors and students were compelled to narrow their focus in pursuit of achievable goals and tasks. Some tutors actually stated as much at the outset. But my impression is that there was more to it than that. Following these events in my own role as an invited critic, I could not help but compare the progress and outcome of the Sydney students' efforts with what I and my fellow students at the Architectural Association in London might have made of such an exercise way back then in the wholly different and more optimistic cultural milieu of the 1960s. I imagine that our own efforts may well have been sketchy at most, ill-conceived maybe, naïve and over ambitious almost certainly, but I cannot imagine

them involving anything less than a future strategy for the whole island. That's simply what you did back then. You took hold of a given problem and promptly enlarged it to take in whatever other contingent factors or contextual issues were going to affect your proposals. And if that meant re-conceiving an institution or re-planning a whole district, then that's just what you would do, uncertain though the result might be.

To repeat – then was most surely a very different time, when anything seemed possible and the UK's Archigram group, along with Japan's Metabolists, were throwing up megastructures galore, and architects in some cases were actually designing whole cities in different parts of the world. One would not necessarily want to repeat much of what was proposed or achieved. Archigram's Plug-In City included (far from showing the way forward, many of Archigram's ideas were rooted in a wasteful, throw-away consumerist culture based on mass-production technologies that have since been displaced by more flexible technologies of production), not to mention countless dreary new towns. The transition from the continuing Modernist fixation with utopian schemes that characterized the 1960s, to the more humble position that architects and urban designers find themselves in today, has also been well documented, by Hidaka, amongst others. In his essay, *Soft Architecture / Soft Urbanism*,⁵ Hidaka describes architects' withdrawal since the 1970s from large-scale urban planning and design in the face of economic and social forces – what he calls 'the real city' – outside of their control or influence. Quoting from Arata Isozaki's related writings in support of his arguments, Hidaka urges architects instead to embrace the 'invisible city' of the internet and other media:

....the incorporation of software in architecture will increase the proportion of its intangible aspects, and activities will be carried out according to the new environments determined by the media.⁶

It is possible, therefore, to read the fragmentary and more media based projects of the Urban Islands exercise as a manifestation of similar ideas and influences, working their way through as the currently dominant gestalt or paradigm, whether consciously or unconsciously. Neither are these entirely new concepts or values.

At the same time as Chandigarh and Brasilia were being built, Melvin Webber and Robert Venturi *et al* were already arguing that new communications media and private transportation were rendering Eurocentric concepts of compact urban settlements and well defined spaces redundant, and that the urban models for the future were to be found in the dispersed cities and suburbs of North America.⁷

Having long argued for a broader understanding of the significance of the internet and related digital media for architectural production,⁸ I do not dispute their importance or impact. However, along with the exponential growth of the Net, we have also witnessed a renewed interest in concepts of cultural and place identity, suggesting that the Net may not be simply displacing all the rest, as actually creating counterbalancing forces. Taking various forms, including regionalism, new urbanism, densification and numerous other manifestations, these forces are not necessarily all compatible nor do they spring from the same well. Prominent digital gurus like William Mitchell have come to accept that the growth of such media does not necessarily of itself displace the need for concentrated centres of human activity but may actually complement them.⁹ Manuel Castells, celebrated author of *The Rise of the Network Society*,¹⁰ also argues that even workers in the information technology industries themselves function best gathered together in urban centres:

....I argue that in the case of information technology industries, at least in this century, spatial proximity is a necessary material condition for the existence of such milieux, because of the interactive nature of the innovation process.¹¹

It is more constructive – and accurate – to view such developments through what I call my ‘layer-cake theory’ of innovation.¹² In place of the simplistic picture favoured by enthusiasts, of new technologies completely displacing older ones, in the layer-cake theory, new technologies create additional ways of doing things but very rarely obliterate their predecessors. In this more ambiguous and challenging world of change, supposedly outdated technologies may therefore continue for long periods of time in parallel with their newer competitors, and may even enjoy a fresh lease of life, successfully adapting to the new situation. Thus radio survived

the introduction of TV, railways survived jet-aircraft and the automobile, and printed paper and books have so far even survived the Net. The way things are going, along with the decline of the fossil fuel economy, we are likely to see a great many more similar rebirths of this kind, of both technologies and their related culture-forms.

We should not therefore let ourselves be lulled into either-or positions or attitudes where acceptance of new media compels us to reject or pay less attention to other equally important factors, such as, in this case, the creation or enhancement of a particular place. In that respect, most of the projects, not forgetting Yamashiro and Hidaka's installation, demonstrated an admirable sensitivity toward the specific locations in the island where they were focussed. However, isolated gestures like this, no matter how imaginative or brilliant, as some of them undoubtedly were, do not of themselves make a place, nor do they add up to a viable strategy for the island's future, which is so desperately needed.

Maybe its time again to recapture some of that larger and more generous vision that architects and students were so addicted to, not so long ago. Nor is it just nostalgia for another era that prompts me to lament designers' shrinking ambitions. But I fear that, having rightly moved away from the utopian fantasies of orthodox Modernism, the ideological pendulum may have swung too far in the opposite direction, and that narrowly focussed urban interventions of this sort are symptomatic of architects' ineffectiveness in the face of the looming environmental crisis that is threatening to engulf the planet. Given that scientists and engineers are now taking seriously what were only just recently regarded as cranky ideas for manipulating the climate, or geo-engineering as it is called, to counteract the effects of global warming, including orbiting giant mirrors to reflect the sun's rays away from the earth, or creating more cloud cover, is it too much to ask for a holistic approach to one small island?

- 1 Fletcher, P. (ed): 2004, *The Story of Cockatoo Island*, Australian Government, Sydney Harbour Federation Trust, Sydney, p. 11.
- 2 Fletcher, P. (ed): 2004, *ibid*, p. 13.
- 3 Fletcher, P. (ed): 2004, *ibid*, p. 43.
- 4 Sydney Harbour Federation Trust, www.harbourtrust.gov.au
- 5 Hidaka, J: 2004, *Soft Architecture/Soft Urbanism*, in J. Hidaka and H. Kamei (eds) *Urban Dynamics*, pp. 1-4, SlowMedia, Tokyo.
- 6 Quoted from Isozaki, A: 1970, *Soft architecture as responsive environment*, Kenchiku Bunka, January.
- 7 Webber, MM: 1964, *The urban place and the non-place urban realm*, in M. M. Webber et al (eds) *Explorations into Urban Structure*, pp. 79-153, University of Pennsylvania Press, and Venturi, R., et al: 1972, *Learning from Las Vegas*, MIT Press.
- 8 For example, Abel, C: 1996, *Visible and invisible complexities*, *The Architectural Review*, February, pp. 76-83.
- 9 Mitchell, W: 2000, *E-Topia*, MIT Press, Boston.
- 10 Castells, M: 1996, *The Rise of the Network Society*, Blackwell, London.
- 11 Castells, M: 1996, *ibid*, p. 360.
- 12 Abel, C: 2004, *Architecture, Technology and Process*, Architectural Press, Oxford. See Chapter 3, 'Cyberspace in mind', pp. 33-60.

