eVolo

CITIES OF TOMORROW

ENVISIONING THE FUTURE OF URBAN HABITAT

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URBAN VISIONS: 1850 - 1980 | AUSTRALIA IN 2050 | 2010 SKYSCRAPER COMPETITION

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URBAN VISIONS: AUSTRALIA IN 2050

MATHIAS HENNING

Australia is one of the most urbanized continents on earth, with 93% of people living in cities. These proposals are urban visions 40+ years in the future. Its architectural ideas comment profoundly on urban density and sprawl and will act as a catalyst for debate.

The projects were designed for a competition organized by the Australian Institute of Architects to be exhibited in the 2010 Venice Architecture Biennale. The competition lead by John Gollings and Ivan Rijavec was intended to liberate architects from planning and design constraints to encourage hypothetic futuristic visions driven as much by political and economic imperatives as by technology and design.

OCEAN CITY

ARUP BIOMIMETICS

OCEAN CITY

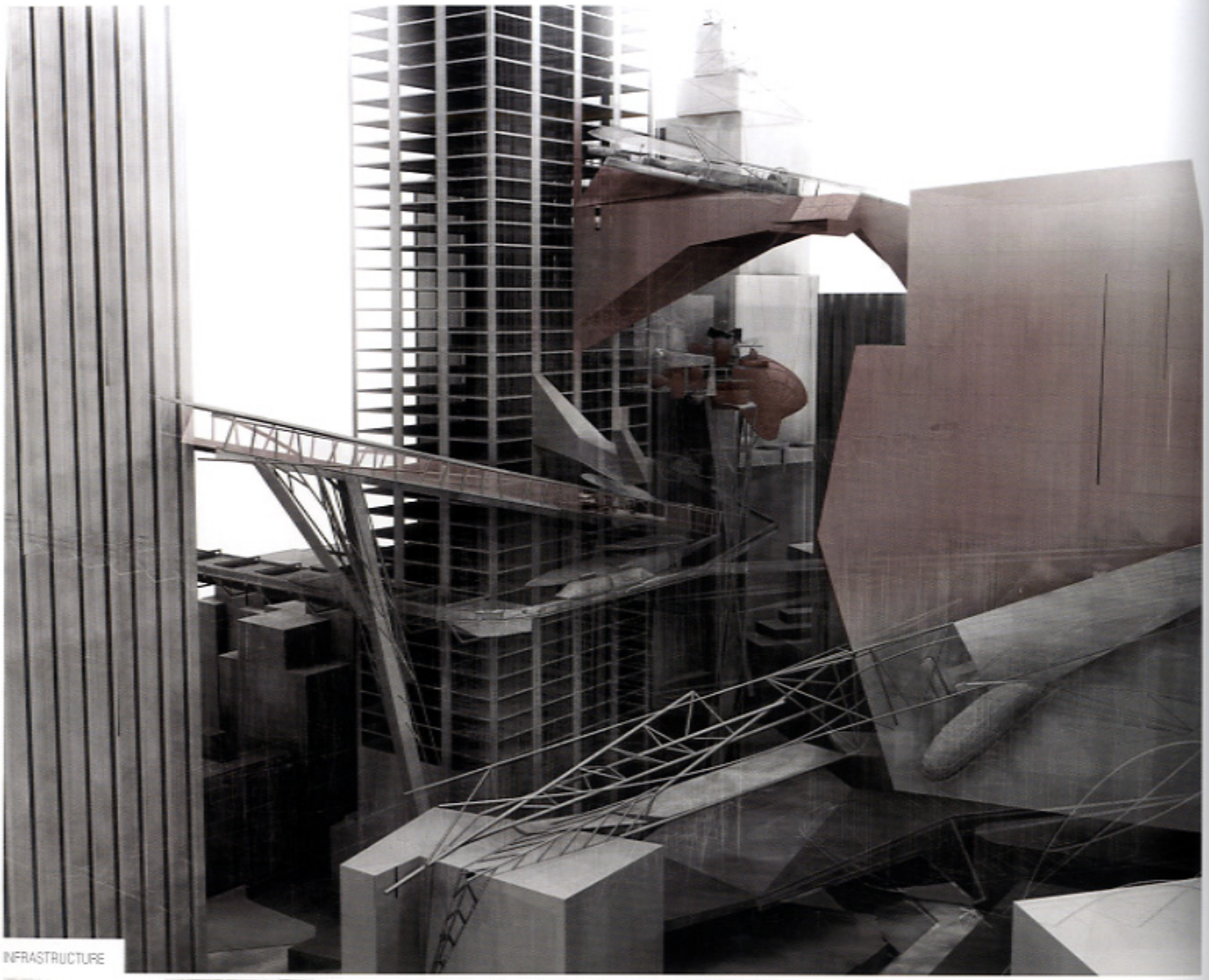
Australia's population is concentrated on its seaboard. The ocean city of 'Siph' invites us to think about long-term responses to flooding risk. Most of our built areas and much of our arable land becomes submerged. Do we migrate to the interior, competing for scarce resources, or do we develop technologies to sustain ourselves in aquatic life?

Siph City sets us free from the ever-changing coastline wracked by extreme atmospheric events. Storms are no threat to the clustered pods, tethered safely beneath the waves. On calmer days, our city floats to the surface and basks like lily pads in the sunshine, soaking up solar power and photosynthesis for food production.

Currents, waves, tides, wind and solar flux all contain vast amounts of natural energy waiting to be tapped. Mimicking the osmosis of living cells, we enjoy unlimited fresh water converted from sea water using minimal energy. Nutrients for hydroponic food production are also harvested directly from the sea. We begin to re-comprehend the bounteous ocean, origin of our own life.

FRAYING GROUND

RAG URBANISM



INFRASTRUCTURE

CONNECTIONS

We propose that the possibility of what Sydney might be in 2050 is already contained there within the city as it currently exists. Consequently, rather than a utopian vision of a future city, we are interested in the interplay between what already exists and it's potential for transformation.

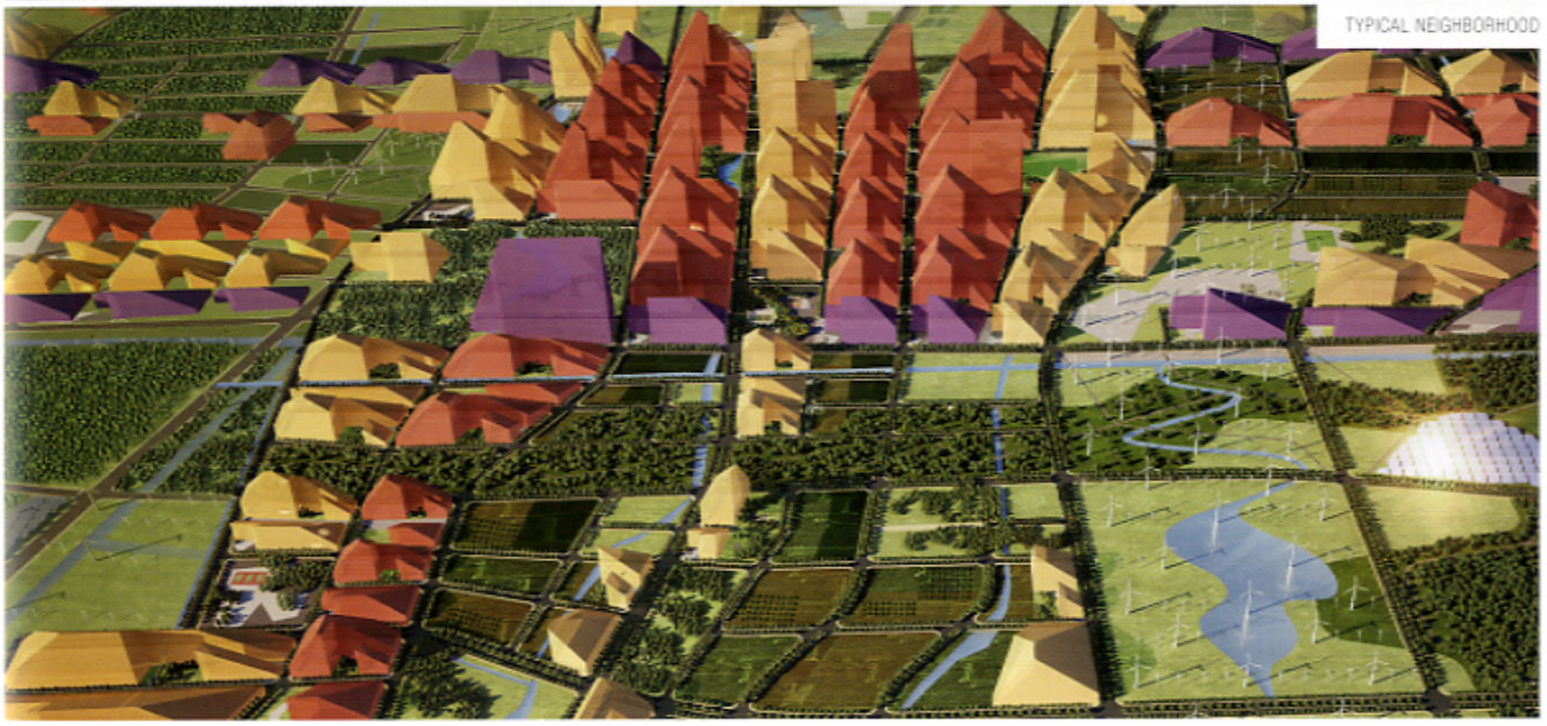
Remapping - be it of the city, block or building - identifies this potential. Thus, as we respond to the given conditions, the already present set of relations – economic, social, environmental, national, international etc – we open up the potential for undoing and interrupting those predetermined relations.

This vision for Sydney 2050 is one where the lines that hold the city together start to fray apart and suggest new forms of control – to open up potential new buildings, structures and urban spaces which address the changing needs of population, environment and economy.

SYMBIOTIC CITY

STEVE WHITFORD, JAMES BREARLEY

MASTER PLAN



TYPICAL NEIGHBORHOOD

As early as 2009, humanity knew it had just six years to reduce its CO2 emissions by 70% and in doing so, stop a three to four degree rise in global temperatures as early as 2050. At that time CO2 emissions were increasing by 3% per year.

Unfortunately, humanity in the 2050's is now striving to balance fresh water needs, arable land, and high-density sustainable development patterns on the only habitable areas now available, land north and south of the tropics of Cancer and Capricorn. One such new high-density sustainable city is New Hobart (just south of the historical city of Hobart, Australia) a city of 8 million people – a Deleuzian abstract city of fine striations and continuous networks, of recycled materials and found objects, of late-capitalist bravado and tactical make-do.

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MOULD CITY

COLONY COLLECTIVE: MADELEINE BEECH, JONO BRENER, NICOLA DOVEY, PETER RAISBECK, AND SIMON WOLLAN

SHELTERS

Mould urbanism is an urban system which reconfigures the relationship between humans, shelter, and collective settlements. Mould urbanism proposes that the garlands of the Vitruvian primitive but offer a new beginning for exhausted cities made from inanimate materials. The urbanists of the future will be indistinguishable from gardeners.

In 2050 Australian suburbs and cities will look disappointingly similar to today and will desperately require new sources of energy and water. Mould urbanism is a response to the carbon production choking the earth's cities and suburbs. Mould will not save us, but if we learn how to tend it new and rich possibilities will emerge.

Mould began in the outskirts of the suburbs. It first settled in eaves, gutters, downpipes, and cisterns; anywhere where once there was water. Mould colonies formed and reformed, thickening where opportunity and the inhabitants allowed. Along with shelter the mould also provides food and fuel. Mould, only barely within our control, is both a destructive and a regenerative force.

AQUATOWN

NH ARCHITECTURE + ANDREW MACKENZIE

MASTER PLAN

PERSPECTIVE

Water defines Australia's future, with relentless drought and regular floods traumatizing colonial settlement patterns. By 2050 Australia abandons not the outback, but also swathes of established settlement, turning to the littoral zone.

A series of new artificial urban forms are developed – as much infrastructure as architecture. Seasonal monsoonal northern floods push development clean off the land, in the form of new Seaburbs. Rural southern drought forces massive population growth in Melbourne, leading to the development of Dockworld in Melbourne bay. In the middle, The Gold Coast's leisure economy extends the already established tradition of coast forming, to create the Central Beach District. Each is a highly artificial urban response to aquatic extremes.

Connecting these is a 21st Century aqueduct bringing life to a linear east coast conurbation, allowing medium density development over 1000 kilometers long. This 'water spine' creates a fully artificial water supply, decoupling agriculture and settlement from climate conditions.

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ISLAND PROPOSITION 2100

SCOTT LLOYD, AARON ROBERTS, KATRINA STOLL
+ SWISS FEDERAL INSTITUTE OF TECHNOLOGY ZURICH

BRIDGE CITY

The Island Proposition 2100 proposes an infrastructural spine as an instrument to connect Australia's regions into a sustainable metabolic system, initiating a new symbiotic relationship between urban centers and their supporting territories.

Connecting Melbourne and Hobart, the spine will carry the physical and virtual flows of exchange, allocate stocks, transform processes, and demarcate future urban development. New urban types for living, industrial, and commercial spaces are formed amongst a backdrop of downsizing sprawl and increasing natural spatial reserves.

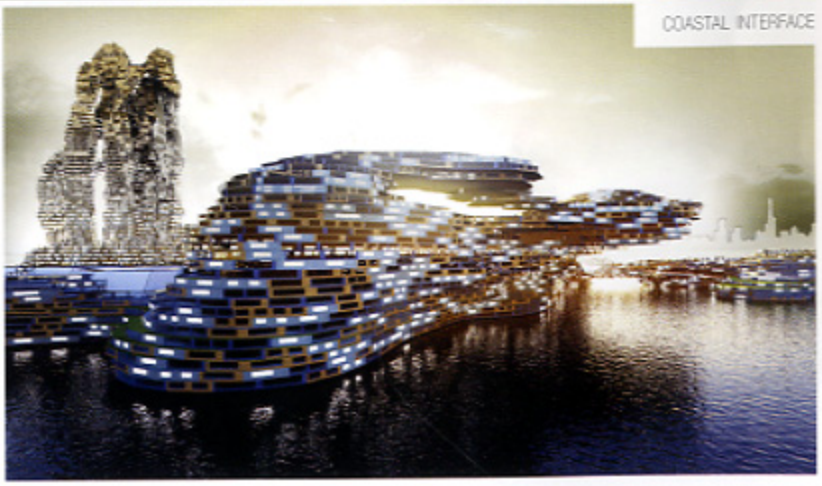
The spine adapts according to function and context, morphing in scale and form to accommodate natural water purification systems, energy harnessing, waste regeneration, and habitat. A balanced system of exchange of population, information, material, energy, water, and capital flows in steady stream along the spine.

LOOP-POOL / SATURATION CITY

MCGAURAN GIANNINI SOON (MGS), BILD + DYSKORS, MATERIAL THINKING

URBAN PRESERVATION

ADAPTIVE, RE-USE



COASTAL INTERFACE

The conundrum for Australian urbanism is not that we have too little land but rather that we have too much; our cities expand on a diet of productive farmland and tenuous infrastructure. With significant social and urban shifts often occurring in times of crisis, Saturation City uses sea level rise as the catalyst to explore the future of Australian urbanism, an imagining of Melbourne's Port Phillip Bay where water has risen well above present levels.

Four flooded domains are presented; radical renegotiations of critical issues in contemporary urbanism - unsustainable sprawl, urban preservation, adaptive re-use and coastal interface - informed by the physics and psychology of catastrophic natural events and allowing a critical evaluation of urban value. Some zones are preserved, modified, transformed, others are returned to landscape.

Besides exploring building morphologies and forms of mobility Saturation City invites a reflective approach to the utopian temptations of predictive digital modeling and an opportunity to deconstruct the city and propose an original contribution to urban futurism, one that provocatively critiques the megalopolises of the planner's mind.