

Education Kit

**NOW AND WHEN
AUSTRALIAN URBANISM**

Object Gallery 2011

INTRODUCTION

“In what promises to be the urban century, the design and planning of our cities is fundamental to our prosperity and survival”

Ivan Rijavec, Creative Director

Australia’s exhibition entry into the 2010 Architecture Biennale in Venice, Italy offers a rich exploration of issues facing Australia’s highly urbanised population that include sustainability, urban sprawl, climate and immigration. It also embraces far broader and immensely important implications for the well-being of all people living together in a diversely populated world. Created using ground breaking 3D technology in projected photography and computer generated simulations, the exhibition is presented in two parts: **Now**, a 3D photographic study from a helicopter of the existing Australian urban condition, and **When**, a speculation into the evolution of this unique continent’s cities in the future.

The **Now And When** education kit looks at the concepts underpinning the exhibition as well as some of the processes used to create it.

It covers the **Now** part of the exhibition and focuses on six of the **When** projects in more detail. Architects have always been interested in visions of the future and a number of other urban and architectural visions from the early to mid 20th century have been included in this kit.

The **Now And When** education kit would be a valuable resource for Visual Arts, Visual Design, Design and Technology, HSIE, Society and Culture and English students and teachers.

Society and Culture: P4,5; H4,5
 Visual Arts: P2,4,8,9,10; H2,4,8,9,10

Visual Design: CH1,2,3,4
 DT: P1.1,2.2,3.1;H1.1,1.2,2.2,3.1,3.2

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 Writer: Peta Mount
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Photograph by John Gollings



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NOW AND WHEN

Now describes the east coast cities of Melbourne, Sydney and Surfers Paradise in counterpoint with their opposition, the mining holes of the western outback. This is a telling juxtaposition. For, as much as Australia is building up in the east, it is digging down in the west—actually digging city-sized holes and shipping the ore to the northern hemisphere to become other cities. Here is the Australian urban paradox: building impossibly big cities that cling to the east coast, while running out of land and water and, at the same time, digging impossibly big holes in the west, which create organic urban forms that in themselves allude to future designs and possibilities for redemption. John Gollings Creative Director

How John Gollings took the photographs in NOW

John Gollings is a well known architectural and urban photographer who is interested in documenting, explaining and interpreting cities. He enjoys pushing the boundaries both conceptually and with his craft. Gollings believes you can best understand the way a city behaves by taking photographs at night from a helicopter. The glow of the city lights helps the viewer understand movement through the city, the density and the way a city is organised.

Traditional stereo photography required 2 lenses, each slightly offset and 65mm apart to simulate the human eye. The eye combined the offset images giving a heightened illusion of depth. When Gollings began taking the photos for NOW he faced a number of challenges. Firstly he did not know how to assemble a stereo image for projection and taking the photos at night meant that the exposures were long and images became blurred. Working out the separation of the 2 cameras at a height of 600 metres required the cameras to be separated by approximately 20 metres- an impossible task.

After much experimentation and failure Gollings decided to use a single lense and fly back and forth taking consecutive images. New difficulties arose that included taking the pictures at the correct angle and position, vibration and fish tailing as the helicopter flew back and forth. Finally Gollings needed to scroll through thousands of images looking for combinations that had the correct offset and fitted together. In his article for *Architecture Australia* Gollings acknowledges the enormous amount of help he had from experts in stereo projection, cameras and rig stabilisation and the helicopter pilots. It was very much a collaborative effort to get these amazing images.



Photographs by John Gollings

NOW AND WHEN

What is Stereoscopic Photography?

The word 'stereo' originates from the Greek and means 'relating to space'. Originally, the term was associated with stereoscopic pictures, which were either drawn or photographed.

The lenses of the eyes project two slightly different pictures onto the retinas, which are then transformed by the brain into a spatial representation. The actual stereoscopic spatial observation is a result of this perception through both eyes.

The picture on paper or film is only one-eyed. It is photographed with only one lens and can, therefore, not convey a true spatial perception. It is only a flat picture. By taking two lenses and imitating the eyes, we can create the illusion of 3 dimensions.



Photographs by John Gollings

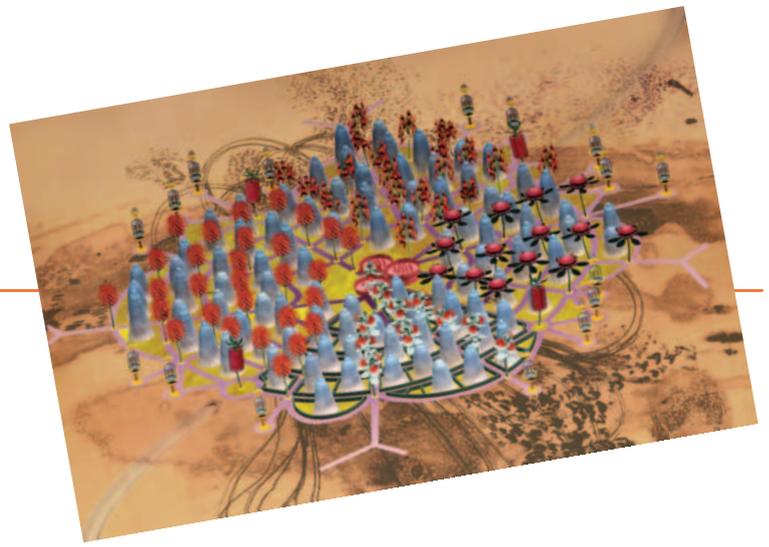
NOW AND WHEN

CITY OF HOPE

TEAM NAME: Edmond & Corrigan

TEAM MEMBERS: Design: Peter Corrigan, Realisation and Support: Michael Spooner

IMAGE CREDITS: Edmond & Corrigan



The City of Hope has a population of 50,000 and sits on seven hectares on the eastern edge of the Little Desert National Park in Wimmera, north west of Victoria. It is a small, specialist city that aims to reassure those that live within its borders. It is a city of hope.

The design incorporates a wide range of ideas. Nature and beauty take on new meaning, and imaginative solutions are applied to issues that result from living inland. The delicious gigantic forms of wildflowers, give this surreal vision its luscious quality.

The city's location is particularly important. The architects note that most Australian cities are located by the sea and we are yet to explore our desert landscape. They suggest that with all the challenges we are to face in the next forty years as

a result of climate change and population growth, central Australia may offer new insights. Dew harvesting, inland water infrastructure are seen as symbols of the possible.

An imaginative image of a future city may be, in the end, even more important than science, in particular because it addresses deeper needs. We have to see the cities of our future as more than just a collection of buildings. We have to conceive of them in the same way we dream.

Questions and Activities

- ➔ Renowned architect, curator and critic Aaron Betsky said
*"Architecture is fiction Some of the most powerful pieces of architecture do not exist in buildings. We inhabit them through stories, whether they are myths, fiction or poetry"*¹
 Debate the value of imagining and creating urban visions or architecture that are not intended to be built.
- ➔ Research the work of visionary architects such as Étienne-Louis Boullée, Giambattista Piranesi and Buckminster Fuller.
- ➔ Design your own City of Hope. How would you make people feel safe, content and reassured?

1 Aaron Betsky 'The Alpha and the Omega' Beyond No. 1, 2009,p.125 from Radar Venice Lee Stickells Architecture Australia

NOW AND WHEN

FEAR FREE CITY

TEAM NAME: Justyna Karakiewicz, Tom Kvan and Steve Hatzellis, Melbourne School of Design (University of Melbourne)

TEAM MEMBERS: Justyna Karakiewicz (University of Melbourne), Tom Kvan (University of Melbourne), Steve Hatzellis (WSH) with Michael Thomas, Wilson Tang, Alex Wilson, Peter Muhlebach, Scott Mason

IMAGE CREDITS: Justyna Karakiewicz, Tom Kvan and Steve Hatzellis, Melbourne School of Design (University of Melbourne)

The idea behind **Fear Free City** is to create an environment in which the 'freedom, pleasure, convenience, beauty, commerce and production' of the city can be enjoyed. The architects ask why we escape the city and head for the suburbs, where we are isolated by the car and live disengaged from our community. They suggest an apparent fear of the city, with its crime and anti-social behaviour, causes us to flee in search of safe and affordable living. We seek space, but end up with barely enough room for a barbeque, and spend much of our free time commuting.



Fear Free City, as the name suggests, is a city in which its inhabitants no longer fear stepping from the private into the public space. The new city provides privacy and isolation while allowing residents to live closer together and enjoy the activities of city life. Private gardens in the air combine with extensive communal parks and public space – places for interaction and meditation. Busy city life and the rural idyll sit side by side.

Today we move through the city either at street level, along elevated pedestrian walkways, or vertically via stairs and lifts. **Fear Free City** proposes a different kind of movement, one that accesses all levels. Narrow streets and plazas existing at different levels with visible links across and between all levels allows for a more integrated city. In **Fear Free City** movement and connections are recognised as the keys to successful form.

Questions and Activities

- ➔ Consider how the city is represented in the movies *Blade Runner* and *Metropolis*. How does the urban environment affect human behaviour in these films? How would you describe these cities and the life that goes on inside them?
- ➔ Why do you think that density in a city conjures fear? What would you design to create a denser city that was safer and comfortable to live in?
- ➔ Why do you think that Australians are so attached to living in suburbs? What are the drawbacks and benefits of living in the suburbs?
- ➔ Create an advertising campaign to encourage people to move from the suburbs and into the centre of the city.
- ➔ <http://www.australiandesignreview.com/feature/19354-Venice-Biennale-The-Fear-Free-City-Justyna-Karakiewicz-Tom-Kvan-and-Steve-Hatzellis>

NOW AND WHEN

ISLAND PROPOSITION 2100

TEAM NAME: Scott Lloyd, Aaron Roberts (room 11) and Katrina Stoll

TEAM MEMBERS: Scott Lloyd, Aaron Roberts (room 11) and Katrina Stoll

IMAGE CREDITS: Scott Lloyd, Aaron Roberts (room 11) and Katrina Stoll

Connections across the globe have been achieved, both physically and virtually, through new links that strengthen communications. These links transform politics, economics, and culture.

Island Proposition 2100 (IP2100) proposes a new way of linking our regions. The design features a spine connecting Melbourne to Hobart via a sustainable system, creating new relationships between urban centres and the surrounding areas.

The spine will carry both physical and virtual forms of exchange while marking out regions for future urban development. New urban environments for living, industry, and business will be created and suburban sprawl reduced. It will be a balanced system – transporting people and distributing information, material, energy,

water, and resources. Stock will be carried efficiently, replenishing regions before shortages occur, and new technologies will be implemented to transport people and supplies along the length of the spine and into adjoining subsystems.

In addition, the spine will harvest energy from the sun, wind and tides, clean grey water through inbuilt wetlands, and act as a rainwater catchment. These resources will then be sent into urban centres. Nutrients from compostable waste and grey water will be collected from these centres and returned to agriculture lands to complete the cycle.

The spine will not only connect Australian cities but will also provide stability across the country.



Questions and Activities

➔ Why could you consider this scenario a particularly Australian ?

➔ What would the advantages be of creating a spine to link cities?

What could this spine look like? Make a diagrammatic representation of the spine that links Melbourne with Hobart.

➔ What are the current issues facing the connections between Australian cities?

➔ Make an imaginative drawing to illustrate the ideas of **Island Proposition 2100** using the spinal cord as a starting point.

NOW AND WHEN

MULTIPLICITY

TEAM NAME: John Wardle Architects and Stefano Boscutti
 TEAM MEMBERS: John Wardle Architects and Stefano Boscutti
 IMAGE CREDITS: FloodSlicer

Multiplicity responds to Australia's unsustainable urban sprawl by expanding Melbourne's CBD not further out, but up and down. Resources are maximised by bringing people together allowing Melbourne to become a high-density but self-sustaining city. People from different backgrounds and social groups live more closely together with wealth, privilege and ethnicity no longer dividing like they once did.

The new city encompasses multiple stories and appear to float like a cloud, hovering above and interconnecting with the original street grid first set down by surveyor Robert Hoddle. The top plane thermally cools the city below. This is also where food is produced through mosaic farming, rainwater is harvested, and sunlight and wind are converted into power.

One of the storeys is virtual. Architectural skins with millions of screens offer a constant stream of information.



Fleets of airships move millions of travellers a day to and from the top of the city while smaller airships distribute goods and keep the roadways below free of commercial traffic.

Multiplicity responds to Australia's unsustainable urban sprawl by extending Melbourne's CBD not further out, but up and down. The new city comprises of multiple dimensions that appear to float like a cloud, hovering above and interconnecting with the original street grid first set down by surveyor Robert Hoddle. Hyper-dense but self-sustaining, the city's resources are maximized through mosaic farming, rainwater harvesting and energy generation.

You can see **Multiplicity** in more detail by going to the Floodslicer website and clicking on the Now and When video.

<http://www.floodslicer.com.au/project>

➔ Why is urban sprawl a problem for governments and people? What can be done in the short term to alleviate this problem?

➔ Bringing food production into the centre of the city is gaining popularity. How are people currently addressing the need to grow food close to where they live?

Design an apartment block where it is possible to grow food and other plants to assist with temperature control.

➔ Design an airship that moves people from one part of **Multiplicity** to another?

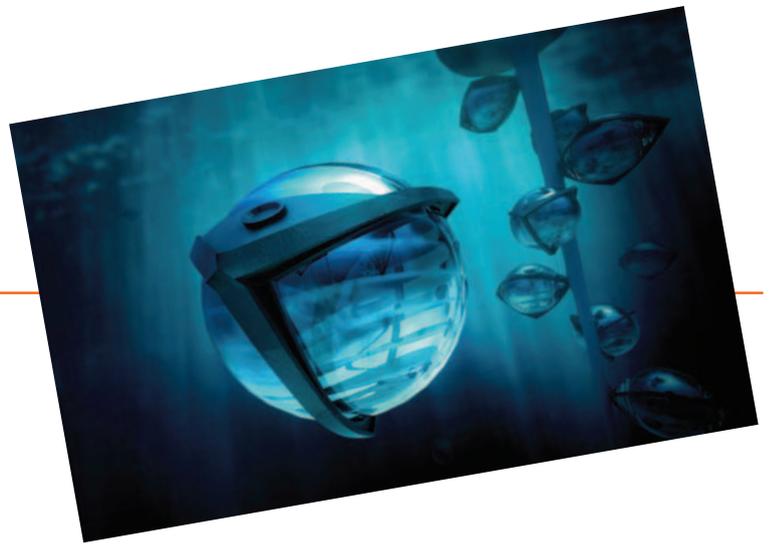
NOW AND WHEN

The Oceanic City

TEAM NAME: Arup

TEAM MEMBERS: Alanna Howe and Alexander Hespe

IMAGE CREDITS: Floodslicer



In the future, global warming causes such severe weather conditions that the Australian coast is no longer inhabitable. We are forced to find an alternative, more stable environment in which to live. **The Oceanic City** provides this new home. Australians have always had a strong connection to the ocean and now it offers a climate free from the storm-ravaged, ever-changing coastline. Sydney becomes the City of Siph and sits safely under the water.

The name siph comes from siphonophore or bluebottle. A bluebottle is in fact 4 different kinds of organism each with its own function, vital to the survival of the whole. With the blue bottle in mind Alexander Hespe and Alanna Howe imagined an **Oceanic City** comprising of 'pods that join together to allow the city to expand and contract according to need.

The separate underwater pods meet all of the needs of a city: food production, energy generation, residences. Clusters of pods can be connected to create communal spaces bigger than football fields and, when the weather permits, upper-deck levels combine and float to the surface to provide vast areas for outdoor activity, to capture sunshine to power the pods and allow photosynthesis for agriculture.

<http://www.australiandesignreview.com/feature/19358-Venice-Biennale-Ocean-City-Arup-Biomimetics>

Buzz Word!

Biomimicry:

The study of nature to find solutions that solve human problems.

Questions and Activities

- ➔ Design your own city based on a natural organism.
- ➔ Design and make a piece of jewellery based on this project.
- ➔ What are some of the advantages and drawbacks about having a city that moves? Are there similar types of cities that already exist?
- ➔ Write a newspaper report from **Ocean City** covering a day in this watery environment.
- ➔ Investigate the following websites:
Water- Scaper is an underwater skyscraper.
<http://www.evolo.us/competition/water-scraper-underwater-architecture/>
Amphibious 1000 envisions Qatar's first semi-submerged hotel.
<http://inhabitat.com/amphibious-1000/>

NOW AND WHEN

Terra Form Australis

TEAM NAME: HASSELL, Holopoint and The Environment Institute
 TEAM MEMBERS: Tim Horton, Tony Grist, Prof. Mike Young, Ben Kilsby, Sharon Mackay, Susie Nicolai and Mike Mouritz
 IMAGE CREDITS: HASSELL, Holopoint and The Environment Institute

Continental Australia currently feeds 50 million people through domestic production and global export. **Terra Form Australis** proposes an Australia in which this population is local and lives on the mainland- Australia welcomes migrants. What would we need to accommodate this population? Architecture firm Hassell proposes a terra – intervention!

A channel that allows seawater to flood the low-lying areas of the interior of the country permits new sustainable cities to be built in places not considered possible today. the high level of evaporation inland drives a continual flow of water, generating hydro-power. Dry inland air becomes super-saturated as evaporation is carried on prevailing winds and restoring rainfall to the east coast making sure that food production is safeguarded. The new inland sea supports



aquaculture, recreation and lifestyle. Clean energy generation replaces current coal-based supply and the new sustainable cities are powered by 100% renewable energy. Desalination supplies water and avenues for biodiversity are developed to ensure no loss of species this century.

Australia becomes a single, unified community that is globally networked, diverse, and inclusive, providing shelter to an international community, particularly those from Asia and the Pacific who are forced to seek a new home due to the irreversible effects of climate change.

<http://www.hassell.com.au>
 Go to Sustainability → Case Studies

Questions and Activities

- ➔ Debate the issue of Australia supporting a larger population.
- ➔ Research cities that have been built in desert regions. How have they adapted to their environment?
- ➔ Masdar is a planned carbon neutral city in the desert in Abu Dhabi. Can already established cities learn from what is planned for Masdar? <http://www.youtube.com/watch?v=FyghLnbp20U>
- ➔ How can architecture, design and urban planning affect social patterns and behaviour? Think about the ways that urban planning can change the behaviour of people in your local community.

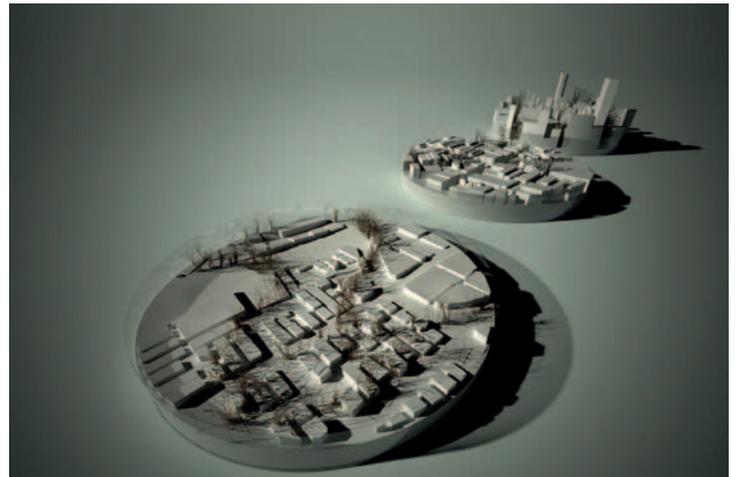
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Symbiotic City re-imagines a high-density, sustainable city in the 2050s made up of networks of regularly intersecting urban and rural cells. In the rural cells, wind generators, water and waste treatment facilities, and shining solar farms sustain the city while recycled materials and found objects form part of the urban cell. An underground metro connects all urban cells and dedicated pedestrian and bike paths link gardens, parks, eco-corridors, and rural cells.



Symbiotic City, Steve Whitford and James Brearley.
Image courtesy of FloodSlicer.

Mould City is a response to the carbon production choking the earth's cities and suburbs. Acting as an agent of growth, rather than decay, mould is cultivated across, over, and through the old infrastructure of the city. Mould Urbanism promotes bio-development, instead of techno-carbon production. The mould is a communal organism. It nurtures life and offers protection to all within its realm.



Mould City, Colony Collective.
Image courtesy of FloodSlicer.

Survival vs Resilience conceives the city as a continually active system rather than a static construct. Embedded within these explorations are notions of an adaptable city, responsive to the changing parameters of demographics, climate and technology. Framed around the themes of survival vs resilience, the project commenced by investigating the diverse ways of dividing a plane. By inputting data into a statistical model three-dimensional diagrams were produced. Those created are similar to city forms but have multiple centres that allow for new relationships and alternative experiences.



Survival vs Resilience, A collaboration between BKK Architects, Village Well, Charter Keck Cramer and Daniel Piker.
Image courtesy of FloodSlicer.

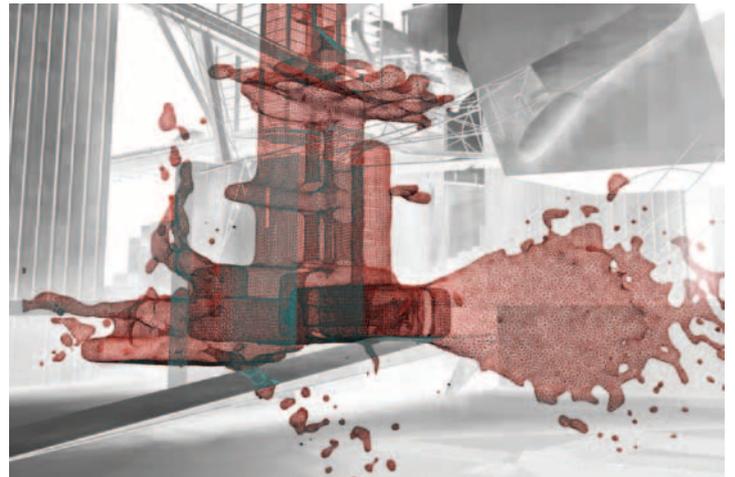
NOW AND WHEN

+41-41 looks 41 years into the past to see 41 years in the future. Drawing on history and experience, the design is intended as less 'solution' and more as a 'working method'. The proposal stems from the idea that even the smallest design solutions can have a big impact on our lives and it is the hidden potential of these that inspires hope when addressing our cities' future.



+41-41, Peck Dunin Simpson Architects.

Sydney 2050: Fraying Ground employs the existing structure of the city of Sydney as a framework for remapping. Through the process of remapping lines separate and join, fray and knot, identifying the potential in the city and creating sites for development. Buildings are rethought and renewed, as densities increase and the need for more three-dimensional public spaces occur. Planners and architects must analyse buildings as organic structures dependent on inhabitation and hostage to public pressure. The potential for Sydney in 2050. It involves 'fraying' the lines that hold the city together to open it to new possibilities.



Sydney 2050: Fraying Ground, RAG Urbanism.

Aquatown was inspired by the belief that it is water that truly defines Australia's future. Relentless drought and regular floods force Australia to abandon most of its cities and turn to the sea where a series of artificial urban structures are developed. The Seaburbs are formed off the coast of Darwin, Dockworld is built in Melbourne's bay, and the Central Beach District extends off the Gold Coast.



Aquatown, NH Architecture & Andrew Mackenzie.
Image courtesy of FloodSlicer.

NOW AND WHEN

In **A Tale of Two Cities** a virtual model of the city floats in the sky, monitoring its consumption and guiding its development. Serving as analytical laboratory, it receives design proposals and assesses their sustainable performance, social impact and urban intervention – cradle-to-cradle tests as a prerequisite for realisation. The cycle of reuse and renewal becomes the way of life. Cities condense and multiply.



A Tale of Two Cities, Billard Leece Partnership Pty Ltd.
Image courtesy of FloodSlicer.

Today, a large number of plans for improving our cities are submitted to government but never implemented. **Implementing the Rhetoric** imagines – with great optimism – that by the year 2050, politicians and planning authorities have the power, conviction and know-how to realise designs that address major urban issues. The proposal interrogates key objectives for sustainable urbanism – solar amenity, density increase, walkable cities – and visualises their literal, undiluted execution.



Implementing the Rhetoric, Harrison and White with Nano Langenheim.
Image courtesy of FloodSlicer.

Sedimentary City is a layered city reinterpreting Brisbane's urban structure and reminding us that water is fundamental to our lives. Each layer is from a specific time and place, carrying traces of the past. The project critiques Australia's post-colonial water management and transforms Brisbane's urban form by restoring its watercourses, cultures and ecologies.



Sedimentary City, Brit Andresen and Mara Francis

NOW AND WHEN

The problem in Australia is not that we have too little land but, rather, too much. **Saturation City** imagines a time of crisis when rising sea levels compel change and Melbourne's Port Phillip Bay is well above its present level. Four flooded domains are presented in radical renegotiations of critical issues in contemporary urbanism: unsustainable sprawl; the urban preservation of parks and gardens; adaptive re-use; and the changing nature of our coastline.



Saturation City, McGauran Giannini Soon, Bild + Dyskors, Material Thinking.

How Does It Make You Feel? critiques the current urban condition of Melbourne and envisions a more dense, unified city that embraces immigration and encourages change. The architects imagine a future scientific breakthrough transforms our understanding of gravity and opens up the possibility of using airspace for increased population growth. They visualise both a dense, ground-based urban realm and floating 'cloud cities' above.

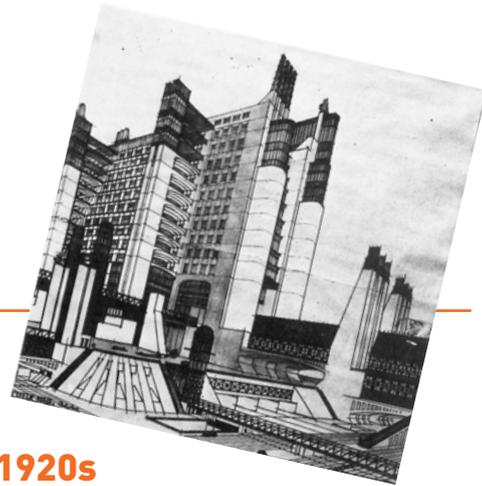


How Does It Make You Feel?, Ben Statkus, Daniel Agdag, Melanie Etchell, William Golding, Anna Nguyen, Joel Ng. Image courtesy of FloodSlicer.

Questions and Activities

- ➔ Evaluate the view that art reflects the social values of a particular time and place.
- ➔ By referring to **Now and When**, explain how artists raise awareness of issues in the world.
- ➔ Consider the role of collaboration in the Visual Arts.
- ➔ Examine the blurring of boundaries between architecture, art and digital media.
- ➔ How could the films **Now and When** cause changes in the way audiences view the practice of architects.
- ➔ What is the role of Biennales?

FUTURE CITIES OF THE PAST



Antonia Sant'Elia and the Futurist Movement of the 1920s

Architects have long been imagining the future. In the 1920s the Italian architect, Antonio Sant'Elia, was designing highly industrialized and mechanized cities of the future. A member of the futurist movement, Sant'Elia is one of the most celebrated figures of modern architecture despite having left behind almost no complete works.

Sant'Elia's vision was of a vast, multi-level, interconnected and integrated urban realm designed around the 'life' of the city. His extremely influential designs featured monumental skyscraper buildings with terraces, bridges and aerial walkways that embodied the sheer excitement of modern architecture and technology.

He expressed his ideas of modernity in drawings for *La Città Nuova* (The New City). A symbol of the new age, Sant'Elia aimed to create a city that acted as an efficient, fast-paced machine. He manipulated light and shape to emphasise the sculptural quality of his projects and the framework behind structures was left visible. In The New City, every aspect of life was centralised into one great powerhouse of energy.

Futurists desired to leave the past behind and fully embraced new technologies. They also desired that future generations do the same and went so far as to recommend that architecture be constructed of degradable materials to ensure that nothing would endure past a single generation. This degrading architecture effectively makes each generation responsible for the construction of their own towns and cities.

We must invent and rebuild the Futurist city like an immense and tumultuous shipyard, agile, mobile and dynamic in every detail; and the Futurist house must be like a gigantic machine. The lifts must no longer be hidden away like tapeworms in the niches of stairwells; the street will no longer lie like a doormat at ground level, but will plunge many stories down into the earth, embracing the metropolitan traffic, and will be linked up for necessary interconnections by metal gangways and swift-moving pavements. The Manifesto of Futurist Architecture

Questions and Activities

- ➔ Debate the following 'we need to destroy the past in order to create the future'.
- ➔ What can we learn from the history of our cities? Consider aspects of sustainability, population control and planning.
- ➔ Make an illustration based on the quote from the Manifesto of Futurist Architecture (in text above)
- ➔ Research Le Corbusier's *La Ville Radieuse* or *The Radiant City*
<http://www.uky.edu/Classes/PS/776/Projects/Lecorbusier/lecorbusier.html>



NOW AND WHEN

FUTURE CITIES OF THE PAST

1960s Futurism: Googie Architecture

Architects continued to design visions of the future in the 1960s. Googie architecture was also a type of futurist architecture, examples of which can still be found today mainly in the United States.

Originating in Southern California, Googie architecture was influenced by car culture and the Space and Atomic Ages. With car ownership increasing business owners and architects had to develop a visual imagery that would catch the attention of customers from the road. Googie architecture did this by capitalising on the public's fascination with the future thanks to the development of nuclear power and the reality of spaceflight. The optimism and energy of the time was incorporated into its designs. Features include upswept roofs, curvaceous, geometric shapes, and bold use of glass, steel and neon. Googie is also characterized by designs depicting motion, such as boomerangs, amoebae shapes, flying saucers, and atoms. One famous example of Googie's legacy is the *Space Needle* in Seattle, Washington.



But architecture was not the only thing influenced by the public's interest in the future. Many other elements of popular culture were as well, including television. The *Jetsons* was an animated television show that originally aired from 1962–1963 and again from 1985–1987. George Jetson, his wife, Jane, and their two children, Judy and Elroy, live in a futuristic utopia in the year 2062. Their home in the Skypad Apartments in Orbit City is raised high above the ground on adjustable columns in the Googie style of architecture. George drives to work in an aerocar that looks like a flying saucer with a transparent bubble top and they have a household robot, Rosie, who does all the chores not otherwise done by the home's numerous push-button space age appliances.

Questions and Activities

- ➔ Make a digital scrap book of Googie architecture.
- ➔ Design your own piece of Googie architecture. Include Amoebae shapes (formless blob like shapes) and bright citrus colours.
- ➔ Research other forms of culture that was influenced by the Space and Atomic Age. This could include Pop Art, film and literature.
- ➔ Look at an episode of the *Jetsons* and think about what aspects of the city and domestic life have eventuated or been transformed into reality. List some current 'futuristic' cartoons and animations. How are they similar or different to the *Jetsons*?

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FUTURE CITIES OF THE PAST

Googie Architecture Scrapbook

Did you know?
Googie Architecture was named after Googie's coffee shop at the corner of Sunset Boulevard and Crescent Heights in Los Angeles.



LAX
Image courtesy of Telstar Logistics



Norms Restaurant
Image courtesy of Kansa Sebastian



Untitled



*'...wherever possible
the building must
hang from the sky.'
Douglas Haskell*

Space Needle, Seattle.

FUTURE CITIES OF THE PAST

Archigram

Archigram dominated the architectural avant garde in the 1960s and early 1970s with its playful, pop-inspired visions of a technocratic future. It was formed in 1961 by a group of young London architects – Warren Chalk, Peter Cook, Dennis Crompton, David Greene, Ron Herron and Michael Webb. Archigram’s exhibition called *Living City* opened in 1963 as a manifesto for their belief “in the city as a unique organism”, which is more than a collection of buildings, but a means of liberating people, by embracing technology and empowering them to choose how to lead their lives.

Archigram’s approach to architecture was fun, as illustrated by two of the group’s most memorable projects: Ron Herron’s 1964 cartoon drawings of a *Walking City*, in which a city of giant, reptilian structures literally glided across the globe on enormous legs until its inhabitants found a place

where they wanted to settle; and the crane-mounted living pods that could be plugged in wherever their inhabitants wished in Peter Cook’s 1964 *Plug-in City*.

The practice dissolved in 1974 having completed only three projects. “Archigram gave us a chance to let rip and show what we wanted to do if only anyone would let us,” said Ron Herron just before his death in 1994. “They didn’t.”

Yet Archigram’s influence has endured. It is visible not only in the subsequent work of the group’s members but in buildings by other architects such as Richard Rogers and Renzo Piano’s *Centre Georges Pompidou* in Paris. It is also acknowledged in the writing of later generations of architects such as Zaha Hadid and Rem Koolhaas.



Questions and Activities

- ➔ What is meant by the term Avant Garde? What made Archigrams work Avant Garde?
- ➔ How do the designs reflect the social milieu of the 1960’s and 1970’s?
- ➔ Research some of Archigram’s projects such as *Capsule*
http://www.archigram.net/projects_pages/capsule_homes.html
- ➔ ‘The future cannot be predicted but futures can be invented’ Dennis Gabor, inventor and engineer
Comment on the importance for architects and urban planners to imagine and design cities for the future that may not be realised.
- ➔ Archigram saw the city as a ‘unique organism’ What aspects of the city make it like an organism?
- ➔ Research the work of Zaha Hadid or Rem Koolhaas. Both architects were influenced by the work and ideas of Archigram.
- ➔ Find out where the name Archigram came from. Can you guess?



NOW AND WHEN

FUTURE CITIES OF THE PAST

The Metabolist Movement

In the late 1950s a small group of young Japanese architects and designers, known as the Metabolists, proposed a new kind of architecture. Their designs, based on adaptability and change, are characterised by large-scale, flexible and expandable structures that responded to the culture of change in which they were living.

In the 1960s Japan's economy was growing rapidly after the Second World War and technological developments were moving quickly. The population was also growing and overcrowding was becoming a problem. The Metabolist movement developed in response to these developments.

The Metabolists believed a different type of architecture was required. Unlike modern architecture, with its love of heavy materials

such as concrete and tall structures like the skyscraper, buildings needed to be adaptable and flexible. Metabolist designs involved new technologies, they were large and ambitious, often megastructures, they had the scope for organic growth, and they addressed the country's housing issues. Many of their proposals included capsules that could be plugged-in or suspended from the main structure when additional room was required.

One of their more radical designs, *Marine City*, was made up of prefabricated pods attached to large cylinders that floated in the ocean. Although only a few of their projects were ever built the Metabolists encouraged architects and designers to think in new ways that was responsive to the pace of change in 20th century society.



Questions and Activities

➔ 'Unlike the architecture of the past, contemporary architecture must be ... capable of meeting the changing requirements of the contemporary age.' Kiyonori Kikutake

How can we make our buildings and public spaces more adaptable to our changing needs?

➔ Design your own adaptable building or city. Refer to one of the speculative projects from Now and When called *Survival and Resilience*.

➔ Why was this movement called the Metabolist Movement?

➔ Go to http://en.wikipedia.org/wiki/Nakagin_Capsule_Tower and read about the *Capsual Tower*, pictured above, the most famous built example of Metabolist architecture.

Buzzword!

Metabolism:

The chemical processes by which cells produce the substances and energy needed to sustain life.



NOW AND WHEN

IMAGE CREDITS

Sydney, New South Wales, Australia, John Gollings.

'Super Pit' Gold Mine, Kalgoorlie, Western Australia, Australia, John Gollings.

Surfers Paradise, Queensland, Australia, John Gollings.

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