



Landcare Research
Manaaki Whenua

Stories of Asia and research for sustainable urban development Auckland, New Zealand

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Overview

- Low impact urban design and development programme
- Urban development in Auckland
- How are stories of Asia informing urban development?
- What might this mean for research in sustainable urban development?

Link to conference themes

- Cross-regional dialogue
 - Stories travelling between Asia and New Zealand
- The relationship between Economic Geography and other Geographies
- Applied research for sustainable development

Examining a research programme

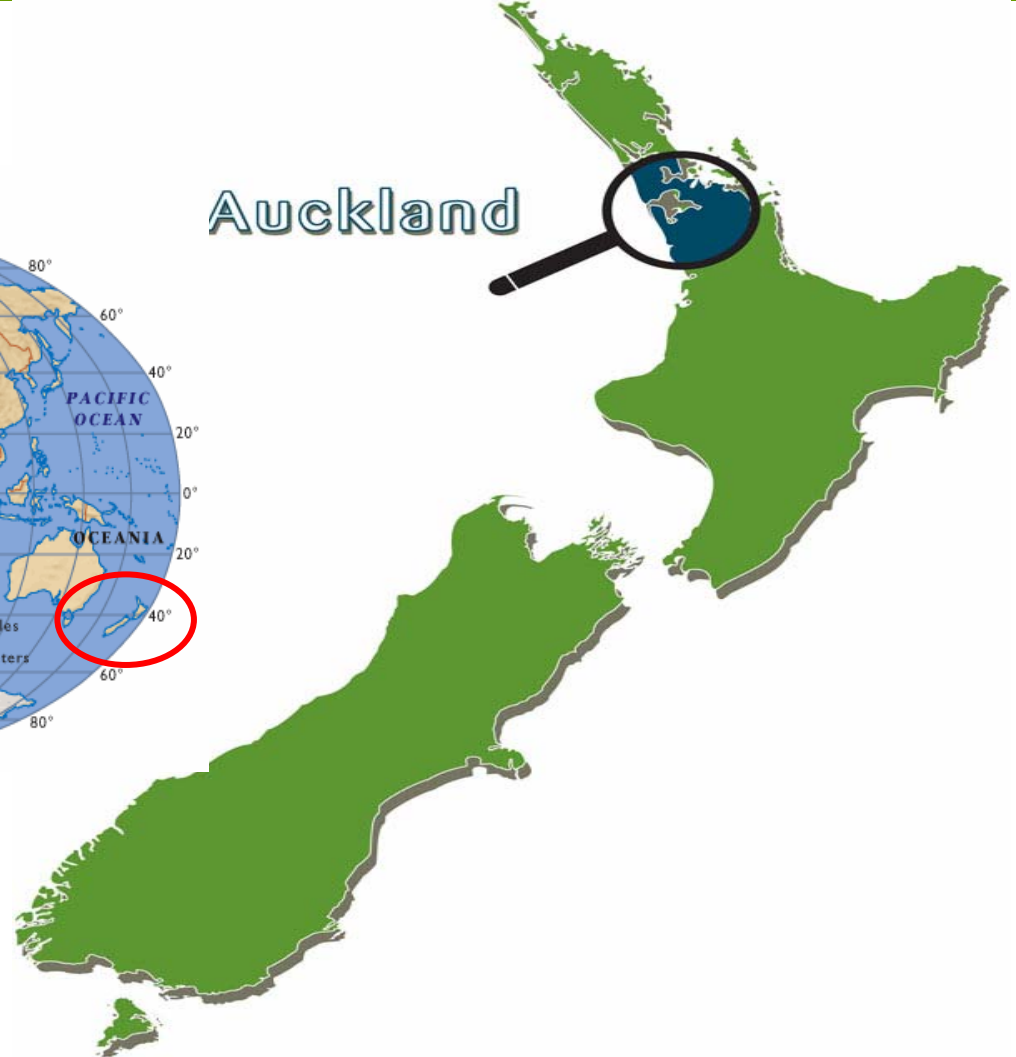
- How do stories relating to Asia inform research for sustainable urban development?
 - Stories found within 60 interviews conducted as part of the broader research project
 - Insights from participant observation (over three years) of stories from research colleagues and planners working in urban development
 - Review of media, local and central government planning documents
 - Discourse analysis

Auckland NZ

The World



Auckland

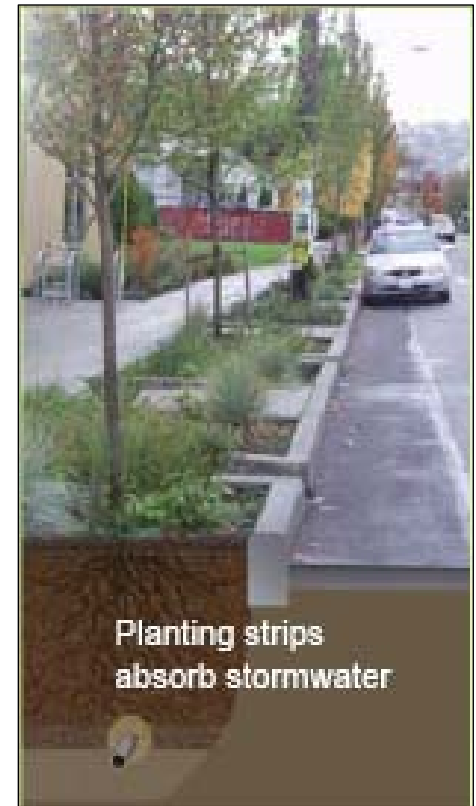


LIUDD Research programme

- Low Impact Urban Design and Development
- Social researcher, part of a multi disciplinary team
- Purpose of the research programme:
 - Supporting the use of alternative urban development approaches
 - Designing and testing appropriate stormwater management technologies
 - Understanding how indigenous biodiversity can be enhanced
 - Promoting improvement of freshwater and terrestrial environmental quality
 - Exploring the performance of low impact urban form

Examples of LIUDD

- Low impact stormwater devices
 - Raingardens, greenroofs, ponds
- Biodiversity restoration
 - stream day-lighting
 - Indigenous biodiversity in Urban areas
- Low impact buildings and neighbourhoods
 - Energy efficiency
 - Water reuse and minimisation
- Low impact development
 - Reduction in bulk earth works
 - Managed growth through intensification of housing developments
 - Landscape appropriate development



Planting strips absorb stormwater

Conventional urban development

- Traditionally low density, single low rise dwelling with a garden
 - (1/4 acre section)
- Investment in roads, car travel prioritised over public transport
- Remove water from land quickly and efficiently
 - Kerb and channelling
 - Piping
 - Paving
- Centralised infrastructure managed by local government or company



Growth of Auckland

- In 2001
 - 49 new people a day in Auckland
 - 21 new houses required
 - 1 hectare of new land for housing
 - 35 new cars
 - 14 years of land supply left
- 1/3 of Auckland's population growth through immigration

(Source: Auckland Regional Council)

Stories of people, yet to come

- *Almost 240,000 or 1 in 15 people in New Zealand were of Asian ethnicities in 2001*
- *In the Auckland region, 1 in 9 people were born in Asia*
- *The Asian population of the Auckland Region is expected to increase by at least 50% by 2016*
- *In Auckland City, over one-third (36 %) of residents will be of Asian ethnicity by 2016, up from 20 percent in 2001.*
 - *From 77,000 - 177,000*

(Source: Auckland Regional Council, Statistics NZ)

Stories of people already here

- *‘Asians’ (excluding Indian and Chinese) in Auckland appear to have the smallest household incomes of all ethnicities.*
- *‘Asians’ have increased their proportion of households earning high incomes, low income earning Asian households have also increased substantially.*

(Source: Auckland Regional Council)

The other and different

*...they do have different expectations.
Especially about the use of open space...
They use open space a lot more than we do.*

(Interview state housing official)

Rejuvenating an urban park



Used to high density, less lazy

Their perception of high density is a lot different to maybe the other ethnic groups...I suppose you could say they don't have high expectations of it. They're very happy where they are and [with] what we've delivered them. We've over delivered in their view. We get people saying to us - 'What's wrong with walking up two flights of stairs to get to the second storey, you know what's the problem with that, why do you need a lift. You know you people are lazy'. - A seventy five year old Chinese guy telling us that we were lazy, we were discussing whether we should have lifts or not and he goes -'why'?

(Interview state housing official)



Active residents: stakeholders in a sustainable cities project



I felt very privileged to be invited to participate. People genuinely wanted to hear my voice. This is the first time in my life someone from the government has asked me for my opinion.

(Participant observation. Adult male from China, participant in a sustainable cities project)

Different, no green ethic

Well my brother was in China and he said that they were rushing to destroy the Yangtze. So how much do different cultures embrace an environmental ethic? I think some of them just don't.... I guess some are interested – you know in energy efficiency if it saves them money. That is good. And that is part of the education process. But energy efficiency is a long way away from changing their behaviours.

(Interview NGO worker)

Undesirable high density

I know when I was a kid – everybody had 4 kids and you had 3 bedrooms – one for the parents, one for the boys and one for the girls. That was the way that every house was built – and so that was pretty typical. The housing matched the typical sort of household...Density housing is not going to suit children that well at all. And we don't have to live like Europeans or Asians or something like that, we can actually live in a far better environment.



(Interview NGO worker 2)

Stewards

We are very lucky that we live in New Zealand, which is renowned for its environment conservation. Chinese in Auckland are especially lucky to have the Department of Conservation to help to set up a "Chinese Conservation Education Trust". Through activities we can learn about conservation. Though we can enjoy clean fresh air and nice living environment here in New Zealand, we understand that any environmental pollution happening anywhere in our Global Village, sooner or later will affect us.

(Chinese conservation education trust: www.ccet.org.nz)

Green Experts

Learning from China

- *China provides examples of incentive schemes. Shanghai is subsidising the installation of 100,000 roof top solar panels.*
- *Perhaps China can teach the developed world how to behave in a more sustainable manner?*
(participant observation: Travelling Researcher)

Dongtan

“Red China going Green with Eco-city”

“Land of hope in Industrial Stream”

(http://www.nzherald.co.nz/section/2/story.cfm?c_id=2&objectid=10380293)

PERSPECTIVES

land of hope in industrial stream

Dongtan project at the mouth of the Yangtze River is the world's biggest single venture: an eco-city for millions of people that could provide a blueprint for sustainable living, Frank Kane reports

Wetlands of Dongtan make a likely place for a social revolution, but success being planned only if the course of development is successful, it changes the course of development.

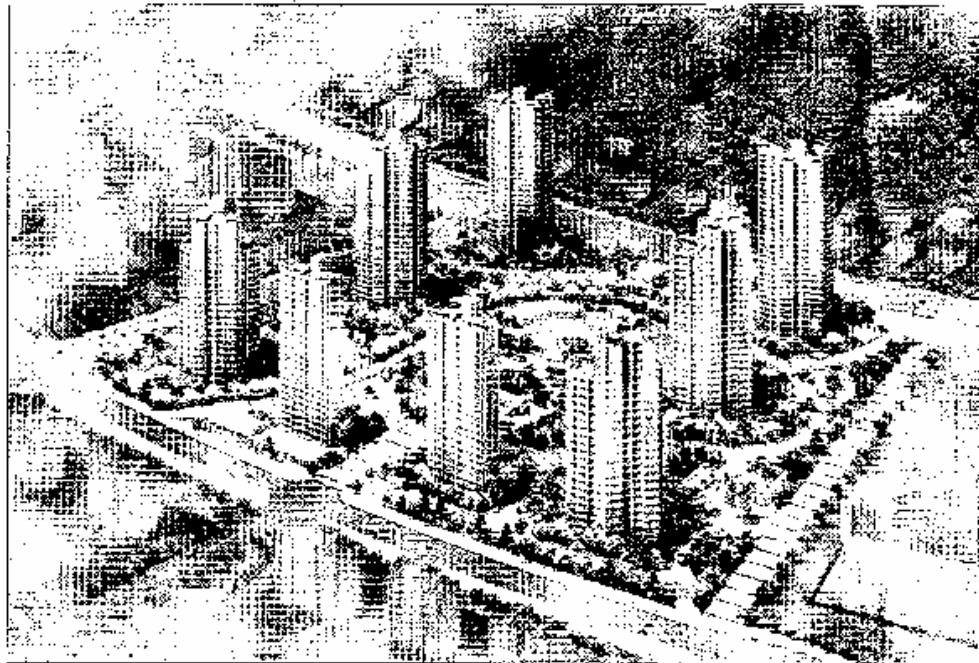
It is part of a plan to develop thousands of square kilometres of the mouth of the Yangtze, which includes the building of a deep-sea harbour for Shanghai some 50 kms out in the East China Sea. This is the largest urban development anywhere in the world.

Dongtan is the prestige project at the heart of this grand plan and is largely the brainchild of one man, Peter Head, the director of British-based engineering consultant Arup. Head was awarded an Order of the British Empire for his work on Britain's 2012 Olympic bid, which in turn cemented the work he had done for the Chinese on Beijing's 2008 Games.

Lead architect of the project is a personal crusade. "Dongtan is the best hope we have for producing a sustainable urban way of life. Somebody, somewhere has got to face up to the challenge, and I believe this project is a blueprint for the way we should be living," says Head, who met the central role at a meeting of the Shanghai Industrial Investment Corporation (SIC) project last month.

"Dongtan will be the largest project in China's frontier urban growth, incorporating all the economic, social and environmental principles to reduce its impact on nature and provide a model for future development across China and East Asia. It will be a post-industrial, sustainable city of the highest quality."

The SIC, controlled by the municipal government of the city, is China's biggest developer. It is in the process of preparing a sustainable urban development plan for the



along up of the Yangtze estuary, is mainly farmers and has provided a way of life for its present inhabitants, exporting agricultural products to feed Shanghai's demanding millions.

During the Cultural Revolution, it was the destination for thousands of Shanghai's intellectuals and "young red guards" who were ordered to work-breaking forced labour in the rural countryside. Chairman's other great imprint was the

migration journeys. Dongtan is designated an international wildlife reserve, administered by the Shanghai authorities, which adds to the sensitivity of building in such an environment.

Head admits to "nightmare moments" when the prospect of ruining an ecologically unspoiled area occurs to him, but he is determined that developers can keep it under control.

"An industrial revolution on the scale

CITY OF TOMORROW: Dongtan is envisioned as being self-sufficient with energy and food.

In any case, he believes the long-term benefits of the Dongtan project will outweigh any short-term risks.

Environmental considerations are key to the whole project and have been agreed with the SIC and the powerful municipal authorities of Shanghai.

The blueprint for the city needs like an environmental group's wish list.

Dongtan will be energy self-sufficient with all its residential and

In principle, Dongtan will also be self-sufficient in food, with Changxing's farmers encouraged to use organic agricultural methods where possible.

There are strict criteria for addressing Dongtan against flooding, erosion or over-vegetation.

The scale of the development is ambitious. The deal signed at last month's Shanghai meeting proposes an initial "demonstrator" habitation for 250,000 people to be built by 2010, when Shanghai will become the centre of world business aviation, with its international

This is projected to rise to 700,000 by 2040, by which time the total population of Changxing Island will be nearly 10 million (currently around 2 million). It will be big like Manhattan island stretched to 10 miles across its 500000 area and shipped by the Yangtze River. It will outpace the famous Hong Kong skyline, which Shanghai has just lost to its development of the city's first special district in Pudong.

"Dongtan will be a waterfront development for the 21st century," says Sebastian Dong Arup's liaison executive in Shanghai. "Pudong is to be looked at, Dongtan is to be lived in."

The ambition is wider than that, however. Dongtan is intended as a prototype for fully integrated urban living, where light industrial and high technology employment and recreational and residential facilities planned to the finest detail, such as the availability of bike paths, walkways or sunward orientation of buildings.

All this must conform to a Chinese business mix of Confucianism, Daoism and communism that lays emphasis on natural harmony. One aim of the Dongtan project is to "create a diverse, cohesive and tolerant community that recognises traditional and modern Chinese and other cultural values". It also plans for "consistent economic progress, which recognises China's old and new economies and allows for sustainable objectives to be met".

The meeting in Shanghai last month agreed all these principles in outline, and the SIC is preparing a prospectus to invite foreign and national investors to take part in the first round of public fundraising being

Analysis of stories

	Dominant	Less dominant
Subjectivities	Other Different Recently arrived Uncaring about the environment	Green Expert Steward Stakeholder
Discourse	People from Asia are driving high density development People from Asia are driving environmental degradation	People from Asia are providing expertise in low impact urban design and development

Research and urban governance

- *Governances must tap and work through two kinds of situated comprehensions: sense of the world and sense of the individual.*
 - Wilson, David (2004)
- *Globalisation looks different from different places. This observation requires intellectual work that will enable us to particularise the apparently universal and to develop a sensitivity to the situatedness of globalising processes.*
 - Larner and Le Heron (2002)

Conclusion

- A number of contesting stories of people with an Asian background are shaping urban development in Auckland
- These stories have trajectories through the LIUDD research programme, informing dominant and less dominant representations, discourses and subjectivities
- Alternative development practices are linking researchers with stewardship discourses and practices in Asia.

