

URBAN DESIGN STUDIO II RE-SCRIPTING URBAN RULES FOR ASIAN NEW TOWNS: MA LIU SHUI – SHATIN, HONG KONG

2014-15 2nd Term

Mondays & Thursdays 1:30 pm – 6:15 p.m., Venue: AIT Zone A

Instructor: Francesco Rossini



This studio is organized as part of a comparative research project of the M.Sc. in Urban Design programme, investigating, developing and testing urban rules for different cities in the Pearl River Delta. The studio will be conducted parallel to our studio in Shatin (Hong Kong) and focus on a similar current New Town project in Taipa (Macau). This studio set-up will allow us to learn from the comparison of different but similar urban conditions and design approaches.

Study Background

Hong Kong has a land mass of 1,108 square kilometers, only about 24% of which is built-up with infrastructure facilities. In the Government plans land supply is at the very top of the priorities. To increase land supply, one clear option is to increase the development density of the built-up area, taking into account planning considerations such as traffic and infrastructure capacities as well as the environment, and visual and air ventilation impacts.

As land is a scarce resource in Hong Kong, the Government has been adopting a flexible approach to land supply for years, including land rezoning, redevelopment, land resumption, reclamation, rock cavern development (RCD) and reuse of ex-quarry sites to support our economic and social development. To meet the increasing needs for housing and community facilities to cater for the projected population growth, infrastructural and economic development, and aspirations for a better living environment, it is essential to have an adequate and steady supply of land.

The Civil Engineering and Development Department has therefore commissioned a consultancy in July 2011 to conduct relevant studies and a public engagement exercise to explore, in particular, the feasibility of the options of reclamation outside Victoria Harbour and RCD for enhancing land supply in Hong Kong. The move of the existing sewage plant into rock caverns and the reclamation site at Ma Liu Shui could potentially provide land close to Sha Tin town centre, Chinese University of Hong Kong and the Science and Technology Park. Shatin can be considered Hong Kong's most successful New Town. When it was planned in the 1960s-70s it was planned with the ambitious goal 1) to create a socially balanced city, and 2) to be self-sufficient by combining places to life and work. The area of the sewage plant and the potential reclamation site at Ma Liu Shui could be connected with the existing railway system and benefit from the upcoming Shatin to Central Link, making it a highly competitive location for residential development. At the same time there have been strongly voiced concerns against further reclamations on this location, which each project at this location would have to address.

Design Studio

After the study of different urban rules in the PRD, we use the extension project of Shatin, to formulate new urban rules for a sustainable city in the 21st century by rethinking and extending the ambitious program of Shatin including today questions of biodiversity, ecosystems and food circles. This includes a rethink of Hong Kong's practice of land reclamations and the question how to plan and design a healthy city. It also includes a radical rethinking of the organization of infrastructure in the city, currently undertaken by Asian cities such as Hong Kong, Singapore and Macau, by considering moving parts of the urban infrastructure underground or in rock caverns and thus free up space for urban living and working.

The studio will focus on the development of urban planning strategies and design proposals to create a new sustainable mixed used district. A comprehensive urban design strategy is needed to integrate the new development into the existing context with Shatin, Ma On Shan, CUHK and the Science and Technology Park. Particular attention will be given to the provision of means for spontaneous social and recreational activities and the challenge of finding more ecological techniques for land reclamations. The course will offer a field of experimentation to bring together various interdisciplinary perspectives at CUHK linking to new initiatives of the interdisciplinary Institute for Future Cities.

The studio will include the participation in the coming IFoU Winter School at the end of January 2015, in which we will investigate together with our international partners such new approaches to infrastructure and the design of new mixed used districts at the occasion of Singapore's 50 years celebration and its leading role in innovative urban design and planning in Asia.

Parallel to the studio in Hong Kong, there will be a second studio focusing on a comparable site of new land reclamations in Taipa (Macau). The aim of this studio is to create new approaches by learning from the lessons both from Singapore and Shatin and test these ideas for the new urban expansions in Ma Liu Shui (Hong Kong) and Taipa (Macau) and develop new urban rules and guidelines. .

The studio theme is coordinated with the topic of the upcoming World Expo 2015 “Feeding the Planet, Energy for Life” in Milano (Italy) and we plan to present the results together with the results of a parallel design competition for Italian and Hong Kong urban designers supported by the Italian Consulate and The National Council of Architects, Planners, Landscapers and Curators at the Expo. (CNAPPC)

Objectives of The Design Studio

- To create a sustainable mixed used district, with focus on increasing living quality, social interaction and economic vitality
- Create a comprehensive urban design strategy to integrate the new development into the existing community including analysis of different scenarios and study schemes indicating, land use with program lay-out;
- Identify and understand how existing urban areas (here Shatin New Town) emerged and are currently transforming.
- Developing strategies to improve and enhance the neighborhood’s economic vitality and sustainability.
- Explore new opportunities for integrated infrastructure planning to guide the development of more cost-effective and resilient green infrastructure investments over time.
- Create synergy with the land released by relocating Sha Tin Sewage Treatment
- Works to rock cavern and strengthening the relationship between the urban area and the waterfront.
- Increasing the potential of the shoreline of Ma Liu Shui as place for public enjoyment and leisure.

Student Learning Outcome

Upon completing the studio, students will be able to:

- Understand how to organize a sustainable development strategy for Hong Kong that will integrate economic, social and environmental perspectives;
- Understand, map and interpret the urban morphology of an important part of Hong Kong’s New Territories.
- Understand how urban forms are generated by different urban rules and processes
- Understand the complex relationships between enhancing urban mobility and environmental, economic and social sustainability
- Learn from key examples of New Town Planning in Hong Kong and Singapore.
- Create a comprehensive urban design strategy by learning to work in different scales in the fields of architecture, urban design and city planning.
- Understand and address contemporary urban issues with particular focus on develop advanced urban design, presentation and communication skills while addressing key issues and developing context sensitive strategies and designs
- Develop concepts how urban design can foster and support healthy living.

Studio Output

Students develop individual strategies and designs for the improvement of urban integration including public spaces and street level building interfaces based on prior identified issues and realizing opportunities. Drawings and models in 1:500 / 1:200, plus detail studies, montages and perspectives should show the intended qualities of urban transformation and integration of public spaces usable in various seasons and times of the day. Statements of addressed issues and design intentions should be formulated in text and drawings. With progression of the design project they should be revised and updated. Research findings and projects will be gathered in a joint studio booklet. All students have to submit a digital documentation.

Deliverables

- Group studies according to defined issues
- Developing a site model
- Written description of addressed issues and design intentions (500 words)
- 1:500 group drawings and models with strategic propositions
- Phasing plan of proposed development strategies
- 1:200 urban integration, public space/building design drawings and models
- 1:100 detailed study of urban integration incl. mixed development & public spaces
- Photo montages, Sketch Up models, visualizations and perspectives studies of urban integration
- Joint studio booklet

(Digital documentation of group and individual work is compulsory after final review)

Assessment Scheme

- Group Research 20%
- Overall Group Strategy 20%
- Individual Design Work 50%
- Participation 10%

Course Format

The course is organized in a research part (group work), overall and group strategy and individual design. The research encompasses field and precedent studies allowing for team and individual work. As part of the course students will join the related IFoU Winter School at the National University of Singapore. Please start early to apply for the relevant visa.

Required Readings

Alex Lehnerer, *Grand Urban rules* (Rotterdam: 010 Publishers, 2009)

Roger Bristow, *Hong Kong's New Towns: a selective review* (UK: Oxford University Press, 1989)

Jan Gehl, *Life Between Buildings: using public space* (Van Nostrand Reinhold New York, 1987)

Jan Gehl, *Cities for People* (Island Press, 2010)

Shane, David Grahame, *Urban Design Since 1945: A Global Perspective* (Wiley, 2011)

Richard Rogers, *Cities for a Small Planet* (Boulder: Icon Editions, 1998)

Shelton, Barrie, Karakiewicz, Justyna & Kvan, Thomas, *The Making of Hong Kong: From Vertical to Volumetric* (Taylor & Francis, 2010).

Recommended Readings

Urban visions and experimental massing

WORKac, *49 CITIES* (New York: Storefront for Art and Architecture, 2009)

Stan Allen and Marc Macquade, *Landform Building* (Lars Muller Publisher, 2011)

R. Klanten and L. Feireiss, *Utopia Forever: Vision of Architecture and Urbanism* (Gestalten, 2011)

Winy Maas, *Visionary Cities* (Rotterdam: NAI Publishers, 2010)

Winy Maas, *Hong Kong Fantasies* (Rotterdam: NAI Publishers, 2012)

Aurora Fernández and Javier Arpa, *Density Projects* (Vitoria-Gasteiz: a+t ediciones, 2008)

Site and Situation

Burdett Ricky. (ed) *LSE Cities. Hong Kong: Cities, Health and Well-being*. Available at: <http://lsecities.net/ua/conferences/2011-hongkong/>

Govada Sujata, *Ten Principles for a Sustainable Approach to New Development: Towards Sustainable and Integrated Large-Scale Developments for a More Livable Hong Kong*. (Washington, D.C: Urban Land Institute 2010)

Frédéric Edelmann, *In the Chinese City. Perspectives on the Transformation of an Empire* (Barcelona: Actar 2008)

Johannes Widodo, *The Boat and the City: Chinese Diaspora and the Architecture of Southeast Asian Coastal Cities* (Singapore: Marshall Cavendish Academic, 2004)

Edward Ng. *Designing high-density cities for social and environmental sustainability*. (London ; Sterling, VA : Earthscan, 2010.)

City and Citizens

Anne Mikoleit and Moritz Purckhauer, *Urban code: 100 Lessons for Understanding the City* (Cambridge, MIT Press 2011)

Kevin Lynch, *The Image of the City* (Cambridge, MIT Press, 1960)

Gordon Cullen, *The Concise Townscape* (Oxfrd: Architectural Press, 1996)

Jane Jacobs, *The Death and Life of Great American Cities* (New York, Random House, 1961)

Magda Anglès, *In Favor of Public Space. Ten years of the European Prize for Urban Public Space* (Barcelona: Actar, 2010)

Aurora Fernández Per and Javier Arpa, *The Public Chance: New urban landscapes* (Vitoria-Gasteiz: a+t ediciones, 2008)

Sustainability

Albert Ferré, *Total Housing: Alternatives to Urban Sprawl* (Barcelona: Actar, 2010)

Mohsen Mostafavi and Gareth Doherty, *Ecological Urbanism* (Baden: Lars Muller Publishers, 2010)

Mason White, Maya Przybylski, *On Farming: Bracket 1* (Barcelona: Actar, 2010)

Schedule

(Will be handed in the first day of class)

FIELD TRIP

Yes Local; Overseas Date(s): TBC Destination(s): Macau & Singapore

No

SAME COURSE OFFERED BEFORE

Yes Offer year [2013] Term [2] Course code [URBD 5720a]

No

ACADEMIC HONESTY AND PLAGIARISM

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <http://www.cuhk.edu.hk/policy/academichonesty/>.

With each assignment, students will be required to submit a signed declaration that they are aware of these policies, regulations, guidelines and procedures. For group projects, all students of the same group should be asked to sign on the declaration.

Students are required to submit a softcopy of the assignment to the VeriGuide system at: <https://veriguide2.cse.cuhk.edu.hk/cuhk/>. After submission, student should receive a receipt and an academic honesty declaration statement via an e-mail from VeriGuide. Please print the receipt and the declaration statement (below) and submit them to the lecturer together with a hardcopy of the assignment.

I declare that the assignment here submitted is original except for source material explicitly acknowledged. I also acknowledge that I am aware of University policy and regulations on honesty in academic work, and of the disciplinary guidelines and procedures applicable to breaches of such policy and regulations, as contained in the website <http://www.cuhk.edu.hk/policy/academichonesty/>

Signature

Date

Name

Student ID

_____ _____
Course code Course title