THE 'NEW' NEW TOWN:

Creating sustainable, liveable and supportive communities in Hong Kong's Northern Metropolis

2023-2024 2nd Term, Mondays & Thursdays, 1:30pm -6.15pm

Instructors: **Jeroen van Ameijde Jiaxiu Cai**



Source: Northern Metropolis Development Strategy Report, HKSAR Gov., 2021

1. STUDIO BACKGROUND AND AIMS

The Urban Design Studio II explores theories and methodologies around the conceptualisation and development of comprehensive urban design projects based on in-depth research. Continuing our research agenda into the role of self-contained neighbourhoods in response to global and local environmental challenges, we study the historic context, precedents and recent developments around the formation of supportive communities in relation to the practice of urban planning and design.

This year, we will continue our research on the notion of **The 'New' New Town**, analysing the tension between the need for large-scale planned urban developments, and the organic social and economic processes that lead to vibrant neighbourhoods and social resilience. Using international case studies, in-depth Hong Kong field research and speculative urban design proposals, we will

reflect on the challenges of planning new urban areas fit for a healthy and sustainable future, while incorporating opportunities for community-led initiatives, entrepreneurialism and the improvement of social capital.

For the research and design project stage, we will engage with Hong Kong's rich laboratory of satellite districts, ranging from the first-generation new towns constructed in the 1970s to the current New Development Areas. Through critical analysis and data-driven mapping of the different organisational layers of these areas, we will identify different underlying planning models, their technical and social infrastructures and the impact of their configurations on urban life. Informed by guest lectures and support from AECOM, ARUP and the Hong Kong Planning Department, we will explore new planning proposals for increased liveability, collaboration and innovation. Through student-led research-by-design work, critical discussions and project narratives reflecting on urban theory and international precedents, the projects will aim to illustrate new visions for socially and environmentally sustainable urban design.

2. STUDIO APPROACH

The studio will begin with a combination of literature research and digital modelling exercises, focusing on the creation of multi-layered urban simulation models that evaluate mobility networks, environmental performance, density and liveability. As a group, we will develop a library of urban organisational structures which reference the urban morphology, function mixing, activity and behavioural patterns found in Hong Kong. The aim of this stage is to develop critical studies into the constraints and opportunities of urban planning frameworks, shaping vibrant and liveable urban environments that facilitate supportive social processes.

The final phase of the studio will focus on the development of a series of visionary scenarios and pilot schemes for the Northern Metropolis planning region, proposing strategic arrangements of public, private and mixed-use urban areas and exploring the interplay between urban facilities, networks, public spaces and Quality of Life. As a studio, we will aim to critically reflect on the inability of urban planning to shape or predict the detailed qualities of vibrant urban community life, and seek to adapt a time-based and human centric design approach that incorporates the notions of contingency, adaptation and participation. We aim to discuss how investment in new infrastructure, shared facilities and urban spaces can be instrumentalised to create more vibrant, equitable and resilient communities, capable to evolve with future societal and environmental changes.



Concept for the Experimental Prototype Community of Tomorrow (EPCOT), The Walt Disney Company, 1965.

3. OBJECTIVES OF THE STUDIO

- To identify and understand how existing urban areas have evolved historically and are currently transforming;
- To explore new opportunities for integrated infrastructure planning to guide the development of more cost-effective and resilient urban and social infrastructure investments over time;
- To develop strategies to introduce or improve neighbourhoods with economic vitality and social and environmental sustainability;
- To propose and develop contextual and considerate urban design solutions, that contribute to increased living quality, social interaction, and economic vitality;
- To create a conceptual design framework, planning proposal and study schemes indicating land use functions, infrastructure systems and neighbourhood qualities;
- To develop an urban design proposal through the potential synergies and integration within its existing context;
- To develop a comprehensive urban design proposal that combines strategic and quantitative urban design measures with appropriate spatial and environmental qualities that support urban communities.
- To propose design strategies that address urban networks at the neighbourhood, city and regional scales during "the new normal", that balance interconnectivity with local self-sufficiency to promote health and well-being, and economic mobility.

The course objectives align with the framework of the UN Sustainable Development Goals and the UN Habitat's New Urban Agenda, as students will be exposed to interdisciplinary thinking that is essential to address the complexity of social and environmental sustainability challenges.

4. STUDENT LEARNING OUTCOMES

Upon completing the studio, students will be able to:

- Understand how to organize a sustainable development strategy that will integrate economic, social and environmental perspectives;
- Understand, map and interpret the urban morphology of a representative part of Hong Kong's urban fabric;
- Understand the complex relationships between enhancing urban mobility and environmental, economic and social sustainability;
- Learn from key examples of Urban Design;
- 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 focus on development of advanced urban design, presentation and communication skills while addressing key issues and developing context sensitive strategies and designs;
- Determine priorities and strategies to create sustainable urban environments:
- Understand and balance the priorities from different stakeholders including policy makers, end users, etc., to develop urban design strategies.

5. ASSESSMENT SCHEME

| - | Group Research 1 | 20% |
|---|--|-----|
| - | Group Research 2 and Conceptual Design Framework (Midterm) | 20% |
| - | Final Design Project Development | 50% |
| - | Participation | 10% |

6. COURSE FORMAT

- Studio work
- Site visits to selected New Towns and future Development Areas across Hong Kong
- Invited lectures and seminars by outside experts
- Pinups, reviews and research and design document submissions

7. REQUIRED READINGS

- Gehl, J. (2010) Cities for People. Island Press
- Gehl, J., and Svarre, B. (2013). How to study public life. Washington, DC: Island Press.
- Jacobs, J. (1961). The Death and Life of Great American Cities. Random House., New York.
- Larice, M. and Macdonald, E. (2013) The Urban Design Reader. Second edition. Routledge
- Ng, E. (2010). Designing high-density cities for social and environmental sustainability. London; Sterling, VA: Earthscan.
- Shelton, B, Karakiewicz, J & Kvan, T, (2010). The Making of Hong Kong: From Vertical to Volumetric. Taylor & Francis
- Talen, E. (1999). Sense of Community and Neighbourhood Form: An Assessment of the Social Doctrine of New Urbanism. Urban Studies. 36. 1361-1379. 10.1080/0042098993033.

8. RECOMMENDED READINGS

Mapping and infographics

- Bertin, B., Semiology of Graphics: Diagrams, Networks, Maps, Esri Press (2010)
- McCandless, D. (2009). Information is beautiful. London: Collins.
- Rendgen, Wiedemann, Ciuccarelli, Wurman, Rogers, Holmes, . . . Holmes, Nigel. (2012). Information graphics. Köln: Taschen.
- Tufte, E.R., Envisioning Information, Graphics Press; 1st edition (1990)

Other recommended literature

- Dehaene, M and DeCauter, L (eds) (2008). Heterotopia and the City, Routledge, London
- Amin, A. (2008). Collective Culture and Urban Public Space. City, 12:1, 5-24, DOI: 10.1080/13604810801933495
- Bolchover, J., & Hasdell, P. (2017). Border ecologies: Hong Kong's mainland frontier. Basel: Birkhauser.
- Burgess, R. and Jenks, M. (2002). Compact Cities. London: Taylor and Francis.

- Castells, M., Goh, L., and Kwok, R. (1990). The Shek Kip Mei Syndrome: Economic development and public housing in Hong Kong and Singapore (Studies in society and space; 4). (London: Pion).
- Chau, C. S. (1981). High density development Hong Kong as an example, in R. Y. Kwok, and K. S. Pun (Eds.) Planning in Asia: Present and future, pp. 11–14. (Hong Kong: Centre of Urban Studies and Urban Planning, University of Hong Kong).
- Chavis, D. M. and Wandersman. A. (1990). Sense of community in the urban environment: a catalyst for participation and community development, American Journal of Community Psychology, 18, pp. 55-81.
- Cheng, V. (2010). Understanding density and high density, in E. Ng (Ed.) Designing high density cities for social and environmental sustainability, pp. 3–17 (London; Sterling, VA: Earthscan).
- Chow, J. (2018). Geospatial Analysis of Public Open Space Accessibility in Hong Kong. Civic Exchange and Hong Kong Jockey Club Charities Trust, Hong Kong
- Chui, E. (2008). Ageing in Place in Hong Kong—Challenges and Opportunities in a Capitalist Chinese City. Ageing International, 32(3), 167-182.
- Cuthbert, A. R. (1985). Architecture, society and space—the high-density question reexamined. Progress in Planning, 24, 71-160.
- Deng, Y., Chan, E.H.W., and Poon, S.W. (2016). Challenge-driven design for public housing: The case of Hong Kong. Frontiers of Architectural Research, 5(2), 213-224.
- Gehl, J. (1987). Life between buildings: Using public space. New York: Van Nostrand Reinhold.
- Gou, Z., Xie, X., Lu, Y., and Khoshbakht, M. (2018). Quality of Life (QoL) Survey in Hong Kong: Understanding the Importance of Housing Environment and Needs of Residents from Different Housing Sectors. International Journal of Environmental Research and Public Health, 15(2), 219.
- Harvey, D. (1997). Contested cities: Social process and spatial form, in: N. Jewson, and S. MacGregor (Eds.). Transforming cities: Contested governance and new spatial divisions (pp. 19–27). London, New York: Routledge.
- Hillier, B. (1996). Space is the machine: a configurational theory of architecture. London: Space Syntax.
- Hillier, B., and Hanson, J. (1984). The social logic of space. Cambridge; New York: Cambridge University Press.
- Hong Kong Housing Authority, Development Construction Division (2011). Planning, design, and delivery of quality public housing in the new millennium. Hong Kong: Hong Kong Housing Authority.
- Hong Kong Planning Department (1991). Hong Kong Planning Standards and Guidelines. Hong Kong: Planning Department, Hong Kong Government.
- Jacobs, A., and Appleyard, D. (1987). Toward an Urban Design Manifesto. Journal of the American Planning Association, 53(1), 112-120.
- James, L., (2019). Implications and Application of Maslow's Hierarchy of Needs in Community Change Initiatives, Dissertations Abstracts International 81-06A. Valdosta State University. Political Science, 2019.
- Kan, A.W.S. (1978). A Study of Neighbourly Interaction in Public Housing: The Case of Hong Kong, in: Wong, L. Housing in Hong Kong: A multi-disciplinary study (Asian studies series), pp. 160-182 (Hong Kong: Heinemann Educational Books).
- Lai, C. (2018). Open Space Opinion Survey. Civic Exchange and Hong Kong Jockey Club Charities Trust, Hong Kong.

- Lau, K.Y. and Murie, A. (2017) Residualisation and resilience: public housing in Hong Kong, Housing Studies, 32:3, 271-295, DOI: 10.1080/02673037.2016.1194376
- Lee, C. / Harvard GSD (2016). Common Frameworks.
 - https://issuu.com/gsdharvard/docs/common_frameworks_part1
 - https://issuu.com/gsdharvard/docs/common frameworks part2
 - https://issuu.com/gsdharvard/docs/commonframeworks3
- Legeby, A. (2013). Patterns of co-presence: Spatial configuration. PhD Dissertation, School of Architecture, Royal Institute of Technology, Stockholm, Sweden, 2013.
- Low, S. (2016). Spatializing Culture: The Ethnography of Space and Place. London, England; New York, New York: Routledge.
- Offenhuber, D., & Ratti, C. (2014). Decoding the City: Urbanism in the Age of Big Data. (ebook available via the CUHK library website)
- Ratti, C., & Claudel, M. (2016). The city of tomorrow: Sensors, networks, hackers, and the future of urban life. New Haven; London: Yale University Press.
- Saunders, P., Wong, H., and Wong, W.P. (2014). Deprivation and Poverty in Hong Kong. Social Policy & Administration, 48(5), 556-575.
- Smart, A. (2006). The Shek Kip Mei Myth. Squatters, Fires and Colonial Rule in Hong Kong, 1950–1963 (Hong Kong: Hong Kong University Press).
- Strange, C. (2019). Monotown: Urban dreams brutal imperatives. San Francisco: Applied Research and Design.
- Tang, W.S., Lee, J.W.Y, Hui, T.W. and Yip, M.K.C. (2019). The "Urban density" question in Hong Kong: From absolute space to social processes. City, Culture and Society, 17, 46-53.
- Tuan, Y. F. (1977). Space and place: The perspective of experience. U of Minnesota Press.
- Wai, R.C.C. (2014). The architectural origins of Hong Kong's public housing: The pioneering "Mark" series and its development. Ph.D. Dissertation, University of Hong Kong, 2014
- Whyte, W.H. (1980). The Social Life of Small Urban Spaces. Conservation Foundation, Washington, D.C.
- Yeh, A., and Yuen, B. (2011). High-Rise Living in Asian Cities (1. Aufl. ed.). Dordrecht: Springer Science Business Media.
- Yeung, Y.M. and Wong, K.Y., Hong Kong Housing Authority (2003). Fifty years of public housing in Hong Kong: A golden jubilee review and appraisal. (Hong Kong: Chinese University Press for the Hong Kong Housing Authority, Hong Kong Institute of Asia-Pacific Studies).
- Zheng, W., Shen, G., Wang, H., Lombardi, P. (2015) "Critical issues in spatial distribution of public housing estates and their implications on urban renewal in Hong Kong", Smart and Sustainable Built Environment, Vol. 4 Issue: 2, pp.172-187, https://doi.org/10.1108/SASBE-09-2014-0047

9. SCHEDULE

| Date | Studio Activities |
|------------|---|
| | |
| | Stage 1: Research |
| | - Task 1.1: Theories and Precedents of Utopian Communities (1 week) |
| Mon Jan 8 | Studio Introduction / Topic Selections |
| Thu Jan 11 | Research Tutorials |
| Mon Jan 15 | Research Pinup |
| | – Task 1.2: Hong Kong Urban Structures and Places (2 weeks) |
| Thu Jan 18 | Group Discussions |
| Fri Jan 19 | Site Visits |
| Mon Jan 22 | Research Tutorials |
| Thu Jan 25 | Research Tutorials |
| Mon Jan 29 | Research Pinup |
| | – Task 1.3: Northern Metropolis Site Analysis (2 weeks) |
| Thu Feb 1 | Northern Metropolis / Shenzhen Site Visits |
| Fri Feb 2 | Northern Metropolis / Shenzhen Site Visits |
| Mon Feb 5 | Research Tutorials |
| Thu Feb 8 | Site Research Pinup |
| Mon Feb 13 | No Class - Spring Festival |
| Thu Feb 15 | No Class - Spring Festival |
| Mon Feb 19 | Research Tutorials |
| Thu Feb 22 | Research Tutorials |
| Mon Feb 26 | Site Research Reviews |
| | Stage 2: Research by Design |
| | – Task 2.1: Site-Specific Conceptual Framework (1.5 week) |
| Thu Feb 29 | Research Tutorials |
| Mon Mar 4 | Research Tutorials / Midterm Rehearsals |
| Thu Mar 7 | Midterm Reviews – Research Insights and Conceptual Framework |
| | – Task 2.2: Comprehensive Urban Planning (2.5 weeks) |
| Mon Mar 11 | Group Discussion |
| Thu Mar 14 | Design Tutorials |
| Mon Mar 18 | Design Tutorials |
| Thu Mar 21 | Design Tutorials |
| Mon Mar 25 | Design Tutorials |
| Thu Mar 28 | Research by Design Pinup |
| | – Task 2.3: Final Project Development (5 weeks) |
| Mon Apr 1 | No Class – Easter Holidays |
| Fri Apr 5 | Design Tutorials |
| Mon Apr 8 | Design Tutorials |
| Thu Apr 11 | Design Tutorials |
| Mon Apr 15 | Final Design Review |

| Thu Apr 18 | Final Visualisations / Presentation |
|------------|-------------------------------------|
| Mon Apr 22 | Final Visualisations / Presentation |
| Thu Apr 25 | Final Visualisations / Presentation |
| Mon Apr 29 | Final Review Rehearsals |
| Thu May 2 | Final Reviews |
| | Submission of Studio Documentation |

10. SAME COURSE OFFERED BEFORE

Yes

11. IMPORTANT NOTES TO STUDENTS

ATTENDANCE:

Class attendance is required in all courses. For an excused absence, the instructor must be notified and presented with documentation of illness or personal matter. Please note: Three (3) or more unexcused absences may result in a failing grade for the course.

STUDENT WORK:

Submission of studio documentation must be complete and correctly formatted. Missing or incomplete submission of the documentation folder will result in the grade for the course being withheld. This will prevent registration for the following term or delay graduation. In addition, a grade deduction of one letter grade will be made.

ACADEMIC HONESTY AND PLAGIARISM

Plagiarism is the use of another person's words, images or ideas in any academic work without proper acknowledgment. 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 https://www.cuhk.edu.hk/policy/academichonesty/.

THE USE OF ARTIFICIAL INTELLIGENCE (AI) TOOLS

The use of AI tools, such as ChatGPT or image generation tools (MidJourney etc.) without explicit acknowledgement and submitting this as one's own work is considered academic misconduct. Students may refer to the CUHK 'Use of Artificial Intelligence tools in Teaching, Learning and Assessments' – A Guide for Students. The use of AI tools for specific assignment within the course work process may be permitted as part of the course framework, and could be implemented after discussion with, and approval from the course tutor. 'Acknowledgement' shall be defined as 'acknowledgement of the specific AI tool used and how it has been used in producing the work.

For more information: https://libguides.lib.cuhk.edu.hk/c.php?g=917899&p=6975970.