

Dean's Roundup: 1 September 2017

Roundup: *Ceiling function*, the mathematical operation of rounding a number up to the next higher integer.

Roundup: a term in American English referring to the process of gathering animals into an area, known as a "Muster" in Australia.

Rounding up: when a helmsman cannot control a boat and it heads into the wind

Roundup: the plan for an invasion of northern France by Allied forces during World War II (Wikipedia)

Dean's Roundup: part blog, part bulletin; part honour roll, part curatorial [cu¹ra-to¹ri-al (ky⁰⁰r¹e-tô¹r¹e-ə¹l, -tô¹r¹-) n. nounised by the Dean from curator + editorial]

Dear all,

Welcome back! It seems to have been both a long and a short summer recess, as always. The principal focus of this Roundup is to celebrate colleagues' achievements that have built since the last edition. I'll allow myself a blog, however, to comment on this week's Think Tank on the *Imminent Commons*, hosted and chaired by Nasrine as part of the Seoul Biennale. This brought together seven speakers, including our own Christian Lange, to reflect on the challenges of designing future cities in the presence of various *commons* issues. *Common land* has been a technical legal concept in English Common law systems for centuries. Formal scholarly thinking on the 'commons' as an explicit term and concept goes back to the European enlightenment, with philosopher David Hume making reference to the problem of two neighbouring landowners interested in cooperating over draining and developing their swampy land. The ecological philosopher Garrett Hardin popularised the idea of the *tragedy of the commons* in his famous 1968 essay. An interesting distinction that came to me as I listened to Monday's speakers was the idea of designing *with* and *for* the commons. This was, I think, part of Alejandro Zaera-Polo's idea, in fashioning the Biennale programme and the accompanying book, which was being launched in Hong Kong at this week's event. He wasn't there to elaborate, however, so I made my own elaboration. The scholarly concept of the commons draws on the idea of non-depletable resources, defined as being (a) consumed non-competitively, such that one person's enjoyment does not diminish that of other peoples', and (b) non-excludable, in the sense of it being difficult to prevent people consuming the resource. David Hume's insight was that free-riding over commonly-enjoyed land would lead to under-investment. Hardin's insight was that free-riding and underinvestment would lead commonly-enjoyed land to deteriorate to the point where all users are worse off than if they had cooperated over their joint use. Alejandro and Hyungmin Pai, co-authors of the book, identified nine commons, including earth, air, water, and communications infrastructure. The book covers both 'designing with' and 'designing for' pieces, (my structure not the authors'). Ecological and urban planning practice and research tends to focus on better and more creative ways of managing the commons or mitigating the problems of over-consumption. Designers working at the urban scale, use the commons as elements in their designs. Designers can break new frontiers in commons problems by creating more commons and configuring them spatially to preserve their integrity (keeping usage balanced with capacity). Very often, as I have said in different ways in Dean's Roundups, public spaces are designed as commons but function as something else: they tend to be overused to the point of serious degradation, or captured by specific groups, rendering them private spaces for those groups, (in terms of consumption, not law). Louie Sieh made

an insightful comment in the panel discussion following the talks on Monday's event: commons are *subtractive spaces* and designed spaces aim to be *additive spaces*. This brilliantly crystallises the purpose of urban design and reminds designers to understand the post-occupancy dynamics of spaces they imagine. The role of the architect in anticipating the imminent commons of tomorrow cities is not to create new commons that become subject to subtractive commons dynamics as soon as they have been built; but to create spaces that become additive as soon as they are built. One way or another, this requires the designer to intentionally build-in exclusion, whether by lengthening access routes, walling and obscuring, elevating or narrowing, or by legal and technological enclosure. Herein lies a conundrum. For all but the largest urban spaces, if they are designed to be truly non-excludable 'commons', like all commons they will start to degrade as soon as they are constructed. To avoid degradation, access needs to be costly (in time, money or effort), in which case we are creating something less than 'commons'.

Congratulations and thanks to all those mentioned below.

Chris.

Teaching and other Achievements

FoA Departments and Divisions

Division of Architectural Conservation Programmes (DACP)

1. Dr. Gesa Schwantes, MSc(Conservation) graduate of 2011, and currently the Director of the Architectural Conservation Laboratory (ACLab)
 - Was featured on TVB's Pearl Report in the episode entitled "The Conservators" aired on 3 July 2017 (and repeated on 4 and 8 July).

Here's the link to the episode:

<http://programme.tvb.com/news/pearlreport/episode/20170703/>

Department of Urban Planning and Design (DUPAD)

1. The 15th International Conference on Computers in Urban Planning and Urban Management (CUPUM)
 - Staff and research students of the Department of Urban Planning and Design have attended the 15th International Conference on Computers in Urban Planning and Urban Management (CUPUM) that was organized by the School of Art, Architecture and Design of the University of South Australia from 11 to 14 July 2017. First held at the University of Hong Kong by the Centre of Urban Studies and Urban Planning in 1989, for more than 25 years, the CUPUM (Computers in Urban Planning and Urban Management) Conference has been one of the premier international conferences for the exchange of ideas and

applications of computer technologies to address a range of different social and environmental problems. After Hong Kong (1989), it has been held in Oxford (1991), Atlanta (1993), Melbourne (1995), London (2005), Mumbai (1997), Venice (1999), Honolulu (2001), Sendai (2003), Iguazu Falls (2007), Hong Kong (2009), Lake Louise (2011), Utrecht (2013), and Boston (2015). The next CUPUM Conference will be held in Wuhan in July 2019 to celebrate the 30th Anniversary of the Conference.

The followings are papers and posters presented by staff (*) and research students (+) of DUPAD in the Conference:

Paper Presentations

1. Jobs-housing balance and self-containment of employment using big data, Joseph Xingang Zhou*, Anthony G. O. Yeh*, Yang Yue
2. Examining the accessibility and social exclusion in urban China using social media data: A case study of Shenzhen , Zifeng Chen+, Anthony G. O. Yeh*

Poster presentations

1. The equity and spatial implications of transit fare based on smartcard data, Jiangping Zhou*
 2. Automatic generation of hybrid skeleton-grid navigation graph from building information model, Teng Zhong+, Anthony G. O. Yeh*
 3. The rise of the mega-city regions in China: A railway perspective Xiaoyan Mu+, Xiaohu Zhang, Anthony G. O. Yeh*
 4. Identifying intra-city residential spatial distribution changes using transit smart card data, Yang Yue, Qili Gao, Anthony G. O. Yeh*, Qingquan Li
- Prof. Anthony Yeh attended the Board of Directors meeting and nominated Dr. Weifeng Li to be a member of the Board of Directors. Prof. Yeh chaired the sessions on Planning Support Systems for Disaster Prevention-1 and Planning Support Systems -Institutional/Political systems. He was also one of panelist in the Closing Ceremony of the Conference.



Panel discussion at the Closing Ceremony of the Conference.



From left to right, Mr. Zifeng Chen, Miss Xiayan Mu, Prof. Anthony G.O. Yeh, and Mr. Teng Zhong

2. Master of Science in Urban Planning

- Two student teams from the MSc Urban Planning programme have respectively won the Champion and the Merit awards in the “Social Innovation Inventor Competition for Innovative Design – Smart City” under the Tertiary Education Group. They received the awards from the Secretary for Environment at the Award Presentation Ceremony.

Champion Award: Au Chi Yan Ryan, Leung Cheuk Nam Jeff and Ngan Mui Chun Jenny (MUP-2).

Merit Award: Cheng Ka Yan Aileen, Wong Kai Nang Canon, Yeung Wing Yee Alice (MUP-1).

The press release from World Green Organization and media are available at the following links:

World Green Organization (<http://thewgo.org/website/chi/news/sii-2016-2017-ceremony/>)

ON.CC - <http://m.on.cc/nc/hknews/20170622/20170622171711lc.html>



3. Dr. Kishan Datta Bhatta

- Dr. Kishan Datta Bhatta, an alumnus of Department of Urban Planning and Design, has been appointed as Dean of Faculty of Engineering, Far Western University, Nepal.

Dr. Bhatta is a registered architect by training and has high impacts publications on heritage conservation and tourism development in Nepal. He is involved in the rehabilitation programmes of the 2015 earthquake in Nepal. He has submitted articles to the RTPI Bulletin and other media on the post-earthquake reconstruction projects. Dr Bhatta is now conducting research on Cultural heritage and Tourism in the Post earthquake Scenario: Study of Historic town 'Bungamati' in Nepal.

Dr. Bhatta is a recipient of the HKU PhD Fellowship (UPF) and read his doctoral degree under the supervision of Dr. Roger C K Chan. They have ongoing collaboration to research on the impacts of infrastructure projects between Nepal and China in tourism and conservation under the FoA HKUrbanLab "OBOR Observatory".



4. Dr. Roger Chan

- Dr. Chan is appointed as the chairman of the Council of Asian Shopping Centre (CASC) Conference 2017. CASC 2017 is the most significant platform in Asia to acquire cutting edge knowledge and expertise about shopping centre evolution, exchange ideas for continued improvement and dissemination of industrial best practice. The Conference will be held in the HK Convention and Exhibition Centre on 18-20 October 2017.
- Dr. Chan is appointed as External Examiner to the MSc in Urban and Regional Planning (K423A-5337) of the University of Glasgow, U.K. from 1 October 2017.
- Dr. Chan is appointed to serve on the HKIP Annual Awards (2017) Adjudicating Panel. The Awards is a highly-acclaimed competition in the field of urban planning and urban design in Hong Kong and Greater China.

5. Professor Rebecca Chiu

- Awarded the Medal of Honour by the Chief Executive of the Government of HKSAR for her dedicated public service, particularly her contributions to the country parks management and environmental impact assessment.
- Received the Faculty Knowledge Exchange Award 2017 (Faculty of Architecture) as the team leader of the submission of “Improving Livability in Ageing Hong Kong”, which was underpinned by a contract research commissioned by the Hong Kong Housing Society: “A Comprehensive Study on Housing in an Ageing Community” and her GRF project “Social Sustainability of Gated Communities in a High Density City: The Case of Hong Kong”.

6. Dr. Shenjing He

- Dr. He and Ms. Wincy He led a team of 14 students from the Master of Housing Management Programme, DUPAD, attend a two-day fieldtrip in Guangzhou, 12-13 August 2017. The team visited Guangzhou Urban Planning & Design Survey Research Institute (GUPDSRI) and attended a seminar given by planning experts about the history, development and planning of Guangzhou and the planning and design of resettlement housing programmes in Guangzhou. Students and teaching staffs from DUPAD exchanged ideas with planners at the GUPDSRI about public housing development in Hong Kong and Guangzhou. Led by local planning and housing experts, the students also deepened their understanding of housing development and urban renewal in Guangzhou through visiting various types of housing development in Guangzhou, including Danwei (work unit) compound, resettlement housing, high-end commodity, traditional urban neighbourhood, and affordable housing (public rental housing and economic and comfortable housing), and a historical neighbourhood undergoing urban redevelopment.



7. Dr. Kyung-min Nam

- Dr. Nam completed his visiting scholarship (June 26-27) at Seoul National University. This visit was to facilitate CGE-based collaborative research projects between an HKU OBORobs research team and the SNU Spatial Economics Lab.
- Dr. Nam completed his visiting scholarships at the Massachusetts Institute of Technology (July 7-15, 2017) and at the Institute of Energy, Environment, and Economy, Tsinghua University (Aug 17-18, 2017). Primary purpose of the visit

to MIT was to improve the quality of model calibration/simulation results, as part of his ECS-funded project.

- Dr. Nam delivered an invited presentation, titled "Environmental Challenges in Chinese Mega-city Regions: Focusing on Air Quality Management" at the Workshop "Exploring Sustainable Smart Cities: Opportunities and Challenges in Interdisciplinary Approaches," held at the City University of Hong Kong (School of Energy and Environment) on Aug 21-22. Dr. Nam also participated in panel discussions at the workshop.

8. Professor Anthony Yeh

- Has been awarded the CPGIS Life Time Achievement Award in the *25th International Conference on Geoinformatics*, organized by the International Association of Chinese Professionals in Geographical Information Sciences (CPGIS) in celebration of their 25th Anniversary in Buffalo, NY, USA, on 4 August 2017.



- Has been awarded the Research Grant Council's Humanities and Social Sciences Prestigious Fellowship Scheme 2017-18 for the project entitled "Impacts of Economic Restructuring of Export-Oriented Industrialization on Urban Development in the Pearl River Delta – A case study of Dongguan". This year, only 5 projects from amongst the UGC funded institutes have received this award. (<http://www.ugc.edu.hk/doc/eng/rgc/result/hsspfs/hsspfs1718.pdf>).
- The Dirty of Loudness" HKU BA (Urban Studies) student wins international GIS award with research on Traffic Noise Pollution in Western District

9. Mr. Kenneth Wong Kiu-ho (Bachelor of Arts in the Urban Studies Year 4 student)

- has won the **Esri Young Scholars Award (YSA) 2017** for his entry "*The Dirty of Loudness - Investigation on Traffic Noise Pollution to Residents in Western District*". He has been invited to receive the Award at the 2017 ESRI User Conference in San Diego, California, in July that will be attended by over 16,000 scholars and representatives from the Geographic Information Systems (GIS) industry worldwide. His work will represent Hong Kong and be displayed alongside that of other Young Scholar winners from around the world in the conference.

Kenneth's research aims to identify the impact of traffic noise pollution on the residents of the Western District, and the results reveal that part of the buildings in Western District are exposed to serious traffic noise pollution. One

of his research findings showed that traffic noise of about 60 buildings located next to the highway exceeded recommended standards all day.

The research area includes Tertiary Planning Units (TPUs) 1.1.2, 1.1.3, 1.1.5 and 1.1.6, which represent areas from Sai Ying Pun to Shek Tong Tsui (see Figure 1). The study first used a mathematical model, with vehicle flow data provided by the Hong Kong Transport Department as a parameter, to calculate the noise generated by the traffic. GIS was then used to calculate the traffic noise at different times in different places in the district to analyse the impact of traffic noise to nearby residents. The research findings were represented in temporal GIS to show the variation of traffic noise level in one day.

With reference to the environmental noise standard stated by the Hong Kong Environmental Protection Department (EPD), the road traffic noise planning standard in Hong Kong is L10(1 hour) = 70 dB, that is, traffic noise should not exceed 70dB by 10% of the total measuring time. However, what the study found was a scenario that considerably exceeds the standard:

In terms of about 1500 buildings in the study area, the major highways already affected around 40% of the buildings for at least an hour per day (see Figure 2);

Traffic noise of about 4% of all buildings (amounted to about 60 buildings) located next to the highway even exceeded the standard all day (see Figure 3);

Preliminary estimation showed that nearly half of the population in the Western District experienced noisy traffic during peak hours.

This alarming situation poses severe health risks to the local residents.

The Young Scholars Award is an international Award launched in 2012 by Esri in the USA, the global market leader in Geographic Information Systems software, to recognize the exemplary works in geo-spatial sciences of undergraduate and graduate students at universities around the world. The contest for this Award was launched in Hong Kong for the first time this year in celebration of the 20th Anniversary of Esri China (Hong Kong). This award (Hong Kong) was judged by a panel of nine GIS experts from the universities in Hong Kong and professional associations. In addition to the winning Award by Mr Kenneth Wong, four other Year 3 Bachelor of Arts (Urban Studies) students, (Chan Zi-tao, Choy Tsz-hin, Huang Chi-ho, Leung Sheung-hin) won the Merit Awards.

Kenneth would like to express his gratitude to Dr Kenneth Tang Siu-sing, who guided him throughout the competition and selflessly provide suggestions to the research. Kenneth would also thank Esri for holding this competition and providing him with a chance to gain a deeper understanding of environmental science and GIS. Kenneth is still perfecting his model. He is currently searching for a method to locate resident distribution in a more accurate manner. By considering more parameters like land use and the number of blocks, the spatial distribution of affected residents could be more accurate in reflecting the actual scenario.

Professor Anthony Yeh Gar-on, Programme Director of the BA (Urban Studies), is very happy that the new multidisciplinary studio-based programme with emphasis on design and multi-media communication skills and problem-

based learning projects to equip students to become professionals in the built environment who can approach any problem from multiple perspectives has helped students in winning this competition.

Results of this Award and details of Kenneth's entry can be found at <http://www.esrichina.hk/ysa/Result%20Announcement/> and <http://arcg.is/2mLLWP7> (for his winning Story Map Presentation).

For the powerpoint slides on this research, please click [here](#).

10. Dr. Wang Jiejing, PhD graduate supervised by Professor Anthony Yeh

- Has been awarded the Li Ka Shing Prize 2015-2016 for his thesis entitled "The Role of the State in China's Urban System Development: Government Capacity, Institution, and Policy".

Research Achievements

The Faculty has received the results of RGC's GRF, ECS, and HSSPFS (2017/18 Exercise). We are awarded 9 GRF grants and 1 Humanities and Social Sciences Prestigious Fellowship Scheme (HSSPFS) grant. For details of the above awards, please refer to the table below:

No.	Scheme	Panel	Dept.	Title	PI	Amount Awarded (HK\$)
1	GRF	H	DoA	Renovation toolbox: Strategies for adapting vernacular architecture in rural China	Mr. Lin, Chun-han John	1,041,070
2	GRF	H	DoA	DomestiCities: Composite Building Histories in Hong Kong, 1950s-1970s	Dr. Seng, Eunice Mei Feng	597,010
3	GRF	H	DoA	Urban Courtyard and Sustainable Architecture: Environmental Performance Evaluation and Strategies for Building Transitional-outdoor Urban Spaces in Pearl River Delta	Prof Wang, Wei Jen	666,800
4	GRF	E	REC	Generation of semantically rich as-built Building Information Models (BIMs): A derivative-free optimization approach	Dr. Xue, Fan	454,157
5	GRF	E	REC	The causal effects of green building certification on construction waste minimisation: triangulating 'big data' with 'thick data'	Dr. Lu, W.S.	534,559
6	GRF	E	REC	Bridging the BIM gap: investigating the transition towards BIM compliance among general contracting SMEs	Dr. Leiringer, Roine	582,000
7	GRF	E	REC	The resale market of subsidized housing: pricing and liquidity	Dr Wong, Siu Kei	527,680
8	GRF	E	DUPAD	Open Space in Hong Kong : Spatial Distribution, Access and Disparity	Prof TANG, Bo-sin	294,699
9	GRF	H	DUPAD	The Development of New Central Business Districts (CBDs) in China: Development Model and Dynamics	Prof Yeh, Anthony Gar On	1,120,328
10	HSSPFS	H	DUPAD	Impacts of Economic Restructuring of Export-Oriented Industrialization on Urban Development in the Pearl River Delta – A Case Study of Dongguan	Prof Yeh, Anthony Gar On	978,416

HKUrbanLab research groups

Architectural Conservation Laboratory (ACLab)

1. Dr. Gesa Schwantes

- Organized a three-day specialist workshop: “*Application of Handheld XRF in Cultural Heritage Conservation*” in collaboration with the University Museum and Art Galleries (UMAG) on 29-31st August 2017. The workshop was led by Dr. Lee Drake, a former senior XRF applications scientist for Bruker Nano and now vice president of the Paleoresearch Institute in Colorado US. The workshop provided participants with a fundamental knowledge of the physics of X-ray fluorescence (XRF) and how to apply this technique to elemental analysis in the investigation of cultural heritage materials. The workshop addressed applications, possibilities, and limitations of handheld XRF. Participants were invited professionals from science and conservation backgrounds (HKU, M+ Museum and private), as well as selected students who express strong interest to pursue a future degree in cultural material conservation.

The workshop, together with the public lecture on 28 August 2017, was integrated in the series of lectures and workshops in the Andrew W. Mellon Preservation Series organized by (UMAG) and the HKU Library Preservation Section. The workshop was jointly funded by UMAG and ACLab. Further joint activities between ACLab, UMAG (Faculty of Arts) and Faculty of Science in this field are anticipated.



1. Professor Rebecca Chiu

- Delivered an invited presentation on “Accreditation by Hong Kong and U.K. institutes of planning: why serve two masters?” at the Dean’s (and Chair’s) Forum of the 2017 conference of the International Conference of China Planning, Harbin Institute of Technology, 16 – 18 June 2017.
- Set up and chaired a Panel on “Housing and Comparative Urbanism” at the RC43 Conference of International Association of Sociology, Unreal estate? Rethinking Housing, Class and Identity, 18 – 20 June 2017, City University of Hong Kong.

2. Dr. Shenjing He

- Has published the following two papers:
 - (i) He, S. (2017). The creative spatio-temporal fix: Creative and cultural industries development in Shanghai, China. *Geoforum*.

Abstract: *As the idea of creative city becoming a universal panacea for economic stagnancy and urban boosterism, the heavy dependency on creative fixes has widely spread to cities around the globe through urban networks and neoliberal urban policies. Since the late 1990s, Shanghai has expeditiously embraced the idea of making creative city and enthusiastically promoted the development of creative and cultural industries (CCIs). This research proposes the idea of ‘the creative spatio-temporal fix’ to interpret Shanghai’s CCIs development over the last decade: under an overarching framework of creative entrepreneurial governance, the creative reconfiguration of the built environment (spatial fix) and temporal deferral of crisis and long term speculation on land (re)development (temporal fix) are in place to cope with the crisis of capital accumulation. Two rounds of creative spatio-temporal fix are discerned and epitomised in the case of Red Town, an iconic CCIs zone in Shanghai. Drawing on policy analysis and in-depth fieldworks, this study scrutinises into the creativity of the spatiotemporal fix and the spatiality and temporality of the creative fix in Shanghai. The findings are threefold. First, CCIs development is underwritten by a multi-scalar entrepreneurial network and its alliance with SOEs landlords and private developers. Second, the creativity of the spatio-temporal fix can be seen in the creative institutional design enabling CCIs development and forming an alliance with the SOE landlords, as well as the strategic speculation on the theme of creative city. Third, the spatiality and temporality of the creative fix are manifested in the temporal deferral of the crisis of deindustrialisation and limited spatial reconfiguration at the first stage, and a radical spatial restructuring with a temporal fix introducing financial capital at the second stage.*

- (ii) Liu, Y. & He, S. (2017). Unpacking the heterogeneity of poor neighbourhoods and neighbouring in large Chinese cities. *Area Development and Policy*.

Abstract: *The heterogeneous socio-demographic composition of, and social interaction in, poverty-stricken urban neighbourhoods in China is comparatively less understood. Drawing upon a large-scale household survey of dilapidated old city neighbourhoods, declining workers' villages, inner-urban villages and peri-urban villages, this paper identifies contrasts and similarities in the demographic and socio-economic characteristics and the patterns of neighbourhood interaction in 25 poor neighbourhoods in six large Chinese cities. These results demonstrate the importance of neighbourhood and neighbouring in enabling disadvantaged groups to negotiate their rights to inhabit and thrive in the city.*

- Was invited to give a lecture entitled "How to conduct domestic research and write for international journals?" at the College of Architecture and Urban Planning, Tongji University on 30 May 2017, Shanghai, China. This workshop was attended by more than 100 participants including professors and students from Tongji University and other mainland Universities.



- Was invited to give a talk entitled "Small Property, Big Market: Property Rights and the Pricing Mechanism of Informal Housing in China?" co-authored with Dr. Dong Wang, Professor Chris Webster and Professor K W Chau, at the international workshop entitled "Land Tenure and Real Estate Market Development in China", co-organized by the Development Research Center, The State Council of China, and the Samuel Tak Lee MIT Real Estate Entrepreneurship Lab, MIT, on 31 May – 1 June 2017, Beijing, China.
- Was invited to give a lecture entitled "Low-end Housing Provision under China's State-led Financialisation and its socio-spatial implications", at the School of Architecture, Tsinghua University, on 2 June 2017, Beijing, China.



- Was invited to give a Plenary speech entitled “Triple Movements in China’s Urban Transformation: Gentrification and the Remaking of Chinese Cities”, at the Urban China Research Network 2017 International Conference, hosted in Shanghai University, 14-15 June, 2017 Shanghai, China.



- Was invited to give a lecture entitled “How to conduct domestic research and write for international journals?” at the School of Urban and Regional Sciences, East China Normal University, 15 June 2017, Shanghai, China.
- Was invited to give a Plenary speech entitled “Triple Movements in China’s Urban Transformation: Gentrification and the Remaking of Chinese Cities”, at the International Sociological Association, Research Committee on Housing and Built Environment (ISA-RC43) 2017 Conference: Unreal Estate? Rethinking Housing, Class and Identity, City University of Hong Kong, 18-20 June 2017, Hong Kong.
- Was invited to be the commentator for a workshop entitled “Community Planning in China”, organized by the Yale-NUS College, Singapore, 23-24 June 2017.



- Published the following paper:

Yuting Liu & **Shenjing He** (2017): Unpacking the heterogeneity of poor neighbourhoods and neighbouring in large Chinese cities, *Area Development and Policy*, DOI: 10.1080/23792949.2017.1341816

Abstract: *The heterogeneous socio-demographic composition of, and social interaction in, poverty-stricken urban neighbourhoods in China is comparatively less understood. Drawing upon a large-scale household survey of dilapidated old city neighbourhoods, declining workers' villages, inner-urban villages and peri-urban villages, this paper identifies contrasts and similarities in the demographic and socio-economic characteristics and the patterns of neighbourhood interaction in 25 poor neighbourhoods in six large Chinese cities. These results demonstrate the importance of neighbourhood and neighbouring in enabling disadvantaged groups to negotiate their rights to inhabit and thrive in the city.*

- Was awarded the first prize, Excellent published papers in Urban Geography, Urban Geography Committee, Chinese Geographical Society, 2017.
- Was invited to give a plenary speech entitled "From an emerging market to a multifaceted urban society: Urban China studies" at the 2017 Annual Conference of Urban Geography Committee, Chinese Geographical Society, at Peking University, 9-10 July 2017, Beijing, China.



- Was invited to attend the Tianjin Forum and give a talk entitled "The Creative Fix: Making Creative Cities in China", 7-8 July 2017, Tianjin, China. Tianjin Forum is jointly hosted by the Government of Tianjin city, Korean Foundation for Advanced Studies and Nankai University.



3. Professor Anthony Yeh

- Was invited to be the academic consultant of Jiangsu Province Institute of Urban Planning and Design, Nanjing University Sino-France Research Centre and Urban Planning and Design Institute of Nanjing University, Beijing Branch.
- Was invited to present the Distinguished Visiting Professor Lecture by the Department of Urban Planning of Tsinghua University on 26 May 2017. He gave a lecture on “From Mega-Cities to Mega-City Regions in China”.



- Was invited to give a Key Note Speech on “The Challenges and Opportunities of Hong Kong in a Changing Global Spatial Economy” in the **Conference on the Repositioning and Transformation of Hong Kong Under the One Belt One Road** organized by the College of Economics and Guangdong-Hong Kong-Macau Economic Research Institute of Jinan University in Guangzhou on 10 June 2017.



4. Dr. Jiangping Zhou

- Has published the following paper:

Zhou, J., Sipe, N., Ma, Z., Mateo-Babiano, D. & Darchen, S. (2017). Monitoring transit-served areas with smartcard data: A Brisbane case study. *Journal of Transport Geography*.

Abstract: *A city can be divided into areas that are served by transit and those that are not. In this study, the former is referred to as “transit-served areas (TSAs)”. To quantify, monitor and visualise the TSAs of the Southeast Queensland (SEQ), this study analyses half-year smartcard data between 2012 and 2013 from TransLink, the transit agency for SEQ. For scenarios are prescribed and four corresponding metrics (the minimum, actual, random and maximum travels) are calculated, which reflect transit riders' different levels of elasticity of distance travelled (EDT) relative to the cost of travel within or between TSAs and how transit riders could possibly travel as EDT varies. The total trips generated by or attracted to TSA and the temporal and spatial variations of these metrics across days are used to monitor TSAs, especially transit trips within or between them. The results indicate that transit trips attracted to, and generated by TSA and transit trips between TSAs vary significantly over time and across space. Across the scenarios, the temporal variance tends to be larger as EDT becomes more inelastic. The above results provide useful references for decision-makers to understand better the ranges of transit demand (by TSA) across the space and time when EDT is a variable.*

Fabrication Lab

1. Donn Holohan, Fabrication Lab manager

- Following up to last year's experiential learning project in Fujian, Donn and the fabrication team have recently completed a second structure entitled "Sun Room". Details of the project has been published on Dezeen:

<https://www.dezeen.com/2017/08/15/architecture-students-university-of-hong-kong-sun-room-pavilion-bamboo-robotic-digital-technology-fujian-china/>

Last year's project entitled "Wind and Rain Bridge" has been nominated for this year's London Design Museums Beazley award. (Last years shortlisted nominees included OMA, Mad Architects and IKEA and Herzog & de Meuron)

- Public announcement will be made tomorrow 16th.

The project seeks to address the current drastic loss of intangible cultural heritage in China and focuses on the age old craft of bamboo weaving. It is a woven in-situ composite bamboo shell built by students and local craftspeople and made possible through the application of digital design techniques. The pavilion is a reinterpretation of Peitians traditional and unique "Tea House" typology, and functions as a shelter and resting place for those who work the land nearby.

Healthy^{HD}Cites

1. Dr. Chinmoy Sarkar, Professor John Gallacher and Dean Webster

- Submitted a paper entitled “Association between adiposity outcomes and residential density: Cross sectional evidence from 450 433 UK Biobank adult participants” to The Lancet Planetary Health Journal:

2. Dr. Chinmoy Sarkar and Dean Webster

- Published an article entitled “Urban environments and human health: Current trends and future directions” at the Journal *Current Opinion in Environmental Sustainability*, Vol. 25, April 2017, pp 33-44. DOI information: 10.1016/j.cosust.2017.06.001

<https://authors.elsevier.com/a/1VKEE6gsyPQHRA>

3. Dr. Guibo Sun, Dean Chris Webster, Alain Chiaradia

- Have published the following paper in Urban Studies:

G. Sun, C. Webster, A. Chiaradia (2017). Un-gating the cities: A permeability perspective. Urban Studies

Abstract: *China is seeking to prohibit the construction of any new gated communities and to gradually open existing schemes after three decades of growth of large-block gated estates. In this paper, we use permeability analysis to explore the “what if” question posed by the policy: what if gated communities became permeable? We ask the question in respect of non-motorised access. We use two permeability metrics, closeness and betweenness, as outcome measures of gated and non-gated versions of the city. We construct a bespoke complete pedestrian network, rather than using the road network, for our permeability modelling. Nanchang, a medium-sized Chinese city with widespread gated communities, is our study area. A series of permeability analyses with and without gated communities is conducted using GIS and spatial design network analysis (sDNA). On the basis of these analyses, we sequentially sort the gated compounds whose opening will maximise permeability gains with minimum expropriation of property rights through coercive un-gating. We offer the analysis to urban scholars, planners and governments by way of a quantified simulation. This study and methodology, which is transferable without high data requirements, can assist urban practitioners in reconfiguring urban form to promote a healthier living environment (more walking) and more economically viable local service centres (greater pedestrian footfall concentrations).*

4. Dr. Guibo Sun and our Visiting Research Professor Dr. John Zacharias

- Have published the following paper in Sustainable Cities and Society.

G. Sun, J. Zacharias (2017). Can bicycle relieve overcrowded metro? Managing short-distance travel in Beijing. Sustainable Cities and Society

Abstract: *Beijing is experiencing severe over-use of mass public transit system. In this paper, we explore the question of whether it is possible to attract a portion of metro and bus riders to bicycle. We used a series of short-distance travel scenarios to collect data on bicycle choices and perceptual aspects of bicycling environments. Participants are current metro and bus riders, and bicyclists. We found that the highest possibility to bicycle was in two-station distance travel - around 1.5km~2km distance, with 13% current metro riders and 10% bus riders willing to bicycle. Several perceptual aspects of the bicycle and bicycling environment have been revealed for current metro and bus riders and bicyclists. Our findings suggest a distance benchmark to attract potential bicyclists to relieve the pressure on the current public transport system in Beijing. In the rush to meet the growing mobility needs of a large and expanding city, macro-level planning of the mass transit system has been emphasized. The present research strongly suggests that the focus needs to shift to the district and local level, where a high proportion of travel occurs and where conditions do not currently favor sustainable travel.*

iLab

1. Ms. Xi Chen, Ms. Meng Ye, (both PhD students of REC) and Dr. Wilson Lu

- Attended the World Sustainable Built Environment (WSBE) Conference 2017, jointly held by the Construction Industry Council (CIC) and the Hong Kong Green Building Council (HKGBC).

Ms. Chen presented the following research paper:

Chen, X., Lu, W., and Liu, X. (2017). Does BEAM Really Matter to Construction Waste Management? What Big Data Does and Does Not Tell. Proceedings of the World Sustainable Built Environment Conference 2017 (WSBE17), 5-7 June 2017, Hong Kong SAR, China.

2. Miss Jing Wang (PhD student of REC), Dr. Frank Xue, and Dr. Wilson Lu

- won the Special Award for Joint Computing in Construction of the LC3 Innovation Competition 2017 (out of 17 international teams) in Heraklion, Greece, on 9 July 2017. The award-winning research proposal is titled "Wang, J., Lu, W., and Xue, F. (2017). The Automatic Development of Semantic BIM Object Libraries Using Case-based Reasoning. Research proposal. LC3 Innovation Competition 2017, Heraklion, Greece, 9 July 2017".
- Attended the 2017 Lean & Computing in Construction Congress (LC3) in Heraklion, Greece, July 4-7. They presented two research papers.

One paper was presented by Miss Wang, entitled:

Lu, W., Chen, K., Wang, J., and Xue, F. (2017). Developing an Open Access BIM Objects Library: A Hong Kong Study. In: LC3 2017: Volume I – Proceedings of the Joint Conference on Computing in Construction (JC3), pp. 407 -414. doi: 10.24928/JC3-2017/0254.

Another paper was presented by Dr. Xue, entitled:

Chen, K., Xue, F., and Lu, W. (2017). Development of 3D building models using multi-source data: A study of high-density urban area in Hong Kong." In LC3 2017: Volume I – Proceedings of the Joint Conference on Computing in Construction (JC3), pp. 611-618. doi: 10.24928/JC3-2017/0252.

3. Dr. Frank Xue

- Attended the 2017 Genetic and Evolutionary Computation Conference (GECCO) in Berlin, Germany, July 15-19; and presented the following research paper:

Xue, F. and Shen, G. Q. (2017). Design of an efficient hyper-heuristic algorithm CMA-VNS for combinatorial black-box optimization problems. In Proceedings of the Genetic and Evolutionary Computation Conference Companion, pp. 1157-1162. ACM. doi: 10.1145/3067695.3082054.

4. Dr. Frank Xue and Mr. Ke Chen (PhD student of REC)

- published the following research paper:

Li, C. Z., Zhong, R. Y., Xue, F., Xu, G., Chen, K., Huang, G. G. and Shen, G. Q. (2017). Integrating RFID and BIM technologies for mitigating risks and improving schedule performance of prefabricated house construction. *Journal of Cleaner Production*. In press. doi: 10.1016/j.jclepro.2017.07.156

Abstract. *With its generally recognized benefits of clean and safe working environment and good quality, prefabricated house construction (PHC) as a solution is gaining momentum in the face of various housing challenges in Hong Kong's construction industry. Although prefabrication has its own benefits, its fundamental disadvantages of fragmentation, discontinuity, poor interoperability, and scarce real-time information availability have imposed significant adverse influence on the schedule performance of prefabricated house construction. As a result, despite the promise of the government to provide sufficient houses and harmonious housing, schedule delay problems still frequently beset the industry of PHC. To help address schedule delay problems encountered in the construction of prefabrication housing, this research first identified and analysed critical schedule risk factors that may have significant influence on the schedule performance of PHC. Based on the identified schedule risks, the challenges and corresponding required functions for enhancing schedule performance are determined. Then, a radio frequency identification device (RFID)-enabled BIM platform that integrates various involved stakeholders, information/data flow, offshore prefabrication procedures, and state-of-the-art construction technologies, is developed to handle the critical schedule factors. Smart construction objects and RFID-enabled smart gateway work collaboratively to ease operations within the three echelons of prefabrication manufacturing, logistics and on-site assembly construction, while real-time captured data are used to form a closed-loop visibility and traceability mode in which different end users can supervise the construction statuses, progresses in real time. The developed platform can provide various services, tools and mechanisms to different stakeholders, improve the success of daily operations and decision makings throughout PHC management, such that critical schedule risks can be mitigated and the schedule performance of PHC can be enhanced to ensure timely project delivery.*

5. Dr. Youzhi Zhang (visiting researcher attached to the iLab)

- won an HSSF (Humanities and Social Sciences Fund, Ministry of Education, China 教育部人文社科基金) for the following project:

Project title: A roadmap to regional low-carbon urbanization: a carbon emission-urbanization effect approach(基於城鎮化碳排放效應的區域低碳城鎮化路徑)

Primary Investigator: Dr. Youzhi Zhang

Co-Investigators: Hongchun Gu, Dr. Weisheng Lu, Faqiang Pan, and Wenjing Zhuang

Project Funding : CNY 100,000

1. Dean Webster

- Moderated a roundtable discussion “Masterplan as a Major Deal” at the Moscow Urban Forum held in Moscow on 6 July 2017



- Spoke at a roundtable discussion “Urban Resilience. How to assemble the jigsaw puzzle of sustainable urban development?” at the Moscow Urban Forum in Moscow on 7 July 2017

