

Dean's Roundup (Friday, 20 November 2015)

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 [**cu ra-to ri-al** (ky^{oo}r^{ee}-tô^{er}'^{ee}-el, -tô^{er}'-)] *n.* nounised by the Dean

Dear All,

HKUrbanLab is starting to flourish. Long-established groups are getting on with what they have always been good at but are making more international and multi-disciplinary connections. New labs have been initiated to consolidate established and emerging expertise. One of the latest ideas is for a lab focusing on residual space within and without buildings. Anderson Lee is exploring collaboration with government and other interested parties in Shanghai. This is a great niche for applying what may become something of a signature cross-disciplinary emphasis in our UrbanLab: *physical+institutional design*. You cannot practically realize an architectural design for useable residual space without a matching smart institutional design, since underdeveloped residual space is nearly always a result of an interacting mixture of shape, size, physical access, legal and organizational constraints. Watch this space.

New projects, variously submitted for funding, funded or in preparation include the following. All five projects are still open for additional expertise. Please contact me or any other team members if you are interested. I list them to encourage colleagues to talk to each other about research interests and to explore creative discussions and joint work across boundaries. These projects and others underway, are responding to HKU University Research Committee's current emphasis on extending the scope and ambition of our research grant bidding to try to access a greater number of international competitive funds (which usually means high quality research questions, projects, partners and outputs). I will list another five projects in the next Deans Roundup.

1. **Cities Foresight Network.** Applying the UK government's urban foresight methodology to four cities (HK, Groningen, Newcastle and Sydney) as an experimental part of each city's own future planning processes. (2016-17, funded by UK government and four universities; Cols: Rebecca Ciu, Bo Tang and Chris Webster. Project team open for additional expertise. Status: funded, starts March 2016. A CUSUP-led project).
2. **iTwoCity.** A huge vision to create a 21st century equivalent to Ebenezer Howard's Garden City model. Can we create a new product – a model city for the current century, designed to optimize energy, walkability, health, visual excitement, economy, social integration (including migrants), environmental services, fiscal accounting, municipal revenue and expenditure, organizational structure and ownership, constructions time, costs and waste? And can this be modeled digitally with parametric urban

planning, urban design, architecture, cost engineering, pre-fabricated on-site manufacturing, construction and post-occupancy management? And all within 18 months? (2016-18, funded by RIB, various levels of German governments, German construction firms, German finance companies, and Chinese pre-fab systems companies. A 0.5-1 Billion Euro project. Lead university partners with RIB are HKU and Georgia Tech. Cols: Chris Webster, Steve Rowlinson, Wilson Lu and Yan Gao. Project team open for other experts in design, construction management, landscape urban planning. Status: funding committed, pending land purchase, initial work scheduled to start Jan 2016 on one German site. Three other sites identified. An iLab-led project)

3. **Institutional and physical design of gated communities in China.** Most studies of private communities in China focus on architecture and urban design. A few have focused on organization, property rights and economics, including a path-breaking 2005 edited book from Renmin University with a chapter by me and an introduction by Nobel Economics Laureat Eleanor Ostrom. Can we bring design, law and economics together to influence for good, the dominant genre of urban development in China? (Status: collaboration request from Chongqing university to be a partner in an NSFC project bid, project running 2016-2021. Chris Webster has been approached to be a co-PI and is looking for an additional Co-I/Co-PI. This also links to a current PhD project in HKU 2015-2018. A RCCPRR-CUSUP project).
4. **Spatial housing sub-market definition and dynamics.** Spatial housing market dynamics drive urbanization and shape cities far more potently than city planning, urban design or architecture. Current methods of sub-market demarcation are typically coarse and not helpful to designers and planners in helping them understand the realities of the neighbourhoods they are working to redevelop or renew. Can we define housing submarkets at a much finer scale, for example at the level of street, or link in a city's road grid? Can we identify house price spill-over, spread and ripple-effects not only between contiguous spaces but between spaces that share a similar position in the hierarchy of spaces within a city? Or between spaces at a similar hierarchical level within different cities – in the same country and globally? This will be a cross-national study of HK, Paris, Chicago and Cape Town. (Status: expression of interest submitted to the French national scientific research council ARN in collaboration with the department of Geography Universite de Paris VII. Other project partners: Cambridge University and Tongji University. Co-Is at HK: Chris Webster and Kelvin Wong. The ARN has a joint funding scheme with HK RGC, with the submission having to be made in the first instance to the ARN. Project team open. Project would run 2016-2019. A RCCPRR-CUSUP project)
5. **Re-structuring Ankara and Istanbul.** Istanbul is one of the world's great market-driven cities, growing over history and in recent decades by informal accretion of squatter areas that stabilize and become part of the mature city. It is currently undergoing a massive restructuring exercise using a Turkish version of the land readjustment legal and planning and design instruments that have been used to reshape China's informal neighbourhoods. Ankara is a quintessential planned capital city, the core planned shape of which bears little relevance to the dynamics that drive a city. In the past 15 years, the Turkish economy has been reshaped by radical reforms that have made it more economically liberal, for example, the creation of a domestic mortgage market for the first time in the early

2000s. How have Istanbul and Ankara adjusted to the liberalization of economic policy? We hypothesise that the spatial and economic structure of Ankara will have had to adjust more than Istanbul, including a shift of CBD and a re-structuring of its hierarchy of sub-centres. By contrast, we hypothesise that Istanbul's emergent morphology is a more efficient one, needing institutional restructuring but less spatial restructuring. (A collaboration between Gazi University, HKU and Cardiff University. Funded by the Turkish Science and Technology Research Council. HKU Co-Is: Chris Webster and Xiaohu Zhang. Data completed, analysis about to start. Project team open. Turkish funding runs out 2016. A good opportunity for a 2016/17 GRF or PhD project, focusing on urban renewal, urban structure or economic geography. A RCCPRR-CUSUP project)

Some of the above provide research opportunities for design, science and social science colleagues. A good source of inspiration for designers wanting advice on how to position their research alongside other researchers can be found at the following link. UCL Bartlett has bucked the trend in many UK universities by placing architecture towards the top of UCL's RAE (REF) performing units.

<http://bartlettdesignresearchfolios.com/>

Congratulations to all those listed below.

Chris

Department of Architecture (DoA)

1. Ms. Mandy Lee Man Yee (MArch, Class of 2015)
 - Has been awarded the Hong Kong Institute of Architects (HKIA) Student Medal 2015.

2. Mr. H. Koon Wee and Dr. Eunice Seng
 - contributed a map from a research project titled "Void Deck: Planned Utopias, Toa Payoh," in the exhibition, A Luxury We Cannot Afford, at Para Site HK (Sep 19 – Nov 29, 2015). The exhibition focuses on the use of art, popular culture, and architecture of the 1950s/60s and 2000s (two moments in which Singapore, currently celebrating its 50th year of independence, was at the brink of economic utopia) to reflect on the formation, development, and paradoxes of the country's national ideology. <http://www.para-site.org.hk/en/exhibitions/a-luxury-we-cannot-afford>

3. H. Koon Wee
 - His above research project was featured at Mingpao Daily on September 25, 2015.

4. Dr. Eunice Seng
 - participated in a discussion series 5x7, invitations with 7 guests, a series of public programmes taking place alongside the exhibition. Moderated by Para Site curator Qinyi Lim, this discussion held on Tuesday, November 10, (7-9pm) delved into the public spaces, public housing projects, and modes of utopias featured and referenced in the exhibition.

Department of Urban Planning and Design (DUPAD)

1. Professor Anthony Yeh
 - Prof. Anthony Yeh has participated in the Annual Meeting of the Chinese Academy of Sciences in Beijing from 9 to 13 November 2015 as an Academician of the Academy. While in Beijing, he had made use of the opportunity to visit the Chinese Academy of Sciences, China City Planning Association, Peking University-Lincoln Institute Center for Urban Development and Land Policy, and Tsinghua University to find out about their latest research and development.

2. Professor Rebecca Chiu
 - Attended the Chief Secretary's consultation meeting on the 2016 Policy Speech, 16 November 2016.

Centre for Urban Studies and Urban Planning (CUSUP)

1. Professor Rebecca Chiu (DUPAD)

- Delivered an invited presentation on "The social sustainability of Hong Kong's high-rise housing estates: the planning and design perspectives" at the Second Habitechno International Seminar organized by the Faculty of Architecture, Planning and Policy Development, Bandung Institute of Technology, Indonesia, 9 November 2015.

2. Dr. Kyung-Min Nam (DUPAD)

- Chaired the session "Population Distribution and Growth" at the 2015 North American Meetings of the Regional Science Association International (Portland, OR, USA) and presented a research paper titled "Is the Spatial Distribution of China's Population Excessively Unequal?: A Cross-country Comparison."

Abstract: *So far, China has strictly controlled domestic migration and implemented regional policy, assuming that China's demographic geography is excessively biased toward large cities or coastal regions. The validity of this assumption, however, is in question, as a widely accepted reference value does not exist. In this study, I test whether the spatial inequality of China's population distribution deviates upward from that of other countries when controlling for a set of socioeconomic variables. My preliminary results show that the spatial Gini coefficient for China is not biased upward, while Moran's I index is. That is, the spatial inequality of China's population distribution is more obvious at the regional level than at the city level.*

3. Dr. Shenjing He (DUPAD)

- has published the following article:

He, S. (2015), "Homeowner associations and neighborhood governance in Guangzhou, China", *Eurasian Geography and Economics*, DOI:10.1080/15387216.2015.1095108

Abstract: *Drawing on a large-scale household survey and in-depth interviews in Guangzhou, China, this research closely examines the formation and operation of homeowner associations (HOAs) and their governance efficacy in urban neighborhoods. This study examines the application of theories on private governance and collective action in the Chinese context and integrates the empirical analyses into a general discussion of state–market–society interactions. The HOA concept in China is far from a form of private governance by Western definition. On the contrary, it generates a societal force to counterbalance the market force brought by property management companies and the state power enforced by the residents' committee to address homeowners' political and material needs. Collective action theory is a useful explanatory tool for the HOA's governance efficacy in China. Yet, the state power and market force also bring a strong imprint on the decision-making of collective action in terms of determining organizational arrangements, the availability and quality of information, and the benefits of collective action.*

4. Dean Webster

- Dean Webster's joint article with Professor Fulong Wu (UCL) and Professor F Z Zhang (UCL) is re-printed as a book chapter, details are as follows:

Wu F, Zhang FZ and Webster CJ (2013) "Informality and the development and demolition of urban villages in the Chinese peri-urban area," in *China Cities – urban transformation, development, restructuring and planning education*, edited by Xu, Xueqiang, Yeh G. O. Anthony, Zhou Chunshan and He Shenjing (Beijing: Science Press, 2015), pp. 193-205. ISBN 978-7-03-045104-0

The article is now available on ScienceDirect:

<http://www.sciencedirect.com/science/article/pii/S0305750X15002296>

Abstract: The fate of Chinese urban villages (*chengzhongcun*) has recently attracted both research and policy attention. Two important unaddressed questions are: what are the sources of informality in otherwise orderly Chinese cities; and, will village redevelopment policy eliminate informality in the Chinese city? Reflecting on the long-established study of informal settlements and recent research on informality, it is argued that the informality in China has been created by the dual urban–rural land market and land management system and by an underprovision of migrant housing. The redevelopment of *chengzhongcun* is an attempt to eliminate this informality and to create more governable spaces through formal land development; but since it fails to tackle the root demand for unregulated living and working space, village redevelopment only leads to the replication of informality in more remote rural villages, in other urban neighbourhoods and, to some extent, in the redeveloped neighbourhoods.

- Dean Webster's joint article with Dr. Yang Xiao (Tongji) and Dr. Scott Orford (Cardiff) has been accepted for publication in *Housing Studies*, details are as follows:

Yang X, Webster CJ and Orford C (2015) "Identifying house price effects of changes in urban street configuration: An empirical study in Nanjing, China"

Abstract: We explore the proposition that the fast continuous changes in urban street network associated with urban growth and the attendant changes in accessibility are partial determinants of micro-level house price movement. To test this hypothesis we examine the dynamic relationship between urban configuration and house price in the short-run from 2005 to 2010, taking the case of the city of Nanjing, China. A spatial-network analysis method is employed to track changes in accessibility within the urban street layout over time. The results provide evidence that changes in urban configuration are statistically associated with housing market changes. As the city's road grid changes through suburban expansion, new highways and internal adaptation, changes in relative accessibility follow, both locally and throughout the whole city. Generally, improved accessibility leads to higher property prices as expected. But we also find a negative relationship where new congestion hot spots are created and we identify several types of systemic spill-over effects.

Healthy HD Cities

1. Dr. Isabelle Chan

- had a paper accepted by the Accident Analysis & Prevention (5-year IF: 2.699)

Chan, I.Y.S., Leung, M.Y., Liu, M.M. (2015) Occupational health management system: A study of expatriate construction professionals, *Accident, Analysis and Prevention*, in press.

Abstract: *Due to its direct impact on the safety and function of organizations, occupational health has been a concern of the construction industry for many years. The inherent complexity of occupational health management presents challenges that make a systems approach essential. From a systems perspective, health is conceptualized as an emergent property of a system in which processes operating at the individual and organizational level are inextricably connected. Based on the fundamental behavior-to-performance-to-outcome (B-P-O) theory of industrial/organizational psychology, this study presents the development of an I-CB-HP-O (Input-Coping Behaviors-Health Performance-Outcomes) health management systems model spanning individual and organizational boundaries. The model is based on a survey of Hong Kong expatriate construction professionals working in Mainland China. Such professionals tend to be under considerable stress due not only to an adverse work environment with dynamic tasks, but also the need to confront the cross-cultural issues arising from expatriation. A questionnaire was designed based on 6 focus groups involving 44 participants, and followed by a pilot study. Of the 500 questionnaires distributed in the main study, 137 valid returns were received, giving a response rate of 27.4%. The data were analyzed using statistical techniques such as factor analysis, reliability testing, Pearson correlation analysis, multiple regression modeling, and structural equation modeling.*

2. Dr. Chinmoy Sarkar, Dean Webster, Matthew Pryor, Dorothy Tang, Scott Melbourne, Dr. Xiaohu Zhang, Jianzheng Liu (DLA-DUPAD project team)

- their landscape and urban planning (LUP) paper has made the top 20 most downloaded paper in the past 90 days among all LUP papers:

Sarkar, C., Webster, C.J., Pryor, M., Tang, D., Melbourne, S., Zhang, X.H., Liu, J.Z. (2015) Exploring associations between urban green, street design and walking: Results from the Greater London boroughs.

Received 19 January 2015, Revised 29 June 2015, Accepted 30 June 2015, Available online 20 July 2015 at:

<http://www.journals.elsevier.com/landscape-and-urban-planning/most-downloaded-articles/>

Abstract: *In recent years, a series of studies have highlighted the positive effects of urban green on individual activity behaviour and health. In this paper, we examine salutogenic environment effects of urban green upon walking behaviour and how such effects are mediated by built environment configuration and street-level physical accessibility. The dwelling locations of N = 15,354 respondents of the London Travel Demand Survey were geocoded and individual walking behaviour was extracted from the travel*

diary. A 0.5-m resolution normalized difference vegetation (NDVI) index derived from spectral reflectance measurements in remotely sensed colour infrared data was employed as an objective measure of greenness, while density of street trees acted as proxy of perceived environmental quality in street corridors. A network model of street-level physical accessibility was developed using spatial Design Network Analysis (sDNA). Logistic regression models reported a significant association of odds of walking with density of street trees and street-level betweenness (a measure of street network connectivity), while sensitivity analyses with continuous regression models for participants doing some walking indicated beneficial associations of distance walked with NDVI greenness and street trees. The results illustrate the necessity for targeted intervention strategies in activity-friendly planning via greening and optimized physical design of urban built environments.