Dear All,

We’re experimenting with format in this DRup. First we have departmental sections for general and individual departmental achievements. Then we have research achievements organized by HKUrbanLab research labs and centres, with departmental affiliation noted against researchers. We may not get it right first time round – feedback welcome. Most research achievements will be aligned to one centre or lab so please let Winnie know which one when submitting. If the alignment is not clear or it is a teaching or other achievement, please list it under your department/division. This is intended to take the activation of HKUrbanLab a step further, strengthening our research through multi-disciplinary perspectives, contrasts, conversations, synergies and collaboration. It will also strengthen our academic, professional and societal impact through focusing our research and achieving economies of depth, scale and scope.

I have just been at the University of Toronto for a Places journal board meeting. Places is an ambitious project, aiming to create a journal of first choice for popular scholarship on urbanism. Something like the New Yorker or Economist for cities. I would like HKUrbanLab to be regularly publishing popular scholarship in it. It comes from architectural roots and one of its challenges is to transform from a publication by and for designer-focused writers and readers to something broader, but without losing its design emphasis. One particular challenge is knowing how to handle the issue of peer-review. It struck me during discussion in Toronto that many around the table (mostly senior architectural academics, many of them deans) had an understanding about the purpose of peer-review that was at odds with most academic discipline. Acknowledging this raises interesting and unresolved questions about the role of peer review in design subjects and about the appropriate mechanisms for achieving it.

Consider the following. Peer review in academic publishing emerged as an institution of quality control, a mechanism of knowledge validation and as an accountability device. The object of peer reviewed publishing is to help in the process of creating verifiable, robust, valid and reliable knowledge - establishing truth. It goes hand-in-hand with the idea of the journal. A journal is, literally, a record of the progression of thought over time. Time and chronology are important because knowledge develops chronologically. It involves plenty of iteration and feedback loops, but of necessity it is nonetheless still chronological and in that sense linear. So it matters that an idea emerged in the 1950s and was revisited in the 1970s and 90s. There is perhaps a cyclical phenomenon at work, as with 18
year property cycles driving waves of building in cities all over the world, or 50 year Kondratiev waves driving periods of technological and urban expansion, or cycles in fashion or architectural design such as modern or neo-gothic, which have had many incarnations over history. Then there are paradigm shifts and the incremental steps in knowledge that lead to them. There are game-changing scientific breakthroughs, often reached at about the same time by different teams on different continents because ‘the time has come’ for the breakthrough. There are social mood driven secular trends in ideas such as the pervasive domination of socialism in political science, the arts, economics and other fields in the first half of the 20th century and the shift to economic liberalism as a reaction in the 1980s. There was the romantic period in the late 19th century as a dialectic response to the inhumanity of the industrial city. Shifts in technology often drive shifts in paradigm such as the shift from a public health science based on loose ideas about environmental contagion (18th century), to a science of pathogens (19th century), to one based on pathogens plus social environment (20th century), to genetics plus social, natural and built environment (21st century). All knowledge develops with every small addition and the peer-reviewed journal has evolved as an efficient (put by no means perfect) way of keeping track. In many ways, academic peer-review is the central discipline that organises the process of knowledge development.

Since the enlightenment, peer review has served academia by helping to maximize the chance that wheels are not reinvented, that ideas are thoroughly tested in their logic and where appropriate, empirically, before they are proclaimed to a wider audience. In some ways this can be understood as a reaction against elitism, opaqueness and religious control of knowledge by the clergy and other ruling classes during the middle-ages. Peer review holds the professor to account in what he or she professes. It demands demonstration that an idea is logically thought-through. If you want to publish and proclaim, then produce evidence that the method is superior; demonstrate through force of argument that your new semantic model of society is superior in yielding novel insights into tricky problems; show how your ideas build on the ideas of others and be explicit about how your contribution challenges existing ideas, refutes them, improves them, uses them in a new way, transforms them.

Without peer review to hold the purveyors of knowledge to account, we revert to the Wild West, with inventors of miracle cures making wild claims with impunity. Those who have had the joy of attending an AAG (American Association of Geographers) meeting, where five or six thousand inventors of new ideas gather to sell their wares, may note a similarity. Geography is a particularly inventive and ill-disciplined discipline. Many great ideas have emerged from it as a result – it is, after all, a discipline of explorers and the frontier tradition has never really gone away - but the hundreds of AAG parallel sessions have often seemed to me like the booths surrounding Jamalphna square in Marrakesh, where snake charmers, palm readers, ancient book sellers, jugglers and sooth sayers of all kinds vie for attention. Peer review focuses all this energy and speeds the demise of useless ideas and the advancement of good ideas. Academic disciplines without a tradition of effective democratic peer-review are likely to experience problems. Elitism will tend to dominate discourse. Doctrine will be a stronger guide than enlightenment. Protection of vested interests will distort the advancement of young talent. If the sclerosis sets in too deeply, the absence of open, meritocratic, transparent accountability through appropriate peer-review processes may lead the entire academic community into cul-de-sacs or even to extinction. Some would say that mainstream economics is heading in this way because traditionally open
and efficient peer-review journals have become dominated by elitist, self-serving mathematical economists. This is an example of a powerful elite capturing a peer-review system. The comeuppance for the elite happens as new journals form and re-establish a freer market in knowledge, where useful ideas can prove themselves, regardless of high-priestly control of establishment academic gatekeepers.

The case of architecture is an intriguing one. Precisely because of the above, the lack of peer review tradition should give insights into the state of the discipline. Above all, it says something about the way knowledge is developed, tested, accumulated and passed on. I would like us to have a discussion in FoA about this and will ask someone to write a DRup blog exploring the practices and roles of peer-review in architecture.

Back to Places journal. It seemed to me that the discussion in Toronto risked confusing journalistic editorial review with academic peer review. This is understandable because the journal is attempting to create an exciting hybrid genre. It accepts ‘popular scholarship’ papers, to which it applies heavy editorial input of a very high journalistic quality. It also accepts ‘peer review’ papers. Journalistic editorial review is more about refining style and keeping articles in line with the editorial mission. Peer review, on the other hand, is not focused on helping the author produce a better-written article or to align the article more closely with an editorial perspective or to refine its style (if the style is below a threshold, reviewers will simply recommend rejection). Similarly, editorial perspective in an academic journal is managed by rejecting papers not suitable for the journal before they go to peer review. Editorial review and peer review are two quite distinct publishing models. I suspect that it will be difficult for Places to maintain both, especially since its great strength and its core mission is in helping urban scholars produce world-class journalistic writing. It may be that peer-review as currently practiced in architecture represents a distinct third model. I would like to hear the arguments.

Congratulations on the achievements listed below, especially to Wilson Lu on his successful application for tenure with promotion to Associate Professor.

Chris
1. Professor Dietmar Eberle (Honorary Professor)

- Professor Eberle’s publication titled “DICHTE ATMOSPHÄRE” received one of the International DAM Architectural Book Awards.

   The jury’s verdict is as follows: “Sensitive typography, clever use of imagery, different types of paper and top of this a thumb index succeed in gaining the readers’ interest in the topic and making them aware of inhabitants’ needs with regard to urban planning.”

   Source: http://www.dam-online.de/portal/en/Awards/DAMARCHITECTURALBOOKAWARD/0/0/80546/mod1183-details1/1854.aspx

2. Dr. Cole Roskam

- delivered a paper, "Defining a New Modern Architecture for Africa: Cheng Taining's National Theatre of Ghana, 1989-92," at the international conference, Asian Studies in Africa: Challenges and Prospects of a New Axis of Intellectual Interactions, organized by the University of Ghana, the International Institute for Asian Studies at Leiden University (IIAS), and the International Convention of Asia Scholars (ICAS), held in Accra, Ghana on September 24-26.

- Please also see Cole’s response to the last Dean's Roundup below:

   “It was a surprise to see two of the most durable “old chestnuts” in architectural theory reemerge within the context of the Dean’s Round-up last week. The first concerns perceptions of truth and beauty in architecture; the second, of course, is the relationship between form and function.

   The notion that there exists some universal, objective definition of beauty in architecture, ostensibly derived from an ideal set of proportions, dates back to the Renaissance. In 1667, the French doctor-cum-architect Claude Perrault, an avid reader and translator of Renaissance-era Italian architectural treatises, set out to prove the theory once and for all by tracing this “ideal” proportional relationship in the published work of architects ranging from Jacopo Barozzi da Vignola to Andrea Palladio.

   Through this effort, however, Perrault discovered an inconvenient truth—no architect, it seemed, could agree on the ideal ratio for architectural beauty. In his own scholarship, A Treatise on the Five Orders of Columns (1683), Perrault subsequently concluded that two definitions of beauty could be discerned in architecture: positive beauty, a universal quality derived from the richness of material, a building’s size and grandeur, and evidence of symmetry; and arbitrary beauty, a judgement rooted in one’s previous experiences, customs, and inclinations. Perrault’s treatise effectively shifted the source of beauty in architecture
This leads us to the debatable relationship between form and function. Over the course of the twentieth-century, form has been conceptualized as deriving from multiple sources, including function, the imagination of the architect him/herself, the cultural spirit of a particular era, and a particular social, political, or economic context, among others. The perceived symbiotic dynamic between form and function is theory, not fact.

A successful architectural curriculum offers students a range of design methodologies and encourages each of them to pursue that which is most exciting to them as individuals. Rather than telling students exactly where to position themselves on some imagined spectrum between form and function, it’s important that we teach students how to position themselves and their work within the discipline at large. The most active, productive institutions—think of the Architectural Association in the 1970s, or Cranbrook Academy in the 1980s—are those schools that support a plurality of distinctive architectural voices and produce students with diverse and eclectic approaches to architecture. I believe teaching and testing the limits of what architecture is, rather than arguing over what it ought to be, is an admirable goal to which we should all collectively aspire.

Finally, it might be productive to redirect such debate from the Dean's Roundup to the Departmental Forum, scheduled for October 23….”

3. Professor Weijen Wang

- The RIBA Education Committee in its meeting on 7 October 2015 confirmed that the following courses and qualifications are unconditionally validated with effect from 1 January 2013:

  Bachelor of Arts in Architectural Studies (BAAS), 4 years
  Master of Architecture (MArch), 2 years

  The next full visit will take place in 2022. The RIBA will also conduct a mid-term visit at a date to be agreed mutually by the RIBA and HKU.
1. BA(US) Students Won Second Place in Yale-NUS Global China Connection’s ASEAN-China Case Competition 2015 in Singapore

A team of Yr. 4 BA(US) students won the Second Place in the Grand Final of the ASEAN-China Case Competition 2015 that was organized by the Yale-NUS Global China Connection of Yale-NUS College in Singapore on 16-17 October 2015. The case competition has over 400 participants from more than 60 universities in ASEAN and beyond. 89 teams signed up for the competition. Eight Teams with participants from Singapore, Hong Kong, UK, Philippines and Thailand was shortlisted for the Semi-Final in Singapore on 16 October 2015 and finally, 3 Teams were selected for the Grand Final on 17 October 2015. The team from Yale-NUS won the first place, our BA(US) team second, and NUS Business School team third.

The HKU Yr. 4 BA(US) team members are Aileen CHENG Ka Yan (Team Leader), Grace CHEUNG Yeung Mei, Ophelia WONG Cheuk Man, Alice YEUNG Wing Yee, and Janet LAM Tin Kei (Yr. 3 Medicine). Their Second Place winning entry is “SOWeco-city” for Liangjiang, Chongqing, China.
2. Dr. Shenjing He

- Elected to the Board of Directors of International Association for China Planning (IACP) by its members to serve as a Professional Board Member from 2015 to 2017.

- Was invited to join the Editorial Board of Journal of Urban Affairs (Wiley Blackwell) and Geography Compass (Urban) (Wiley Blackwell)
1. Dr. Isabelle Chan

- has been invited to deliver an opening speech for the inauguration ceremony of ISHP TI (Institute of Safety and Health Practitioners – Training Institute) cum CPD seminar on ‘Sick Building Syndrome and Heavy Metal Poisoning’.

![Isabelle at the speech](image1.jpg)

From left to right: Dr. Ivan Fung, Chairman of ISHP; Mr. Victor Kwong, President of Hong Kong Federation of Occupational Safety & Health Associations, Isabelle

![This event was participated by more than 80 participants.](image2.jpg)
Division of Architectural Conservation Programmes

1. Dr. Ken Nicolson

   - Cited for the top Honor Award for Architecture for *St. Andrew’s Church Life Centre* in the American Institute of Architects (AIA) Honors and Awards 2015. Ken is a consultant for this project led by Nelson Chan Architects, the founding principal of which, Prof. Nelson Chen, is the Director of CUHK’s School of Architecture and has been a guest lecturer for the ACP Division. See: [http://www.indesignlive.hk/articles/aia-honors-awards-2015](http://www.indesignlive.hk/articles/aia-honors-awards-2015).

2. Dr. Hoyin Lee


   - Interviewed by China Daily Asia for the news article on adaptive reuse of heritage buildings “From spinning mills to spinning tales,” published on 20 October 2015 at [http://www.chinadailyasia.com/focus/2015-10/20/content_15332061.html](http://www.chinadailyasia.com/focus/2015-10/20/content_15332061.html).

Rural Urban Framework

1. John Lin, (DoA) Joshua Bolchover (DoA) and Dorothy Tang (DLA)

   - their project “Mulan Primary School” has received a commendation (3rd place) in the recent AR (Architectural Review) Schools Competition, an open international search for the best schools worldwide. Working with Dorothy, John and Joshua developed an educational landscape as a response to the nearby construction of the hi-speed railway. Here is the writeup:

   [http://www.architectural-review.com/buildings/it-is-more-than-a-school-it-is-a-restitution/8689142.article](http://www.architectural-review.com/buildings/it-is-more-than-a-school-it-is-a-restitution/8689142.article)

   and the award announcement (with jury comments in the video)


   The above project is placed in front of other well-known projects from OMA and Vo Trong Nghia.
2. Dr. Wilson Lu (REC)


  **Abstract:** The primary aim of this research is to define smart construction objects (SCOs), the fundamental building blocks of future construction. SCOs are construction resources (e.g. machinery and, device, and materials) that are made “smart” by augmenting them with technologies conferring autonomy, awareness, and the ability to interact with their vicinity. This “smartness” can enable better decision-making in construction. Understanding of SCOs, however, is still in its infancy. Informed by theories on ubiquitous computing and general smart objects, this paper firstly defines the core properties that differentiate SCOs from conventional construction objects. Secondly, example representative scenarios of the use of SCOs are given to illustrate the new workflow with enhanced smartness in the future. Next, using prefabrication construction as an example case study, this paper further elaborates SCOs by using Industry Foundation Classes (IFC) Extensible Markup Language (XML) and exploring their software/hardware representations. This is the first-ever research to articulate canonical SCOs and their core properties, computing applications, and representations. More specific and applicable SCOs are compellingly desired as the future study. Properly linked to building information modeling (BIM) and Internet of Things (IoTs), SCOs can enable a safer, greener, more efficient, and more effective construction system that has ever been seen.


  **Abstract:** The waste generation rate (WGR) is usually used as a key performance indicator (KPI) to benchmark construction waste management (CWM) performance, with a view to improving the performance continuously. However, existing researches, for different reasons, only investigated a relatively small amount of construction projects, whose WGRs cannot be confidently accepted as KPIs. This study develops a set of more reliable KPIs/WGRs using an available big dataset on CWM in Hong Kong. By mining the 2,212,026 waste disposal records generated from 5,764 projects in two consecutive years of 2011 and 2012, the WGRs/KPIs are revisited and refined. Demolition is found the most wasteful works. New building, and maintenance and renovation (M&R) works individually produce the least waste amount but by accumulating all M&R works, their contribution to the total amount of construction waste could be phenomenal. Based on the more reliable WGRs from the big data, CWM performance benchmarks for different categories of projects are set.
A contractor can benchmark its CWM performance against its counterparts or its past performance as ‘Good’, ‘Average’, and ‘Not-so-good’, and thus identify better CWM practices that induce superior performance. Based on the benchmarks, the government may consider setting up a WGR-step toll system to encourage those ‘Not-so-good’ contractors to perform well in the future, and initiate incentives to the companies conducting ‘Good’ projects to spur better CWM performance. Overall, the WGRs derived from the big data and more robust analyses provide a very powerful and handy tool for CWM.

- Was invited to attend the “Sustainable Megacities: Food, Energy, Water, and the Built Environment”, which is a U.S.-China EcoPartnership forum jointly organized by New York Institute of Technology (NYIT) and Peking University, from 20th -21st Oct 2015 in Beijing. He gave a talk on “Will God create more land? Land reclamation for megacities” in the 1st Panel “Thriving in an ear of FEW resource choke points”.

- Visited the Environmental Sanitation Engineering Technology Research Center of China Urban Construction Design & Research Institute Co. Ltd and gave a talk on “Big data for construction waste management in Hong Kong” on 21st Oct 2015, Beijing.

- Attended the CRIOCM2015 (Chinese Research Institute of Construction Management) the 20th International Symposium on “Advancement of Construction Management and Real Estate” fro 23rd–25th October, 2015, Hangzhou, China. Prof. K.W. Chau is the current President of the CRIOCM. The 21th annual conference will be held by the Department of Real Estate and Construction at HKU.


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**Centre for Urban Studies and Urban Planning**

1. **Prof. Rebecca Chiu (DUPAD)**

   Successfully applied as Co-I with a team from the Centre of Ageing of the Faculty of Social Sciences and Faculty of Medicine for a four-year project of “Help Build Hong Kong into an Age-friendly City Project” funded by the Hong Kong Jockey Club Charities Trust. With a funding of $4.5 million, the project aims to enhance the Wanchai District and the Central and Western District towards the goal of becoming age-friendly cities.

   The Centre of Urban Studies and Urban Planning is invited to participate in this project as a collaborator since the centre’s expertise in urban studies and design will contribute to this interdisciplinary project. Initially, Dr Xingjian Liu and Miss Sylvie Nguyen of CUSUP have been invited to join the project.

2. **Dr. Shenjing He (DUPAD)**


   **Abstract:** The extant literature on urban China is preoccupied by concerns over the production and usage/consumption of urban space in relation to the dualistic state–market or state–society relation. This special issue presents a collection of carefully selected papers to counter-balance the skewed tendency observed in current urban China studies. We argue that the growth and spatiality of China’s new urbanism can be better understood by a critical analysis of how the state, market, and society interact in the processes of producing and consuming urban spaces in a rapidly changing global and local context. We propose that contemporary Chinese urban processes and experiences can be demonstrated holistically and realistically by placing due attention on both the production and consumption of China’s new urban spaces and the resulting contestations and contradictions. Our collective effort to examine how China’s state–market–society triad plays out in the
production and consumption of urban spaces has yielded significant insights to advance ongoing enquiry in urbanising China in response to the advocacy for a decenring theorisation of the urban revolutions taking a perspective inclusive of the voices from the global south.

3. Dr. Weifeng Li and Ms. Jing Song (PhD student) (DUPAD)


Abstract: Accumulation of heavy metals in agricultural land and their ecological risks are key issues in soil security studies. This study investigated the concentrations of six heavy metals—copper (Cu), zinc (Zn), lead (Pb), nickel (Ni), and chromium (Cr) in Shenzhen’s agricultural lands and examined the potential hazards and possible sources of these metals. Eighty-two samples from agricultural topsoil were collected. Potential ecological risk index was used to calculate the potential risk of heavy metals. Principal component analysis (PCA) was applied to explore pollution sources of the metals. Finally, Kriging was used to predict the spatial distribution of the metals’ potential ecological risks. The concentrations of the heavy metals were higher than their background values. Most of them presented little potential ecological risk, except for the heavy metal cadmium (Cd). Four districts (Longgang, Longhua, Pingshan, and Dapeng) exhibited some degree of potential risk, which tended to have more industries and road networks. Three major sources of heavy metals included geochemical processes, industrial pollutants, and traffic pollution. The heavy metal Cd was the main contributor to the pollution in agricultural land during the study period. It also poses the potential hazard for the future. High potential risk is closely related to industrial pollution and transportation. Since the 1980s, the sources of heavy metals have evolved from parent rock weathering, erosion, degradation of organics, and mineralization to human disturbances resulting in chemical changes in the soil.

4. Mr. Jianzheng Liu (PhD student) (DUPAD)

- Mr. Jianzheng Liu (PhD student) is elected to the Board of Directors of International Association for China Planning (IACP) by its members to serve as a Student Board Member from 2015 to 2017.

5. Prof. Anthony Yeh (DUPAD)

- was invited as one of the experts in the *Evaluation Meeting of the Establishment and Construction of Wuhan University Joint International Research Laboratory of GeoInformatics* organized by the Ministry of Education on 16 October 2015 in Wuhan University to evaluate the proposal submitted by the State Key Laboratory of Information Engineering in Surveying, Mapping & Remote Sensing (LIESMARS) of Wuhan University. He was elected as Chairman of the Expert Panel of this Evaluation Meeting and a report was submitted to the Ministry of Education.
6. Prof. Anthony Yeh and Dr. Qi Zhixin (DUPAD)


Abstract: This is Chapter 22 in the remote sensing handbook, Land Resources Monitoring, Modeling, and Mapping with Remote Sensing edited by Prasad S. Thenkabail. It introduces the use of radar remote sensing in land use and land cover (LULC) mapping and change detection and monitoring. Optical remote sensing has been widely used in LULC mapping and change detection. However, its application is limited by cloud cover. Difficulties are encountered in collecting timely LULC information in tropical and sub-tropical regions that are characterized by frequent cloud cover. Being capable of transmitting and receiving its own electromagnetic waves, radio detection and ranging (RADAR) remote sensing is nearly weather independent and can acquire imagery day and night. Radar remote sensing is an effective tool for LULC mapping and monitoring in the perpetually cloud-covered tropical and equatorial regions of the world where many developing countries with the greatest need for LULC data are found. This chapter introduces radar system parameters for LULC mapping, and methods of classification and change detection of radar imageries. It further discusses the applications of radar imagery in LULC mapping and monitoring in forestry, agriculture, urban development, ice mapping and other applications.

7. Dr. Sun Yi (PhD Graduate) (DUPAD)

- Gave a presentation entitled "Governance and China's New State Space: A Theoretical Review" on the 10th China-Japan-Korea Joint Conference on Geography held on 9-12 October 2015 at East China Normal University.