Dear All,

I promised I would extend a previous Dean’s Roundup discussion to comment on ‘truth and beauty’ in architecture. Delifrance, on the HKU campus, delivers the case study.

To prove that beauty without truth is ugly, order a very large hot coffee at the French-inspired cafe. It will come in a cup looking roughly like this:

![Image of a coffee cup]

If the cup is full, the beautifully circular handle means that it tips scalding liquid over your laptop. To prevent spillage you have to place a finger against the mug under the handle, which you cannot sustain for long enough to take a sip without burning yourself. The coffee therefore has to sit in the mug until it has cooled to an unpleasant temperature. There is a reason, therefore, why the more conventional mug handle is asymmetrical like this:

![Image of an asymmetrical mug handle]
Or more trendy and with artfully more secure thumb-finger physics:

Or, for designers insisting on a circular motif: with a porcelain finger under the circle, doing the job for you, like this:

A slightly larger circle might satisfy both designer and user, like this:

But this is still not as easy as an incomplete circle:

Or even better, an elongated one to accommodate several fingers:

But now we are moving away from beauty: the handle reminds us of an oversized human ear. Of course, designers need to experiment. That’s what they are trained and paid for. Every geometric possibility for a coffee mug handle must have been tried:
A manufactured design communicates to the user a message of form and function. To find that the form does not function well is disappointing at the least, if not dysfunctional and dangerous.

The beauty becomes a lie. Few will forgive the lie if the designed object was purchased for a purpose not fulfilled. However, if the lie is monumental or purposefully playful or self-parodying, it becomes fun and moves from functional design to art. Like this:

Or this:

Design, involves give and take. The designer gives an idea. The user takes. Some designs involve interaction prior to physical production. Architecture and urban design are generally like this. Cup handle design, like the design of rules in a legal system and words in a language system, has evolved over millennia at the interface of designer/makers and users. ‘Evolved’ designs tend over time to optimize the combined needs of makers and users. Where it is possible, words tend to get shortened over time to save time and energy of both speaker and listener. If an abbreviation goes too far, ambiguity arises, and the shortened version of the word will not take. But some elaborations in language stick because they add elegance and beauty and richness of expression and precision in description. Most dimensions of built environmental design tend to simplify over time, such as road layout, the gaps between buildings, roof pitch, window size and so on. Technology and laws govern this process but so does the balancing act between user needs and designer/maker needs (including cost/price and beauty/functionality). Evolved morphology (a less oxymoronic term than ‘evolved design’) tends to have a good fit between beauty and truth. That’s why we love the apparently disorganized spaces of historical cities and the charm of ancient buildings that have grown incrementally over centuries. The perturbations to simple form are understandable in terms of past human use and we value this experience.

To have a final year student design a hotel tower that could never stand up might be ok if the project is experimenting with the impact of form on environmental performance or the design implications of building a lunar hotel at 16% of the earth’s gravity (though I think you might need to model structure for that). If structure is not explicitly presented as an abstraction, however, the design is untruthful. It tells the observer that it is a model of a building, but it is not. It is a
model of an abstraction of a building. And what is a building model if it is abstracted from gravity and the laws of physics? If it is a piece of inspirational art, then it will better inspire the architectural community if it has paid attention to structure since an observer will want to know what materials and engineering feats could realize such a beautiful form. If it is meant to inspire more generally, as a provocation of some kind, then of course, it need not have structural integrity.

Abstractions are important in all scholarship. To work, they have to have a specific purpose. Like Newtonian gravitational physics abstracting from the time dimension of physics; or a climate model abstracting from micro-scale wind eddies around window casements; or an urban transportation commuting model abstracting from leisure trips. As long as you are honest in making the abstraction and consider the consequences of the missing dimension for your conclusions, then it can be a powerful method for pushing the frontiers of knowledge.

Coffee cup designs abstracted from the laws of thermodynamics and gravity should not have made it to Delifrance.

Congratulations on the achievements listed below, especially to Professor Anthony Yeh for the official conferment of his endowed professorship. Please note the welcome to Lennon and John, new colleagues in REC, and ensure you let Winnie have details of all new arrivals so that they can be introduced to the whole faculty.

Chris
1. Dr. Chinmoy Sarkar

- Dr. Chinmoy Sarkar gave an invited open lecture at the Centre for Ageing & Supportive Environments, Faculty of Medicine, Lund University, Sweden entitled, "UK Biobank Urban Morphometric Platform (UKBUMP) – A nationwide resource for evidence-based healthy city planning and public health interventions".

- Dr. Chinmoy Sarkar chaired the 'Planning for Health & Wellbeing' track at the UK-Ireland Planning Research Conference 2015, London South Bank University, London as well as presented a paper entitled, "UK Biobank Urban Morphometric Platform (UKBUMP) – A nationwide resource for evidence-based healthy city planning and public health interventions".
1. Ms. Tris Kee

- is the Editor of a new book publication “Of Dreams and Space” which documents five years of designing and building charity schools with NGO PLD in Prey Run Village, Khna Rong Village, Thon Mun Village and Thnouh Village in Takeo, Cambodia. ISBN 978-988-13114-8-1


- was awarded a Gallant Ho Experiential Learning Fund for the teaching of BAAS Building Technology 4 ARCH 4602 (Building Construction and Practice).

2. Ms. Tris Kee and Dr. W S Wong

- Won the Faculty KE Awards 2015 for the project titled “Architecture Teaching Kit for All Secondary Schools in Hong Kong”
Division of Architectural Conservation Programmes

1. Dr. Hoyin Lee and Dean Webster
   - attended the IFT 20th Anniversary Gala Dinner on Tuesday, 15 September 2015 in IFT, Macao.

2. Dean Webster
   - signed a HKU-IFT (Institute for Tourism Studies, Macao) cooperation agreement with the President of IFT, Dr. Fanny Vong, on Tuesday, 15 September 2015 in Macao.
Division of Landscape Architecture

1. Ms. Vincci Mak was invited to contribute to the *Hong Kong Echo* Magazine - a publication of the Hong Kong French Chamber. She contributed to the article “Town Planning: No Driver behind the Wheel”, as part of the cover story of the magazine’s latest issue about “Is Hong Kong in Decline? Debating the Future of our City”. Issue 77, Summer / July 2015. Page 26-27.

New Staff

We are pleased to let you know that there is a few new staff joining the Department. Please find the details and their contact as follows:

1. Dr. Choy Hung Tat, Lennon (Associate Professor)

Dr. Choy Hun Tat, Lennon, has joined the Department as Associate Professor in September 2015. Dr Choy’s office is located at KB508 (temp office at KB512) and he could be reached at his office no. 2859 8065 / email lennonchoy@hku.hk.

Here's a short bio from Dr Choy:

Lennon is an Associate Professor in Real Estate Economics and Finance at The University of Hong Kong. He is a General Practice Surveyor (Valuer) by profession. His principal research interests are in new institutional economics (NIE) and urban studies. Lennon was a Senior Fulbright Scholar at The University of Washington. He also held visiting faculty posts at the Law School and the Booth School of Business in The University of Chicago. His study has been published in the Journal of Law & Economics, Habitat International, Cities and Urban Studies etc. Lennon also acted as a Co-Guest Editor of a special issue of the Habitat International 2013 on Low Carbon Cities.

Lennon was a faculty member and an active consultant when he worked in The Hong Kong Polytechnic University. Major clients that Lennon served include the HKSAR Government (Central Policy Unit, Works Bureau, Estate Agents Authority), quasi-government bodies (Consumer Council, Hong Kong Examinations and Assessments Authority), think-tanks and professional bodies (Bauhinia Foundations, Hong Kong Institute of Surveyors), as well as private companies (HSBC, MTRC, Chesterton, Commercial Press and Oxford University Press etc).

For public services, Lennon was a member of the Authorized Persons Registration Committee, a member of the Real Estate Service Training Board, Part I Assessor of HKIS GPD, and a panel member of the Hong Kong Council for Academic Accreditation & Vocational Qualifications.
2. Dr. Shen Yuzhong, John (Post-doctoral Fellow)

Dr. Shen Yuzhong, John, has joined the Department as Post-doctoral Fellow in July 2015. John’s office is relocated from the original RPg office to Room 523 and he could be reached at johnshen@hku.hk.

Here's a short message from John:

Dr. Shen is a post-doctoral fellow at the Department of Real Estate and Construction, the University of Hong Kong (HKU). His primary research area is occupational health and safety in construction. He obtained his PhD from the Department of Real Estate and Construction, HKU. His PhD thesis has been recognized by local professional institutions. He is involved in various research projects as principal investigator and project coordinator, and his findings are reported in international journals and book chapters.

3. Ms. Joanna Chu (Executive Officer of ACP)

Joanna is repositioned from the Faculty Office to the ACP in August 2015 for overseeing admin matters of ACP. You may find Joanna at her office KB241 / her office no. 2859 1102 / email joannacy@hku.hk.

Other items

1. Sr. Bay Wong

- Represented HKIS in a CIC Task Group on strategy for management and reduction of construction and demolition waste in Hong Kong on 9 Sep 2015
- Elected as a member of the HKHS Supervisory Board in the annual general meeting on 8 Sep 2015
- Appointed a member of the HKHS Audit Committee on 8 Sep 2015
1. Professor Rebecca Chiu

- Delivered an invited presentation on “Hong Kong as Asia’s world city: more livable through smarter strategies?” at the HKIS Annual Conference 2015: Development for a Smarter World City: Hong Kong, 12 September 2015.

2. Dr. He Shenjing

- Fu, Qiang; He, Shenjing; Zhu, Yushu; Li, Si-Ming; He, Yanling; Zhou, Huoning; Lin, Nan (2015) Toward a Relational Account of Neighborhood Governance, American Behavioral Scientist, 2015, Vol.59(8), pp.992-1006

**Abstract:** Although changes in urban space often mean a restructuring of social relations, few studies elucidate why network-related frameworks are inherently related to residential outcomes in urban neighborhoods. By proposing a relational account of neighborhood governance, we investigate outcomes of neighborhood governance by incorporating a series of measures of network forms of organization, network-based social capital, and neighborly interactions. Based on a collaborative survey project conducted in Guangzhou, we find that neighborhood ties and neighborly interactions are positively associated with neighborhood attachment and cohesion, whereas uneven power relations between grassroots governments and civic homeowners associations are negatively associated with these two measures. These results not only reveal new social dynamics in urban space but also lend support to a relational account of neighborhood governance.

3. Dr. Liu Xingjian


- Awarded a grant from the National Natural Science Foundation of China (NSFC) to work on the relationship between the spatial structure of city-regions and economic productivity in China.

- Published the following paper:


**Abstract:** Against the paucity of information on urban parcels in China, we propose a method to automatically identify and characterize parcels using OpenStreetMap (OSM) and points of interest (POI) data. Parcels are the basic spatial units for fine-scale urban modeling, urban studies, and spatial planning. Conventional methods for identification and characterization of parcels rely on remote sensing and field surveys, which are labor intensive and resource consuming. Poorly developed digital infrastructure, limited
resources, and institutional barriers have all hampered the gathering and application of parcel data in China. Against this backdrop, we employ OSM road networks to identify parcel geometries and POI data to infer parcel characteristics. A vector-based cellular automata model is adopted to select urban parcels. The method is applied to the entire state of China and identifies 82,645 urban parcels in 297 cities. Notwithstanding all the caveats of open and/or crowd-sourced data, our approach can produce a reasonably good approximation of parcels identified using conventional methods, thus it has the potential to become a useful tool.

4. Ms. Christina Lo

- Appointed as a Member of the HK Green Building Council (HKGBC) Green Building Faculty CA Aspect (Social Sustainability and Community Aspect) with effect from 1 Sept 2015.

5. Professor Bo-sin Tang

- Professor Tang’s joint paper with Dr. Winky K.O. Ho on Land-use Planning and Market Adjustment Under De-industrialization: Restructuring of Industrial Space in Hong Kong has been awarded a highly commended prize for the RTPI Research Awards 2015 in the Academic Category, and was praised by the judges.

6. Professor Bo-sin Tang and Dr. Winky Ho

- Their co-authored paper entitled: “Land-use planning and market adjustment under de-industrialization: restructuring of industrial space in Hong Kong” published in Land Use Policy has received the Academic Award Commended under the Royal Town Planning Institute (RTPI) Awards for Research Excellence 2015. Details as follows: http://www.rtpi.org.uk/knowledge/research/rtpi-awards-for-research-excellence/
7. Dean Webster

- The Dean was interviewed by the iMoney magazine on China’s urban planning and the Tianjian explosion. The interview was published in iMoney Issue 409, dated 22 August 2015.

Abstract: Regular land development detection on a short-term basis (monthly or multi-month) has grown in importance with increasing concern over the impact of rapid urbanization on the environment. Unauthorized urban land developments have caused considerable damage to the environment in many developing countries because they are difficult to be controlled using conventional long-term (annual or multi-year) monitoring with optical remote sensing images. This paper presents the results of a novel study that detects land developments monthly using RADARSAT-2 polarimetric synthetic aperture radar (PolSAR) data. A sequence of seven RADARSAT-2 PolSAR images acquired at intervals of 24 days was obtained for this study. Land cover classification of each image was performed independently to investigate the ability of RADARSAT-2 PolSAR data in classifying land cover types under the influence of environmental change and vegetation growth. On the basis of the investigation, land cover types that are easily confused with each other were aggregated into the same category to form a new classification system that leads to the categorization of land cover changes induced by land development into types which can be accurately detected by RADARSAT-2 PolSAR images. Wishart maximum likelihood ratio (MLR) was combined with post-classification comparison (PCC) to detect land developments from each pair of successive images based on object-oriented image analysis (OOIA). The combination of Wishart MLR and PCC attempted to detect different change types and decrease the effect of classification errors on the change detection. OOIA was used to reduce the effect of speckle noise in PolSAR images, as well as extract textural and spatial features to support PolSAR image classification. The average detection accuracy and false alarm rate for monthly land development detection were 85.20% and 0.39%, respectively. The errors were mainly caused by the seasonal paddy growth, which resulted in changes that were easily confused with land developments. The results show that land developments can be effectively detected from RADARSAT-2 PolSAR images on a monthly time step. Land development is typically a gradual expansion process. By the time that it is detected using long-term detection methods, the small development may have already been developed into a large site, causing irreversible damage to the environment. Monthly short-term detection of land developments can enable the authorities to locate the sites which just start the development. This can allow the government to prevent unauthorized land developments and stop their resulting damage to the environment at an early stage.

Abstract: This study proposes a new three-component method for timely detection of land cover changes using polarimetric synthetic aperture radar (PolSAR) images. The three components are object-oriented image analysis (OOIA), change vector analysis (CVA), and post-classification comparison (PCC). First, two PolSAR images acquired over the same area at different dates are segmented hierarchically to delineate land parcels (image objects). Then, parcel-based CVA is performed with the coherency matrices of the PolSAR data to detect changed parcels. Finally, PCC based on a parcel-based classification algorithm integrating polarimetric decomposition, decision tree algorithms, and support vector machines is used to determine the type of change for the changed parcels. Compared with conventional PCC based on the widely used Wishart supervised classification, the three-component method achieves much higher accuracy for land cover change detection with PolSAR images. The contribution of each component is evaluated by excluding it from the method. The integration of OOIA in the method greatly reduces the false alarms caused by speckle noise in PolSAR images as well as improves the accuracy of PolSAR image classification. CVA contributes to the method by significantly reducing the effect of the classification errors on the change detection. The use of PCC in the method not only identifies different types of land cover change but also reduces the false alarms introduced by the change in the environment. The three-component method is validated in land development detection, which is important to many developing countries that are confronting a growing problem of unauthorized construction land expansion. The results show that the three-component method is effective in detecting land developments with PolSAR images.

9. Professor Anthony Yeh

- Has been conferred the Chan To Haan Professorship in Urban Planning and Design effective from 26 August, 2015. A formal Inauguration Ceremony will be arranged by the Development and Alumni Affairs Office in April 2016.