Dean's Roundup (Friday, 21 August 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*** (kyo͝or·ə-tôr′ē-əl, -tōr′-) *n. nounised by the Dean*

Dear All,

Environments shape morphology. Open up an animal's body and you find tubes – intestinal tracts, blood vessels and so on. Excavate into the ground and you find tubes – animal burrows, train tunnels, water mains. Static living organisms under the sea and on the earth's surface tend to be dendritic. Trees branch as they optimize growth under the constraints of gravity, photosynthesis, hydration hydraulics, structure and so on. Corals branch for similar reasons. Mobile living organisms in the sea tend to be streamlined; those in the air also stream lined. On the earth's surface larger animals tend to have four limbs and an elevated head containing sensory organs linked to the brain via shortest internally protected paths. In outer space, the dominant morphology is the sphere. In the lithosphere, the flat plain is the long-term dominant form as mountains erode and valleys fill up with eroded sediment.

The natural morphology of advanced human habitats is the extruded rectangle. The more crowded the habitat, the more so. Architects experiment and embellish but economics, technology and forces of competition tend to pull back building form to the morphological norm. Hong Kong illustrates this in the extreme. Could this ever be different? What would it take for a pyramidal cityscape to emerge as a natural form? Or the polygonal mega-buildings starting to roll off the plotters in Chinese architecture offices?

The Shard and Burj Khalifa suggest an answer. As buildings become taller, they may well become less rectangular. Perhaps the natural morphology of cities of the future will be pyramidal for reasons of structure. Work has begun on the Saudi royal family's 1km-high Kingdom Tower in the north of Jeddah. Its morphology is pyramidal not rectangular. It couldn't be built to the original 1-mile high specification because of the geology, but its successor will be, somewhere – and it will also be pyramidal.

The pyramid was the natural morphology of ancient mega-structures: Egypt's Giza Necropolis, Saggara, Dahshur and Hawara; the Canary Isle's Gulmar; Mexico's Teotihuacan and Coba; Algeria's Madghacen; Cambodia's Ankor Wat and Prasat Thom; Rome's Cestius; Iran's Tchogha Zanbil; Guatamala's Yaxha; and India's Brihadisvara. The morphology emerged in response to building technology, and it is likely that the aesthetic, cultural and religious significance of the shape emerged subsequently. Modern pyramids share this rationale – in part, technical solution, in part symbolic.

But as tall building technology improves will the modern pyramids revert to the rectangular? The rectangular tall building may not be as beautiful as a pyramid but it is a triumph of economy over physics. Imagine a rectangle extruded from the footprint of the Shard and then remove the Shard itself. What you have left is economically unproductive space. The 3D equivalent of dead-loss space under an economist's graph. There will be strong forces at work over time to capture value from the external void of a pyramid. It may be that as with the beautiful pyramids of old, the 21st century pyramids now being built will soon become romantic anachronisms, superseded by the mega-block, as the extruded rectangle once again reasserts itself as the natural morphology of advanced human habitation.

On the other hand, nature does contain some pyramids as stable forms. These are usually associated with defense. Think of the thorns on a rose bush, the spires on a sea horse, a sea urchin's spines or the triangular corrugations on a durian or horse-chestnut fruit. The environments that shape natural pyramidal morphology are hostile ones. Oxford's famous spires and the spire and steeple-dominated skylines of pre-industrial European cities seem a peaceful idyl. But historians tell us that early church architecture reflected both a militancy and imperialism (the spire as the spear) and a defiant gesture against paganism and later, humanism (the spire as a finger pointing to the heavens).

Defensive pyramids tend to be longer and finer on sea-creatures than on land animals (think lion fish versus a lizard) because a salt-water environment moderates the effect of gravity. The moderating effects of gravity on geological pyramids reduce them to ground zero over the eons. The forces moderating the pyramid as an urban morphology are economic. Perhaps other forces will arise to counter this. If pyramidal structures are more resilient in times of civil, military or terrorist strife or more resilient to extreme weather, we may yet see a reversion to the spired city as a natural form.

Congratulations on the achievements listed below. Especial praise for Architecture's PhD student Dulmini for disseminating her work around the globe - three intriguing talks in the USA, UK and Netherlands.

Chris

Department of Architecture

1. Yin-Lun CHAN, Research Postgraduate Student, Department of Architecture

   - presented a paper titled "Ephemerality and Permanence: A Typological Analysis of Protest Signs" at the Inter-Asia Cultural Studies (IACS) Conference 2015 in Surabaya, Indonesia, 7-9 August 2015.

   Abstract: Staged against the backdrop of the 21st century's intensified global flows of capital and information, the Asian city as "empire of signs" is increasingly being experienced through the instant circulation of media images. The long series of protests by the citizens of Hong Kong have, in the past decades, attempted to reverse the dominance of the more permanent architectural signs through the creation of mobile, ephemeral signs that directly challenge and subvert hegemonic discourses of statist and capitalistic operations. Through a typological analysis of the signs produced during protests, this paper examines the cultural implications of the renewed production-consumption circuit, thereby conceiving the emergence of a more democratic notion of civic space.

2. Dulmini PERERA, Research Postgraduate Student, Department of Architecture

   - Presented a paper titled " Beyond Autopoiesis: Embodied Cognition in Francisco Varela and the Case of the Barefoot Architects" at Production Sites: Resituating the Culture of Architectural Knowledge Conference, The Bartlett School of Architecture, UCL, in United Kingdom on 29-30 July 2015.

   Abstract: This paper offers a theoretical analysis of the case of "Barefoot architects," a model of informal design education and praxis that appeared in developing countries during the 1980s, to deal with the critical problems of slums and other underdeveloped settlements. These settlements present one of the most challenging examples of "self-organizing systems." The most contemporary reading on self-organizing systems, The Autopoiesis of Architecture utilizes the second order cybernetic theory of "autopoiesis" to promote parametric logic as a mode of dealing with self-organizing systems. Yet by showing how the complexities of these sites cannot be reduced to the logic of parametricism, the paper offers the work of Second order cybernetician Francisco Varela (a less known figure in architecture) and his research on embodied cognition as an alternative lens through which we may begin to understand the operational logic of these systems.

   - presented a paper titled "Rethinking Reflexivity in Design Studios: Selves in Design to Design of Selves." in 19th World Multi-Conference on Systemics, Cybernetics and Informatics Proceedings volume II, edited by Nagib Callos and Shigehiro Hashimoto, 382-387. Florida; IIIS, 2015.

   Abstract: Designers are often moved by situations before they are able to identify with a self (I) that is able to rationally communicate these experiences. Yet due to the lack of techniques that allow one to become aware of this pre-linguistic layer of experience, this dimension of self-reflexivity is often ignored in design studio education. However, if utilized properly it has great significance in helping designers to move beyond

egoistic assumptions about self, which inhibits them, from engaging in relational modes of thought much needed in light of contemporary ecological concerns. Using the model of "double-loop learning" by Chris Argyris and Donald Schon I revisit the notion of "reflexive learning" as practiced in two educational models: the design studio and the Vipassana meditation studio. In so doing I will demonstrate that the Vipassana model centering on "embodied-reflexivity" can help overcome certain limitations in self-reflexive praxis identified in the design studio models.

- presented a paper titled "Revisiting the U-Machine: Gordon Pask and Stafford Beer's Adaptive Controllers and Post-humanist Design Epistemologies (1955 -1965)." in Critical and Clinical Cartographies International Conference Proceedings, organized by Architecture theory section in cooperation with Bio Mechatronics and Bio Robotics Section, edited by Andrej Radman and Stavros Kousoulas, 25-38, Delft ; Technical University of Delft, 2014.

Abstract: *Gordon Pask and Stafford Beer created a unique series of machines called adaptive controllers. They looped organic life forms to mechanical elements hoping to enroll the agency of these naturally occurring self-organizing systems (biological computers). In other instances, this looping encouraged the system to grow its own senses (chemical computing) so they would find their own relevance criteria to solve real world problems. Mostly studied as failed experiments of a digital culture they provide unique insights into one of the central concerns within the contemporary theoretical context of post-humanism; the need for design epistemologies that are able to bring, what Gregory Bateson defines as, the "logic of life" and the "logic of technology" into a point of conversation. The paper highlights the importance of rethinking the "computer" in relation to a "performative" model of knowledge as opposed to "representationalist" models championed by contemporary digital culture.*

3. Ms. Tris Kee

   - Was invited as the external juror for the final thesis review of M.Sc in Urban Design, School of Architecture, CUHK, with Prof Collin Fournier, Prof Hendrik Tieben and Chris Law, on Aug 15, 2015.

Division of Architectural Conservation Programmes

1. Janice Kwok (2009 MSc(Conservation) graduate)

   - With an industrial design background, Janice worked in the administration role in several architectural practices, including the internationally renowned OMA. She served as the Personal Assistant to a Director of another internationally renowned architectural office, the London-based Wilkinson Eyre Architects (WEA), and helped establish WEA's Hong Kong office. In 2007, she was admitted to ACP's MSc(Conservation) programme, where her dissertation research into heritage buildings in Shanghai motivated her to consider further studies in architecture, so that she could become a conservation architect. This August, she received notification that she has been admitted to the prestigious Master of Architecture programme at New York's Pratt Institute.

2. Polly Hui (2007 MSc(Conservation) graduate)

   - With a journalism background, Polly worked as a journalist for 11 years starting with the South China Morning Post, followed by AFP and The Wall Street Journal. In 2008, she received the Distinguished Alumni Communicator Awards from her undergraduate alma mater, Hong Kong Baptist University. In 2004, she joined ACP's MSc(Conservation) programme, and this piqued her interest in learning more about conflict resolution in heritage conservation, which led to her further studies in law at HKU. In 2012, Polly became a trainee solicitor at the law firm Howe Williams Bowers, and this year she was appointed the firm's Associate in commercial litigation.

Division of Landscape Architecture

1. Ms. Vincci Mak

   - Led "Career Discovery in Landscape Architecture" (CDLA) to design the *"Sitting Objects x Landscape Cylinders"* Installation at the HKU Chi Wah Learning Commons Lobby.
   The two *Sitting Objects* were designed to engage people to sit, lean, and hang out. The cardboard seats are interpretations of the verbs: 'to twist' and 'to bend'. While the verbs are reflected in the seats' shape, they can also be experienced by the human body. These *Sitting Objects* are exhibited with a series of *Landscape Cylinders* - a collection of aquatic grasses, indoor plants, succulents and cacti planted in acrylic cylinders - to enhance the public space's experiential quality when visitors rest on our *Sitting Objects*.
   This installation will be on display during Aug 15 – 26, 2015.

Department of Real Estate and Construction

1. Dr. Wilson Lu

   - Published a paper "Lu, W.S., Chen, X., Ho, C.W.D., and Wang, H.D. (2015). Analysis of the construction waste management performance in Hong Kong: the public and private sectors compared using big data. *Journal of Cleaner Production* (IF=3.844), Forthcoming".

     Abstract: There is an ongoing debate concerning the disparity between the public and private sectors in relation to construction waste management (CWM) performance: some argue that CWM performance between the two sectors should have no difference since they are under the governance of the same set of CWM related regulations, while others argue that public sector clients should perform better as they are subject to greater social scrutiny. Previous studies comparing CWM performance have suffered from insufficient quality data, leaving the debate on the CWM performance disparity largely inconclusive. Informed by the Coase Invariant Theorem, this research empirically compares CWM performance between public and private projects. It does so by using big data in the form of 2 million waste disposal records generated from around 5,700 projects undertaken in Hong Kong during 2011 and 2012. It is found that there is a notable CWM performance disparity between the public and private sectors, with contractors performing better in managing both inert and non-inert waste in public projects than they do in private projects. Furthermore, the interviews and case studies conducted as part of the research suggest that CWM transaction costs are not high enough to incentivize contractors to manage waste conscientiously and therefore other institutional arrangements, such as promoting the value of environment protection leadership, are critical for achieving superior CWM performance. The research therefore supports the corollary of Coase Invariant Theorem, which asserts that certain forms of institutions would improve CWM performance by reducing transaction cost even though both sectors are subject to the same set of CWM-related formal public policies.

   - Gave a talk "Corporate Social Responsibilities (CSR) in international construction business" on Tsinghua Summer School for International Construction on 6th July 2015, Beijing, China.
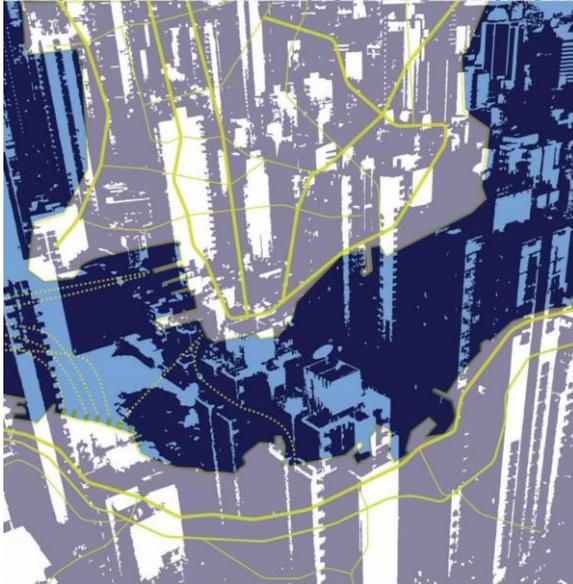
Department of Urban Planning and Design

1. The 1st MUD Degree Show was held from 4 to 7 August in Rooms 417 and 422, Knowles Building. Theses with the theme on Community, Regeneration, and Place Making were exhibited in Rm. KB 422 and Health, Well-Being and the Environment in Rm. KB417 respectively. Exhibition on the Mumbai Studio was held in the corridor outside Rooms 417 and 422 with video show in the exhibition halls.

   The reception for the MUD Degree Show was held from 6 to 8 pm in Rm 417 on 3 August to kick off the Degree Show which was participated by the representatives of related professional institutes and employers and alumni.

   This year's MUD thesis supervisors were Jianxiang Huang, Brian Jan (part-time), Laurence Liauw (part-time), Sylvie Nguyen, Guy Perry (part-time), and Chris Romanos (part-time).

MASTER OF URBAN DESIGN DEGREE SHOW

EXHIBITION
4-7 AUG 2015
10:00-17:00 Knowles Building 417 & 422

Master of Urban Design Programme (MUD) 2014-2015
Department of Urban Planning and Design
Knowles Building, The University of Hong Kong, Pokfulam Road, Hong Kong

2. Professor Rebecca Chiu

   - Awarded a grant in the Knowledge Exchange (KE) Funding Exercise 2015/16 to conduct the "Housing in an Ageing Community – Public Engagement Project". The project aims to disseminate the findings of the contract research "A Comprehensive Study on Housing in an Ageing Community" commissioned by the Hong Kong Housing Society through knowledge exchange activities engaging the academic sector and non-academic sector.

3. Professor Bo-sin Tang

   - Attended the 13th International Congress of Asian Planning Schools Association (APSA 2015) at the University Teknologi Malaysia, Johor Bahru from 12 - 14 August 2015 as the representative of DUPAD and gave a presentation on "Urban Transformation under Metro Railway Development in Hong Kong" in its parallel session.

4. Dean Webster

   - Had a paper accepted in World Development, one of the leading Development Studies journals. (He started writing this paper in 2008!).

     Webster CJ, Wu F, Zhang F, Sarakar C. Informality, property rights and poverty in China's 'favelas'. World Development.

     Abstract*: We analyse associations between informality, property rights and poverty. Informality has been expressed in-terms of property rights (presence/absence, strength, completeness and ambiguity). Drawing upon property rights (entitlements) theories of Sen, deSoto, Ostrom, Alchian and Coase, we refine a list of property rights effects. Using representative household survey of 1208 respondents from 60 urban villages in Beijing, Shanghai and Guangzhou, we examine statistical relationships between household performances on six poverty domains as function of four property rights domains. We find evidence for what we call Sen effects and deSoto effects with some property rights being associated with lower poverty indicators.*

   - Gave a presentation titled "Methodological issues in researching the shift from Phase I to Phase II urbanisation in China" at the New Urban Researcher Seminar Series (NURSS) on Friday, 5 August 2015, in KB 820.

     Abstract: This is mainly a talk on research methods in urban scholarship. The objective is to generate discussion about the correct choice of method in urban planning and urban studies research. This includes questions about normative vs. positive research; empirical v. theoretical research; case study vs. survey research; secondary vs. primary data; longitudinal versus static data series; experimental versus non-experimantal research; qualitative vs. quantitative; design research vs. other forms of research; and so on. Since these issues take on more meaning when discussed in the context of a specific problem, I shall introduce a set of theoretically focused research questions and associated hypotheses relating to contemporary Chinese urbanisation and planning and use these to develop

detailed empirical research plans through a mix of presentation and interactive discussion. I would hope that most PhD students present could fit their own research interests and plans somewhere in the broad sweep of issues considered.

5. Professor Anthony Yeh

    -   Attended the 13th International Congress of the Asian Planning Schools Association that was held at the Department of Urban and Regional Planning of the Universiti Teknologi Malaysia, Johor Bahru, Malaysia from 12 to 14 August 2015 as the Secretary-General of the Association. The Congress was attended by over 200 participants from over 20 countries. The 2017 Congress will be organized by Tsinghua University, Beijing and the 2019 Congress by Seoul National University, Seoul.