

Dean's Roundup: 30 September 2016

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 (kyŏr'ə-tŏr'ē-əl, -tŏr'-) n. nounised by the Dean from curator + editorial]

Dear All,

Rowan Moore recently published a provocative piece in the Guardian online on Patrik Schumacher, Zaha Hadid's successor (thanks Nasrine for alerting me to it):

https://www.theguardian.com/artanddesign/2016/sep/11/zaha-hadid-architects-patrik-schumacher-blueprint-future-parametricism?CMP=share_btn_link

Rowan's basic premise is an elegantly simple critique: the reality of parametric architecture has put its practitioners directly on a path that they profess to be striding away from. Rowan quotes Patrik's mantra about parametric design moving the designer away from intuition, pure formalism, elitism, design-autocracy and 'back' towards greater sensitivity to the environment, a new kind of design-democracy, openness and accountability and a tighter linking of form and functionality.

To this fine-sounding prospectus, the critic holds the mirror of reality: Hadid's distinctive curves are best known for their cladding of great monuments to the dreams of over-ambitious, over-capitalised and under-discerning municipal politicians. Clearly the case is over-stated, but Moore has a good point.

It could have been predicted. Parameterising architectural design solutions without parameterising the functional problems for which a building is a solution, inevitably leads to fantasy structures. Clearly many investors, developers, mayors, and members of the public like fantasy structures. Personally I love some of Zaha's buildings precisely because I am attracted to the visual fantasy that people can live in structures that look like evolved natural objects.

It is a fantasy because the shapes being emulated are shapes consistent with processes quite different to the processes being used to create the buildings or the processes governing their use. Curvaceous cavernous spaces are formed by the erosive effects of water and are an efficient result of those processes. Subtly sloped convex exterior profiles that look like hills and valleys are efficiently created by the eroding effects of water and wind. Sharper forms in nature owe their existence to the actions of moving glacial or continental ice or the micro-action of ice in freeze-thaw cracking rocks. Reproducing such wonderful forms in buildings, in principle, necessitates a high degree of waste and redundancy and expensive construction processes and materials.

For a square plot of land, anything but a rectangular cuboid building is, in theory, wasteful economically, since it doesn't use the full three-dimensional extruded volume permitted by the plot shape. Apply a parametric algorithm to, so to speak, erode the rectangular cuboid away, internally to create a cavern or externally to create a mountain peak, and you will lose occupyable space – but you may also add sufficient design value to compensate for the loss of built volume.

So we have the idea of beauty compensating for lost rental-space. Anderson Lee recently had a fascinating HK exhibition of single story houses. One of the exhibits was a highly designed HK village house where the owner had put his money where his mouth is and built at something like 70% of the permitted FAR. The result: a stunning village house with a market value way over the average.

This demonstrates that in the real world, design is parameterized not in isolated solution-space but in complex, multi-dimensioned problem-solution space. Architects (boutique or commercial) design within space constraints and cost constraints. Smart real world architects balance cost and beauty and this balancing act in itself is something beautiful to behold (the inspiration of simple elegance achieved on a low budget; or the repulsion of an overly indulgent grand project that comes in 3 times over-budget).

Cost is not the only dimension we should be teaching our design students to parameterize. Nasrine is leading a review of the balance between studio and classroom teaching in our architectural curricula and of the teaching of technical matters. The issue for a university architecture school in respect of technical knowledge is not so much the degree of technical skills students graduate with (although we have to give thought to that); it is more the ability of our students and graduates to design within constraints. As I said in another Dean's Roundup not so long ago: to design without constraints is to dream and the true mark of a good designer is arguably to create something beautiful and functional within constraints.

So we should embrace parametric design, but not in the sense often used. Our students should be able to parameterize the context of the sites they design – using BIM and GIS, urban climate models, building physics models, Twitter-based sentiment models, engineering loading models, green space demand models, pedestrian movement simulations and whatever else is at hand. Mathematical parameterization is not good enough on its own, however. Quantified parameters should be moderated with the qualitative 'parameters' more typically used in designs (opinions, user requirements expressed in a brief, formal consultations, ethnography etc).

If the parameterization of architectural design over the past twenty years has led to an over-emphasis on exotic form (exotic to the city), then perhaps a renaissance of parametricism might kick back under a different influence: the availability of big urban data.

I had lunch recently with Chris Law, from Oval Partnerships, where in one breath he was saying first, that architects and urban designers need to embrace 'design by big data' and second, that his firm has collaborated with an English literature professor in HKU's Arts Faculty to develop a narrative methodology as a substitute for the local plan. This was one of those moments for me: numeric computational analysis and story-telling going hand in hand in a successful architectural office. A bit like finding that left vs right is no longer an adequate political dimension.

Old style parametric architecture gave elite designers a new tool for working magic for wide-eyed designophiles. CIM- (City Information Modelling) and BIM-style parametric architecture is a more truly democratizing innovation. This poses a challenge of course.

It demands that architecture evolves. On the one hand it presents a new platform on which architecturally trained professionals can re-capture the project management role architects once enjoyed. On the other hand, it identifies more clearly than ever, the uniquely valuable contribution of the designer. More finely defined divisions of labour in society usually lead to higher skill levels and higher productivity and greater wealth. An architecture school focusing on the contribution of design to raising the value of the built environment, through creating buildings and spaces that contribute higher environmental value, rental value, capital value, social value and cultural value seems a good vision to me.

Congratulations to colleagues for the achievements listed below.

Chris

Teaching and other Achievements

FoA Departments and Divisions

Department of Real Estate and Construction (DREC)

1. Dr. L.H. Li

- Awarded the Sino-British Fellowship Trust Visitorship to visit the University of Glasgow for one month to carry out academic and research exchange.
- Published a book chapter "Understanding the Home Purchase Decision of the Younger Generation in Hong Kong" in the edited book "Progress in Economics Research". Editors: Albert Tavidze

https://www.novapublishers.com/catalog/product_info.php?products_id=6006

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Department of Urban Planning and Design (DUPAD)

1. Professor Rebecca Chiu

- Re-appointed by the Chief Executive as a member of the Appeal Board Panel (Town Planning) for a term of two years from 1 October 2016 to 30 September 2018.

2. Professor Anthony Yeh

- His paper entitled “Economic Transition and Urban Transformation of China: The Interplay of the State and the Market” was shortlisted for the 2016 Academic Award.

<http://www.rtpi.org.uk/knowledge/research/rtpi-awards-for-research-excellence/academic-award/>

3. Dr. Xingjian Liu

- His paper entitled “Measuring Polycentric Urban Development in China: An Intercity Transportation Network Perspective” was shortlisted for the 2016 Early Career Researcher Award.

<http://www.rtpi.org.uk/knowledge/research/rtpi-awards-for-research-excellence/early-career-researcher-award/>

4. Dean Webster

- has been appointed Distinguished Chair Professor at Feng Chia University, Taichung, Taiwan, for 1 August 2016 to 31 July 2017.

Division of Architectural Conservation Programmes (DACP)

1. Dr. Hoyin Lee

- Collaborated with New York Times journalist and China Managing Director Craig Smith on a series on live streaming reports to New York on the living cultural heritage of Hong Kong communities. The first episode in the series, streamed on 4 August 2016, received 43,000 views:
<https://www.facebook.com/nytvideo/videos/1740763846141130/>
- Collaborated with South China Morning Post (SCMP) journalist and Interactives Digital Producer Daniel Moss on “Interactive special: Chungking Mansions, Hong Kong’s multi-layered, multi-story globalised community,” published on SCMP Multimedia website on 8 September 2016:
<http://multimedia.scmp.com/chungking-mansions/index.html>
- Invited by the Urban Renewal Authority (URA) to attend a meeting of the Antiquity Advisory Board, with live broadcast to reporters and the general public in the Public Viewing Room adjacent to the meeting venue, on the URA’s proposed conservation of the remains of some of Hong Kong’s earliest shophouses. The meeting was reported by all major local newspapers and television stations, such as:
<http://hk.apple.nextmedia.com/realtime/news/20160908/55620140>
- Invited by the Global Heritage Fund as a Keynote Speaker for the seminar *The Role of NGOs in Cultural Heritage Conservation in Mainland China and Hong Kong*, and made a keynote presentation, “Moving Forward in Public-Private Partnership: The Role of NGOs in Cultural Heritage Conservation in Hong Kong.” Held at the Asia Society Hong Kong Center on 20 September 2016; attended by about 100 invited guests. This event is for the inauguration of Hong Kong branch of the Global Heritage Fund; other speakers were Kuanghan Li (Director of China Heritage Program at GHF) and (Stefaan Poortman, Executive Director of GHF); moderated by Prof. Puay-peng Ho of CUHK.
See:<http://asiasociety.org/hong-kong/events/role-ngos-cultural-heritage-conservation-mainland-china-and-hong-kong>.

2. Dr. Hoyin Lee and C. P. Lai

- Published an Internet article 「香港原來有四代殖民地建築！」 (“There are Four Generations of Hong Kong Colonial Architecture!”) on 19 September, by invitation of Radio Television Hong Kong (RTHK) for the RTHK Liberal Studies Web (香港電台「通識網」<http://www.liberalstudies.hk/>, a teaching and learning resource website for Hong Kong Senior Secondary Education’s Liberal Studies curriculum). See:
http://www.liberalstudies.hk/blog/ls_blog.php?mode=showThread&id=2950&mother_id=862.

Research Achievements

HKUrbanLab research groups

Architecture, Urbanism and the Humanities Initiative (AUHI)

1. Dr. Cole Roskam

- Curated an [exhibition](#) titled "Accommodating Reform: International Hotels and Architecture in China, 1978-1990" (设计改革：国际饭店与中国建筑，1978-1990) at the Ullens Center for Contemporary Art (UCCA) in Beijing. There was an accompanying public lecture on August 20, and on September 25, I organized a public round table discussion to discuss the exhibition. The event, which was cosponsored by Beijing Design Week, included H.S. Liu (Pulitzer Prize-winning photojournalist), Lell Barnes (John Portman & Associates), Feng Jiang (South China University of Technology), and Zhang Lei (Guardian Investment Company).

The exhibition has been reviewed in *China Daily*, *Leap 艺术界*, *Bloomberg Business News*, and *Urban China 城市中国*, among other publications. It will be on display at the UCCA until October 23.

2. Ms. Sylvia Chan (PhD student of Dr. Cole Roskam)

- Has had a paper accepted at the Association of Asian Studies annual meeting, scheduled for March 16-19, 2017 in Toronto.

Centre of Urban Studies and Urban Planning (CUSUP)

1. Dr. Roger Chan and Dr. Sun Yi (Graduated PhD student)

- Published the following paper:

Chan, R. & Sun, Y. (2016) Planning discourses, local state commitment, and the making of a new state space (NSS) for China: Evidence from regional strategic development plans in the Pearl River Delta, *Urban Studies*, doi: 10.1177/0042098016665954

Abstract: *Grounded in the interpretive tradition, this paper applies the theory of New State Space (NSS) to China's city regionalism. We argue that in the NSS effort in China, planning discourses enable a regulatory framework to be applied at the level of city region. City regionalism corresponds to the conceptualisation of NSS in two dimensions. First, the rise of the city region gives rise to a new territorial form of state administration. Second, the city region is made to be the most appropriate scale encapsulating capital-labour relationship (CLR). This study uses NSS to examine the regional strategic*

development plans (RSDPs) of the Pearl River Delta Region and presents two primary arguments based on an interpretation of the Outline of the Plan for the Reform and Development of the Pearl River Delta (2008–2020) (OPRDPRD) and the preliminary actions of various levels of government based on it. First, RSDPs serve as effective regulatory tools that not only enable new state administration articulating regulatory responsibility throughout the various levels of governmental hierarchy, but also elaborate the CLR in the interest of regional based industrial development, infrastructure construction, and formulation of social policies. Second, the city region has become a site for political rhetoric and related actions whereby regulatory order is unfolding in order to itself effect an economic restructuring and political reshuffle. Creating a city region is 'planning ideological' and solving problems is difficult because of the asymmetric jurisdictional power relations between municipalities.

- Published the following paper:

Yao, S., Chen, W., Chan, R. and Peng, L. (2016) Some Key Aspects of New Urbanization Process under the New Normal of China's Economics Growth. Areal Research and Development, Vol. 35, No.1, Feb 2016.

Abstract: *Fast social and economic growth of China has been achieved in terms of urban modernization construction and major infrastructure construction since the reform and opening-up. But the process also brings disordered development of urbanization, soil erosion and destruction of the ecological environment. Chinese leaders have repeatedly proposed to a healthy and stable development of the new urbanization under the new normal after the 18 th National Congress. This paper introduced the background of economic globalization and expounded the features of new urbanization in China. Proceed from our national conditions, the mode of innovation and reinforce the regularity recognition were put forward. The new ideas of major strategies to urbanization and a people oriented, resource-saving way combining environmental enhancement and harmonious city were also fully elaborated. A rational and healthy urbanization coordinated with resources and environment and Chinese characteristics should be promoted under the "new normal".*

2. Dr. Xingjian Liu

- Published the following paper:

Long, Y., Liu, X., Zhou, J., & Chai, Y. (2016). Early Birds, Night Owls, and Tireless/Recurring Itinerants: An Exploratory Analysis of Extreme Transit Behaviors in Beijing, China. *Habitat International* 57, 223-232.

Abstract: *This paper seeks to understand extreme public transit riders in Beijing using both traditional household surveys and emerging new data sources such as Smart Card Data (SCD). We focus on four types of extreme transit behaviors: public transit riders who (1) travel significantly earlier than average riders ('early birds'); (2) ride in unusual late hours ('night owls'); (3) commute in excessively long distance ('tireless itinerants'); and (4) make significantly more trips per day ('recurring itinerants'). SCD are used to identify*

the spatiotemporal patterns of these four extreme transit behaviors. In addition, household surveys are employed to supplement the socioeconomic background and tentatively profile extreme travelers. While the research findings are useful to guide urban governance and planning in Beijing, our methodology and procedures can be extended to understand travel patterns elsewhere.

3. Professor Bo-sin Tang

- Attended the Annual China Planning Conference at Shenyang, China and gave a presentation on the topic about “Successful Application of TOD: Review of MTR and Urban Development in Hong Kong” at the Hong Kong Forum co-organized by the Hong Kong Institute of Planners and the Urban Planning Society of China on 25 September 2016. He also attended the Young Planners Forum in which a number of MSc Urban Planning students were involved in giving presentations about the planning and development issues of Victoria Harbour.



4. Professor Anthony Yeh

- His paper entitled “Economic Transition and Urban Transformation of China: The Interplay of the State and the Market” was shortlisted for the 2016 Academic Award.

<http://www.rtpi.org.uk/knowledge/research/rtpi-awards-for-research-excellence/academic-award/>

5. Dr. Xingjian Liu

- His paper entitled “Measuring Polycentric Urban Development in China: An Intercity Transportation Network Perspective” was shortlisted for the 2016 Early Career Researcher Award.

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Healthy^{HD} Cities

1. Alain Chiaradia and Dean Webster

- Their project entitled “HK WalksDNA” a high definition walking network map of Hong Kong as the infrastructure for “walkability” innovations has been shortlisted as one of the finalists in the public category of the Walk21HK CityTech Awards

2. Dean Webster

- Dean Webster’s joint paper with Dr. James White of the Centre of the Development and Evaluation of Complex Interventions for Public Health Improvement, Cardiff University, et. al. entitled "Improving Mental Health through the Regeneration of Deprived Neighborhoods: A Natural Experiment", has been accepted on 28 September 2016 for publication in the American Journal of Epidemiology.

1. Professor Steve Rowlinson

- Co-authored a paper with Dr Jia, A Y(Curtin University, Australia), Loosemore, M(UNSW, Australia), Gilbert, D(KAEFER, Australia) entitled "Shielding Workers From Heat Stress:Reconciling The Paradoxes Of Protection And Production Logics" at the 32nd Annual ARCOM(Association of Researchers in Construction Management) Conference, 5-7 September 2016, Manchester, UK.

Abstract: *Safety and productivity are often perceived as competing demands in a construction project organisation and the strategies of achieving them as a dilemma for project decision-making. We explore the safety-productivity paradox through an institutional logics lens. Through an in-depth single case study of climatic heat stress management in a subcontractor's project organisation under a mega-project in north Australia, the manifestations, consequences and interrelations of three institutional logics of processing safety in production are explored: the protection logic, the production logic and the reconciling logic. The results illustrate the paradoxical effects of the protection logic and the production logic and the emergence of a reconciling logic leading to innovation that improves both safety and productivity. However the reconciling logic is missing at senior and middle management levels of the production side of the organisation, and overwhelmed by the strong production logic. It is concluded that the reconciling logic can be further established and endorsed through adjusting the structure and modification of the production and human resource management system.*

- Visited the Centre for Lean and Virtual Construction (BIM Studio) at Building & Construction Authority(BCA) Academy in Singapore, and had a meeting with the Director and Faculty members on September 23rd, 2016

2. Dr. Wilson Lu

- Co-authored the following paper:

Dr Wilson Lu and Ms. Xi Chen (A PhD student working with Dr Wilson Lu) published a paper "Chen, X. and Lu, W.S. (2016). Identifying factors influencing demolition waste generation in Hong Kong. *Journal of Cleaner Production*, forthcoming".

Abstract: *As demolition normally generates the largest proportion of construction and demolition (C&D) waste, more importance should be attached to it for effective C&D waste management. Previous studies have attempted to understand demolition waste generation (DWG) but the understanding remains relatively insufficient, in large part due to the erratic and poor quality data available. This research aims to identify factors impacting DWG by making use of a big dataset which has recently become available as a result of C&D waste management practices in Hong Kong. Using big data analytics, it is confirmed that DWG, demolition cost, and duration of conducting the demolition work are dependent on each other. It is also found that geographical location, building usage, and the public-private nature of a building also have a significant impact on DWG in the Hong Kong context. Based on the correlations between DWG*

and these identified factors, stakeholders may introduce proper managerial or policy interventions to effectively minimize DWG. For example, public policy-makers may formulate more tailor-made regulations to attach more importance to the locations, usages and public-private nature, which have more potentials for demolition waste minimization.

Rural Urban Lab (RUL)

1. RUL received a donation from the Oyun Foundation of the Lorinet family to support its ongoing research into an incremental urban strategy for the “ger” districts of Ulaanbaatar, in particular, to design a prototype for a ger-plug-in that will incorporate environmental strategies and be tested during the winter.

The donor from the Lorinet family was impressed by the ongoing design research Joshua has been doing in Ulaanbaatar and initially got in contact with him after seeing the following article reported by the Financial Times in 2015:

FINANCIAL TIMES

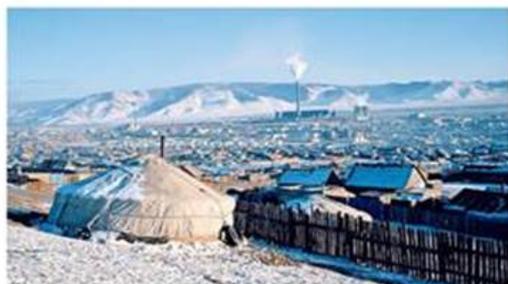
Home World Companies Markets Global Economy Lex Comment Management Life & Arts
 Arts Magazine Food & Drink House & Home Lunch with the FT Style Books Pursuits Travel Column How To Spend It Tools

January 23, 2015 3:03 pm

Out of step: the \$28bn plan to modernise Mongolia's Ulan Bator

Nicola Davison

Project will seek to move former nomads living in poor areas of the capital out of their traditional tents and into modern flats



A ger district outside Ulan Bator

In 1990 Enkhtuya Baatar was a nomadic herder living in Mongolia's northern Bolgin province when, one day, wolves began picking off her sheep. When a bitter winter, known as a *zud*, killed her remaining livestock Baatar, now 55, had little choice but to pack up and move her husband and four children to Ulan Bator, Mongolia's capital. They rented a room on the outskirts of the city, sleeping on the floor. "We didn't have any furniture, just a little old chest that served as a table, the place to make food, a cupboard, everything," she says.

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Mongolia is one of the most sparsely populated countries in the world, a land of desert, steppe and mountains of dizzying expanse. Ulan Bator, though, is brimming. In 1989 and 1990, when the Soviet Union collapsed and Mongolia became a democratic market economy, 27 per cent of the country's population lived in the city. In recent years rocketing economic growth, spurred by the country's vast and mostly untapped natural assets, has drawn herders to the capital in droves. Today almost half the country's population, about 1.3m people, live in the city. The Asian Development Bank estimates about 40,000 migrants arrive each year.

With a lack of affordable housing and limited space in central Ulan Bator, most newcomers have little choice but to settle in ger districts, named after the country's traditional round felt tent, which translates as "home". These sprawling, unplanned neighbourhoods, formed of gers, makeshift houses and dirt roads, radiate from the high-rise office and apartment blocks of the centre like rings on a tree stump, with the newest settlements the furthest flung.

Once regarded as a temporary byproduct of modernisation, these districts now house about 60 per cent of Ulan Bator's population. Basic services such as running water, sewage and waste disposal are near absent, while schools, medical centres, community space and public transport are oversubscribed. During the winter, when temperatures drop to -40C, residents burn coal and sometimes rubbish on stoves, making Ulan Bator's air among the filthiest in the world.



Radruun Gardi, an adviser at the Zorig Foundation, an NGO working in the ger districts, describes Ulan Bator as "extremely divided". "The truth is a very low percentage of people living in the ger districts can even dream of moving into one of these apartment buildings," he says. "Integration is a problem because it's such a shift from a herder mentality to living in a city. The word 'community' doesn't exist in the Mongolian language."

Although the ger areas have long received attention from global charities and development banks, the barrage of new arrivals has meant that conditions have little improved.



The year 2012 brought hope of change. A new mayor, Erdeniin Bat-Uul, was appointed and his

2. Joshua Bolchover, John Lin and Christiane Lange

- Guest-edited the latest issue of Architectural Design entitled “Designing the Rural: A Global Countryside in Flux”, published by Wiley, London 2016 featuring articles by the editors and colleague Cole Roskam.