

## Dean's Roundup (Friday, 19 September, 2014)

**Roundup:** *Ceiling function*, the mathematical operation of rounding a number up to the next higher integer.

**Roundup:** a term in American English referring to the process of gathering animals into an area, known as a "Muster" in Australia.

**Rounding up:** when a helmsman cannot control a boat and it heads into the wind

**Roundup:** the plan for an invasion of northern France by Allied forces during World War II (Wikipedia)

**Dean's Roundup:** part blog, part bulletin; part honour roll, part curatorial [**cu**'**ra**-**to**'**ri**-**al** (ky<sup>oo</sup>r<sup>ə</sup>-tōr'<sup>ē</sup>-əl, -tōr'<sup>ə</sup>)] n. nounised by the Dean from curator + editorial]

Dear all,

Welcome back to the new academic year. There are many in-house strategic matters that I could raise in this first Dean's Roundup of the new session but I thought I would instead, pitch-in with some thoughts about symmetry.

Symmetry is important to architecture. It has a less obvious place in the canons of planning, landscape and real estate economics, but look closely and it is all around us adding to our conscious and subliminal comfort and to the values bid in property markets for superior locations.

The scientific definition of a symmetrical object is one that is invariant to transformation. Commonly this is associated with reflective transformation but symmetry strictly describes many other transformations including rotation and scaling.

I have mentioned before one of the pivotal moments in my intellectual and vocational education, when as a young high school pupil my art teacher asked his students to divide a line in a way that was pleasing to them. In my memory, the statistical distribution of the proportions created by each student dividing his/her line was tri-modal. Some clustered around the centre of the line, dividing it roughly in half with reflective symmetry. Others clustered at one or other quartile (3/4 along or 1/4 along). My mark on the line was exactly (to the 1mm accuracy of the teacher's ruler) at the position of the golden ratio, approximately equal to 1.62 (warm glow). Why had my subjective emotionally-calibrated evaluation (I was 'feeling' where to put the dividing mark) arrived at what mathematicians denote as *phi*? Perhaps because I had innocently and subconsciously been in search of symmetry as I placed the mark on my pencil line. The symmetry in question is scaled symmetry: the pencil mark divided the line into a+b, such that  $(a+b)/a = a/b$ . The ratio of the whole line to the larger part of the line equaled the ratio of the larger part to the smaller part of the line. The pattern (ratio) is repeated at two different scales. It is invariant across scale. Scale-independent patterns are a form of symmetry and a form of beauty. It is remarkable that we can develop an instinctive appreciation of such regularities without doing the math.

DUPAD's Huang Jianxiang is working on an algorithm that automatically measures the proportion of different kinds of surfaces or objects, colours or textures seen from any particular point in a 3D urban model. Imagine if he took a set of 'snap-shots' of townscapes associated with various urban design typologies and measured the degree of scale-free symmetry in each. This could be done, for example, by measuring the fractal dimension of each image; or by

classifying each image into various classes of object and computing the ratio of the area of the most common object and the area of the second most common object; then the ratio of the second and third most common objects etc. I would hypothesise that townscapes with a regularly recurring ratio thus measured would, if calibrated on human observers, be regarded as more interesting or more beautiful than townscapes without scale-independent qualities.

I recently read a paper that did something similar analysing landscape images. Photos of naturally formed landscapes tend to have scale-free properties. You would not intuitively think of one of John Constable's Suffolk landscapes as symmetrical. But they typically are – in the sense that the ratio of colours in blocks at one scale (eg in a small 5cm square portion of the painting) is similar to the ratio of colours at a larger scale.

So how about some research exploring the hidden symmetry behind highly valued/appreciated elements of buildings and townscapes: historic building facades, market streets, iconic skylines, mixed-use areas, vernacular street layout and so on?

Congratulations to those mentioned below, with a special mention to John Lin for winning one of the prestigious HK UGC 2014 teaching awards. This is a most impressive start to the year with three significant prizes, six papers in good journals, a Routledge book, lots of high level local and international professional and academic work and more.

Chris

# Architectural Conservation Programme

## 1. Lee Ho Yin and Lynne DiStefano

- Published a conference paper, "Purposeful Repurposing: Adaptive Reuse of Hong Kong's Heritage Buildings," in the proceedings of The Hong Kong Institute of Surveyors Annual Conference 2014 (held on 13 September 2014), *Hong Kong: Our Smart City in the Next 30 Years* (Hong Kong: The Hong Kong Institute of Surveyors, 2014), 22-25.
- Made a presentation entitled "Adaptive Reuse of Hong Kong's Heritage Buildings: the Good, the Bad and the Ugly" at The Hong Kong Institute of Surveyors Annual Conference 2014, held at Conrad Hong Kong, 13 September 2014. (Attended by about 300 surveyors and other professionals)

THE HONG KONG INSTITUTE OF SURVEYORS  
香港測量師學會

30週年  
30th Anniversary  
The Hong Kong Institute of Surveyors

The Hong Kong Institute of Surveyors  
**Annual Conference 2014**

Hong Kong:  
**Our Smart City**  
in the **Next 30 Years**

13<sup>th</sup> September 2014 (Saturday)  
Grand Ballroom, Conrad Hong Kong, Pacific Place,  
88 Queensway, Hong Kong

Dr LEE Ho Yin / Prof Lynne D. DISTEFANO

Purposeful Repurposing: Adaptive Reuse of Hong Kong's Heritage Buildings  
Dr Lee Ho Yin  
Associate Professor, Department of Architecture, The University of Hong Kong  
Prof Lynne DiStefano  
Adjunct Professor, Architectural Conservation Programme, The University of Hong Kong

**Abstract**  
2007 was the year when the Chief Executive of the Hong Kong Special Administrative Region announced Hong Kong's first ever Conservation Policy in his annual Policy Address. In eight paragraphs, the longest ever on the agenda of heritage conservation, the detailed policies laid down a roadmap of how conservation in Hong Kong would be carried out. In particular, paragraph 51 states that "revitalisation, rather than preservation alone, should be pursued to maximise the economic and social benefits of historic buildings." This paper explores the concept of "revitalisation," the Hong Kong terminology for an approach in conservation that is more commonly referred to, worldwide, as "adaptive reuse." As "adaptive reuse" becomes an increasingly relevant approach to the conservation of heritage buildings, the term has morphed into more creative variations, such as "constructive conservation" by English Heritage (2008). In Hong Kong, "revitalisation" began life in 2008 under the Revitalisation Scheme, an initiative that is part of the implementation of Hong Kong's Conservation Policy. Under this scheme, government-owned heritage buildings that are not Declared Monuments are "revitalised," or in other words, adapted for new uses. Whether it be adaptive reuse, constructive conservation or revitalisation, the definitions amount to the same emphasis on permitting alterations/changes for the purpose of given a building continued use – a new lease of life.

**What's in a Name – Adaptive Reuse, Constructive Conservation and Revitalisation**  
In the future, when we look back in time at the early history of post-Handover Hong Kong, the year 2007 will be seen as the historic year in which Hong Kong began to see conservation of its built heritage as part of sustainable development – a perspective shared by many countries worldwide. This was the year when the Chief Executive of the Hong Kong Special Administrative Region announced Hong Kong's first ever Conservation Policy in his annual Policy Address. In eight paragraphs (the longest ever on the agenda of heritage conservation), the detailed policies laid down a roadmap of how conservation in Hong Kong would be carried out. In particular, paragraph 51 states:

In my view, revitalisation, rather than preservation alone, should be pursued to maximise the economic and social benefits of historic buildings. This is in line with the concept of sustainable conservation.<sup>1</sup>

But what is "revitalisation"? It is the Hong Kong terminology for an approach in conservation that has many names that amount to the same thing. The root term is "adaptive reuse," which is defined by Heritage BC (among others) as:<sup>2</sup>

Using an old building for a new purpose or function. Sometimes involves extensive alteration to both the exterior and interior.<sup>3</sup>

While both "adaptive reuse" and "preservation" are standard conservation approaches, the former involves alteration while the latter involves maintaining the existing state. As "adaptive reuse" becomes an increasingly relevant approach to the conservation of heritage buildings, the term has morphed into more creative variations, such as "constructive conservation" by English Heritage (2008), which is defined as:<sup>4</sup>

the broad term adopted by English Heritage for a positive and collaborative approach to conservation that focuses on actively managing change. The aim is to recognise and reinforce the historic significance of places, while accommodating the changes necessary to ensure their continued use and enjoyment.<sup>5</sup>

<sup>1</sup> See: <http://www.policyaddress.gov.hk/07-08/eng/51.html>.  
<sup>2</sup> See: <http://www.heritagetc.ca/resources/guides/tps-1/terms-definitions>.  
<sup>3</sup> See: <https://www.english-heritage.org.uk/professional/advice/conservation-principles/constructive-conservation/constructive-conservation-in-practice/>.  
<sup>4</sup> See: <https://www.english-heritage.org.uk/professional/advice/conservation-principles/constructive-conservation/constructive-conservation-in-practice/>.

22 The Hong Kong Institute of Surveyors Annual Conference 2014

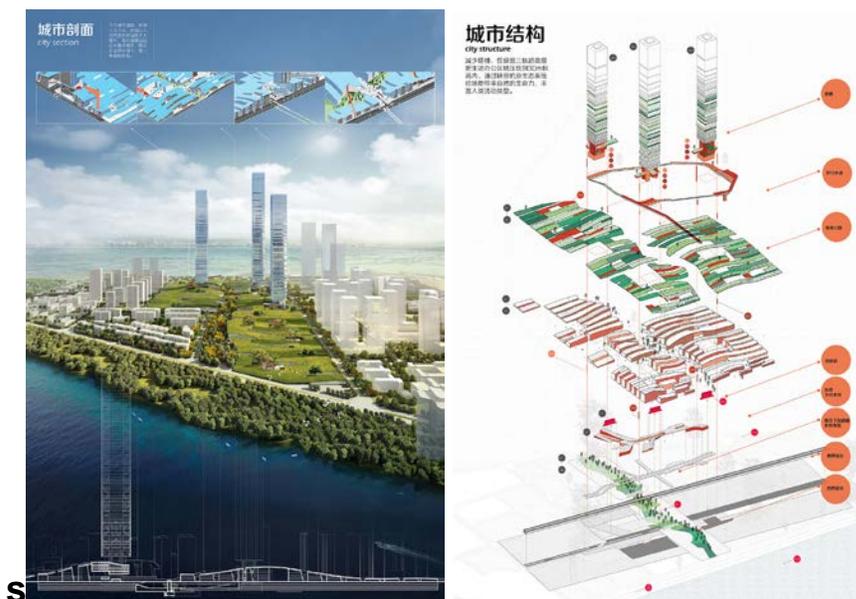
# Department of Architecture

## 1. Ms. Juan Du

- Invited to give lecture at research forum “**Urban Past: History in the Modern City**”; and panel participation of “**Urban Present: Global Urban Design Practice in China Today**”. Events organized by Princeton University, held at the HKU Shanghai Study Center on 31 August, 2014.
- Invited to present design research at the “Urban Formation Symposium”, organized by AASH Summer School 2014, Architectural Association on 23 July, 2014

## 2. Mr. Yan Gao

- Was invited as the Academic Creative Consultant by Huahui Design Co. Ltd in Shenzhen for the international competition The Cloud City Shenzhen Bay (Mega City). Our entry Emerging Sci-Garden City has won the 2nd Prize while the 1st Prize was vacant. I applied my methodological and theoretical research findings for the design practice to project the possible future for this real project, as the result the design outcomes was the synthesis of multiple domains including new working x living x socialising style in China; low-rise high-density hybrid urban patch; inspiring urban space energising citizens across the fields of art, move, work, live and entertainment; a multi-layered volumetric “valley” with human scale streets, and; continuous green network with sufficient space between towers for migratory birds and existing bio-migration.



- The Village China Summer Program has just successfully finished. To sum up this program, we have visited 4 villages, i.e. He Xi 河西, Jiang Zuo 江苴, He Shun 和顺, Jiang dong 江东 in Tengchong, Yunnan Province. We made some preliminary survey about He Xi 河西, and thorough investigation for Jiang Zuo 江苴 (the gate village to Gao Li Gong Nature Reserve 高丽贡自然保护区 famous in the world for its extremely rich bio-diversity), which ended up with more than 60G files including interview, sketches, photos and drawings for 90ish households, in respect of our research testing of applying Big Data theory and methodology to village study, as well as deploying the Universal Manless 3D Scanning Aircraft to produce a full 3D model of the entire village. Other two villages more in the tour mode. The collected data helped us to initiate 4 design projects for Jian Zuo village. Students stayed in an ancient court yard hotel and spend 5 days to document the work, i.e. 2 days in data visualization and statistics, 3 days for the 4 design

projects, all of which have received commendations and request for continuation into real projects by the local government. Further actions to be sought subject to time and fund.



### 3. Mr. Stephen Lau

- Has published three recent journal papers:

Article title: Contextualizing green building rating systems: case study of Hong Kong  
Journal title: Habitat International 44 (2014) 282-289  
Zhonghua Gou and Stephen Siu Yu Lau  
<http://www.elsevier.com/locate/habitatint>

Article title: Visual alliesthesia: the gap between comfortable and stimulating illuminance settings  
journal title: Building and Environment 82 (2014) 42-49  
Zhonghua Gou, Stephen Siu Yu Lau and Hai Ye,  
<http://www.elsevier.com/locate/buildenv>

Article title: Healthy Campus by Open Space Design: Approaches and Guidelines  
Reference: FOAR129  
Journal title: Frontiers of Architectural Research  
Stephen Siu Yu Lau, Zhonghua Gou and Liu Yajin  
<http://authors.elsevier.com/sd/article/S2095263514000430>

4. Mr. John Lin

- Has been honoured with the 2014 UGC Teaching Award. Please see below the congratulation message from the President and Vice-Chancellor on John's winning of the award:

*From: the President and Vice-Chancellor [vcoffice@hku.hk]*

*Sent: Wednesday, September 10, 2014 11:00 PM*

*Cc: [mail.service@intranet.hku.hk](mailto:mail.service@intranet.hku.hk)*

*Subject: Congratulations to Mr. John Lin on winning the 2014 UGC Teaching Award*

*Message from the President and Vice-Chancellor*

*Dear Colleagues, Students and Alumni,*

*As you might already have heard, we have some terrific news: Mr. John C.H. Lin, Associate Professor of the Faculty of Architecture, has been honoured with the 2014 UGC Teaching Award. Please join me in extending to him our warmest congratulations! The Award was launched by the UGC in 2011 to honour academics in the UGC-funded institutions for their outstanding teaching performance and achievements, as well as their leadership in and scholarly contribution to teaching and learning. Only 2-3 awards are made each year.*

*Since joining the University in 2006, Mr. Lin has distinguished himself as a first-rate teacher and researcher in architecture, and as a pioneer of experiential learning, both within his discipline and across disciplines. Mr. Lin's portfolio demonstrates sustained commitment to experiential learning in his own teaching, as well as leadership in experiential learning as an institutional strategic priority. In recognition of his outstanding contributions in enhancing student learning, he was awarded the University's 2010 Outstanding Teaching Award.*

*It is most encouraging to note that three of our colleagues have been conferred this prestigious Award in the past four exercises, which is clear evidence of the University's excellence in teaching and learning.*

*Professor Peter Mathieson  
President and Vice-Chancellor*

## Division of Landscape Architecture

### 1. Mr. Ashley Scott Kelly

- ground.hk <<http://www.ground.hk>> is launched

After a few months of programming, the first full run of this "model" of Hong Kong Island is finished and uploaded to a pan-zoomable online platform, complete with Google Street View. Also rendered in 3D are sections from the 1982 PWD Mid-levels study.

There are many issues as one might expect from a "hands free" algorithm, but this first pass is phenomenally better than I had expected. Comments welcome.

This map presents initial trials of methods that can enable designers parametric and categorical control over complex surfaces, point clouds, and heavy data, from site-scale manipulations to the projective visualization of entire territories and land mosaics. The test site is a 27-square-kilometer area of Hong Kong Island that contains a representative sample of the territory's "features," including forested mountainsides, cascading artificial slopes and superimposed public grounds. The model is 100% interpolated from spot elevations, non-urban contours, and two-dimensional feature data.

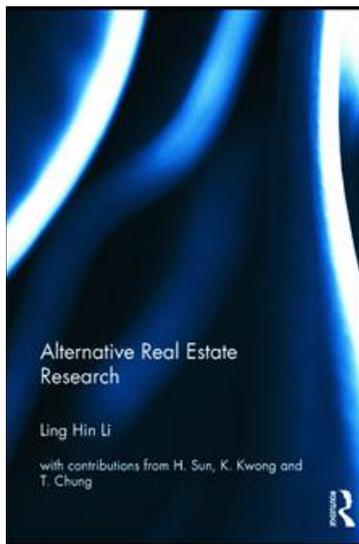
# Department of Real Estate and Construction

## 1. Professor K W Chau

- Attended the International Real Estate Finance and Investment Conference, organized by the Department of Land Economy, Cambridge University and the Cambridge University Real Estate Finance Asian Alumni Society, 9 September 2014, The Peninsula Hong Kong, Hong Kong, as an invited panelist.

## 2. Dr. L H Li

- Has recently published a new book Alternative Real Estate Research. English version by Routledge, book's ISBN 9781138782082. The Chinese version is published and distributed by Tsinghua University Press in Mainland China :



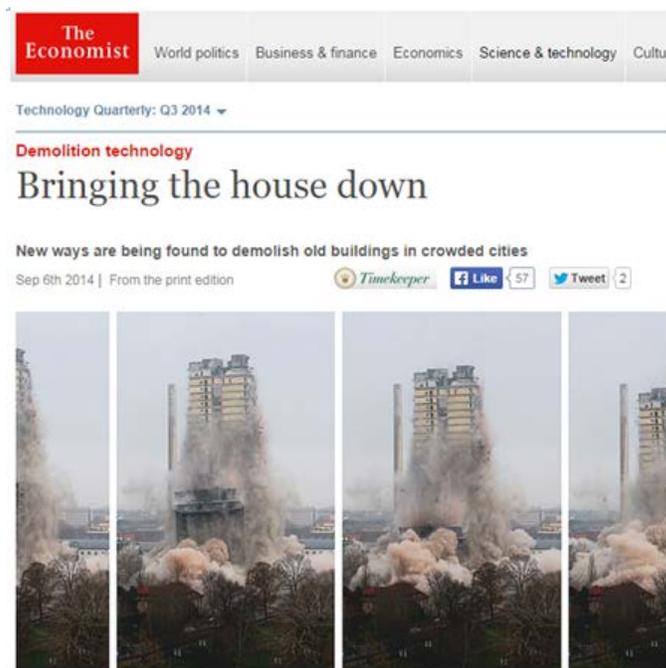
- Has been invited to deliver a paper on urban regeneration practices in Hong Kong and China at the 5th Asia Pacific Ministerial Conference on Housing and Urban Development in November, South Korea. The conference will have delegates from the governments of Asia Pacific as well as Middle-East countries.

### 3. Dr. Wilson Lu

- Made a roundtrip to Faculty of Science and Engineering, Queensland University of Technology, Brisbane, Faculty of Society and Design, Bond University, Gold Coast, School of Civil and Environmental Engineering, University of New South Wales, Sydney, Australia, and School of Design and Environment, National University of Singapore, Singapore.
- Was appointed as External Associate Supervisor of a PhD student at Queensland University of Technology, Brisbane, Australia.

Dr. Wilson Lu, Dr Sean Peng, Mr. Cong Liang (A PhD student jointly supervised by Dr. Lu and Prof. Rowlinson), and Prof. Steve Rowlinson

- Published a paper “**Lu, W.S., Fung, A., Peng, Y., Liang, C. and Rowlinson, S. (2014).** Cost-benefit analysis of Building Information Modeling (BIM) implementation in construction projects by demystifying the time-effort distribution curves. *Building and Environment* (IF: 2.7). Forthcoming”.
- was invited to give a keynote speech “Construction waste management in Hong Kong – facts, figures, and fantasies” on CIOB (HK) Annual Conference 2014 on 12 September 2014.
- The interview on “building demolition technologies” was published on The Economist – “Bringing the house down”, *The Economist*, 6<sup>th</sup>-Sep-2014 (<http://econ.st/1Dhyu4B>)



...

“Jacking” buildings in this way generates a bit less dust than explosives. Even so, the resulting clouds can still be thick enough to require buildings in the neighbourhood to be sealed. Other ways of physically pushing parts of the building apart are being developed. Excavators with hydraulic arms of unprecedented length and power are one alternative. Their use is growing in China—and not a moment too soon, says Wilson Lu, a professor of architecture at the University of Hong Kong. Many cities in China are plagued by air pollution and the pace of demolition and construction is frantic. It is not unusual for buildings in China to last only a few decades, in part because they were badly built.

...

Little of mainland China’s demolition waste is recycled but the proportion is growing, says Hong Kong’s Dr Lu. This is partly because it is becoming harder for haulage firms to find places to dump rubble illegally without being photographed by angry locals with smartphones. Two new types of disassembly could help increase recycling further.

#### 4. Professor Steve Rowlinson and Dr. Koh Tas Tong

##### - HKCA & Steve Rowlinson's Cost Escalation Study Press Conference, 1 Sep 2014

Prof Steve Rowlinson has been commissioned by the Hong Kong Construction Association (HKCA) to study the reasons behind construction cost escalation in Hong Kong. The study aims to identify the sources and explain the causes of cost escalation in the construction industry in recent times. The study has culminated with the production of a "Cost Escalation Report" by Prof Rowlinson and a press conference organized by the HKCA on 1 Sep 2014. In the press conference, Dr Koh, with the authorization from Prof Rowlinson, had presented the findings of the study to a group of HKCA senior committee members and media reporters including the reporters from the South China Morning Post, Ming Pao, Apple Daily, Oriental Daily News, Ta Kung Pao, and The Sun. The study had also been presented to the HKCA's Senior Management Committee Members and ordinary members in earlier occasions.



#### 5. Dr Koh Tas Yong

- Has been invited to present the findings of the construction workforce alcohol survey to the British Chamber of Commerce's (BCC) Construction Industry Group (CIG) at their meeting on 28 Aug 2014. The alcohol survey was conducted in May 2014 with the MTRC construction workforce. The survey was jointly led by Prof Steve Rowlinson, Dr Koh, and Dr John Shen with the help of a group of both undergraduate and postgraduate students. In the meeting, Dr Koh had presented the drinking patterns of the construction

workforce to the group of senior personnel of construction industry who are the members of BCC.

6. Mr. Wong Kwai Yiu (a BSc(Surveying) student – class of 2014)
  - Is awarded CIOB(Hong Kong) Outstanding Student Awards 2013/14.
7. Mr. Wong Kwai Yiu (BSc(Surveying) students – class of 2014 (Supervisor: Professor Steve Rowlinson))
  - Is awarded CIOB(Hong Kong) Outstanding Student Awards 2013/14.

## **Department of Urban Planning and Design**

### 1. Dr. Roger Chan

- Department of Land Economy of the University of Cambridge's visit

Staff and research students of Department of Land Economy of the University of Cambridge visited our Faculty on Monday 8 September 2014. During this visit, the Faculty hosted a lunch as well as held a PhD workshop in the afternoon. During this workshop, students from HKU and the University of Cambridge gave presentations. The workshop was very well attended and the students found the presentations thought-provoking.

The visit was well received and proved very meaningful.

Roger Chan was the event chairman, Professor K W Chau, Dr. Mandy Lau and Dr. Wilson Lu attended the PhD workshop.

### 2. Professor Rebecca Chiu

- Invited by the China Academy of Urban Planning & Design (Beijing) to give a presentation on "The comparative roles of the government and the market in the housing systems of Hong Kong and China", at the *Symposium of Market Function and Government Roles: the Future Direction of Housing Reform after the Eighteenth Plenary Session*, a celebration activity of the 60th Anniversary of the Academy, 22 August 2014.
- Appointed as a Member of the Green Building Faculty in the Social Sustainability and Community Aspects, Hong Kong Green Building Council Limited and the BEAM Society Limited, 25 August 2014 - 30 June 2016.

### 3. Professor Bo-sin Tang

- Gave a presentation entitled: "Creating Communities, Developing New Towns or Managing New Growth Areas? Past Lessons and Future Direction" at the University-Government-Industry Forum on *New Ways of Development for New Towns in Hong Kong*

organized by Research Institute for Sustainable Urban Development (RISUD) of the Hong Kong Polytechnic University on 26 August 2014.

#### 4. Dean Chris Webster

- Published a book review:
  - o Webster CJ (2014), Morphet, Janice. 2011. *Effective Practice in Spatial Planning*. London: Routledge. 296 pp. \$57.95 (paperback). ISBN 978-0-415-49282-9, reviewed in Journal of Planning Education and Research, 1-2. DOI: 10.1177/0739456X14550589
- Had the following papers accepted for publication:
  - o White J, Greene G, Dunstan F, Rodgers S, Lyons RA, Humphreys I, Webster C, Palmer S, Weightman A, Elliot E, Phillips C, Fone D, Communities First, mental health and social cohesion (ComFi): protocol for a natural experiment to evaluate the impact of area-wide regeneration on mental health and social cohesion, British Medical Journal Open, Accepted September 2014.
  - o Yang Xiao, Webster C and Orford S, Identifying house price effects of changes in urban street configuration: An empirical study in Nanjing, China. Urban Studies. Accepted September 2014.
- With Dr. Chinkmoy Sarkar, has been honoured with the Royal Town Planning Institute's Excellence in Spatial Planning Research: Academic Award 2014, presented at the RTPi Planning Research Conference dinner at St Edward's College, Oxford University on 10 September 2014. See: <http://www.rtpi.org.uk/briefing-room/news-releases/2014/september/excellence-in-spatial-planning-research-awards-winners/> and <http://www.rtpi.org.uk/ellawards>

UK Biobank Built Environment Morphometrics for Wales:

[https://biobank.ctsu.ox.ac.uk/crystal/docs/ard-1195\\_UKBBuiltEnvWales.pdf](https://biobank.ctsu.ox.ac.uk/crystal/docs/ard-1195_UKBBuiltEnvWales.pdf)

UK Biobank Built Environment Morphometrics for UK:

<http://biobank.ctsu.ox.ac.uk/crystal/label.cgi?id=100115>

