Dear all,

Simple versus complex: rules versus visuals

This week I joined John Lin, Professor Anders Abraham of the Royal Danish Academy of Fine Arts and others in a workshop that reflected on a series of first-year BAAS studios held over three years. One of the linking themes for the studios was complexity and scale.

Studio 1 had students arranging scaled-down city blocks in groups with (it seemed to me) various implicit but non-codified rules linking individual group member interventions and group objectives.

Studio 2 required students to manually decrypt and then codify the vernacular rules governing the buildings, configuration and uses in a Guangdong village.

Studio 3, this year’s, moved to the cladding scale and had groups of students working with scaled geometric 3D blocks – templates - to build them into a panel that had a prescribed function with respect to light and wind. In creating a syntax and grammar from these visual language elements, they were asked, among other things, to consider how simplicity and complexity featured in the emerging patterns. Forgive me if this over-simplifies, but I think this was the gist.

I asked one group of students to describe what was happening in their design in respect to simplicity and complexity. The base element for their panel (they also had to introduce secondary shapes at some stage) was small in size and L-shape, I think. The design seemed to proceed by systematically shifting the angle at which the L-shaped elements protruded from the vertical square frame (latticed to support the elements). Three of four L-shaped elements were arranged together into a tile and these tiles were placed side by side, with say 20 per row of the lattice. Each of the elements in a tile was shifted by a small angle compared to the elements in the tile before it. The linear mathematical progression continued down the rows so that at the top of the panel, the elements were flat and at the bottom, they were protruding at various angles. The basic algorithm as I have described it was complicated by each element in any given tile being tilted by the same incremental angle but on a different axis from the other elements in that tile.

(If you’re getting a little lost, I am purposefully describing this in prose rather than pictures, poetry or maths, to make a point, which shall become clear)
The visual effect was to move from a simple pattern at the top of the panel to a complex one at the bottom (ignoring the foreign elements introduced for another part of the exercise). The transition from simple to complex was interesting. Certainly non-linear. Possibly even chaotic for a section. The simple part was easily interpreted as being composed of regular elements. As the angle of protrusion gradually increased, the pattern remained visually simple. At a transition point, you could see roughly what was happening but the regularity was being broken up by configurations not easy to interpret (‘where did that bit come from?’). Beyond that point, the pattern was not easy to interpret (‘are there the same number of elements in each tile?’ ‘Is there any regularity to the juxtapositions or to the angles?’).

The transition from simple to complex or chaotic visuals, seemed to be happening as a result of a constant (simple) underlying design and construction algorithm – a small incremental shift in angle around fixed axes for each of 3 or 4 L shaped elements in a tile. This is quite a profound discovery for a first year BAAS student to have made. If they were to have experimented with light and materials, they would have probably have discovered that the light angle and reflective properties of the material mediates the relationship between simple design algorithm and complex visual effect.

Four thoughts:

(1) This kind of studio is a rich learning experience for students;

(2) exploring connected themes across years with a linked pedagogy potentially adds a lot of value – so long as the connections are robust intellectually and students have opportunity to explore them;

(3) students should be encouraged to formulate and formularize their analysis using methods other than graphics and interpretative text (this applies to most if not all design studios in my view) – analytical pros, geometry, algebra, logic (IF…THEN), poetry, musical score, computer pseudo-code, a made-up language/grammar and so on. In general, I would suggest that the more formal the expression of a students analysis, the better the learning experience, since the student has had to filter his or her personal interpretation of the design through the language of an established knowledge domain. This makes for maturity and adds substance in many ways;

(4) this process would be helped by input from other disciplines – by background reading, the involvement of invited guests at an early stage of designing the studio experience; open crits and so on.

On the last note, we might want to experiment in the Faculty with cross-discipline peer-peer and teacher facilitated informal crit sessions (after the final assessment, or before – with different results). Studio 2 above (decrypting village configurational DNA) would be a great one to expose urban design, landscape, surveying, planning and conservation students to. Joint studios are complicated but having small groups from other disciplines participate in a collective discussion could have all manner of unpredictable and creative results.

Congratulations to those appearing below – especially to Zhu Tao and Yan Gao for winning two important design competitions. Both will be looking for ways to develop teaching and research agenda on the basis of their projects.

Chris
1. Ms. Juan Du

- organized Discussion Symposium “Urban Nature in Megacities”. Presentation and discussion included research findings of Safari SZHK, Safari Sao Paulo, and Hong Kong Platforms.

- invited Speaker to Discussion Panel of “Xiao-Chang-Wei Village Renovation Project” organized by the Shenzhen Municipal Planning and Lands Bureau Design Department.

2. Mr. Yan Gao

- led by Yan Gao, The design proposal Broken Bridge & Hidden Dragon (斷橋藏龍) has won the First Prize of the Professional Group in the Design Ideas Competition for Preservation Corridor for Lung Tsun Stone Bridge Remnants (http://www.ltsb-design.hk/). Yan will continue to engage with the Leisure and Cultural Services Department and the Architectural Service Department of the HK Government to realize the project which is expected to start on site in 2018.

3. Ms. Tris Kee

- was interviewed and reported by Mainland media on the exhibition installation, Hong Kong Value Farm, at the 5th Shenzhen Bi-city Biennale of Urbanism\Architecture.

http://huanan.artron.net/20140114/n559123.html

https://www.dropbox.com/s/lwbftmykgc4cz0w/Tris%20Interview%20on%20HK%20Value%20Farm.mp4?m=


- was invited to speak at the Hong Kong Architecture Center with Curator Ole Bouman on Jan 23, 2014.

- was invited to conduct a lecture seminar and workshop “We Build Our City” at the “Building M+ Exhibition: The Museum and Architecture Collection” at ArtisTree, TaiKoo Place on Jan 26 2014.
4. Mr. Stephen Lau

- Stephen Lau was Juror for the International Design Competition for the Three Museums at the Guangzhou New City Axis, invited and organized by the Guangzhou Municipality on January 7 in Guangzhou.

-Stephen Lau represented HKU to the Editorial Team for the New National Standard (GB Series) for the Assessment of Green Ecological District (68 new national standard for the built environment were approved by the MOUHURD for 2014). He and PhD designate ZHANG Zhidong were invited to the First Preparatory Editorial Meeting in Beijing 16-17 January.

5. Dr. Hoyin Lee (ACP Director)

- co-organiser and moderator (with Lynne DiStefano) in the Master Class Distinguished Lecture Series: Master Builders on Materials and Techniques of Conservation Projects in Mainland China and Hong Kong (大師級傑出講座系列: 內地與香港 營造大師論 建築文物保育工程的材料與技術). This lecture series, organised by ACP, the Construction Industry Council, the Hong Kong Government and other parties, consists of eight lectures by master builders of materials and techniques of (1) heritage building in Southern China, (2) heritage buildings in Northern China, (3) Western colonial buildings in Hong Kong and Shanghai and (4) Chinese and Western landscape architecture in China. The objective of this lecture series is to promote the technical expertise of built-heritage conservation among building professionals in Hong Kong and Mainland China. Over 1,000 participants enrolled to this event. Website for this event: http://www.hkcic.org/chi/ConservationProject/Index.aspx.

- ACP features in a scholarly article in the Urban Studies Journal re: Making Heritage Policy in Hong Kong: A Relational Politics of Global Knowledge and Local Innovation
  
  http://usj.sagepub.com/content/early/2013/07/15/0042098013495576

6. Dr. Eric Schuldenfrei

- his firm, ESKYIU, was awarded a “Commendation” in the WKCD A Arts Pavilion international competition together with the collaborator LEAD.

  http://www.westkowloon.hk/en/the-district/architecture-facilities/arts-pavilion/chapter/Winning-design-61

Professor Weijen Wang’s comment - “the book had already kicked off heated discussions among academias and culture media in China for Liang’s contribution and limit. Academia will email or Wechat me expressing and seeking views”

- in leading his joint team with Shenzhen Huazhu Engineering Design Company, won an international design competition for the urban/architectural design of Shenzhen Liuxiandong Headquarters Base, Block 1. His team was selected as one of the two finalists to design the Areas 2 & 3 in Liuxiandong new city district. The Liuxiandong development is one of the key projects (along with Qianhai & Shenzhen Bay districts) launched by Shenzhen government in late 2013 in attempt to trigger its new round of urbanization process.
Department of Real Estate and Construction

1. Dr Koh Tas Yong

- had been invited by Gammon Construction as a guest speaker and discussion panellist at the Gammon's Annual Safety Conference 2014 held on 23 January 2014 at the Wanchai Convention and Exhibition Centre. The topic of Dr Koh's presentation was "Construction Workers Safety Behaviours: Gammon’s Experience and Beyond."

Department of Urban Planning and Design

1. Dean Webster

- has been invited to participate in the Shanghai Forum, an international economic forum hosted by Fudan University and sponsored by the Korea Foundation for Advanced Studies (KFAS). As a communication platform for academic, political and commercial circles, Shanghai Forum has been held for eight rounds successfully. In the purpose of “focusing on hot issues, gathering the elite together, promoting the interaction, enhancing the cooperation and seeking consensus,” this forum invites leaders and elites of all fields to dialogue and collaborate so as to provide perspectives and advice for the overall progress of Asia in economy, politics, society and culture. The 2014 Shanghai Forum is planned to be held in May 24-26, 2014, Shanghai, China, which has an overall theme of “Asia Transformation: Identifying New Dynamics” Shanghai Forum 2014 will continue to organize a sub-forum on Asian Cities, and this year’s theme is “Urbanization Upgrading and Future Cities”.