Dear All,

Professor Ronald Coase, patron and intellectual inspiration for our eponymous RC Centre for Property rights, sadly died in Chicago earlier this week. A faculty obituary is posted on our home page: http://fac.arch.hku.hk/news/2013/09/03/professor-ronald-coase/

Professor Coase gave the world a new paradigm for understanding resource allocation problems and designing solutions for them (economics is correctly to be understood as the science of scarcity – making it directly relevant to the urban professions). Hong Kong’s sky-line is ultimately created by the patterns emerging from the processes of subdividing rights over land, labour and capital. Coase’s insights offer an explanation for both the consequences of these property rights divisions and causes – effort minimisation and cost avoidance.

What makes people live at altitude? If you include mountains as well as high-rise: defense, fear, view, air quality, flood avoidance, prestige, fashion, ideology (Corbusier), spirituality (mountain top temples), investment, privacy, nostalgia, arrogance (Tower of Babel/ Burj Khalifa)? I was taken to Fujian’s Tulous last Saturday. The migrating Hakka people started building them in the mountains 600 years ago as a defensive strategy. The early ones are higher in the mountains than the later ones and in more remote valleys. They are also taller and more fortified than the later rectangular tulou (‘earth houses’) further down the mountains. The Hakka came further down to earth as they became more dominant and secure.

What makes people live at depth? Defense, fear, protection from weather, spirituality (the hermit’s cave), prestige, land scarcity, ideology (modern hobbit homes), fashion, nostalgia? If you browse real estate listings in Turkey you can enter ‘cave’ as a category of home (cave gentrification is common in Cappadocia). 29% of the earth’s surface is land and only roughly 5% is flat enough to build houses and grow crops on. Roughly 2% is inhabited by humans. But humans are not distributed evenly across this area: they need to cluster in order to achieve the comforts they aspire to, since only by living together with others can labour specialize and excess value be created. So you end up with a city like Hong Kong where people started clustering in a very confined space. The result: build up and build down. What used to be the commons (the air above us) becomes subdivided into privately acquired property rights. What about the space below us? The process of subterranean property rights subdivision is not as well established as the equivalent process above ground. The same logic exists, however, and it is interesting to ask how the process might proceed.
Start with the question: what uses might be expected to ‘go-below’? Or in terms of land economy: what uses might out-bid others to rent space below ground? From an architectural perspective: what kinds of spaces can be designed to accommodate underground densification and diversification? Currently and historically? I would include: car parking, shopping malls, transportation, hazardous waste storage, mining, military research and storage, prisons (dungeons), water storage and extraction (wells), water treatment (pit latrines), building foundations. As space gets scarcer, the value of creating, subdividing and selling underground property starts to exceed the costs. Where might this lead? HKU recently innovated by putting a reservoir into a massive manmade bore-hole. It is talking about using caves for waste storage. Dungeons were underground in medieval castles for punitive, security and convenience reasons. Malls are underground in HK because of high land values above ground, bad weather above ground and high-density MTR-generated pedestrian flows below ground.

Many factory buildings have no natural lighting – for security, financial or technical reasons. Could certain types of industry go underground? It would be one solution to Ronald Coase’s ‘problem of social cost’. And if industry and MTR-linked malls, why not all shopping malls, reserving scarce naturally-lit space for homes? But not all residential uses need natural lighting. When did you last look out of, or open, a window in a city hotel? I recently drew a room-width curtain in a HK hotel to find a wall behind most of it and the small window looking out onto a blank wall. So why not hotels too? How about data clouds, high-value warehousing and secure storage: the entire volume of gold ever produced in the world could be contained in a cave the size of just 20 swimming pools the size of Stanley-Ho. Most concert halls are already designed like caves; and what about inside sporting venues – a Trogolodyte 2028 Olympics in Hong Kong?

Seriously, watch this space (or should I say hole) for significant innovations in urban order. I was lunching with Christian Lang today and we talked about the constrained nature of building footprints in cities like HK and the limitation this places on innovation in building form. He has a great idea about finding a small number, say 4, of housing design parameters that could be experimentally varied to create a ‘family’ of shapes that broadly fit a given site and function context – as an alternative to repetitive shapes and homogenous urban form. My response was that probably all the major candidates have been thoroughly experimented with (such as the lift shaft) but that it would be exciting if he could, in fact, find 3 or 4 parameters that when co-varied, produce novel morphology around a theme. But I suspect that to do this, one would need to introduce also a novel kind of ‘trunk’ or strategic parameter, such as new forms of connectivity between individual buildings. Back to the underground theme: although some cities have recently started to coordinate (plan) underground uses, the latter remain mostly uncoordinated (digging down within the boundaries of a development site). Introduce a coordinated subterranean land-use transport system and the nature of buildings above ground would, I suspect, also change. Similarly, extend land-use transport coordination to above-ground levels and suddenly the de rigueur tower and podium morphology of Asian cities will change in subtle and possibly dramatic ways.

Congratulations and thanks to colleagues for the valuable contributions listed below

Chris
1. **Mr. David Erdman**

- was featured in the South China Morning Post City Section (C10) on Friday, August 30th, 2013. The article/interview entitled “An Eye For Overheads” by Peta Tomlinson focuses on the work of his firm davidclovers and their most recent project in Hong Kong.

![Image](https://via.placeholder.com/150)

**An eye for overheads**

The whole space integrates horizontally and vertically – even around corners and across floors.

David Erdman, Architect

2. **Mr. Stephen Lau**

- delivered a Keynote Speaker at the 50th year Anniversary of the School of Architecture, Hasaruddin University, Indonesia.

- performed green research at the GREEN SCHOOL Indonesia, for his book research on Sustainable Design - Bamboo Architecture.

- participated as a Session Chair and a Member of the Scientific Committee for the SB 2013 Singapore (SB = Sustainable Building, one of world’s two top conference in the subject).

**Division of Landscape Architecture**

1. **Ms. Dorothy Tang**

- received a grant from the Gallant Ho Experiential Learning Centre for a project titled “Thailand’s Water Economies: Experiential Learning in the Landscape Planning Curriculum” to take BA(LS) students to southern Thailand for a studio trip and workshop with the Department of Landscape Architecture at Chulalongkorn University in the Spring Term.
I. Professor Steve Rowlinson

- was invited to attend Gammon Fellowship Ceremony on August 28th, 2013 with three REC interns

- was invited to attend the Closing Ceremony HKICM Summer Internship Program 2013 on August 31st, 2013 with two REC interns

- was awarded Winners of the Best International Research Paper Award in the CIOB Association of Researchers in Construction Management 29th Annual Conference 2013
1. Professor Rebecca Chiu

- presented a paper on “The Social Sustainability Performance of High-rise Housing Estates in Hong Kong: Planning, Design and Management Perspectives” at the 2013 APNHR Conference - Global Housing Dilemmas: the Way forward”, organized by the Faculty of Built Environment, University of Malaya. Kuala Lumpur, from August 20th to 22nd, 2013.

2. Dr. Roger Chan

- gave a talk to the Institute of Shopping Centre Management entitled “Urban-rural integration and its impacts to the Retailing sector in Chinese cities” on August 30th, 2013.

- hosted an orientation city tour for the new cohorts of the Master of Science (Urban Planning) and Master of Urban Design with Prof. Bo Sin Tang and Mr. Jimmy Leung on August 30th, 2013.

3. Dr. Qi Zhixin

- PhD student of Professor Anthony Yeh, was awarded the Li Ka Shing Prize for academic excellence. The Prize is in the form of gold-plated medal plus a cash prize.

4. Professor Chris Webster

- had a meeting with Dr. Zhao Yanjing, Director of Xiamen Planning Bureau, Fujian province, to discuss a paper of Dr. Zhao’s that proposes a land grant system to allocate a home (land) to all people in China currently without one. The paper was sent by China’s Vice Minister of Construction to the Chinese Premier for consideration and last weekend, a panel of leading economists were sent to Xiamen to quiz Dr. Zhao on the proposal. He acquitted himself well and I have invited him to present the idea and the underlying theory in HKU in October.