Due to historical circumstances and the lack of space, the podium tower typology has become the modus operandi within the city boundary of Hong Kong. In the last two decades, this typology has emerged as the predominant building type for efficient high-density urbanization, determining to a large extent, how public space works within the city. The tower typology, which is shaped predominantly by the building code, has a huge implication on the public space. The building code is conceptually the genetic DNA for the life and success of cities. Hong Kong is massively shaped by the building code. The call for density is a necessity, however, the quality of urban space should not suffer. How can the building code be rethought in order to overcome the lack of public space? The project “Density and Openess Revisited | The ideal City of refigured Civic Space” is a reevaluation and extension of the urban space, the space in which politics and social life takes place. Questioning the current approach of urbanization in Hong Kong and the PRD, the project presents an inquiry in the relations between architecture and the city with a focus on networks and civic space.
Instead of limiting the public domain to streets and plazas, the project incorporates a ratio of open space into architecture. New spaces are distributed throughout the buildings by networking and clustering different figure ground conditions together. The consequence is a continuous vertical and horizontal organization of public and open spaces. The hypothetical project tries to establish an alternative system to define massing solution and public space distribution for high-density living environments. Instead of extruding the maximum boundary condition of a given site to determine the building mass, this model incorporates a ratio of open space within the massing process. At its core is a computational logic that is based on 2D Cellular Automata. The rule-based parametric model can adapt to different site and programmatic conditions. It has the capacity to generate new forms of public space, semi public and private exterior and interior spaces. Outcomes never look identical and result in specific massing configurations. The intention of this setup is to produce varying spaces and varying densities between solid and void patterns. In order to activate the public domain, the model breaks the vertical cores into strategic segments, with the implication that users will have to transfer through a layer of public program to get to their destination. As a result, a multi-dimensional network emerges bringing the public domain into the vertical realm.

The project based on rules and codes rethinks building and zoning codes in order to arrive at a civic space that reflects the complexities and contradictions of existing urban rules, typologies and life. It reflects critical on Hong Kong’s current urbanization strategies and the efficient and literal interpretation of zoning and building codes. The result is a space that is more than the agglomeration of streets, parks, urban structures and buildings; it is a space of boundaries, of demarcations and differentiations of connections, and opportunities for civic life to take place.
Physical Model of connected CA Towers (Scale 1:200) revealing continuous circulatory network and open space distribution.

Section of connected Tower configurations.

Plan of connected Tower configurations.

Theatre Stage  Public Bridge  Courtyard  Sky Plaza  Theatre Stage
Typological Transition & Mix

Massing Configurations of different CA rule systems

IMAGE CREDITS
All image credits to Rocker-Lange Architects (2014).

CHRISTIAN J. LANGE is a German architect and lives and works in Hong Kong. Christian received his Master’s of Science in Advanced Architectural Design from Columbia University in 2003 and his Diploma in Architecture from the HTWK Leipzig, Germany in 2001. He has taught at Columbia University, Pratt Institute and the School of Architecture at Georgia Tech. He is currently an Assistant Professor of Architecture in the Department of Architecture at the University of Hong Kong where he is the 3rd year studio coordinator and teaches Architectural Design and courses and seminars in the visual communication sequence.

INGEBORG M. ROCKER is a German architect and lives and works in Boston. Ingeborg received her PhD from Princeton University in 2010, her Master of Art from Princeton University in 2003, her Master’s of Science in Advanced Architectural Design from Columbia University in 1996 and her Diploma in Architecture from the RTWH Aachen, Germany in 1995. She has taught at Columbia University, Princeton University and the University of Pennsylvania. Currently she is an Associate Professor of Architecture in the Department of Architecture at the GSD, Harvard University. She teaches Architectural Design and gives courses and seminars in the theory sequence.