Urban Liveability: Negotiations of Scale, Urban Elements and Architecture

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According to Mohamad Kashef (2016), the concept of 'urban liveability' remains a precarious term appropriated by a variety of disciplines in a number of settings. Irrespective of its application in either professional or educational contexts, urban liveability essentially links the systemic aspects of human life with social contingencies in an immersive physical environment. In this short text we wish to contemplate liveability and its manifestation within the practices of a design brief that manages macro strategies equally with those at the micro scales.

In the context of increasingly complex urban questions related to sustainability, systematic planning strategies, ecosystems, compact environments and biodiversity, the challenges of urban liveability must draw together an even wider diversity of conditions, scales, stakeholders and disciplines, to collectively meet the challenges of 21st Century urbanity. Drawing on the work of Gausa and Banchini's 2003 publication entitled HiCat: HiperCatalunya and the premise of layered complexity and planning, this would entail more complex interface between regional, territorial, city, neighbourhood, parcel, building, space, material cycles, and performance indices as scale levels, between those who live in cities, those who design them, and those who actually build cities as stakeholders. Finally, between disciplines, liveability must absorb knowledge domains of territorial strategies, spatial planning, urban design, architecture, interior architecture, sociology, morphology, engineering, environmental studies, and military strategy.

From a historical perspective, Louis Wirth's original concept, or what he terms 'Urbanism' (1938), could be seen as a first take on a definition of the urban liveability premise. Apart from defining the concept of Urbanism, Wirth's definition links liveability to the physical, the social and the ecosystems of human and environmental engagement. Settlements, the city, and specific housing questions are by-products of a collective social process drawing together, (1) the physical nature of the city comprised out of a population and forms of technologies, (2) a social system of organization involving social structures, institutions and social relationships, and (3) the formulation of a set of attitudes and registers that collectively produce norms, standards and regulations to guide behaviour processes. Standing outside of the realm of design itself, the urbanism concept has remained instrumental in both conceptual and methodological approaches for formulating liveable settings.

Moving down in scales, we find the architectural criticism of Morris (1961), outlining the complexity of domestic standards in relation to living quality. His opus "Homes for Today and Tomorrow" is a credible and scientific perspective that relates the spatial expression of the home, outdoor spaces and street relationships to the needs of the individual by questioning, 'what are the new ways of living?' Covering both freestanding and apartment type housing, the study reflects on standard space allocations impacted by living patterns. The study expands on several aspects of domesticity: the adaptability of the dwellings, heating and cooling re-

quirements, hallways, open plan layouts, spaces for meals, living spaces, bedrooms, bathrooms, for families and singles. He gives working areas - encompassing kitchens, roof spaces and storage spaces - special attention discussing the design through use, appropriation, and functional layouts. Morris discusses apartments, rethinking lifts spaces, private balconies, sound insulation and refuse disposal. Overall, the report fundamentally establishes the need to formulate domestic standards on humane and ethical principles for living in a mixed society, that promotes social mobility and the well-being of citizens.

Returning to the activity of design and the question of urban liveability reminds us that cities are composed of numerous parts. Buildings, small built structures, airports and bridges, vacant plots of land, road infrastructure, greenery, waterscapes, coastlines, and ridge escarpments remain the generic elements of all urban landscapes. Combinations of elements associated to user groups or urban functions, whether clumped together or distributed over a vast area, deliver landscapes with a variety of unique spatial characteristics that in each way become distinctive to the liveable conditions of a setting. Viewed from up-close and from afar, the landscape resolves through layering of textures and elemental pixilation, brought together by way of design strategies, fuse together liveable intentions at interlinked scales.

Furthermore, intentions, propositions and design incentives are part and parcel of the production of scenarios in 'liveable design'. This is especially relevant to spatial thinking, and

the development of scenarios to, "play out" opportunities whilst testing the valance of ideas, what works and what seems less meaningful. For territories these have previously been defined as design 'fantasies' (Maas, et al. 2011), game board processes (Reinart & Poplin, 2014), or seen as methodologies of developmental processes (Bunchoten, et .al, 1999) that later become policies, new directions in design or, at the extreme, production of new urbanities.

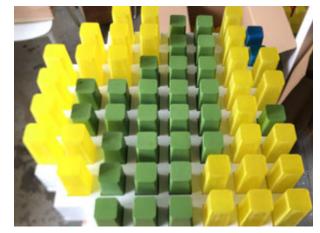


The via. Architecture / OPENUU / POLYU proposal fuses together spatial liveability through three distinct sections. This submission, in the format of a vertical column (1m x1m x 3m) vertically aligns three proposals above one another, with POLYU's urban research operating as base map, OPENUU's Growing Bridges section in the middle and via.'s architecture proposal at the top section.

As one of the several Hong Kong Based entries to the postponed 2020 Venice Biennale, the via. / OPENUU / POLYU proposal fuses together spatial liveability through three distinct sections. Given the urban liveability challenge in an increasingly complex future the three sections seek to explicate the layered negotiations between the region, the city and its architectural premise. This submission, in the format of a vertical column (1m x1m x 3m) vertically aligns three proposals above one another.

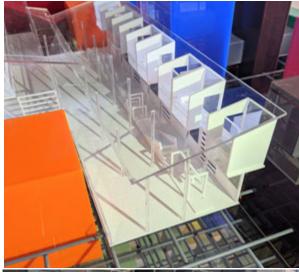
The via. / OPENUU / POLYU Architecture proposal is a vertical element combining three distinct parts. The column base section draws from POLYU's research representing a territorial map of Hong Kong.⁵ It depicts one of four development scenarios that question how the Hong Kong Special Administrative Region will develop as either a monocentric, separate territory or a node in the polycentric Pearl River Delta urban agglomeration, as increased population impacts its formal character. The speculative scenarios elaborate specific tendencies emerging in HK and the Great Bay Region and asks how Hong Kong can remain a competitive player in its regional urban context. As base, the proposal sets the tone for a pixilated territory, negotiating functional characteristics upwards into smaller scales of the neighbourhood and urban block levels. Each colour of the pixilated map colour codes liveable qualities that ranges from housing, education neighbourhoods, regional industry, and territorial greening.

The column's middle section depicts OPEN-UU's approach to pixel-to-pixel linkages, through a study of pedestrian bridges as urban elements entitled Growing Bridges. Bridges provide opportunities to question rising environmental factors as extreme weather conditions. They also manifest a variety of shapes and sizes within their shared purpose to connect programs across open space. In Hong Kong bridges serve other programmatic roles, utilizing and activating space above and within the built landscape. They support transportation, ensuring buildingto-building connectivity. In parallel, bridges contribute to the liveability of a city providing retail and recreational opportunities that add to the pedestrian life, as a microcosm of the Great Bay Area's territorial connectivity and density.



The column base section draws from POLYU research representing a territorial map of Hong Kong. The pixilated map is translated into a three-dimensional base structure representing urban functions of a territorial level.

⁵ Research project entitled HK2 is an ongoing research project at the Masters level of The School of Design, The Hong Kong Polytechnic University.





OPENUU's Growing Bridges manifest a variety of shapes and sizes within their shared programmatic purpose to connect programs across open space.

The upper section of the composition completes its progression from large to small scales with .via's focus on pixilated architectural features. The column capital is a textured structure referring to a lantern wall to celebrate heritage and traditions of the Chinese vernacular courtyard house. via's segment extracts the configuration of the lantern wall from a related project defined by brick-clad pavilions surrounding a central pool, with inward and outward views. Visitors experience interior and exterior environments within the column capital as a reinterpretation of a culturally significant spatial pattern. The composition is therefore not only the architectural premise of fusing together elements of nature, vernacular architecture and





The upper section of the composition completes its progression from large to small scales with .via's focus on pixilated architectural features. The column capital is a textured structure referring to a lantern wall to celebrate heritage and traditions of the Chinese vernacular court-yard house.

interior design into a living experience that encourages a sense of well-being in unique and dense settings, but also it provides a vignette into an actual spatial experience of urban liveability, when spatial experience, material, and light effects fuse together in a contemporary city setting.

via. / OPENUU / POLYU layered composition accommodates a site provided within the Hong Kong 2020/2021 Venice Biennale Exhibition, linking three collaborating teams' work into one expression. With later installation in Venice, visitors will be able to circulate around the column structure, taking in the scope of each section through and within each segment.

In conclusion, the layered composition exposes risks and potentials of design which strategically links liveability at higher and lower scale orders in the city. Continuous negotiation processes, gazing up as well as down, highlight a delicate balance between two extreme conditions. Firstly, when disassociated as independent scales, each segment reflects the constituencies and consequences of different disciplinary realms, whether territorial, connectively programmatic, or experiential. Secondly, with the three scales coalesced, the column reflects disciplinary relationships which designers, planners, and stakeholders must integrate as a politics for framing urban liveability.

via. / OPENUU / POLYU members:

via.: Frank Leung & Irene Lai. https://via-arc.com.

OPENUU: Kevin Lim & Caroline Chou. http://openuu.com.

The School of Design, The Hong Kong Polytechnic University (POLYU): Peter Hasdell, Dr.ir Gerhard Bruyns & Daniel Elkin. https://www.sd.polyu.edu.hk/en/

Bibliography

- 1 Bunschoten, R. et al.,. (2001). Urban flotsam: stirring the city, Rotterdam:010 Publishers.
- 2 Hasdell, P., Bruyns, G (2019). Hong Kong2 [HK2], Master's Studio, MDes Programme. School of Design, The Hong Kong Polytechnic University, Hong Kong.
- 3 Gausa, M., & Banchini, S. (2003). HiCat: Hiper-Catalunya: Research Territories. Barcelona, Actar.
- 4 Kashef, M., (2016). Urban Liveability Across Disciplinary And Professional Boundaries. Frontiers of Architectural Research, Volume 5(2), June 2016, 239-253. https://doi.org/10.1016/j.foar.2016.03.003
- 5 Maas, W., Salij, T.H. & Why Factory, (2011). Hong Kong Fantasies, Rotterdam: NAI Publishers.
- 6 Morris, P., Alford, H., et al. (1961), 'Ministry of Housing and Local government: Homes for today & tomorrow', London; Her Majesty's Stationery office.
- 7 Reinart, B. Poplin, A. (2014). Games In Urban Planning A Comparative Study. Proceedings (Tagungsband), Real Corp 2014, 21-23 May 2014. Available at http://www.corp.at.
- 8 Wirth, L. (1938). Urbanism as a Way of Life. American Journal of Sociology, 44(1), 1-24. Retrieved October 18, 2020, from http://www.jstor.org/stable/2768119

Biography:

Gerhard Bruyns

Dr Gerhard Bruyns is an architect and urbanist. He is Associate Professor of Environment and Interior Design, School of Design at The Hong Kong Polytechnic University, Hong Kong. His research deals with the aspects of spatial forms and its impact on both the formal expression of the city and societal conditions that are compressed into an urban landscape of Asia. He has published on design strategies and urban morphology. In 2012 he coedited African Perspectives [South] Africa. (010 Publishers: Rotterdam), Issue #16 of Footprint (2015), and is currently operational editor of Cubic Design Journal.

Daniel Elkin

Daniel Elkin is a researcher, designer, and maker with a decade of experience. He serves as Assistant Professor in Environment and Interior Design in The Hong Kong Polytechnic University School of Design. Educated at Cranbrook Academy of Art (MArch, '15) and the University of Cincinnati, Elkin's research focuses on spatial agency, collaborative governance, and housing, particularly in non-normative development scenarios. His recent work in stilt house communities is published in international journals and conferences. His spatial activism work with student collaborators was published in Cubic Journal's Design Social edition. His analysis of emergent spatializations was published in Architectural Research Quarterly. He served as first editor of the upcoming Cubic Journal Issue on Design Making.

Peter Hasdell

Peter Hasdell is the Associate Dean and Associate Professor at the School of Design, Hong Kong Polytechnic University. He is an architect, urbanist, artist and academic. A graduate from the University of Sydney and the prestigious Architectural Association in London.

He has taught in Europe, North America and Asia for 20 years at schools including the Bartlett School of Architecture (University College of London), The Berlage Institute in Amsterdam, KTH Architecture School in Stockholm, Columbia University Architecture School (New York), and currently in the School of Design at The Hong Kong Polytechnic University, HKU Architecture School and University of Manitoba. He was the founder of the innovative research laboratory / program in Stockholm Architecture and Urban Research Lab (A+URL) and was a senior research associate of research institutes including CHORA Institute for Architecture + Urbanism in London, research associate of the Centre for Architecture Structures and Technology (C.A.S.T.) in Manitoba and founder of Pneuma open source research network in Canada.