Research Assessment Exercise 2020 Impact Overview Statement

University: The Chinese University of Hong Kong

Unit of Assessment (UoA): 17 architecture

Total number of eligible staff of the university in the UoA: 10

(1) Context

The Unit's overall direction can be described as clusters of in-depth studies structured around questions of 'place' and 'making'. This direction is differentiated as the following five research units: Building Technology and Sustainable Design; Design Methodology and Practice; Digital Technology and Computational Design; History, Culture and Conservation Design; Urban Design and Landscape Urbanism. Research outputs include books and scholarly papers, exhibitions, prototypes, artifacts and buildings. Impact of the Unit's research is measured in the way it contributes to, or influences, policy or the behavior of social or user groups, and how it advances knowledge in the profession and related industries. The Unit's research into 'place' concerns the conditions of habitation, social, physical, natural and urban environments (in contemporary and historical contexts). The Unit's emphasis on 'making' explores tectonics and materials, from traditional craft to digital fabrication. The case study represents the Unit's expertise in designing the physical condition of habitation. In order to develop impact, the Unit engages with a wide variety of non-academic user groups, including government departments (e.g. Ministry of Housing and Urban-Rural Development of the People's Republic of China and China Green Building Institute, Planning Department of the HKSAR Government), professional liaison groups (e.g. Hong Kong Architecture Centre, Royal Institute of British Architects, Hong Kong Institute of Architects, Hong Kong Green Building Council, Construction Industry Council); rural communities (e.g. Dong minority village of Gaobu, located along the Pingtan River in Hunan Province) and urban community groups (e.g. Sai Ying Pun, Tin Shui Wai, To Kwa Wan).

(2) Approach to impact

The Unit's impact strategy is to maximize its research impact through the efficient integration of academic activities: our research, teaching and practice are inter-dependent, mutually reinforcing and at best, indivisible. This integrated environment has reached out to (and has drawn on) external agencies to fully align knowledge creation to impactful issues (e.g. social conditions of public space, design for disaster regions or construction in fast growing areas). We have engaged with these nonacademic users and communities in a variety of ways: First, the Unit maintains a rolling programme of invited speakers, studio reviewers and critics. The Programme comprises experts in the field as well as non-academic and members of user/client/community groups. Second, the Unit has hosted a significant number of events, conferences and symposia that facilitate knowledge transfer and development outside academia. For example, it hosted the 10th Conference of the International Forum on Urbanism (IFoU.org), a network of 26 leading urban programmes in Asia and Europe (2016) and a series of workshops in the summers of 2016-19, in collaboration with Guangzhou University, looking at Village Reactivation in the Dong minority villages. This led to a major international event held in the School of Architecture, Adapting Villages Workshop organized with the University's Institute of Environment, Energy and Sustainability in 2019 (https://www.adaptingvillages.com/). The University hosted the Passive and Low Energy Architecture (PLEA) conference in 2018 and three Urban Thinkers Campus events of UN Habitat's World Urban Campaign. Third, much impact is the result of field work-based applications and knowledge transfer. The Magic Carpet project is an example of on the ground engagement with urban communities, whose findings eventually drive policy. The Book House in Gaobu illustrates how research in remote rural village communities can result in innovative buildings for the community; lightweight structures research applied to specific user groups in Southern China have delivered economic and sustainable buildings for communities in faster growing areas and earthquake-stricken areas. Similarly, the One University One Village team

has engaged with communities in earthquake-prone rural China to deliver award-winning rammed earth prototypes.

Such community-related activity is connected formally or informally to the Design Studios, enabling the *studio-based research* to become a genuine testing ground for the creation of relevant - and impactful - design research. Each design review (generally two per semester) is attended by a range of practitioners and professional consultants who learn from and contribute to the development of our design research. The Unit has supported staff to develop impactful research in the creation of an informal workload model and in the utilization of institutional funding initiatives. Importantly, a dedicated research administrator is deployed to support research income generation and associated research administration.

(3) Strategy and plans

Research impact will be maximized through further thematic focus. In line with Faculty strategy, the Unit will seek to strengthen research that has social impact. It will further enrich its crossdisciplinarity, including collaboration with subject areas in Social Sciences, Urban Studies, the University's research institutes (e.g. Institute of Future Cities), as well as more diverse areas such as computation, robotics and the Fine Arts. The Unit will align with Planetary Health as part of a new CUHK's Strategic Research area. We will augment the range of external contributors to studio reviews and explore new ways to engage with professional bodies and practitioners (such as on-line mentorship for research and teaching, new practitioner teaching fellows). We will establish strategic relationships across education providers in the region and work closely with the research activities of the Royal Institute of British Architects (RIBA), The Hong Kong Institute of Architects (HKIA), Hong Kong Institute of Urban Design (HKIUD), Royal Town Planning Institute (RTPI) and the Royal Institution of Chartered Surveyors (RICS). Our staff will engage these professional bodies, through being members in these organizations, hosting conferences, consultancy, validation events, and knowledge exchange. We will increase grant capture and other forms of external funding to grow impactful research, particularly in the area of rural development, urban density and housing, public space, prototyping, digital fabrication and design innovation. We will allocate internal funds available to both strengthen capacity among established researchers and also to give early career researchers opportunities to deliver impactful research areas. Underpinning the Unit's approach to impact has been a supportive environment of mentorship across the spectrum of the 'teaching-research-practice' environment. In line with Faculty guidelines, the Unit will further enhance support for individuals where potential is identified for impactful research outputs. Activities will include exposure to best practice internationally and professional development to better understand how to best measure impact in architectural research (e.g. an international symposium for the World University Network on Urban Form and Health and a IFoU Winter School on the future of Hong Kong's New Territories).

(4) Relationship to case study

The Unit's ethos concerns design, making and social impact. It integrates teaching, research and practice, three areas of activity that are exemplified in the activities described by this case study. The Unit's focus on the impacts of architectural design on society, by engaging end users and external bodies, including communities and government departments, is reflected in the design process and impact activity. Our research outputs respond to the lack of public facilities, resource depletion and social inequality. This character corresponds to issues of sustainable and regenerative design that lie at the heart of the Unit's activities. The Unit supports the case study group's development and reciprocally the knowledge generated by the group's research nourishes the Unit's overall environment, overlapping with similar research projects situated in rural China. As such the case study exemplifies the Unit's emphasis on outward-facing research, societal engagement and community-based design.