Education, Design and Practice – Understanding skills in a Complex World

• Paper / Proposal Title:
Modelling a Future Practice

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• Abstract (300 words):
The nature of architectural practice is undergoing rapid change and evolution. The increasing adoption of digital fabrication and direct manufacturing technologies within the design and construction industries presents both significant challenges and opportunities for the practice of architecture.

Digital fabrication refers to the direct manufacture of three-dimensional objects from digital files using additive (3D printing) or subtractive processes (milling, laser cutting etc). There is a well-established lineage of investigations of advanced fabrication in architectural design and education. However, the majority of this research has focused on the development of, or design potential presented by, novel tectonics made possible by these techniques and/or the opportunities for material or process optimization that these tools offer.

There is limited research into how the adoption of these technologies will impact the practice of architecture itself. The adoption of these techniques allows for the fabrication of components, assemblies or increasingly whole structures directly from digital design models, resulting in a dramatic collapse of the traditional separation between the architect and the produced object. This is a significant opportunity in that
it allows more much greater agency in the fabrication/construction process, however, also delivers increased risk for architects engaging in these modes of practice.

At RMIT these issues are being explored in the Architecture Professional Practice 3 course. In the context of this course students, as emerging practitioners, are asked to respond to these changes described above and leverage the opportunities that they offer to develop proposals for innovative modes of practice. This paper will describe the role and value of a design research approach for the teaching of Professional Practice in architectural education and in exploring the emerging role of the architect. Specifically, investigating the application of speculative modeling of business propositions as a mechanism for understating the practice of architecture and its relationship with entrepreneurship.

• Author(s) Biography (200 words each):

Dr John Doyle is a permanent faculty member and lecturer in the Architecture and Urban Design Programs at RMIT University. He currently Program Manager and Head of the Master of Architecture program at RMIT. He is a Visiting Professor at Tokyo Institute of Technology. In addition to his academic roles, John maintains an active built and speculative design practice. He is a co-director of architecture & interiors practice Mártires Doyle and a partner in urban architecture and research consultancy NAAU.

Ben Milbourne is a permanent faculty member and lecturer in the Architecture and Urban Design Programs at RMIT University. He currently coordinates the Master of Architecture Design Studios and Professional Practice 3 courses in the Master of Architecture program. In addition to his academic roles, Ben is the founder of Bild Architecture and is a partner in the architecture and research consultancy NAAU. In recognition of his contribution to architectural practice, research and the broader community, Ben was recognized by the Australian Institute of Architects as the Victorian Emerging Architect of the Year in 2017.