ONLINE EDUCATION: TEACHING IN A TIME OF CHANGE

• Paper / Proposal Title:
Teaching Architectural Design in a Time of Change: Digital Tools and Methodologies

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• Abstract (300 words):
The current situation has limited the graphic visual interaction tutors, and students usually have during individual and group tutorials in the design studio. During these crucial constructive moments, tutors and students exchange various ideas and, usually, support their verbal descriptions with drawings, models, and quick sketches made on the spot during the meeting to clarify concepts or suggest ways to develop ideas further. Hence, sketches and drawings are used as a visual language that supports, expands or clarifies the verbal explanations. It is evident that, in this context, oral and visual communication support and complement each other. Obviously, moving all our tutorials online has limited this kind of real-time graphic visual interaction. Lecture-based modules are not affected in the same way by the current situation. Moreover, interaction during design tutorials cannot be substituted by asynchronous sessions such as recorded lectures or recorded tutorials because during design tutorials students and tutors explore creative solutions together interactively, and each exchange of ideas can open up new exciting hypothesis and investigations. Each design solution is different and has a personal
development tailored around each student’s design and cultural preferences. This ongoing research is exploring digital tools and methodologies to support design-based activities. In particular, the project is investigating the use of a graphic tablet with a stylus (a digital pen for a touch screen) and a selection of digital tools. The technology is mature enough to replicate in a satisfactory way what we can do with several analogue tools, also thanks to the stylus being pressure sensitive. The use of a stylus and the possibility to manipulate images on a touch screen replicate the immediacy of the actions and visual communication that take place during tutorials in the design studio. The paper will present how this technology is being used together with software packages during design studio activities.

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

Dr Danilo Di Mascio is a Lecturer in Architecture, researcher and qualified architect. He joined the School of Art, Design and Architecture at the University of Huddersfield on September 2017. Before that, he was Postdoctoral Research Fellow at Northumbria University (Department of Architecture and Built Environment) and Research Associate at Open Lab, Newcastle University where he worked on a multidisciplinary research project funded by the EPSRC. Before, during and after his PhD, Danilo has undertaken several research projects related to the documentation, comprehension and analysis of tangible and intangible features of architecture and places in five different countries: Belgium, England, Italy, Scotland, and the United States. During his research projects, he developed theoretical approaches and methodologies and used various tools, both analogue and digital, including CAAD, 3d modelling, Image editing software, BIM, game engines, semantic web technologies.

Danilo participated, as author and speaker, at various international conferences in Europe, the Middle East and the Far East. During the CAADRIA (Computer Aided Architectural Design Research in Asia) Conference held at the Chinese University of Hong Kong in 2010, he received the Young CAADRIA Award for his research.