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Editorial

We are pleased to be able to present a set of papers in this issue that address a range of current themes in the field of Computer Aided Architectural Design across a spectrum that ranges from the very practical issue of digital fabrication to the philosophical reflection on the nature of the field, currently. What all of the papers share is an interest in current issues in the CAAD research field. The papers have, as their starting point the presentation of particularly interesting ideas at either the eCAADe 2005 Conference in Lisbon and the CAAD Futures 2005 Conference in Vienna. The work presented here represents new developments and extensions of ideas stemming from those start points.

We begin with a paper by Nancy Cheng that analyses the nature and process of digital sketching. Since the dawn of the digital architecture era there has been interest and study of the relationship between traditional digital sketching and its digital counterpart. By analysing the use of the digital pen as a core tool this paper sets out some of the observations and conclusions deriving from the recording of sketching processes; an interesting interplay between analogue and digital. This is followed by a paper by Lee, Hu and Selker that takes a very different view of how digital devices may be used to help us develop and understand the sketch design phase of the design process. The product is an interesting and novel tool called i-Sphere.

The field of digital fabrication continues to expand and attract attention from researchers. The next two papers make particularly interesting and exciting contributions to the field. Stehlke and Loveridge have developed techniques to enable the extraction of digital data that describe elements of ornamental architecture and this in turn can be used to manufacture ornamental pieces using CAM devices. Sass, on the other hand, looks at wood buildings and, using grammar based techniques, shows how digital fabrication can be developed from a suite of component parts.

The eCAADe Organisation awards a prize, called the Ivan Petrovic Prize, annually to the conference paper and presentation judged to be the best amongst the cohort of young researchers. In the European Union, in this context, young is defined as being under 35 years of age. This year the quality of the work presented was so high that it was felt that a double prize should be awarded. The author of the next paper, Agnieszka Sowa, was a joint winner of the prize in 2005, and her paper continues the theme of digital fabrication. The paper deals with the issues relating to bringing together CAAD and CAM techniques to aid the architectural design process in a most productive way. The other joint winner of the prize was Axel Killian whose paper shows, very well, that constraints can be used as a creative force in the design process rather than being a limitation to what

can be accomplished. The papers conclude with a reflection by Elger and Russell that looks at the Architectural profession and the potential role for digital Information Spaces in the future.

Bob Martens and André Brown

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