

CIRCUIT BENDING, BREAKING AND MENDING

Editorial introduction

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After 10 years, this year's CAADRIA conference returns to Australia, where it is hosted by the School of Architecture and Built Environment of The University of Newcastle, Australia. The two calls for papers issued for CAADRIA 2001 (then hosted by The University of Sydney), and CAADRIA 2011 bracket a captivating decade of CAAD research that allows insights into the gradual development of interests, concerns and future expectations of researchers working in the field of Computer Aided Architectural Design Research. A review of the topics in these calls for papers shows how some topics draw sustained attention. Such topics include human-computer interaction, generative design and computational analysis. Other topics stand out as new additions to the CAAD research repertoire. These are worthwhile to mention here since they indicate directions into which CAADRIA is likely to develop in its future. Among these new additions are digital art and new media, interdisciplinary computational design research as well as theory, philosophy and methodology of computational design research. Taken together, these new topics indicate a broadening interdisciplinary scope and a growing maturity of our field. They also highlight a renewed theoretical discourse on the relationship of design and research.

CAADRIA 2011 called for research papers addressing the theme “Circuit Bending, Breaking and Mending”. This title aimed to provoke researchers and practitioners to reflect on the epistemological dimensions of their enquiries: What works? What does not work? And how do we learn while negotiating the two? This theme acknowledges the circular nature of designerly enquiry (Glanville, 1999) that extends into CAAD research. New ways of seeing are being explored and brought forth by the realisation that computational methods, technologies and designerly thinking are interdependently giving rise to each other. Creative thought brings forth technology. Technology, in return, promises to support creative thought. Investigations into the potential of computing in this relationship hence call for holistic research approaches.

Research in the context of designing can be usefully divided into three attitudes (Frayling, 1993/94, Findeli, 1999 and Downton, 2003, pp. 2 ff.): research for design, research into design and research through design. With its interest in computational technology, CAADRIA has a long and productive tradition focused on research for (i.e. in support of) designing. As an academic research field, CAADRIA also has a long and productive tradition focused on research into (i.e. empirically studying) designing. Research through designing (i.e. practice-based design research), however, is only hesitatingly making its way into our field. The reason for our delayed adoption of this research approach seems to lie in an additional challenge that applies to practice-based research. Outcomes of research for designing can be rigorously justified by practical utility. Outcomes of research into designing can be rigorously justified by empirical evidence. Research through designing, though, can only be appreciated rigorously outside the reach of readily formalised criteria: It leads to innovative outcomes as well as to innovative standards for the critical evaluation of these outcomes. Accommodating the required openness to support such an abstract and self-referential form of scrutiny poses challenges to an annual academic conference that draws much of its weight from strict standards, unified formats and equitable procedures.

The ongoing developments outlined above seem all the more appropriate given CAADRIA’s regional basis in Asia where holistic appreciation of systemic interdependencies and self-cultivating consciousness have long traditions. These developments demonstrate that CAADRIA, now in its 16th year, has neither reached a point of saturation with respect to its topics of interest, nor has it arrived at a set of conclusively developed standards for valuing the rich and varied work conducted under its umbrella. This indicates that exciting further advances can be expected on the future path of CAADRIA, along which the present volume of proceedings represents only one step.

In this volume, several authors call for a rethinking of the discipline from

a design-based perspective, with their papers exemplifying alternative yet rigorous forms of enquiry that may inspire future developments of our field. For example, Roudavski and Parton (p. 366) observe that CAADRIA tends to exclude non-technical concerns and call for a critical discussion of digital technology with regard to its social and cultural implications. Fischer (pp. 631–632) argues that our full appreciation of designerly ways of perceiving and acting necessitates a discourse on responsibility that acknowledges the value of the personal and particular in addition to the value of the general and formal. Salama's (p. 353) work further emphasises how technological and human-centred views are symmetrically interdependent and mutually giving rise to each other.

Beyond a broadening of its scope and the deepening of its discourse, CAADRIA is taking further steps in advancing CAAD research. These include the establishment of the CAADRIA Postgraduate Student Consortium, which, now in its fifth year, supports the next generation of CAAD researchers. To sustain design-based enquiries and qualitative research approaches, CAADRIA also encourages further alternative forms of presentation, such as posters and exhibitions of artworks. These developments call for a renewed discourse on rigour in a field that should engage in, and take responsibility for, all justifiable forms of enquiry even when they extend well beyond the confines of the scientific.

References

- Downton, P.: 2003, *Design Research*, RMIT University Press, Melbourne.
 Findeli, A.: 1999, Introduction, *Design Issues* **15**(2), 1–3.
 Frayling, C.: 1993/94, Research in art and design, *RCA Research Papers* **1**(1), 1–5.
 Glanville, R.: 1999, Re-Searching design and designing research, *Design Issues* **15**(2), 80–91.

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- Architectural Design Research in Asia*, 345-354. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
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- SHOW DETAILS Enoki, Mariko, Yoichi Hanada, Yuji Matsumoto, Nagisa Kidosaki, Ryusuhe Naka, and Shigeyuki Yamaguchi. "*The territory of the personal workspace: Development of the PWAS (personal workspace analysis system)* ." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 483-492. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.

- SHOW DETAILS Fraser, Matthew, and Michael Donn. "*Thinking through digital simulation tasks in architectural education* ." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 599-608. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
- SHOW DETAILS Lonsing, Werner, and Peter Anders. "*Three-dimensional computational structures and the real world* ." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 209-218. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
- SHOW DETAILS Lin, Chieh-Jen . "*Topology pattern mining: a visual approach for representing and retrieving design patterns of spatial topology in a case library* ." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 535-544. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
- SHOW DETAILS Richards, Daniel. "*Towards morphogenetic assemblies: Evolving performance within component-based structures*." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 515-524. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
- SHOW DETAILS Hanafin, Stuart, Sambit Datta, and Bernard Rolfe. "*Tree facades: Generative modelling with an axial branch rewriting system* ." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 175-184. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
- SHOW DETAILS Lesage, Annemarie, and Tomás Dorta. "*Two conceptual design tools and an immersive experience: Beyond the pragmatic-pleasurable split in UX* ." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 291-300. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
- SHOW DETAILS Nguyen, Thi, and Beng-Kiang Tan. "*Understanding and constructing shared spaces for supporting informal interaction at a distance*." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 189-198. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.
- SHOW DETAILS Fernando, Ruwan, James Steel, and Robin Drogemuller. "*Using domain specific languages in the Building Information Modelling workflow*." In *Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, 731-740. CAADRIA. Newcastle, Australia: The Association for Computer-Aided Architectural Design Research in Asia, 2011.

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