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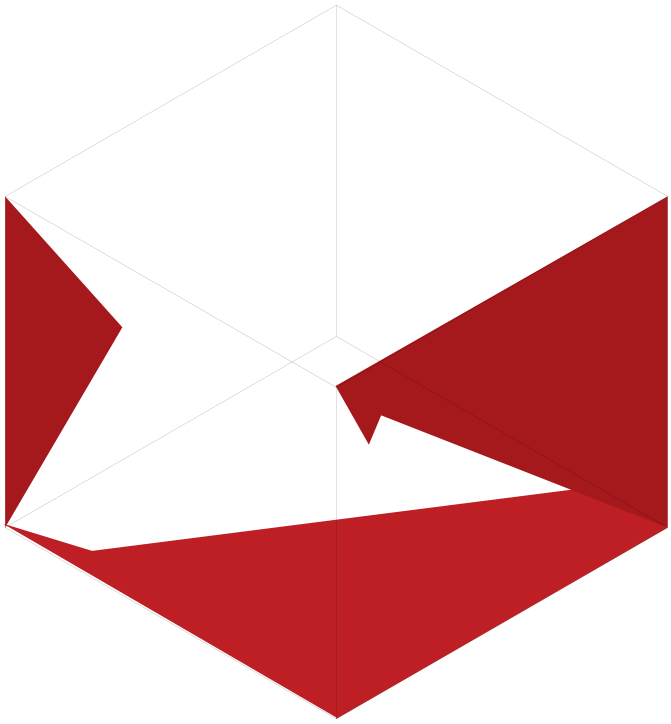

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Re / materialising Design Education Futures

Editorial

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Vol 11
Editorial

Re / materialising Design Education Futures

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Introduction

The focus of this issue of Studies in Material Thinking is the relationship between design education, practice and research. The first two papers set out to describe the current state of doctoral studies in design discourse, with particular emphasis on practice based inquiry. These are followed by a number of papers which detail specific examples of projects within design education that address issues such as the 'T-shaped' design professional, the value of interdisciplinary collaboration, socially responsible design through cross-cultural experiences and the importance of connectivity to the natural world. Overall, the papers suggest the gradual emergence of new directions in design education, which position the designer and design itself as a more flexible and relevant response to continuing global change.

Dunin-Woyseth and Nilsson's *'Design Education, Practice, and Research: On building a field of Inquiry'* provides a useful description of the historical developments within architecture and design, in particular explicating the move from the dyadic interaction of practice and education to a triadic interplay between practice, education and research. Using the metaphor of a toy, the spinning top, to describe this increasingly complex and interactive relationship, they describe defining moments of change across the disciplines through key European conferences on the issues. This is elucidated with specific reference to the impacts on practice through reference to their own experiences in postgraduate research at Sint-Lucas School of Architecture. Although their work is situated in the Scandinavian context, their conclusions go far beyond this context, having import for the wider field not only in Europe, but also to Architectural and Design discourse itself. Their enquiry underlines the value and challenge of practice based scholarship and research by design, noting the contribution of 'permeable practices' that allow for greater depth of enquiry whilst inculcating a more flexible design research model. Here they describe the emergence of a new professionalism which combines professional practitioners, educators, and field-specific researchers 'in one compound skill set', contributing to a more robust and self-confident approach to Architectural and Design enquiry.

An excellent addition to Dunin-Woyseth and Nilsson' article is Vaughan and Morrison's *'Unpacking models, approaches and materialisations of the design PhD'*, which maps current international approaches, models and formats of doctoral study in design. The paper describes the recent history of the discussion around doctorates in design, noting the failure of such discussions thus far to fully 'embrace the complexity of design education, research and practice and the changing nature of the academy too'. The authors seek to address some of the difficulties inherent in the gap between the traditional academic mode of doctoral research and the more practice-informed mode. They offer a valuable collation of key aspects in doctoral education, which seeks to assist the understanding of the complex variability of PhD enquiry. The authors then provide a helpful addition to this discussion, in the explication of two quite different forms of doctoral work and presentation—one from RMIT and the other from Oslo. These exemplify the key points of Vaughan & Morrison's argument, as well as providing useful illustrations of contemporary approaches in doctoral education.

Katja Fleischmann's article *"Design futures—future designers: give me a 'T'?"* addresses a key problem with the 'T' shaped designer, a practitioner with both a specialized knowledge within their discipline, as well as a broad interdisciplinary understanding; namely, how does

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one best educate students for such an outcome. She describes one solution to this problem, the POOL Model which works through a multidisciplinary learning and teaching system. Here, students from different disciplines are brought together into a 'pool' to work together on design problems. Fleischmann provides a thorough analysis in quantitative and qualitative terms of this model at work with students from different disciplines working in a digital design environment. The conclusions, along with a candid discussion of successes, drawbacks and challenges for this methodological approach, make this a valuable study not only within the area of design, but for any application where interdisciplinarity is a significant aspect. Given the conclusions of Dunin-Woyseth and Nilsson, Fleischmann's study suggests early intervention in undergraduate study as one way of preparing designers to be more flexible and competent in the future.

As in Fleischmann's work, Murdoch-Kitt and Emans describe in their paper *'Design Nexus: integrating cross-cultural learning experiences into graphic design education'* the advantages and challenges of working in an educational context with groups from different areas on the same projects. In this case, however, the work tackles the task of broadening the designer's experience and understanding into the realm of cross-cultural learning. Their study describes two separate collaborative exercises that took place between design students at the University of San Francisco and Zayed University students in Dubai. Contextualised by the recognized needs of students to develop cross cultural awareness and communicative abilities in a global marketplace, Murdoch-Kitt and Emans present one solution through the projects undertaken here. The authors give a detailed account of the project aims, methodology and the results expressed in quantitative and qualitative terms along with visual examples that should prove helpful and instructive to design educators in a range of undergraduate courses. There is also a useful discussion of both the technological and cultural challenges to be faced in cross-cultural projects, which includes insightful comments from the participants.

Socially responsible and interdisciplinary design practices are again highlighted in Edwards-Vandenhoek and Sandbach's '*Down the Rabbit Hole we go*', which describes the teaching studio (known as 'the Rabbit Hole') at the University of Western Sydney's Bachelor of Design course. The paper describes a student centered approach where students work with real clients in a process that emphasizes collaboration and applied research. Tutors take the role of Creative Director in the design process with outcomes including publication, video, brand communication, exhibitions and the like. The authors outline the benefits of working on projects that range from commercial briefs to community based projects. Edwards-Vandenhoek and Sandbach's evaluation consists of qualitative and quantitative assessment of the process, with considerable student feedback to support the findings.

The emphasis on collaborative and participatory design in education is continued in '*Teaching the design of narrative visualization*'. Fry, Wilson and Overby outline the use of narrative visualization as a tool for 'depicting informationally-based and culturally-situated scenarios and decisions'. The authors describe two student projects where Parson's design students worked collaboratively with students from the City University of New York's class in 'Personal and Consumer Finance'. The analysis gives an account of the projects in terms of background and project development, providing a useful and highly detailed 'infoEmotion' matrix that matches content elements against visualization elements in narrative visualizations.

'*The "Nature" of Design Education: teaching design fundamentals in an outdoor classroom*' by Andrea Quam describes the historical trajectory of education in design principles from the Bauhaus on, problematizing the disconnect designers (and others) currently have with the natural world. As an alternative approach to design education which addresses this disconnect, the author outlines a project to re-connect students to the natural environment. This innovative project involves having students replicate the IDEO card set—with which many designers would be familiar—yet in this case emphasizing within each card a relation to nature. This relation is 'made real' by the students having to develop their work

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out of research experience of the natural environment. The results are discussed with reference to visual examples.

Christian Montarou's paper '*Mindfulness and Creativity: highlighting the importance of drawing in design education*' rounds off the volume with a persuasive defense of traditional drawing in the design curriculum. Montarou articulates the relationship between context and mindfulness in a drawing studio setting. He recognizes the continuing relevance of traditional drawing pedagogy for design education and makes a case, based on his own experience of teaching croquis drawing with a live model. He argues for design educators to better understand the broad educational/training value of drawing as a core practice, based on cognitive, psychological as well as philosophical grounds.

These studies all demonstrate the significant changes taking place in educational programmes and pedagogic approaches to design education. It is clear that design education is also expanding, with numerous and varied design courses worldwide and ever increasing numbers of students enrolling in doctoral courses. This issue of Studies in Material Thinking reflects the challenges and opportunities inherent in this wave of change. The authors offer some excellent resources for meeting these challenges and taking advantage of opportunities offered by this rapidly changing discourse of design.

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Dr. Amanda Bill is a Senior Lecturer in Industrial Design and Innovation at AUT University, where she is Programme Leader for Design and Business. Her research investigates the role of design in cultural economic processes, sometimes using strategies that are initiated in practice. For example, the 7 Lamps of Creativity project uses digital textile design to research creativity as a type of performative knowledge. Amanda also has a PhD in Sociology and Women's Studies and applies these social science perspectives to emergent discourses in design. Currently she is leading a research project on Knowledge Work in Innovation Ecosystems, for the New Zealand Work Research Institute. This project studies how Design Thinking facilitates collaborative innovation within hybrid organizations.

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Nancy de Freitas is an artist and academic based at Auckland University of Technology in New Zealand. Her installation works have been exhibited in solo and group exhibitions in Canada, Australia and New Zealand. Her current research interests are grounded in epistemological and methodological issues of practice-led research: the materiality of artistic and design practice; the language of research reporting; active documentation as a research method and 'material thinking' approaches. She has lectured widely on art and design practice-led research and material thinking methods at host institutions in the United States, Canada, Australia, the United Kingdom, the Netherlands, Sweden, Norway and Finland. In her installation works, de Freitas prefers low-tech, multi-sensory applications and her work has been grounded in an awareness of immigrant sensitivities and a notion of exile.

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