PREFACE

Speculative and Critical Design: approaches and influences in education

As guest editors of this special edition we are delighted to present this selection of papers responding to our call about Speculative and Critical Design in education. The response to the call demonstrates that interest in this approach is increasing and becoming embedded into design, technology and interdisciplinary educational courses. Speculative and Critical Design (SCD), including the whole family of related approaches, is clearly no longer a niche interest, and it is heartening to see how educators, researchers and their students are developing and adapting methods and ideas to suit their own needs and contexts.

This call grew from the two-and-a-half-year SpeculativeEdu Erasmus+ European Union funded project that ended in 2021. All the editors of this special issue were partners on this project along with several other colleagues who brought their own expertise and perspectives on Speculative and Critical Design. The main outcome of this project is the book; "Beyond Speculative Design: Past – Present – Future", representing a comprehensive reflection of the work [1]. Although the project was based in Europe, we were always interested in widening the discussion to be more inclusive and diverse, and the open call for this special edition allowed us to go some way towards achieving this aim.

The original call asked for both practical knowledge and reflections or viewpoints, leading to quite a substantial collection of contributions from educators working in classrooms in different design settings across different countries. We invite the reader to consider the similarities - and the differences - across these educational experiences and to draw inspiration and confidence from the techniques and methods described in this collection of papers.

Put very simply, Speculative and Critical Design (SCD) releases practitioners from the constraints of conventional solution-orientated, market-focused design, offering reflections and freedom to explore alternatives to how the world currently is, often creating provocations around fictional futures. It supports grappling with theory, encourages critique and offers tactics for investigating both the minutiae of the everyday and the big questions that affect society. Increasingly we are seeing that proponents of SCD are using the ideas to inform tactics for how to move forward, to generate concrete actions and effect social change. It is these elements that, in our opinion, make it so suitable for integrating into education, however, it is not always easy or straightforward to do so. In our call we particularly mentioned the challenges of how to nurture the development of constructive strategies amongst students who are facing a world where problems seem too complex, too inextricably interwoven and too intractable to begin to address. Many of the authors of the selected papers discussed this experience, and we are appreciative of the considered reflections that they offer, often addressing situations where there was difficulty or where not everything went perfectly according to plan. This design space is characterised by Lindley & Green as

messy and fast-paced, while authors such as Veiga give detailed insights into education in the context of real-world situations, sometimes where the expectations of students must be balanced against other needs and priorities. Writing in Colombia, Pérez-Orrego et al present a Latin American, interdisciplinary perspective. One of the challenging tactics they describe is that of exposing the students to "intellectual risk" while encouraging their critical voices.

Speculative Design, Critical Design, and the many related approaches have been discussed in detail elsewhere, and several of the papers in this special issue provide informative introductions to the field, the terminology and the literature. Addressing the question of terminology, it seems that most authors take an inclusive view, seeing the domain as a related family of approaches. Discursive design (derived from "discourse" [2]) is prominent, for example, in Beach and Fox's discussion of Value Sensitive Speculative Design, itself a theme evident in other of the papers, including Eriksson, Hansen & Nilsson who assert that "Speculative and critical design are values-based approaches, as the design process as well as the presentation and narrative around the design itself, opens up for reflection on existing cultural values, morals, and practices."

Many of the papers are explicitly addressing complex and wicked problems such as climate change, environmental crisis and social inequality, usually against a backdrop of technological developments that have impacted all aspects of planetary life and ecosystems. Citing writers including Anne Galloway and Donna Haraway, some of the authors call for thinking beyond borders through engagement with, and consideration of, non-human organisms. For example, Beach & Fox draw on theories of cross-species entanglement for perspectives within a value sensitive SCD activity. It seems that SCD is seen as offering ways to tackle these topics where other approaches to design can struggle. Not only does it lead to a possibility of creating change, it accepts that complexity and difficulty are fundamental parts of any relevant design brief.

The breadth of SCD is considered a strength but brings difficulties around how to manage it within an educational setting. What is the necessary scaffolding for students to critically reflect on their disciplines as a means for better understanding the challenges facing them as practitioners in the future? Criticality is necessary for the next generation of practising designers, but teaching criticality is not straightforward, so we were interested to find out about tactics being used in classrooms. Authors proposed frameworks, such as the Transition Design Framework (Culén & Stevens) and practical classroom activities such as proto-cards (Tost, Schuster & Heidmann) to address the challenges of learning critique within the design process in order to offer actionable insights. In many disciplines this critique is carried out in hindsight after the completion of the design work (Kuijer &Robbins).

Many educators are finding SCD to be a useful resource for education and, as this special edition shows, there is an ongoing debate fuelled by a desire for the domain to evolve while remaining a living, reflective discourse. As Lindley & Green say. "... the sharing of experiences within our community is what will galvanise it, strengthen it, and help it to continually evolve and adapt to contemporary challenges."

We would like to thank all the authors who responded to the call for sharing their experiences so generously and openly, and also, we would like to thank all the students

for their efforts in balancing creativity and criticism through their inspirational SCD projects.

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References

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