

## DESIGN EDUCATION AS A CATALYST FOR CHANGE

### Abstract

This Conversation aims to explore the relationships between design education, design practice, and social change. To achieve this aim, the Conversation will bring educators and researchers from a variety of disciplines together to foster new exchanges and collaborations, allowing us to better explore questions about what it is that we learn when we learn to design, why that is, and what impact that has on our societies. During the Conversation, audience members will work in groups to create “prototype” research articles responding to themes and provocations proposed by the convenors.

**Keywords:** Design Education; Social Change; Design Profession; Hegemony

### 1. Convenors Information

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### 2. Context of Conversation Topic

Designers play a significant role in shaping our world; human lives are spent interacting with designed artefacts, systems, and processes. Designers can therefore be considered examples of Gramsci’s definition of *intellectuals*: the people who organize society and define or reinforce the cultural hegemony of the dominant class (Gramsci, 1989). If we accept this account, then what role does education play in instilling hegemonic values in designers? And could changes in design education help to foster counter-hegemonies? Put differently, if designers really do shape the world, and if education shapes designers, then could design education serve as a “leverage point” for achieving broad social change? Scholarship in the field of science and technology studies (STS) tells us that the relationship between technology and society is not a simple one: neither pure technological determinism (the idea that technology shapes society) nor pure social constructivism (the idea that society shapes technology) is accurate. Rather, technology and society “co-produce” each other (e.g. Bijker et al., 2012). It seems reasonable to expect that a similar model of co-production could be used to understand the relationships between design education, design practice, and social changes. Two examples illustrate the point:

1. In the US during the late 19<sup>th</sup> Century, engineering education began to be taught in universities alongside the emergence of engineering as a profession and the rise of

corporate capitalism. The struggle for the “useful arts” to be accepted as an academic discipline drew strength from, and in turn strengthened, the consolidation of corporate power in society (Noble, 1979). From the beginning, the curricula of the new American engineering schools emphasized a design education focused only on narrow problems of technical performance and cost, thereby producing disciplined design employees for the emerging corporations (Schmidt, 2001; Noble, 1979).

2. In the 2000s, a particular brand of “Design Thinking” (DT) attracted the attention of the management world (Dorst, 2011). Ostensibly drawing on ideas from design education, DT promised a method of solving almost any business problem, from corporate governance to accounting (e.g. Berger, 2009). It also happened to reinforce hegemonic (neoliberal) values of entrepreneurialism and market-based solutions by framing all problems in terms of consultants and clients (Vinsel, 2017). While some have claimed that DT was a management fad whose time has passed (e.g. Nussbaum, 2011), it seems to have had a significant and potentially lasting impact on education (Miller, 2017). Ironically, it has also exerted an influence on design education itself.

Both examples demonstrate relationships of co-production between design education, design practice, and society, and both are examples of changes in design education reinforcing broader hegemonic projects. Of course, many attempts have also been made to challenge rather than reinforce the current hegemony by introducing new perspectives on design to the undergraduate curriculum. From the appropriate technology movement to feminist technoscience to Transition Design, the adoption of these philosophies in education has been less uniform than in the examples listed above, ranging from isolated efforts by individual instructors to wholesale curriculum redesign by entire design schools (e.g. Irwin et al., 2015). Obstacles are to be expected in any efforts to challenge the social status quo, but how could an understanding of these obstacles strengthen efforts to contribute to social change through design education? What can we learn from historical examples of the co-production of designers and society? What design experiments could we perform to yield new insights on this topic?

The proposed Conversation aims to explore the relationships between design education, design practice, and social change. To achieve this aim, the Conversation will bring educators and researchers from a variety of design disciplines together with experts from a range of other humanities and social science disciplines. Much of the current educational research within design disciplines draws primarily on methods and theories from psychology and focuses on understanding *how* students learn to do design. This Conversation aims to foster new exchanges and collaborations that could expand the scope of research on design education, allowing us to better explore questions about *what* it is that we learn when we learn to design, *why* that is, and *what impact* that has on our societies.

#### 4. Set-up of your session

This Conversation aims to encourage new research collaborations and exchanges; the set-up of the session reflects this aim. In the months prior to the conference, the convenors will use the online forum to hold discussions with a multidisciplinary group of researchers,

including those who are unable to attend the conference. Online participants will include Amy Sue Bix (Iowa State University), Cameron Tonkinwise (University of New South Wales), and Kari Zacharias (Virginia Tech).

The online conversation will be used to define terms, share relevant literature, and plan the session in detail. In particular, the participants in the online conversation will prepare a set of at least five Conversation themes and related provocations. Example themes might include: Design Education and Global Warming; Design Education and Oppression; Design Education and Public Policy; or Design Education for Maintenance and Repair rather than Novelty and Innovation. The provocations will be a set of questions, statements, or scenarios related to each theme.

The session at DRS2018 will be structured around the themes and provocations that emerge from the online conversation. For the first 15 minutes, the lead convenor will introduce the overall topic, present relevant background literature, and describe the process to be followed. Over the following 30 minutes, each of the other convenors will present one of the themes, the related provocations, and a summary of the related online discussion.

Following these presentations, the session participants will then break into groups with each group focused on one of the presented themes. The groups will be asked to design a research study on their assigned theme. To focus the discussions during this activity, each group will be asked to produce a speculative “prototype” in the form of a draft research article. This draft will outline the paper that participants would expect to result from their study design and will sketch out the motivations and relevant literature for the study, the data collection and analysis methods used, and the methods of presenting results (e.g. qualitative description, plots, tables, etc.). This group activity will last for 45 minutes. During the final 30 minutes of the session, the groups will briefly present their research design to the room and the convenors and other participants will offer feedback and suggestions.

## **5. Type of space and equipment required**

This conversation requires a room with a projector, moveable chairs, at least six tables, and space for at least 30 people. Whiteboards are desirable but not essential.

## **6. Dissemination strategy**

The primary dissemination goal of this Conversation is that the group activity will lead to real collaborations that will yield research publications. In addition, an aim of the online conversation is to produce an article (e.g. a position paper), co-authored by the participants in the online discussion, that will be submitted for publication in a journal such as *Design Studies*. The concluding document prepared for the DRS2018 site will describe the themes and provocations that emerge from the online conversation, as well as the research questions and study designs developed by the session participants. The group presentations will be audio recorded to assist with this documentation task.

## 7. References

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### About the Convenors:

**Dónal Holland** is Assistant Professor in Mechanical and Materials Engineering at University College Dublin, and Associate at the Harvard School of Engineering and Applied Sciences. His research interests include engineering education and the design of robotic systems for rehabilitation.

**Ramia Mazé** is Professor of New Frontiers in Design at Aalto University, specializing in critical and politically-engaged design and design research practices. Recent projects include a book on feminist spatial practices and the project UTOPIA NOW HERE at the Istanbul Design Biennial.

**Alex Milton** is Head of the School of Design at the National College of Art and Design. His research addresses the development of design policy and strategy; he served as Programme Director of Irish Design 2015, devising and delivering a major government-backed programme.

**Ingrid Mulder** is Associate Professor in Design for Social Transformations at TU Delft. Her ongoing research interestingly combines the strategic value of design and participatory design methods to diffuse design capabilities to trigger societal change.

**Cristiano Storni** is a Lecturer and Director of the MSc/MA in Interactive Media at University of Limerick. His research explores the impact of ICT on people, organization and society, and his expertise includes Actor Network Theory and Social Studies of Information Systems.