Where next for research on fixation, inspiration and creativity in design?



Nathan Crilly, The University of Cambridge, Department of Engineering, Trumpington Street, Cambridge, CB2 1PZ, UK *Carlos Cardoso*, Faculty of Industrial Design Engineering, Delft University of Technology, 2628 CE, Delft, The Netherlands

This is a report from an international workshop focused on the future of design fixation research within the broader context of work on creativity and inspiration. Fixation studies have already generated many useful results but there are clear opportunities to better connect with work done on other related concepts and work done in other disciplines. This would allow fixation research to broaden and strengthen its methodological approaches, offering richer insights into how design ideas originate and how they subsequently evolve. Such knowledge could then be applied to influence the development of design education, training and tools. In this way, fixation research would maximize its potential to provide insights into the creative process, improve design practice and thereby support innovation.

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Workshop participants

Petra Badke-Schaub (Delft University of Technology), Merim Bilalic (Alps Adria University), Philip Cash (Technical University of Denmark), Nathan Crilly (University of Cambridge), Carlos Cardoso (Delft University of Technology), Kees Dorst (University of Technology Sydney), Claudia Eckert (The Open University), Gabriela Goldschmidt (Technion — Israel Institute of Technology), Milene Guerreiro Gonçalves (Delft University of Technology), Molly C. Martini (George Mason University), Maria Adriana Neroni (University of Cambridge), Steven Smith (Texas A&M University), Martin Stacey (De Montfort University), Luis A. Vasconcelos (University of Cambridge), Aukje Verhoeven (University of Amsterdam), Pieter Vermaas (Delft University of Technology).

Other contributors

Corresponding author: Nathan Crilly nc266@cam.ac.uk Bo Christensen (Copenhagen Business School), Nigel Cross (The Open University), John Gero (George Mason University), Anja Maier (Technical University of Denmark), Robert J. Youmans (Google Inc.).

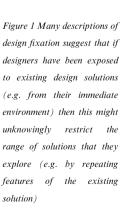


"the mind fails to see the shortest solution for a given problem because of a fixation to one approach of solving a problem of that type"

- Tracz (1979: p. 133), writing about the psychological challenges of computer programming

esigners of all disciplines are required to be creative if they are to arrive at new and useful solutions to the problems that they address. Design tools and design processes are often claimed to unlock this creativity by inspiring designers to undertake a wide-ranging exploration of the design space. Despite this, designers can still inadvertently restrict the range of ideas that they consider, limiting the way in which they interpret problems and explore possible solutions. In particular, potentially useful sources of inspiration or information can have the effect of constraining rather than freeing the designers' imagination (see Figure 1). As Tracz said in 1979, they would then be suffering from 'fixation', only seeing things in one particular way, even if there were a 'shorter', simpler or better approach.

For many years, psychologists have been describing and studying the kinds of blocks that can impede insight, often resulting from the counterproductive effects of prior knowledge. This phenomenon and its variants have been demonstrated in a number of now-classic experiments, including Maier's (1931) and Duncker's (1945: Ch. 7) demonstrations of how people's 'attachment' to the conventional function of artefacts inhibits their capacity to see new possible functions — referred to as 'functional fixedness'. Related to this are Luchins' (1942) demonstrations of the 'Einstellung effect', where people become mentally 'set' in a particular approach to solving problems.





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