45 Years with Design Methodology

This is not an article! With this evident contradiction inspired by René Magritte’s painting of a pipe, I will underline the special conditions I was given by the editor. The intention is that I shall review my own work and career, to articulate key ideas and to tell what I see as future challenges in my area. Therefore the use of ‘I’ is in a non-traditional form. The object of this article is the author’s Weltanschaung concerning design and designing as it has developed over a 45 years period as teacher and researcher. Three dimensions are treated in an attempt to answer the following questions: how can we establish rigour and strong foundation for researching design? How to explain to industry what they are doing, and how to create industrial support? And what to tell the students about designing? I will focus upon the dislocations which have led to the development of the current state and what we see as a comprehensive school of designing. Details about established results can be found in the literature; I will focus upon the questions, thoughts, problems and beliefs behind the answers, and unsolved or non-clarified aspects. The article follows three lines of development, labelled Theory of Technical Systems, Engineering Design and Product Development, and our attempts to create a totality out of design philosophy, Domain Theory, Theory of Properties and our understanding of product development. Together they are the main part of ‘our school’, namely the foundation of the group ‘Engineering Design and Product Development’ at the Technical University of Denmark; the ‘Copenhagen School’ as our friends often refer to us. The conclusion attempts to balance in a joint model what I see as the role of design research in the worlds of teaching and practice, and where I see the challenges for the future.

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