Abstract:

Sustainable design of technical artefacts is referred to as if it were a kind of design with some specific characteristics. However, in design research and practice alike, there appears to be a lack of shared conceptions of what such a design might entail. Furthermore, we have no clear grounds for evaluating what makes the sustainable design solutions permissible. The lack of shared conceptions is largely due to ambiguities associated with the notion of sustainability. In response to these challenges, the aim of my study is to offer a definition of sustainable design of technical artefacts. I argue that despite the ambiguities, there are discernible necessary and sufficient conditions by which the design may qualify as the sustainable kind. My claims are constructed based on two assumptions: the first being the presence of side effects of the design of technical artefacts, and the second being the values afforded by the properties of artefacts.

The study is a conceptual analysis and as such belongs to the field of epistemology of design. It offers three contributions to the design discipline: (1) a proposition of the definition of the sustainable design kind; (2) a proposition of the concept of technical intervention; and lastly, (3) the explicated concept may assist the design practitioners when qualifying their design solutions as sustainable.

Key words: Sustainable Design, Technical Artefacts, Technical Intervention, Design for Sustainability, Dispositions, Side Effects, Utility Value.