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Revisiting sustainable design strategies

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Over the past two decades a number of major eco- and sustainable design strategy compilations have been introduced (Brezet and Hemel, 1997; Thompson, 1999; Fuad-Luke, 2009). The immediate aim of these compilations is to provide an overview of the available strategies (such as 'Recycling' or 'Dematerialisation') in a structured format. However, on a more fundamental level, they all intend to contribute to a better integration of theoretical concepts on one side and applied design activities on the other. Yet, due to the sheer variety of different approaches in naming and clustering the design strategies, there is a considerable degree of ambiguity in the literature. This ultimately contradicts the aim of providing the structure and clarity required for effective planning and communication between stakeholders.

Objectives

This study has identified two main objectives to be explored. First and foremost, the study aims to facilitate effective communication between academics and practitioners. Thereby, a comprehensive collection of eco and sustainable design strategies is established with the following properties:

~ A clear indication of synonyms, together with linkages to corresponding concepts which support a better understanding of individual design strategies in terms of naming and definition.

~ A clear hierarchical structure, which supports the user in finding and evaluating individual design strategies in terms of their position in the wider picture of sustainable design.

Second, the study aims to explore alternative methods of visually representing the introduced design strategy collection. This then facilitates different aspects of planning and communication in the design process.

Approach

The development of the design strategy compilation is based on a literature review. Following an analysis of the data, an original generic structure is developed which builds a framework for the specific sustainable design strategies identified in the review.

The new classification is visualised in two different ways. Firstly, a map provides an overview of all design strategies, supporting the understanding of the generic structure of the classification by clearly indicating major areas and subdivisions. Secondly, the classification also provides a set of cards which enables the rearrangement of strategies or the concentration on specific aspects. Both the map and card visualisations are evaluated according to their potential to support interaction and discussion in a series of interviews.

Implications

On a theoretical level the new classification provides a comprehensive compilation of sustainable design strategies used to date. As the origins as well as the synonymic versions of each specific design strategy are indicated in this study, it may also be used as a reference for future research in this area. On a practical level, both the map as well as the card set may be used as tools to facilitate interview or workshop situations which will be useful for both academic research activities as well as commercial design projects.

References

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