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Title : UNDERSTANDING DESIGNER DESIGN ACTIVITY; UNCONSCIOUS INTERACTION BETWEEN HUMAN COGNITION AND BEHAVIOUR IN EVERYDAY PRODUCT

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Product designers were expected to apply their hermeneutic as well as reflective design thinking skills to find a fit between technology and human behaviour interaction, including the notion of experience-centred. However, due to dynamics of changes in technology and the way users interact with products, the past several years have witnessed a growing interest and enthusiasm for designing the product which explicitly emphasise on user behaviour and interaction. Therefore, the recent studies have been paying attention to critically understand the elements of interaction between human and product used in everyday life. Unfortunately, it has been profound that there are limited discussions were presented within a single coherent perspective of designers' design thinking related to the Unconscious Interaction between Human Cognition and Behaviour (UIHCB) in everyday product. In other words, a little intention has been devoted on how the UIHCB in everyday product can aid designers' design activity. Thus, the purpose of this research is to understand designer design activity towards the UIHCB in everyday product. The research objective is to determine the attributes of unconscious interaction in everyday life, what are their responses towards the UIHCB in everyday product, how their reflective practice can be described, and how does the understanding of UIHCB in everyday product helps to aid designers' capabilities in generating product design ideations. Four research questions have been formulated to get a firm answer posed in this research. The main empirical effort for this thesis involved qualitative and quantitative research in gathering and analysed implicit and explicit designer's knowledge. It included methods such as surveys, observation studies and evaluation studies. Through the empirical

findings, the study found that the attributes of unconscious interaction in everyday behaviour can be identified through observations. This leads to the significance development of understanding the attributes, and helps to widen a gaze about the possibilities of looking at the realms of UIHCB in everyday product. Moreover, the study also found that designer's perception, analysis and reflection on UIHCB in everyday product have a significance characteristic, which helps them to analyse the subtle and amusing interactions between the person and the product as essential elements in design resource. Thus, they can expand their thinking and reasoning parameters by reflecting to produce a various conceptual design solution. Nevertheless, the study also found that designers are proficient enough to determine the 'misfit' in design. They also interactively frames the design problem, names the relevant things they attend to within this frame, working or 'moves' toward a solution and reflects on the outcomes. The final findings of the study found that each level of form entities in all the selected conceptual design ideation has the elements of consistency, uncertainty, and functionality. Thus, it can be concluded that the UIHCB in everyday products is applicable and useful for designers to create valuable conceptual ideation, enduring design solutions and enhancing product values. In conclusion, this thesis presents a descriptive conceptual framework for understanding the UIHCB in everyday product and how designer thinks and reasoning on this matter. The significance knowledge and the applications of this study incorporate the procurement for design education and the product-interaction industries.

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