

Bio-structural analogues in furniture: transformational potential of chair design as can be found in Rafflesia structures

ABSTRACT

The aim of this literature review paper is to explore bio- structural analogues in furniture, focusing on discovering the transformational potential of chair design as can be found in Rafflesia structures. The rationale behind this research problem is to bridging the gap between Transformational Design Theory, Rafflesia morphology and plant analogues chair design. By incorporating a qualitative design methodology and a critical and comprehensive review of a range of recently published literature sources (until December 2014) addressing various issues related to the transformation process, Rafflesia Azlanii and plant analogues chair, hence this research unearths insights about the Transformation Principles, macroscopic and microscopic morphology of Rafflesia endemic to Malaysia resources, and discussion on the latest plant analogues design. It is hoped that the analysis, as captured in this paper, will highlight the different transformation process in chair development. The paper will be of interest to researchers in the areas of plant analogues design, enable learning environments, in general. Further, the finding of this paper demonstrates how the analysis of academic literature sources has been combined with commentaries and opinions on the journals and articles to develop this literature review. Therefore, it fulfills an identified information/resources of Transformation Design Theory, design analogy of Rafflesia and chair to offer practical help to students/academicicians/ designers starting out a plant analogues design direction. It is a very useful source of information and impartial advice which its contributions may be commercialized and influence learning and teaching strategies in higher and further education specifically institutions that are considering the use of Rafflesia cellular structure in chair design.

Keyword: Transformation Design Theory; Transformation Principle; Rafflesia; Rafflesia morphology; Plant analogues design; Chair design; Malaysia identity design; Transformer; Design analogy