ONUR M. COBANLI



Topic: Industrial Design

Authors:

Onur Mustak Cobanli
OMC Design Studios
SRL. Como / Italy.
(Politecnico di Milano
and Bilkent University
alumnus)
polimi.it
bilkent.edu
omcdesign.com

References:

[1] Meyer Marc H, "The Power of Product Platforms", The Free Press, New York, 1997 [2] Sample Works in artgenerative.com
[3] Kota Sridhar, "A metric for evaluating design commonality in product families", American Society of Mechanical Engineers, New York, 2000 [4] Articles found at generativeart.com

Contact:

omcdesign@gmail.com

Paper (+ Poster, Artworks): Generative Design using Design DNA.

Abstract:

What is the difference between an artisan and a sculptor? From my point of view, the very difference lies in the amount of mental and creative processing done. The sculptor has to think creatively and imagine something new that did not exist before. The artisan, on the other hand, is a manual worker. The artisan realizes existing ideas, apply or duplicate the sculptors' designs. The sculptor designs something new. There is a significant mental and creative processing gap between an artisan and a sculptor. Something we note in this article is that, generative art processes can lead to a similar creative processing gap between a designer and a GA-designer which is aided by generative art processes. In my paper, I start by exploring what is mental and creative processing. Secondly, I define the creative processing gap. Thirdly, I underline what is 'higher art' (in which sense being a sculptor is 'higher' then being the 'artisan'). Next. I aim to answer the following questions: Can using generative art processes lead to a creative processing gap between GA-designers and designers. In which sense generative art can carry both the designers' and artists' role in design and art creation to a higher level? Can using generative art processes contribute to the creative processing gap by improving the quality of work? How does using generative art processes increase the quality of work? Does quality of the work get better by increasing the possible number of outcomes? Is the quality of final work could be made better by decreasing the amount of physical labour imposed on the designer? We will carry this discussion to product family design and we will also answer how generative art processes can help to increase the efficiency in design to understand the commercial value of generative art.



Product families designed with Generative & Design DNA approach

Keywords:

product family, product generation, design intelligence, design generation, iterative design, design dna, morphogenesis, algorithm