CRITICAL PRACTICE IN AN AGE OF COMPLEXITY - AN INTERDISCIPLINARY CRITIQUE OF THE BUILT ENVIRONMENT

• Paper / Proposal Title:
Spiralling Slope as a Real Life Co-Design Laboratory

• Format:
Written paper and verbal presentation

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• University or Company Affiliation:
Collaborative Collective and Sysloop

• Abstract (300 words):
The paper and its presentation is to discuss a family house Spiralling Slope (sophia) that is co-designed, inhabited, tested and developed prototype by the second author of this submission and his wife, the clients. The eco-systemically performing house, literally twisted as a helix into the sloping terrain, gaining its thermal energy, is also covered by extensive greenery to gain this property on its top. Algae, grown on the glass roof, moderate its atrium clime. Through its sloping disposition, the house employs natural ventilation for its airing. Though the first author is conducting research that this performance is operated by nature of material properties (Davidová, 2016) in the time of the house’s design stage, this research was not developed enough to meet the building practice. Therefore, the house’s eco-systemic performance that could not have been reached by biology is achieved through the technology of autonomous environment control (sysloop). Sysloop is a real-time knowledge processing software, where the client is the main developer, co-designing with all the other professions involved in the house design and construction, including its architects and systemic designer. Since the house is designed based on natural performance, both its
environmental, social and practical performance is operated through a computer based system. Testing such prototype by life co-living experience brings true insights into its design in time. This approach has been defined by Sevaldson as Time-Based Design at the start of this millennium millennium (Sevaldson, 2004, 2005). However, at that time the crucial leading design team member was not at the same time the subject of testing. 

This brings the Shön’s discussion on ‘reflective practitioner’ (Schön, 1983) few steps further. It is not that s/he designing and lecturing is enriched by tacit knowledge of i. e. building practice experience, but the designer’s experience is gained through living within the system s/he is co-designing and co-prototyping in real life and for real life. Therefore through this such case studies, as the approach fuses the life performance with its design and eco-systemic design and living processes, the first author defends to ratify a new design field, Systemic Approach to Architectural Performance.

• References:


• Author(s) Biography (200 words each):

Indexed and Peer Reviewed Publications:


**Peer Reviewed Publications:**


Davidová, M., & Prokop, Š. (2016). Advances in Material Performance of Solid Wood: Loop, the Environmental Summer Pavilion II. In M. S. Uddin & M. Sahin (Eds.), 2016 DCA European Conferencen: Inclusiveness in Design (pp. 501–507). İstanbul: Özyeğin


• References:


