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PRESENTER ABSTRACTS
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The Design of an Urban Park in the City of Patras, Greece: Towards the Development of an Enriched Environment

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1. ABSTRACT

The term environmental enrichment is associated with stimulation of the brain by its physical and social surroundings. Creating environments that stimulate and enhance human perception and skills, falls within the professional agenda of both practicing and academically oriented architects.

The paper presents an architectural design project that is directly related and based on research findings on neuromorphic architecture which was conducted prior to the design development. The discussed project in essence constitutes an experiment in applying an enriched/enhanced environment in a real city context, the city of Patras. The main purpose of this effort was to attempt a spatial translation of relevant research in Neuroscience into an urban space that will make possible the experimentation with EEG. The paper describes the followed design procedure starting from the main design directions to the details that satisfy the requirements of an enriched/enhanced environment in practice. Two different age groups, the elderly and the children, who are more sensitive to such environments, are selected as target groups. The common potential benefits of both groups from an enriched/enhanced environment determined the design objectives that dictated the main circulation, accesses and paths as well as the main function allocation in the design field. The differences of the two target groups suggested the development of two distinct and contrasting activity areas a) a static one and b) a continuously transformable field. Specifically, the key elements of the expected experience of the users, namely navigation, exploration, multi-sensory experience, cognitive stimulation, social interaction, physical action, suggested a design approach that involved three space organizing principles: the polycentric system, the exploration/navigation experience, the social and sensory interaction. At a following, smaller scale design development phase; the same key elements were spatially translated into architectural features. It is hoped that the design method that has been will serve as an example of how sensorial and motoric actions as well as anticipated social activities can be integrated and become the driving theme in the design of urban spaces. Of course future studies are needed to test the effectiveness of this approach in areal world setting.

Keywords: City of Patras, neuromorphic architecture, enriched/enhanced environment

2. AUTHOR BIO

V.Kondyli obtained her Diploma in Architecture Engineering, in University of Patras Department Of Architecture, Greece with honors (8.55/10). In her graduation research (14ECTS), she delved into topics of perception theories and relevant studies in neuroscience research as well as in experimental research on the perception of space. She continued in the same direction in my Design Thesis. During her Design thesis project (30 ECTS), the research guided her to design an enriched urban environment as an appropriate place for experimentation with EEG systems and human interactions. Towards this effort she was advised by acclaimed researchers in the field, like Dr M. Cooley, P.Mauros, Ryan Dooley, who initiated her to the prospects of this new field of cooperation between neuroscience and architecture.

