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Spatial Cognition and 3-Dimensional Vertical Urban Design Guidelines

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Abstract : The main focus of this paper is to propose a comprehensive framework for the cognitive measurement and modelling of the built environment. This will involve exploring and measuring neural mechanisms. The aim is to create a foundation for further studies in this field that are consistent and rigorous. Additionally, this framework will facilitate collaboration with cognitive neuroscientists by establishing a shared conceptual basis. The goal of this research is to develop a human-centric approach for urban design that is scientific and measurable, producing a set of urban design guidelines that incorporate cognitive measurement and modelling. By doing so, the broader intention is to design urban spaces that prioritize human needs and well-being, making them more liveable.

Keywords : vertical urbanism, human centric design, spatial cognition and psychology, vertical urban design guidelines
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