



Morphological Analysis Of Dar al-Fonoon School Using Space Syntax

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Abstract

Research Problem: Schools are one of the most important spaces for children's education and attention to physical features and spatial relationships and achieving optimal design patterns in contemporary schools are among the important issues in the quality of children's education and learning. Which can pave the way for the development of children's personalities, education, and upbringing in the future. According to The importance of spatial relationships in schools and Its impact on student learning And also due to the diminishing components of the spatial configuration of the past architecture in modern buildings, In this study space syntax has been used to analyze spatial relationships and how spatial configuration. In this regard, Dar ul-Funun school of the Qajar Period was selected as the first successful modern-style school in the contemporary era for analysis

Research Question: The main question of this research is that what is the relationship between how the spatial organization is organized and the index of integration, depth, connectivity, visual connectivity (Transparency), Intelligibility in the form pattern of Dar ul-Funun school plan? A hypothesis that answers the main question of the research we are trying to test is that there seems to be a significant relationship between the spatial organization and the degree of integration, depth, connectivity, transparency (visual connectivity), Intelligibility in the form pattern of Dar ul-Funun school plan and type of space syntax and arrangement is effective on the mentioned indexes in Dar al fonoon school. This study aimed to analyze the characteristics of spatial configuration and identify spatial and social relationships in the past educational spaces to achieve the desired spatial syntax and modeling for the construction of new schools

Research Method: The research method used in the research is descriptive-analytical in the case sample and, ultimately, logical reasoning to prove the hypotheses. The tool used in research includes library studies, field observation, and finally The simulation using The software Space Syntax(depth map). In the process of doing research first, the theoretical foundations using library studies and first-hand references and documents were collected and edited. Then, field observation was made from the selected sample and after simulating the case sample using specialized space syntax software (Depth map), the maps were analyzed and evaluated, and finally, by analyzing the selected sample using the logical reasoning method, the findings were discussed and finally, conclusions were discussed.

The Most Important Results and Conclusion: The findings of the study showed that there is a significant relationship between the type of spatial organization and the degree of integration, depth, connectivity, visual connectivity (transparency) and Intelligibility in the Dar ul-Funun school And the central organization is positively correlated with integration, connectivity, visual connectivity (transparency) indices and Intelligibility and negatively correlated with depth indic. and given that the organization pattern and spatial arrangement in the Dar ul-Funun school are as a central courtyard, this space (central courtyard) has maximum integration, connection and visual connectivity (transparency) with numeric value 28.82, 7461 and 3967 and a minimum depth of

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1.37 in the Dar al fonoon school. Also, the central syntax of the Dar al fonoon school plan creates high resolution with the numerical value of 0.91 in the Dar al fonoon school. Therefore, the use of a central model in a school s plan has been one of the important factors in creating spatial cohesion and integration among the school spaces. And the use of central layout in the school space is one way to create spatial cohesion and integration among school components

Keyword: Space Syntax, Dar al fonoon School, Morphology, Depth map, Analyze

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