Integrating Cognitive Neuroscience and Interior Architecture to Meet Human Needs and Face-to-Face Social Relationship in the Third Places

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Abstract:

Third places became a necessity to fulfill several social and cultural fields. To - day, and due to modern technologies, there is a shortage and lack of interaction and face-to-face conversation between people. Cognitive neuroscience is drawing the attention of researchers, all over the world, to study the interaction with the environmental characteristics of interior space. To-day, this became an extremely interesting research subject in the design of interior architecture. There are several physical features that are to be considered when forming interior space of third places e.g. color, texture, form, empty space … etc., beside environmental aspects such as light, sound, temperature and humidity. It is not an easy task to balance between such features and the elements to come up with the ideal design for the interior architecture in third places. (J. Gibbs, 2010). The purpose of this study is to discuss the role of cognitive neuroscience and its effect on emotions of man towards the space and stimulating human behavior and the interactive reaction together with its influence on brain functions. This study seeks to create an understanding of the development of this complicated relationship and its role to regain the good quality of face-to-face social relations in third places (cafeterias). This is achieved through exploring the structure of brain functions, nervous system and the emotional state of humans. This is done by delving into mutual relations, whither positive or negative, between the design of interior architecture and the human neural cognition. The main tool to perform this study was a questionnaire that was distributed to 111 face-to-face participants to a group of participants whose final number was 106. The study utilized direct observations and qualitative descriptive analytical method within a practical and theoretical framework (before and after modification cafeteria) in Maadi area.

Key words:

Neural Architecture ، Neuroscience/Neurology ،Sences ، stimuli ،Third place