Emotional Design in Architecture

I. ABSTRACT

I.1. BACKGROUND

Architecture and Neuroscience were two separate disciplines, until it was found that the brain is constantly adapted to the environments we are living in. Focusing on healthy environments, a well-designed built habitat with principles of neuroscience, reduces patient stay for example, and even plays a part in treatment such as retrieving old memories and brain stimuli. Neuroscientists study behavior and brain. In addition, they study sensation and perception, how the brain influences decision making, emotions. For example, how we interact with our environment and how we navigate through it, how we hear, taste, and even smell things, how we store the information received and how we can recall the same information, how we react to various situations for example fear and how we evaluate the results of our actions. As seen all these are affected by environmental designs. This therefore requires architects to use these neuroscience principles to input them in their designs. Learning how our brain works with perception will lead to new developments on behalf of users in design, and specifically Architecture. Our Environment explains the different experiences that we receive, for examples, people in rural settlements have certain mindfulness that people in urban areas do not possess. It is therefore of paramount importance for designers to understand the effect various designs have on our emotions. For example, new designs combined with architecture approaches give individuals a pleasant stay, shortens the healing.

I.2. METHODOLOGY / PROCEDURE

Over the past years, several studies have been done focusing their attention on the impacts of architecture on emotions. This research focuses on experiences done in Architectural and Urban settings in the city of Barcelona. In an experiment, two subjects essentially brain mapped by the use of portable EEG neuro-headset connected to its software on the laptop, which analyzed brainwaves in the brain, so that it could detect different degrees of emotions. In addition, this machine has a capability of measuring the affect of the environment on emotions. Therefore, it has become more accessible to measure the architectural impacts on emotions. The paper aims at explaining different degrees of emotional expressions on special Emotions. It also targets in conclusion to be able to design our emotions, through architectural elements.

The choosing in the methodology used designs that activate distinctive emotional expressions that can be felt through changeable architectural elements. The various emotional elements trigger certain emotions. The elements used include Water, Ceiling Height, Natural Light, Colors, and Styles. These design elements provoke emotions of Engagement, Excitement, Interest, Relaxation, and Stress.

OUTCOME DATA: EMOTIONS IN PERCENTAGE

- 99%
- 79%
- 59%
- 79%
- 79%

2. REFERENCES


3. AUTHOR BIO

Richard Georges Aoun
B.Arch, M.Arch.
www.richardaoun.com


2006 | French Baccalaureate (Economics & Sociology) – College Notre-Dame de Jamhous Lebanon

2013 | Bachelor of Architecture (B.Arch.) – Lebanese American University | Beirut

2015 | Master in Advanced Architecture (M.Arch.) - Institute for Advanced Architecture of Catalonia | Barcelona

2016 | Architect & Urban Designer at SOLIDERE INTERNATIONAL | Beirut