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PRESENTER ABSTRACTS

ACADEMY OF NEUROSCIENCE FOR ARCHITECTURE

The Locksmith of Fascination: Resistance and Cognitive Stimulation in Architectural Space

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1. ABSTRACT

Before the grand entrance of any architectural space there is the moment of tactile connection when all the senses combine and form an impression of the experience to follow. In its simplest form this initial contact can be thought of as a latch or gate being moved, physically. As in discussions of consciousness we often speak of the subliminal awareness, this paper speculates that numerous active sensory moments can be understood to create the various elements of an experience of architecture. The touch of a surface, the thermal delight, a feeling of security. How these cognitions are expressed in changes to neurotransmitters and neurotransmitter receptors may have long term effects on building users. We propose a metric for the study of these potential qualities that may actually link the mechanism of ion channels to the tactile experience of quality in material, light and sound. It can be seen that different building types convey a language, does this language have a quantifiable effect on brain function? The investigation will provide a platform for further investigation of psychological and physical benefits of certain architectural qualities.

2. AUTHOR BIO

Mr. Whittet has been a part of the high performance building field as a contractor, designer, developer and consultant on work across the United States for over three decades. His interest in Neuroscience began when he interacted with the Telluride Neuromorphic Engineering Workshop twenty years ago and formed lasting connections with the members of that research group that continue to this day. He has continued to investigate and be active in the development of high performance sustainable architecture and its relation to human potential.

He has worked in Southwest Colorado and Maine on photovoltaic off grid projects pioneering sustainable net zero systems in remote island and mountain locations. Notable LEED projects include Boston's iconic International Place towers, Las Vegas CityCenter, Boston Society of Architects and the Princeton Plasma Fusion Lab Lyman Spitzer building.

Currently active in the Massachusetts USGBC and Member of the ASHRAE SSPC 189.1, he is also a board member of the ADPSR, Architects, Designers and Planners for Social responsibility.

Passionate about craft, quality of life and culture he writes and blogs about these subjects often and takes every opportunity to explore new ways to see, appreciate and encourage a better world.