The Real Meaning of Architecture: Or How to Make Architecture Mean Something

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I. ABSTRACT

Architects ask, “How does Architecture mean something?” Recent developments in neuroscience and building framework bring this classical question to our proposition. Our proposition is that architecture is understood in an instant, much as we realize a first impression through the medium of an atmosphere, by way of embodiment, in the manner of affordances.

Architecture is like a first impression. The etymology of “impression,” is “the first and immediate effect of an experience or perception upon the mind,” and “an image in the mind caused by something external.” A first impression, more than being a mere impression, is a psychological schema. A phenomenon of composite signals emitted by a new stimulus that is immediately and implicitly acknowledged and embodied in its proportion are hardwired into pre-reflective judgments of beauty and action. In “Neuroaesthetics: A Review,” Cinzia, Gallese, and Di Dio13 give a renewed interest in the human body and the revealed divinity of harmonics. Equally, current neuroscience insists that symmetry and proportion are present throughout space, time, and elastic understanding of consciousness. The science of ASC’s is condensed to the oscillations of brainwaves; layered emotional, among others. Their consequences include deviations in perception, dissolution of internal and external boundaries, altered mental states, induced by various physiological, psychological, or pharmacological maneuvers or agents, which can be recognized subjectively by the individual themselves (or by an objective observer of the individual) as representing a sufficient deviation in subjective experience or psychological functioning from certain general norms for that individual during alert, waking consciousness.

The gentle alteration of mind is not exclusive to the built environment. Due to large mass to our evolutionary development, rooted in survival factors on the savannas of Africa. To scan our environs, receiving information through our complete set of senses in order to ensure the continuity and persistence of life, our brains map the environment to the reflection of the present moment. The perception of atmosphere is related to the reflective and pre-reflective recognition of the self and its environment. For architects, atmosphere is perhaps poetic jargon to describe the seduction of space, and its ability to transport its participant to two places, the physical space of the present, and the mental—imagined space of the past.

The primary waves exist, Beta, Alpha, Theta and Delta, each with measured range in frequency and amplitude. Lower levels of wave activity, active in perception and body projection (empathy). These waves are monitored through EEG mapping, precisely recording amplitude and frequency of electrical activity in the brain. Potential for this mental mapping was demonstrated via Galilei and Freedberg by observing suppose reactivity in response to viewing authentic artworks and digitally mapped consciousness. This suggests that humans don’t simply speculate creative acts, and are instead biologically tuned to detect human gesture and intent. This is the outcome of evolutionary development to communicate and cooperate with another pre-linguistically. If true for 2-dimensional architecture, then perhaps there exists a complexity of motives and intentions, then such psychological consequences seems certain. Without discarding atmosphere’s poetic champions, we recognize the potential of modern instruments (EEG and fMRI), and developments in psychology endow us with the potential, to measure, at least in part, the consequences of atmosphere.

As atmosphere gives aesthetic medium to space, embodied imagination gives it value. “Embodied” refers embodied simulation10, whereas “Metaphor” originates from the Greek metaphoron—to transfer11 indicating the transfer of ideas from one to another, whether animate or inanimate. The most fundamental of embodied metaphors are harmonies of kinetics. The Greeks implied the body, as geometry, into architecture, building an aesthetic order into the architectural order. These lessons were recorded in Vitruvius and the Platonists, the eighteenth century with a renewed interest in the human body and the revealed divinity of harmonics. Currently, current neuroscience insists that symmetry and proportion are hardwired into pre-reflective judgments of beauty and action. By understanding the study of Greek and Roman architecture, we are able to introduce the architecture’s “affordances” to the body. The body is acknowledged and embodied in its simplest metaphor as pure geometric projection.

Affordances – the actions our body can create with objects and situations – are only meaningful in relation to their context. For instance, room not only affords us the ability to house our personal objects, but to have meaningful encounters within them. The affordances of a room also extend to social and cultural functions.12 Since embodied simulation (empathy) is responsible for the social understanding among humans, we are naturally able to intuit the meaning of a room for different scenarios, such as personal study or a romantic dinner. The room also affords personal and past experiences. Memory and spatiality are inseparably linked. While navigation is a multi-modal task requiring memory, spatial representation is necessary to recall specific memories14 A simple room is a fraction of that which Juhani Palassarais and architecture can accomplish. Neuroscience provides a foundation for architects to create potential places of meaning.

To confirm our several notions we need to discover how faces and architecture are similar in the brain. For architects atmosphere is thick with mood, but how do we measure it? That we embody architecture is well understood, the aesthetic implications of such simulation is an open research question. How can architecture be a stimulus, relatedly the meaning of architecture is what it affords us, can we design theory be one result of this clear thinking? We seek intimate partnership between architect and scientist, harking back to ages when both were one, with the same obligation as servants of society.

2. REFERENCES

Websites: