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PRESENTER ABSTRACTS
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An Architecture of Embodied Cognition: Louis Kahn's Salk Institute

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1. ABSTRACT

How might findings from cognitive neuroscience be useful to professionals charged with the concrete task of designing buildings for individuals and social groups? Answering this question in principle is easy: the more that architects understand about the operations of human cognition, the better positioned they will be to design buildings and places that enhance or at least do not violate human experiential needs.

Moving from principle to practice is more challenging. To study the brain and human behavior, cognitive neuroscientists conduct circumscribed research to establish precisely articulated, often narrowly calibrated propositions. Yet answers to the large questions that bear obvious relevance to architecture, such as how a given factor in the environment influences human body states, emotions and cognitions come slowly. Two decades into the cognitive revolution, we find countless dots still to connect between laboratory-based research findings on cognition and the making of a good building or urban area.

I propose for this paper that we begin not with the science but with a building. Discussing one that most scientists know—the plaza of the Salk Institute—the presentation will explore how the Salk Institute's architect, Louis Kahn, deliberately manipulates the machinery of human sensory cognition to orchestrate an emotionally powerful experience that effectively communicates the essence of the institute's mission.

The Salk plaza's siting; simple geometric volumes, flat planes and linear paths; compositional differentiation of laboratories and studies; obscuring of the ordinary architectural indicators of human presence and scale—stairs, windows, corridors—orient the viewer's cognitions toward his own solitary experience, deemphasizing membership in a social group. At the same time, the building's rich textures, tactile materials and deliberate construction details prime the viewer to mentally simulate a whole-body, multisensory engagement with the plaza. In this context, Kahn, aware of the human visual and auditory systems' acute orientation to environmental change, makes the plaza's only constants the visual and auditory spectacle of moving water and crashing waves. Together, these design moves subtly manipulate the operations of human cognition to heighten people's conscious awareness of their situatedness in the horizontal infinitude of nature, of the human-made in the biological world.

2. AUTHOR BIO

Sarah Williams Goldhagen, the author of *Louis Kahn's Situated Modernism*, is *The New Republic's* architecture critic. She has taught and lectured at universities and colleges around the world, including for ten years at Harvard's Graduate School of Design. Her scholarly essays and architectural criticism has appeared in numerous edited collections and general publications. Currently she is working on a book on the experience of the built environment to be published by Harper/Collins.

