

Session 5

Raymond Neutra

Are There Practical and Psychological Consequences of attending to Behavioral Statistics and Physiological Evidence about the Impacts of Design?

My career as a physician/environmental epidemiologist was influenced by growing up with an architect father who was convinced that neurophysiological knowledge would lead to more wholesome designs. In my career I was responsible for assembling teams of epidemiologists, statisticians, exposure assessment experts and toxicologist to review evidence on the impact of environmental factors on animal and human physiology and disease rates. The disease rate studies influenced our certainty THAT the agent affected the risk of disease. The physiological studies purportedly explained WHY and HOW the agent affected the risk of disease. Stakeholders who feared a "Guilty" verdict demanded a "beyond a reasonable doubt" certainty THAT the agent increased disease risk and a solid story of HOW the physiology led to disease. Our verdicts were passed on to regulatory agencies who in a "penalty phase" of the process determined how to restrict industry practices. But should architects like my father go through this kind of time consuming risk assessment and demand a "beyond a reasonable doubt" certainty before modifying their designs? What are the consequences for the designer to know HOW physiology leads to behaviors, disease and feelings? Why isn't it enough to rely on evidence from environmental psychologists THAT there is an impact? How is the designer's process affected by attending to different kinds of evidence on the impact of design?

Question: The attraction to a decaf coffee is an acquired taste, the attraction to mother's milk is not. Are there acquired architectural tastes and inherent architectural tastes? Give some examples. What if any practical consequences flow from this distinction?

Question. There is environmental psychology evidence that a hospital room view into nature shortens hospital stays. What neurophysiological pathways might explain this finding? Do we need to understand these pathways in order to prescribe views into nature?

What are the roles of neurophysiological knowledge in influencing design?