Vital: Bringing Indoor Spaces and Sustainability to Life

Interactive Interdisciplinary Session

Abstract

Although nature and perceptible change are important factors in maintaining human well being, many of the indoor environments where most people now spend the majority of their time inadvertently deprive them of these key resources. This presentation demonstrates how the movements of the weather can be used to remedy this situation while increasing the visibility of underused sustainable practices.

Three simple strategies for naturally animating indoor spaces using the movements of the sun, wind and rain were identified through a survey of existing buildings. A series of design studios was then used to determine if these methods were compatible with established passive environmental control and rainwater-harvesting techniques that employ the same natural elements. The human effects of one of the successful combinations identified—wind-animated daylighting—were then tested in controlled experiments and a medical waiting room, both of which indicated a clear calming effect on occupants.

The main objective of the session is closer collaboration between architects and interior designers in configuring building apertures and interior surfaces. Participants will learn how to naturally animate indoor environments; its effects on the health and performance of building occupants, and how this can also help raise public awareness of simple, cost-effective sustainable practices.