



Landscape Architecture Frontiers 053

Cognitive Sciences and Landscape Design

Kongjian Yu

| | |
|-----------------------|---|
| ISBN | 9781957183084 |
| Publisher | ORO Editions |
| Binding | Paperback / softback |
| Territory | World excluding USA, Canada, Australasia & Asia (except Japan; China non-exclusive) |
| Size | 292 mm x 279 mm |
| Pages | 152 Pages |
| Illustrations | 100 color |
| Name of series | Landscape Architecture Frontiers |
| Price | £35.00 |

- How can cognitive science be realised through spatial design?
- Spatial design augmenting desired feelings or experiences?
- How to further explain or assess the effectiveness of the improvement of health level or other benefits in an evidence-based design?

Cognitive sciences that aim at establishing scientific and explicit interpretations can diversify approaches to exploring users' feelings and experiences of a specific environment. For example, people's emotions and feelings change with their environment, closely related to people's sensory processes and brain wiring, personal experiences, and visiting purposes, etc., can be understood as a prompt intuitive response. Environmental information and responses are processed very fast to support quick decision making in relation to people's survival and benefits. Environmental Psychology explains the environmental types people prefer and why certain environments make people feel, for example, anxious or excited. Understanding people's emotional responses to the environment facilitates, or "nudges" (a term usually used in the inter-discipline of Psychology and Behavioural Economics), users to act or make choices as desired. Moreover, research on attention in cognitive sciences can also inform designers: by controlling the spatial elements and intangible elements (such as light and sound) to minimise environmental disturbance or noise, users' attention can be directed to specific elements, element combinations or series. During this process, users' specific emotional memories or symbolic implications are activated, which augments desired feelings and experiences.

This issue explores the mechanism of how landscape design affects users' feelings, experiences, and behaviours, as well as usability, by introducing theories, knowledge, and research methods and findings in Cognitive sciences, psychology, neurobiology, and computer science, so as to support landscape architects' decision making.

Kongjian Yu has a Doctorate in design from the Graduate School of Design, Harvard University, he is an Honorary Foreign Fellow of the American Academy of Arts and Sciences and professor at the College of Architecture and Landscape, Peking University. **Joan Iverson Nassauer** is a professor at the School for Environment and Sustainability, University of Michigan. **Carlo Ratti** is the director of the Senseable City Lab and a professor of the practice for the Department of Urban Studies + Planning, Massachusetts Institute of Technology. **Zheng Chen** is an associate professor for the Department of Landscape Studies at the College of Architecture and Urban Planning, Tongji University. **Tsuyoshi Honjo** is a professor for the Department of Environmental Science and Landscape Architecture at the Graduate School of Horticulture, Chiba University. **Yiyong Chen** is an associate professor of urban planning and associate chair of landscape architecture at the School of Architecture and Urban Planning, Shenzhen University. **Chongxian Chen** is an associate professor and PhD supervisor at the College of Forestry and Landscape Architecture at South China Agricultural University. **Albert Zhengneng Chen** is a senior landscape designer of Stoss Landscape Urbanism. **Xiaoqing Qin** is a project manager at PLAT Studio and a guest lecturer at the Sam Fox School of Design and Visual Arts, Washington University in St. Louis.