



## Exploring Natural Elements in Contemporary Shopping Malls in Bangkok

Songpol Atthakorn

Faculty of Architecture, Rangsit University, Pathum Thani, Thailand

Corresponding author, E-mail: [songpol.a@rsu.ac.th](mailto:songpol.a@rsu.ac.th)

### Abstract

In contemporary architectural design, natural elements are increasingly integrated into built environments through biophilic strategies to enhance spatial quality and visitors' well-being. In shopping malls, this approach transforms commercial spaces into attractive destinations that foster stronger connections with nature alongside leisure and retail activities. Previous studies have proposed theoretical frameworks for biophilic design patterns; however, their application in commercial environments within local contexts remains underexplored. This study therefore examines how these patterns are perceived across different types of biophilic spaces in Bangkok's contemporary shopping malls. The study applies the "15 Patterns of Biophilic Design" to identify natural elements across three spatial settings: an indoor atrium, an outdoor walking street, and a rooftop garden. A checklist-based on-site investigation, supported by group discussions, was conducted to document each pattern. The findings show that the rooftop garden contains the highest number of identifiable patterns due to its extensive vegetation and open views. While outdoor landscapes provide more direct experiences of nature, indoor environments incorporating nature-inspired elements can also evoke a strong sense of naturalness. However, certain patterns—such as non-rhythmic sensory stimuli and risk/peril—remain difficult to identify due to their inherently subjective nature. Participants also agreed that a greater variety of natural features enhances the perceived sense of nature. In summary, shopping malls in Bangkok are increasingly positioning themselves as high-quality urban natural spaces through diverse biophilic design strategies.

**Keywords:** *Biophilic Design, Natural Elements, Shopping Malls, Commercial Spaces, Nature-Integrated Environments*