

A Study of Skybridge Design Patterns and the Use of Types

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ABSTRACT

Due to the changing life style and the developing transportation, roads no longer just provide the pedestrian passing-through. In order to guarantee the security of pedestrians, people start to build the skybridges and subways, which change the way people move from the two-dimension to three-dimension. However, the skybridge has a more direct impact on the local environment; therefore the researcher chooses this issue about skybridges impact upon what mentioned about for further study. The early form of skybridge was simple and dull either in design or utility, so people were reluctant to use it. In recent years, many new styled skybridges were built. The form of new styled skybridges is different from the old ones, and adds up new functions. Skybridge designers start to think about the connection among users, bridge, and environment. The new skybridge designers attempt to transform the impression about skybridges to raise the usage of skybridges and let users have whole new feeling. This research has reorganized the related discussions about bridgescape, bridge esthetics and the design of skybridge; in addition, the research has also collected different cases about the skybridge designs from different countries. In the end, choosing cross-road-type, cross-river-type, and mixed-type of skybridges to be models, through the analysis, questionnaire survey and actual observation, the researcher can understand the habit of users when they use the skybridge. In the meanwhile, researcher can understand the users' thoughts about the skybridge as well. By the SPSS statistical software analysis of the results of the questionnaire, the observation about the results and the review of the Post-Occupancy Evaluation (POE) is displayed. The results of the research from user's preferences in the cross-road-type of skybridge path to the shortest distance and path conducive to pedestrian use for weighting; the cross-river-type of skybridge can increase bridge's function or link the active behavior all around. Besides the different position's detailed components can change in shape, surfacing and the materials are considered the first priority that is greatly affected by climate. The lighting of the general skybridge is that most users consider as important and crucial too. The research will give the skybridge designers new perspectives when they design the skybridge in the future, and have more users to use it, plus the security of pedestrian and the value of skybridge.

Key Words : skybridge, bridgescape, bridge aesthetics, POE

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