

COMPLETION REPORT

Culture Differences in Understanding Japanese and Taiwanese Map Design

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This study aims to examine culture differences of Taiwanese and Japanese tourists by analyzing their understanding of map-reading with route descriptions and wayfinding with cognition map for two famous stations in Japan and Taiwan. By understanding the culture differences of Taiwanese and Japanese tourists, this study hopes to gain more insights into integrated design for maps to enhance the development of tourism in both countries. There are two experiments including ten Taiwanese and ten Japanese in this study. Individual differences of how Taiwanese and Japanese people judge map signs are compared and examined. We are using the floor maps of the Taipei Main Station and Shibuya station as templates. Some indoor destinations are selected. Tasks are to locate them, plan their way towards them and an oral description thereof. We defined four different spots and applied the “think-aloud” method to record the participants’ pathfinding process and codified it for comparability among the different subjects’ cognitive orientation capabilities.

The experiments conducted in Taiwan and Japan indicated that although the distance between the starting point and destination within the Shibuya Station was only 295.1 m, which was 83% shorter than that within Taipei Main Station, the time spent on wayfinding in Shibuya Station was longer 161% than that in Taipei Main Station. The number of times participants paused in Taipei Main Station during movement was zero, whereas participants paused numerous times in Shibuya Station. In addition, many participants preferred to use the stairs, and the majority of the participants in Shibuya Station paused before and after taking the escalators. The wayfinding tasks in the experiments revealed that most of the Japanese participants overestimated the time required for wayfinding, whereas most of the Taiwanese participants underestimated that time. The distances of the planned routes and those of the routes followed were relatively consistent for the Japanese participants, whereas the distances of the routes followed were 1.31 times longer than those of the planned routes for the Taiwanese participants. In addition to the differences in the spatial configurations of the two stations. According to the study results, map designs for passengers who transfer often should emphasize differences among floors. In addition, annotation of scales and coordinates on a map can assist users in distance and time estimation. Maps should represent entire structures to ensure that no staircases, exits, and entrances are hidden from view.

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