

Path Choice in Different Wayfinding Tasks

Simon Buechner

University of Freiburg, Germany

Christoph Hoelscher

University of Freiburg, Germany

Abstract: Path choice behavior in different wayfinding tasks was investigated. Participants experienced a small virtual indoor environment in three different learning conditions (free exploration, uninformed search, path following) followed by a search or a path planning task. To complete the task they had to pass a choice point at which they were forced to choose one of two paths, both leading to the target location. Both paths had a different number of visible further movement options. The least-decision load theory predicts that participants choose the path with fewer options (because the risk of getting lost is smaller) while the maximization theory predicts that participants choose the path with more options to maximize the number of potential successive steps. We hypothesize that the choice is modulated by demands of the current task. The results will be discussed with respect to the attractor and repeller function of choice options in different tasks.