Abstract

Ahmed H El Antably

The Others Know the Way: A Study of the Impact of Co-presence on Wayfinding Decisions in an Interior Virtual Environment

The effect of the social aspects on wayfinding behavior has been largely overlooked and left to designers' predictions. This research expands the understanding of wayfinding behavior in social contexts, common to real-world scenarios, proposing an experimental approach to assess and study the impact of co-presence on wayfinding decisions. Individual and paired (dyads) participants used player-controlled characters (PCs) to interact with identical T-shaped interior virtual environments inhabited by non-player-controlled characters (NPCs) in varying social scenarios. The results indicate a correlation between co-presence and wayfinding decision-making. Individual participants' favorable decisions differed from those of dyads due to social role-taking and social empowerment. The results also indicate that co-presence affected how participants viewed physical navigation aids such as signs and lighting, highlighting the importance of co-presence as a necessary back for wayfinding studies. Designing with co-presence in mind would help architects anticipate wayfinding performances in their designs pre-occupancy and facilitate new design solutions.