

Follow the Signs—Countering Disengagement from the Real World During City Exploration

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Abstract Navigating and exploring unfamiliar urban areas are common and often challenging tasks for tourists, newcomers and other groups alike. Increasingly, people use mobile apps to get support in completing these tasks. A potential side effect of this is disengagement from the real world, i.e. not perceiving the actual environment due to constantly looking at the screen of the mobile device. This in turn can interfere with the construction of a mental map, can reduce people's awareness of their environment, and can cause high mental workload due to frequent attention shifts. In order to counteract these issues, we propose an approach to support navigation and exploration by explicitly managing attention shifts between the virtual and the physical world. It is based on the results of a survey ($n = 102$) investigating touristic navigation and on the Blended Spaces framework by Benyon. We describe the underlying concepts, a prototypical implementation and an initial field study evaluating it. The results provide initial evidence that the approach can successfully support navigation while also facilitating the perception of the environment.

Keywords City exploration, Blended spaces, Pedestrian navigation, Tourism

