Emerging Platial Narratives and Themes from a Leisure Walking Study

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This article presents the preliminary results of a think-aloud leisure walking study, identifying the key themes and platial narratives. A think-aloud study was conducted to explore what and how leisure walkers engaged with while walking. Our emerging results are presented in the context of an approach to extracting and understanding the platial experience during the study. The early findings suggest that the types of places engaged with while walking and the characteristics of these places are varied, while navigation and wayfinding have an impact on the selected route and the changes that occur during the walk. Our future work will now focus on further analysing these results and using them to improve the recommendation of leisure walking routes.

Keywords: leisure walking; platial information; think-aloud study; route recommendation; mobile geospatial computing

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1 Introduction

Walking for leisure can be considered both a physical activity and an experience where participation in activities and nature are important considerations for walkers (e.g., Ettema and Smajic, 2015). Leisure walking is often a personal and subjective experience, which can explore an individual's connection to place (e.g., Lee and Shen, 2013), but is also influenced by the environment, safety, and the route amenities provided (Brown et al., 2007). The wider context of walking has previously been explored by Chan et al. (2021), finding that the perception of the environment can encourage walking as an activity even with low objective walkability characteristics of the neighbourhood. Previous work has used the think-aloud method and the resulting verbal data to identify how planning and navigation impact wayfinding scenarios in urban routes (Hölscher et al., 2011). Walking routes have traditionally been provided by leaflets and brochures, which usually provide information on access, amenities, and wayfinding (Elliott et al., 2016), while more computational implementations have sought to provide these recommendations using digital technologies. For example, Li et al. (2021) consider how a route recommendation system can use sentiment towards scenery and season to improve the quality of leisure walks, while de Oliveira e Silva et al. (2022) investigate how past travel behaviours from Global Positioning System (GPS) traces can be used to recommend personalized routes. Despite

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current technologies, there are several challenges in understanding the role of place in leisure walking. Therefore, understanding the experiential and platial aspects of leisure walking is important for the curation of improved recommendations that are personal to the user.

The lack of experiential factors used for the recommendation of computational routes provides the impetus for the work reported in this article. We use the concept of platial information described in Mocnik (2022) to understand what users are interested in while leisure walking, to then use a spatial-platial approach to extrapolate rich details from these initial studies (Williams et al., 2022). This article presents the first stage of this process, which focusses on the initial platial information collected through a think-aloud leisure walking study, and presents some emerging themes with a focus on user engagement with place and how this can be represented computationally. These results are provided as a set of themes, with the expectation that future work will continue to analyse and report the full findings of this study.

This article presents some initial and emerging themes from the think-aloud study, with a focus on the platial results of the work. The remainder of this article is presented as follows; Section 2 presents the methodology and describes the study scenario in addition to the software used. The initial and emerging platial results are presented and discussed as themes in Section 3. Finally, Section 4 concludes the article and considers how the remaining results will be analysed in future work.

2 Methodology

To investigate how users engage with leisure walks, a think-aloud verbal protocol study was conducted (Van Someren et al., 1994). The study focussed on what participants attended to while walking. Our study was used to capture a rich understanding of how people engaged with the walk, the characteristics of the walk, and the places of interest formed during the walk. During the study, participants received a GPS tracker to record location, a portable camera to record audio and video, and a prompt sheet to encourage thinking aloud. The think-aloud study allowed a complete set of data to be captured; while audio, video, GPS, and transcriptions allowed researchers to triangulate the results of the study using multiple data sources (Charters, 2003).

2.1 Recruitment

Participants were recruited for the study through social media and snowballing. Participants were allowed to walk as part of a group or individually, and a total of 14 studies were conducted. Participants were able to self-select the route for the walk, with assistance being provided through online recommendations if needed. The study was based on the results of a previous leisure walking survey, which found walks between 31 and 60 minutes to be the most common. Participants were also requested to walk only during daylight hours and to provide a general route plan, which had to be confirmed before the study started.

2.2 Analysis Software

Instead of using traditional technology choices, a contextual Geographical Information System (GIS) was used. The WalkGIS software (Williams et al., 2023) allowed quick analysis of multiple data sources, including plotting the route on a map, transcription support, and a linked timestamp to control the overall system. To support the platial analysis of the information, the GIS also enabled a fuzzy spraycan tool (Evans and Waters, 2007) to be used to represent and display uncertain geographical areas computationally. The research team could then use the tool to extract information about leisure walking experiences where subjective locations or places were discussed. WalkGIS also allowed subjective and vague spatial representations (e.g., Miller, 2006) to be captured within a digital tool, with a timestamp that was linked to the spatial video narrative.

3 Preliminary Themes

The analysis and identification of themes from the think-aloud leisure walking study is a work in progress. The themes reported in this section focus on the platial aspects and places of interest

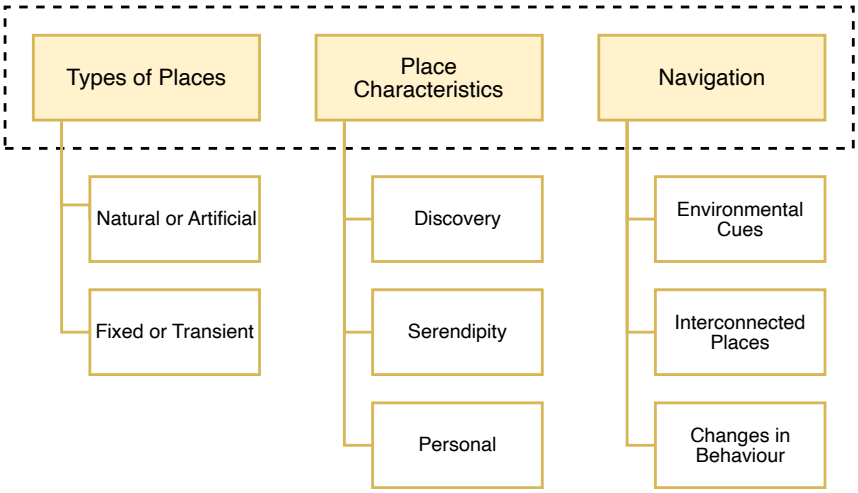

Figure 1: Platial themes identified from the leisure walking study. A diagram presenting the preliminary platial themes identified during the analysis of a think-aloud leisure walking study. The themes present an emerging set of results from the study, and the analysis of these results is ongoing.

identified from the participants' study responses. These form the preliminary themes of the study and were identified from transcriptions, GPS data, and video recordings. Three thematic groups are identified in Figure 1: (1) the types of places that participants spoke about or interacted with during the study, (2) the characteristics of the places identified or the engagements that would occur, and (3) the navigation and wayfinding that the participant did during the walk.

3.1 Types of Places

Participants engaged with a wide array of places or points of interest while walking during the study; some of these included nature, amenities, or the built environment of the walk. Examples of the types of artifacts participants engaged with while walking include houses, signs, trees, and animals. The views or viewpoints of larger collections of artifacts or places were also found to be attended to by participants, which could be performed through either thinking aloud, stopping and looking, or a change of pace while attending to a group of places of interest. Finally, auditory aspects of places were also found to influence leisure walking experiences, such as vehicles on nearby roads or nearby rivers producing background noise.

Natural or Artificial. Leisure walking places were found to be mostly natural or artificial. Natural aspects include trees, signs, hills, and the nature of the environment. Artificial aspects include man-made paths, buildings, and signage. The natural and artificial elements were not classified as generally good or bad by the participants and instead highlight the context of experiential factors that were identified during the walk.

Fixed or Transient. The variability of the types of places was also identified, where the participants would identify the temporal aspects of the places. Some participants identified long-term changes, such as changes in land use over a number of years. Similarly, participants would identify temporal aspects that would change over a day (e.g., the sunlight), or over a more long-term seasonal change. Finally, another identified characteristic of fixed places was determined, which contrasted with transient places because most participants did not explicitly mention changes during the study.

3.2 Place Characteristics

The characteristics of places were also identified from the study, e.g., different places of interest during the walk would have different classifications for the participants. For example, greenspace was often correctly classified as a park or similar green open area, which participants would have a positive acknowledgment of. This positive aspect would not always be the case, and some participants identified the limitations of the places or provided a comparison with other segments of the walk.

Discovery. Discovering new places, walking segments or interesting aspects of a walk was found to be a key element in enjoying the walking experience by participants. This discovery element of the walk was often activated from the planning stage, where participants would leave some aspects of the walk to decide upon arrival. On the contrary, participants were also interested in revisiting areas, whether this was recent or more of a prolonged wait between visits, revisiting previously explored areas in some cases would cause think-aloud utterances of nostalgia from some participants.

Serendipity. The discovery of unexpected but valuable aspects of the walk was a notable theme identified in some of the walks. Serendipity is used as a theme to describe these aspects. Some participants would engage with places on the walk that were unexpected, e.g., the discovery of a new or interesting natural feature as part of the walk. These unexpected aspects are often not represented using traditional mapping tools and are difficult for walkers to predict during the walking experience.

Personal. Existing literature has identified leisure walking as a subjective and personal experience for many walkers, with personal preferences about where to walk, and place attachment being key to these experiences. The preliminary themes of our study identified cases of personal connection to the places where participants walked, with these related to the location or a previous similar experience that occurred. The personal aspect of walking was also highlighted in group walks, as participants would identify and discuss shared experiences or topics of interest.

3.3 Navigation

The final theme identified from these preliminary results is navigation and wayfinding of the participant during the walk. Our early findings suggest that navigation played an important role in the platial aspect of the study during the walking experience. The participants would sometimes locate themselves based on local knowledge of the surrounding area, providing rich details on personal understanding of place. In other cases, participants would use prior experiences, the environment, or signage to support the journey. The participants' think-aloud utterances on the navigational aspects of the walk also provided details on personal navigation choices and factors that determine the desired characteristics of the experience.

Environmental Cues. Participants would sometimes use environmental cues to support navigation and finding directions during the walk, such as rivers, roads, and buildings. Other environmental aspects were supported by noise or the opening and closing of the view of the walker, which participants would sometimes use to confirm the direction of the walk and the current location. Participants also used environmental cues to select which path to take, such as the quality of the path, accessibility of the area, or the natural factors of potential routes.

Interconnected Places. Participants would sometimes connect places as part of the walk, choosing to compromise on the in-between locations of a walk to improve the experience in the future. For this, participants would sometimes break walks into smaller segments to support functional routes between more interesting or engaging parts of the route. This emerging finding highlights how participants value high-quality places of interest along a route and use this to improve the overall experience, even if it means a temporary compromise on the quality of the route.

Changes in Behaviour. Navigation would sometimes change based on the behaviour of the participants, e.g., the participants would sometimes slow down or stop to engage with places of interest along the walk. These changes in behaviour would sometimes have an effect on the overall walk, where participants would identify a new place of interest unknown previously, and would alter the route to include the new aspect as part of the experience. In the context of group walks, participants would also change behaviour by discussing aspects of the place with other group members.

4 Conclusions and Future Work

This article provides a short extract of our emerging platial themes from a think-aloud leisure walking study and presents these preliminary results as a short discussion. Our article has identified three main themes from a platial perspective of our think-aloud study: identifying how the types of place, the characteristics of the place, and the navigation of the route had an influence on the locations and

choices made along a leisure walking route. These results are still in an early stage, and future work will attempt to relate them directly to transcriptions and route segments. Our work will now focus on analysing the themes in full. In addition to extracting platial representations, we hope to analyse the walk for characteristics and other interesting facets which could be used to improve the walking experience.

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