Wayfinding in the Labyrinthine Library: A Mixed Methods Study Investigating Public Library User Wayfinding Behavior

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ABSTRACT

The design of public library facilities is an important area of concern for public librarianship. The building is the physical expression of the library's mission and purpose, to provide information and services to users. If users cannot access and utilize the facility effectively, then they also cannot access and utilize the library's resources and services. The large body of literature devoted to public library facility design shows the importance the field places on this issue.

Wayfinding is the method by which humans orient and navigate in space, and particularly in built environments such as cities and complex buildings, such as public libraries. In order to wayfind successfully in the built environment, humans need information provided by wayfinding systems and tools, such as architectural cues, signs, and maps. This is true of all built environments, including public libraries, but the issue is all the more important in public libraries where users already enter with information needs and possibly anxiety, interfering with the ability to wayfind successfully. To facilitate user wayfinding, which in turn facilitates user information-seeking, public library facilities need to be designed with users' wayfinding needs in mind, along with consideration of users' information-seeking and other library-specific needs.

From his research, Passini observed that the decision plan is developed according to five problem-specific strategies and utilizing two user-specific styles that he detailed in his Conceptual Framework of Wayfinding, the theory guiding the proposed dissertation reported in this poster [1]. The strategies correspond to information seeking (and other problem-solution) strategies and are more or less observable, depending on the strategy, method employed for data collection, and level of forthcoming of the research subjects. The same is true of the two wayfinding styles; they correspond to information seeking styles and have varying degrees to which they may be observed.

In order to research the problem-specific strategies and user-specific styles in the context of public library users having to wayfind while information-seeking, each must be made observable and measurable. Passini does not specify research methods to employ while observing each of these strategies and styles.

Passini sees the wayfinding decision plan as a structured process that operates at different levels of generality, through which the wayfinder focuses on individual tasks or subtasks always while considering the problem as a whole (Strategy 1: Dividing the Task into Manageable Parts While Keeping an Eye on the Larger Task at Hand). But, he can only deal with one problem or subtask at a time (Strategy 2: Narrowing), following a continuous process that can deal with unforeseen problems whenever they occur, pointing to the dynamic property of decision making (Strategy 3: Adapting and Responding). For as large a part of the decision plan as possible, the wayfinder relies on an existing solution repertoire (Strategy 4: Accessing One’s Schemata). He also bases his plan on the available environmental information (Strategy 5: Gathering Information and Adapting Accordingly).

The public library facility design literature identifies the importance of understanding patron wayfinding behavior and designing around it, and the purpose of this proposed dissertation is to make a step toward answering that call. A single-method pilot study utilized unobtrusive observation to investigate library users’ initial wayfinding behavior from the two entrances of a medium-sized public library, with the data analyzed and displayed using Geographic Information Systems (GIS) software. The pilot study found that certain routes are more popular than others and suggested that such information can be gathered relatively easily and then used by the library to improve the library’s wayfinding system and for marketing of library materials in high-traffic areas.

However, the pilot study’s largest limitation, namely the inability to ascertain any user opinions regarding their wayfinding in the library, indicates the need for the proposed dissertation to employ a mixed method research design that replicates the original unobtrusive observation and adds in-depth interviews. This will allow the dissertation research to offer a more comprehensive view of library user wayfinding.
behavior, particularly understanding of how users implement Passini’s wayfinding strategies while orienting and navigating in public libraries. The overall purpose of this mixed method research is to explore how users navigate from the entrance of a library, which routes are most popular and areas that experience the highest traffic, what methods users employ to conduct this navigation, how users feel about their ability to wayfind (or not) in the facility, and ways they would like the existing wayfinding system to be altered (if any). The goal is to explore these topics as a beginning to developing a redesign plan for the library serving as the research site (henceforth, the Library) that improves the facility’s ease of wayfinding and overall usability and provides suggestions for library marketing efforts that make use of the knowledge of the most popular routes and highest trafficked areas of the library.

The poster details the dissertation prospectus, which proposes a mixed method research design, guided by Passini’s Conceptual Framework of Wayfinding, to investigate library user wayfinding behavior from the entrance of a medium-sized public library facility. The mixed method design includes two methods, unobtrusive observation of library user wayfinding behavior and in-depth interviews with library users to discuss their views on wayfinding in public libraries. See Figure 1 for a graphic depiction of the mixed method research design guiding the dissertation. A mixed method design is chosen to guide this dissertation because of the ability to triangulate data gathered from different methods, thereby mitigating the limitations of a single-method dissertation, strengthening the findings, and providing a more comprehensive view of library user wayfinding behavior than could be obtained from a single-method approach.

Categories and Subject Descriptors
H.1.m [Information Systems]: Models and Principles – miscellaneous.

General Terms
Design, Human Factors.

Keywords
Wayfinding, public libraries, library facilities.

REFERENCES
Figure 1. Graphic depiction of the mixed method research design.