



## KEY POINT SUMMARY

### OBJECTIVES

The study examined the influence of symmetrical and asymmetrical layouts on wayfinding in an unfamiliar environment.

### DESIGN IMPLICATIONS

Symmetrical layouts with landmarks of some sort should be used in multiclinic outpatient buildings.

## Wayfinding in an Unfamiliar Environment: Different Spatial Settings of Two Polyclinics

Baskaya, A., Wilson, C., Ozcan, Y. Z.  
2004 | *Environment and Behavior*  
Volume 36, Issue 6, Pages 839-867

### Key Concepts/Context

People in healthcare facilities should be able to find their way easily through the structure. If they can't, they experience stress. Symmetrical layouts, in which spaces with particular functions, for example waiting areas for a certain clinic, are distinguished in some way from other similar spaces, through the use of a landmark such as a particular color on the walls, are an effective design for a healthcare facility because they support accurate navigation through the building.

### Methods

Study participants were architecture students; 68 in the setting with a symmetrical layout and 46 in the asymmetrical one.

Participants were briefly informed about the structure of each site, allowed to look around the site they were visiting for a half hour and then asked to draw a sketch map and answer questions about the visual accessibility of the entrance hall, the spatial differentiation of various areas (“the need for paintings, sculptures, different use of color, light, and materials that influence orientation and wayfinding”), and the “accuracy of the spatial layout,” which was defined as “orientation and wayfinding in relation to spatial landmarks and signage.” Sketch map accuracy was assessed by the authors of the study.

### Findings

Participants at both the symmetrical and asymmetrical site found the entrance halls had high levels of visual accessibility. While walking around the sites, 63% of participants at the symmetrical facility felt completely lost, while only 7% of those



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at the asymmetrical site did so. A total of 12% of participants at the symmetrical setting felt they knew where they were, and 74% of those at the asymmetrical site felt they knew where they were during their walks (differences in during-tour perceptions are all statistically significant). The sketch maps of building layout made by participants at the asymmetrical setting were 4 times more likely to be correct than the sketch maps of people in the symmetrical setting.

Researchers analyzing the data collected determined that “symmetrical building configurations with repetitive units, although enabling users to find their way through, did not allow them to draw a complete sketch map” [the proxy for overt understanding of the environment’s layout]. Of participants in the symmetrical setting, 69% indicated landmarks were needed, while only 39% of those in the asymmetrical setting did so. The researchers conclude that “a symmetrical layout with repetitive units must be used in accordance with landmarks and spatial representations, which may help a person to recognize places when plan configuration is complicated. As reference points, entrances, colored and decorated waiting halls, and even the elements of the circulation system such as stairs, ramps, or elevators are a prerequisite to understanding the spatial organization of a building. They may all provide directional information to remind the first users of where the facilities are located and how to return to their points of origin.” In short, symmetrical layouts with landmarks, such as distinctive uses of color, are recommended.

### Limitations

- Study participants were architecture students, so findings may not be generalizable to nonarchitects.
- Study sites did not have the same number of floors (asymmetrical site one floor, symmetrical site multistory).
- Participants at the asymmetrical site could see the outside as they walked, which has been shown to facilitate wayfinding, while those at the symmetrical facility could not see outside for most of their tour through the facility.