Does Lobby Orientation Influence Visitor Satisfaction?

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and

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Introduction

It is often argued that effective visitor orientation is critical to the entire museum experience. However, there is a dearth of hard, empirical data to support this argument. The current report describes findings that suggest how important it is to provide adequate visitor orientation as people enter a museum.

Orientation includes two components — wayfinding and conceptual orientation. Wayfinding systems should be designed so that users can navigate through the environment in order to locate destinations with ease. Conceptual orientation systems provide information that allows users to plan their visit. For example, what is available to see and do, and how much time does each activity take? Both of these systems combine to provide visitors with the ability to plan their visit, locate desired destinations, and provide the security of knowing where they are at any moment.

Assessing orientation can be difficult because it includes a complex of elements, because visitors may interpret orientation problems as their fault, and no single measurement (survey or observational) can, by itself, adequately describe the effectiveness (or ineffectiveness) of an orientation system. Some problems (e.g., not receiving a visitor guide) can be directly observed; while other problems (e.g., feeling lost or confused) require survey methods to assess.

Part of a study conducted in the summer of 1996 at the St. Louis Science Center examined the relationship between lobby orientation experience and ratings of overall satisfaction of the visit. If orientation in the lobby is critical, then it should influence the entire visit and should be reflected in ratings of overall visit satisfaction. Like many large museums, the St. Louis Science Center is a complex environment fraught with orientation difficulties. One problem is that there are two major buildings each with its own entrance lobby. The two buildings (subsequently referred to as the Oakland Avenue and the Forest Park buildings) are connected by a bridge that spans a divided highway. Often, visitors who enter one building are not aware of the other. The Forest Park lobby is particularly troublesome since it tends to be dark, is smaller than the Oakland lobby, and has minimal signage directing visitors.

Another problem is the lack of distant visual orientation cues in some places. The Forest Park building is round and, as a consequence, exhibit spaces tend to be curved and lack a long horizontal view. Such curved spaces make it difficult to use visual cues for orientation. In the Oakland building, a corridor on the second floor is curved to accommodate the shape of the Omnimax theater. Visitors cannot look down the corridor and see the cafeteria at the end. These limited views deprive visitors of one of the most important types of orientation information.

Many science centers share still another orientation problem with St. Louis — the multiple-option ticketing problem. At the St. Louis Science Center visitors can visit the exhibit galleries without purchasing a ticket. However, they must purchase a ticket to see the Omnimax movie, the Planetarium, the Discovery Room, and (occasionally) traveling exhibitions. These various ticketing options often confuse visitors.

Science Center staff have worked hard to overcome some of the physical limitations of the facility. They have altered wayfinding signage, improved the Visitor Guide, scheduled staff to greet visitors as they enter, and provided a visitor information desk. Despite these changes, orientation problems persist. The visitor orientation project was undertaken because Science Center staff recognized these and other orientation difficulties and because the Science Center sought information for long-range planning.
Method

The visitor orientation project (of which only a small part is reported here) involved several samples of visitors. Two samples of entering visitors (N=210) from the Oakland and Forest Park building lobbies comprised one set of visitor groups. These visitors were observed to determine how long they spent in the lobby and what orientation devices they were exposed to or used. After these visitors left the lobby, they were stopped and interviewed to determine their visit plans (where they will visit, how long they planned to visit, etc.).

Another pair of visitor samples (N=82) were approached in each of the lobbies as they exited the museum. They were asked to complete an interview related to their museum visit (e.g., which orientation devices they used, which destinations they visited) and were asked to retrace their steps through the museum with the aid of a map and the assistance of the interviewer.

Data were collected in the Summer of 1996. This time of year was selected because a higher percentage of first-time visitors were known to visit in the summer and first-time visitors were assumed to have more difficulties with visitor orientation.

Independent variables in this study included: (1) the use or nonuse of the Visitor Guide; (2) frequency of visit (first-time versus repeat visitors); (3) location of the lobby (Oakland versus Forest Park).

Dependent variables were: (1) ratings of overall visit satisfaction; (2) total time in the lobby; (3) total visit time; (4) destinations visited; and (5) self-reported orientation problems.

Results

Ratings of satisfaction. Tables 1 and 2 summarize the ratings of overall satisfaction as a function of lobby location, frequency of visitation, and use of the Visitor Guide. Use of the Visitor Guide was used because it appears to be critical to orientation (equal percentage of first-time visitors at each lobby).

As shown in Table 1, visitors who initially entered the Oakland building were more likely to give an overall satisfaction rating of 9 or 10 than visitors who entered the Forest Park building. Over 65% of Oakland visitors gave a 9 or 10 rating while only 37% of Forest Park visitors gave a similar rating [t(79) = 2.014; p < .05].

Visitor Guide usage. The use of the Visitor Guide appeared to be critical to first-time visitors. First-time visitors (73%) were more likely than repeaters (35.6%) to use the Guide [X²(77) = 11.389; p < .001]. As indicated in Table 2, first-timers who used the Visitor Guide gave an average rating of 8.5, while those who did not use the Guide averaged 7.4. There was little difference, however, between repeat visitors who did (9.0) and repeaters who did not use the Guide (8.8). Both Frequency of Visitation (p < .01) and Use of Visitor Guide (p < .05) were statistically significant in a two-factor Analysis of Variance.

First-time visitors who used the Guide had an average visit of 3.7 hours while those who did not use the Guide averaged only 1.1 hours (see Table 3). Repeat visitors who used the Guide averaged 2.3 hours and those who did not use the Guide averaged 2.8. Even more dramatic was the difference between Omnimax movie goers who used the Guide and movie goers who did not use the Guide. Guide users who went to the movie averaged 5.4 hours while Non-Guide users who went to the movie averaged only 2.9 hours.

Lobby orientation. From the sample of entering visitors, 80% of Oakland first-time visitors received the Visitor Guide, while only 45% of Forest Park visitors received the Guide. First-time Forest Park visitors spent an average of 1.8 minutes in the lobby compared with an average of 3.9 minutes for Oakland visitors. Although it is beyond the scope of this article, it is interesting to note that the vast majority of both first-time and repeat visitors indicated they want a variety of orientation information including what to see and do.

Self-reported problems. The sample of exiting visitors were asked to indicate from a checklist,
which orientation problems they experienced during their visit (See Table 4). Forest Park visitors (30.6%) were more likely than Oakland visitors (13.0%) to check “Which way to go in the lobby.” There was also a difference in terms of awareness of the presence of the cafeteria (41.7% of Forest Park visitors and 13.0% of Oakland visitors checked this as a problem). Forest Park visitors (44.4%) were more likely than Oakland visitors (34.8%) to check that wayfinding during the visit was a problem. Oakland visitors (48.9%), on the other hand, were more likely than Forest Park visitors (27.8%) to report being unaware that the Forest Park building had two levels.

Discussion

The findings can be summarized as follows:

1. The concern over orientation problems in the Forest Park lobby was confirmed. Those who begin their visit in the Forest Park lobby rate their overall visit satisfaction lower than those who start in the Oakland lobby. Furthermore, they tend to receive less orientation in the Forest Park lobby than the Oakland lobby as shown by the amount of time they spend in the lobby, whether or not they are greeted by staff, whether or not they receive the Visitor Guide, the number of orientation problems reported during their visit, and the amount of orientation signage in the lobby.

2. The Visitor Guide appears to be a critical orientation device. First-time visitors who do not get the Guide seem to suffer as a result as shown by their ratings of overall satisfaction and the amount of total visit time.

While these results are correlational in nature rather than experimental, they do suggest that orientation in the lobby is a critical part of the visitor experience. Visitors tend to spend less time in the Forest Park lobby and are less likely to receive orientation information while in the lobby. This seems to translate into lower overall satisfaction for their visit.

The Science Center is currently attempting to correct these orientation problems in several ways. First, the use of an Orientation Information Board in the lobby has already received some pretesting using formative evaluation. This device is designed to be visible as visitors enter the lobby and it is composed of three panels. The first panel is titled, “What to do...,” the second panel, “Where you are...,” and the third panel, “Where to find...”

The initial results of the Visitor Orientation Board were encouraging, particularly in the Forest Park lobby. Those who used the device reported that they were more confident that they had enough information to plan their visit, while a large percentage of non-users did not feel they had enough information. However, it was clear that placement of this device is critical. One of the placements in the Forest Park lobby received little attention while a second placement was frequently used.

The findings of the study are also being used to re-design the Forest Park lobby. It is not clear yet exactly how the findings will be used, but staff are strongly motivated to make the best use of the information.

A final word should be made with respect to the methods used in the current study. The study employed several types of measurements to assess orientation problems. It is believed that no single method would have provided a clear picture of the overall problems. The combination of observational data in the lobby and interviews with the visitors who were observed provided an excellent way to study entering visitors. The exit survey that included a variety of items (destinations visited, orientation devices used, orientation problems encountered, and tracing of the pathway through the Science Center gave a fairly complete view of the nature of orientation problems from the perspective of exiting visitors. When combined, these measurements provided a relatively cost-effective way to analyze visitor orientation.
### Table 1
**Satisfaction Ratings: Percentage of Visitors in Forest Park & Oakland Lobbies**

<table>
<thead>
<tr>
<th>Percentage of Visitors: Lobby Location</th>
<th>Forest Park</th>
<th>Oakland</th>
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<tbody>
<tr>
<td>Ratings of 9 or 10</td>
<td>37.1%</td>
<td>65.2%</td>
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<tr>
<td>Ratings of 7 or 8</td>
<td>54.3%</td>
<td>28.3%</td>
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</tbody>
</table>

### Table 2
**Average Satisfaction Ratings of First-time and Repeat Visitors as a Function of Visitor Guide Usage**

<table>
<thead>
<tr>
<th>Lobby Location</th>
<th>Frequency of Visit</th>
<th>First-time</th>
<th>Repeat</th>
</tr>
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<tbody>
<tr>
<td>Used Visitor Guide</td>
<td>8.5</td>
<td>9.0</td>
<td></td>
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<tr>
<td>Did not use Guide</td>
<td>7.4</td>
<td>8.8</td>
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### Table 3
**Average Total Visit Time for First-time and Repeat Visitors**

<table>
<thead>
<tr>
<th>Total Visit Time: Frequency of Visit</th>
<th>First-time</th>
<th>Repeat</th>
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<tbody>
<tr>
<td>Used Visitor Guide</td>
<td>3.7 hours</td>
<td>2.3 hours</td>
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<tr>
<td>Did not use Guide</td>
<td>1.1</td>
<td>2.8 hours</td>
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### Table 4
**Self-Reported Orientation Problems During Visit**

<table>
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<tr>
<th>Lobby Location</th>
<th>Which way to go in lobby</th>
<th>Finding rest rooms</th>
<th>Finding a destination</th>
<th>Not aware of cafeteria</th>
<th>Wayfinding during visit</th>
<th>Not aware of second level in other building</th>
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<tbody>
<tr>
<td>Forest Park</td>
<td>30.6%</td>
<td>19.4</td>
<td>11.1</td>
<td>41.7</td>
<td>44.4</td>
<td>27.8</td>
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<tr>
<td>Oakland</td>
<td>13.0%</td>
<td>8.7</td>
<td>0.0</td>
<td>13.0</td>
<td>34.8</td>
<td>48.9</td>
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