# "Tracking Visitor Circulation in Museum Settings"

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Summarized by
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#### Introduction

Various methods have been employed to track visitor locomotion: (1) recording visitor behavior unobtrusively on maps; (2) recording the traces of wear within an environment (ex: use of brochures, turned-over leaflets); (3) recording behavior through the use of video equipment; and (4) the Hodometer method developed by Bechtel (1967). In the Hodometer method, the floor of an exhibit is laid out with a one foot square grid (covered with carpet). The frequency of use is measured by electric contacts on the grid which sense visitor circulation.

In a series of studies conducted by Klein, visitor circulation was recorded by unobtrusively tracking visitors and recording their behavior on floor maps of the exhibit hall. The method was adopted from Melton's classic study (1935), and slightly modified to indicate the amount of traffic flow. In Melton's study visitors' routes were drawn on room maps in a single line with numbers identifying frequency. Klein's studies used three methods to record the amount of traffic flow: (1) coding the routes by different degrees of thickness in proportion to their frequencies; (2) representing whole routes by shading visitor paths in different colors to represent frequency of use; and (3) shading frequently visited sections and using arrows to show the dominant direction.

#### Study 1

The first study was two-fold in that it was carried out in the old and renovated Hall of Automobiles at the Deutsches Museum in Munich. The tracking study was done to discover the strengths and weaknesses of the old exhibit hall before renovation was to occur.

The old exhibit hall was set up in a u-shaped circular course going clockwise, with alcoves on the inner side. The results showed that two thirds of the visitors used suggested routes. However, many objects ("oldtimer" automobiles) on the first third of the tour were given less attention due to their crowded appearance while displays located near the exit received more attention.

The renovated Hall of Automobiles incorporated lessons from the above results into its design. Cars were placed on larger and smaller islands that visitors could walk around, the oldest artifact (1886 Benz) was placed in a prominent place, and a throughway to an added-on room was created for motorcycles and commercial vehicles. The change made to

the 1886 Benz produced an increase from 20% to 47% attracting power for visitors. The results also revealed that the most frequently traveled zones do not necessarily coincide with the locations of the objects with the highest attracting power.

#### Study 2

The second study was conducted in a special exhibit titled "1949" (on the 40-year founding of the Federal Republic of Germany) at the Museum of the History of the Federal Republic of Germany in Bonn. Tracking and follow-up interviews were used to study the competition phenomenon between the two sides of the corridor-shaped gallery. It was found that as visitors entered the "1949" exhibit a decision was made for one of the two walls or to cross over from one side to the other. Two thirds of the visitors attempted to see everything by crossing over several times. A critical point in the gallery forced visitors to decide which path to take; one forth of the visitors went left and the remainder followed to the right to the lively colored thematic installations. The disadvantage to this choice point was that not one visitor backtracked to see the parts of the exhibit they had missed.

### Study 3

The final study was done on an existing exhibition, at the Museum of Cultural History in the castle of Rastatt, which was undergoing a formative evaluation. Tracking was conducted on the existing exhibition (Phase 1) and after four didactic aids (an advance organizer, a flip chart, a text graphic unit, and a demonstration of loading old guns) were installed (Phase 2). During Phase 1 visitors spent an average of 2 minutes, 15 seconds. One fourth of the visitors walked from one door to the next, only viewing cases one and three. "Onethird went to the right at the door, and a few more browsed between cases one and three." In Phase 2 the use of the four didactic aids gave information linking the artifacts to one another. The average time in the exhibition increased to 3 and one-half minutes and the use of the aids reorganized the walking routes. Almost three quarters of the visitors turned right at the entrance and the space between the cases was more frequented.

## TOPICS OF FUTURE ISSUES OF VISITOR BEHAVIOR

- Visitor Studies in Germany
- Visitor Studies in United Kingdom
- Visitor Studies in France
- Design of Exhibit Labels

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