

suggests two conclusions. (1) There appear to be different levels of comprehension, perhaps governed by task requirements. Reading for pleasure may result in only partial representations of passage information. (2) In order to make the required inference about Holmes' and Watson's direction, one must construct a mental model of the spatial layout. (The solution, by the way, can be found at the end of the chapter.)

*Understanding Events and Guiding Actions.* Schemata also guide human actions as people find themselves in situations in which they must interpret what is going on and respond appropriately. Schank and Abelson (1975, 1977) investigated what they termed the "restaurant script," or what people know about restaurants and how to behave in them.

The restaurant script contains information about what it is like to go to a restaurant. There are roles to be filled (customer, waiter/waitress, cashier), certain props (such as table, menu, food, check, or tip), and certain activities (sitting down, ordering, paying the bill, tipping, and so on). This general script is also likely to vary depending upon the type and location of the restaurant. For example, fast-food restaurants differ in predictable ways from five-star restaurants, and restaurant customs in the West are likely to differ from those of other cultures.

Several studies (e.g., Anderson, Spiro, & Anderson, 1978; Bower, Black, & Turner, 1979) demonstrated that such a restaurant script served as the context for understanding and remembering information from stories taking place in restaurants. Subjects used their general knowledge about restaurants to comprehend particular events described in the stories. But now consider a story such as the following:

Jim went to the restaurant and asked to be seated in the gallery. He was told that there would be a one-half hour wait. Forty minutes later, the applause for his song indicated that he could proceed with the preparation. Twenty guests had ordered his favorite, a cheese souffle. (Bransford, 1979, p. 184)

Because this story violates your general restaurant script, there seems to be something wrong with it. Bransford (1979) made two points with this illustration. First, the fact that schema violations impede comprehension and memory argues for the very existence of knowledge structures like schemata. Second, suppose you subsequently learn that Jim went to a very special type of restaurant, where customers who can cook are allowed to compete for the honor of preparing their specialties for other customers. The competition involves the customer entertaining the crowd, by singing, dancing, or whatever. Now, the target passage probably makes more sense when you reread it. But Bransford contended that you must have a general restaurant schema in the first place in order to construct a modified one in which to incorporate this story.