Evidence for schema-based processing comes from another source as well. Elizabeth Loftus and her colleagues conducted a series of studies examining eyewitness memory (see Loftus, 1979, for a review). The typical procedure followed in these studies was to show subjects a videotape of a crime or automobile accident and then to ask them questions about what they remembered seeing. The type of question had significant implications for recall. In one study (Loftus & Palmer, 1974), for example, students viewed a film of an auto accident and were asked either, "About how fast were the cars going when they smashed into each other?" or "About how fast were the cars going when they hit each other?" Subjects' memory for the speed of the cars differed significantly depending on which question they were asked. Moreover, subjects asked the question with the word *smashed* reported having seen broken glass significantly more often than subjects asked the question with the word *hit*. These results suggest the possibility of a smash schema being activated and used to reconstruct memory for the auto accident event; a hit schema activates slightly different knowledge.

Although the results of Loftus' research provide support for schema theory, they should be viewed with caution when considered for their application to eyewitness testimony in a court of law. The biasing effects of questions that have been produced in the laboratory do not necessarily hold when witnesses are actively involved in a real crime or accident. Yuille and Cutshall (1986) interviewed witnesses to an actual shooting in which one person was killed and another seriously injured. Subjects showed highly accurate memory for the event over a period of 5 months, and they resisted attempts to mislead them through the wording of questions.

Solving Problems. Finally, there is evidence that schema-based processing occurs as people solve problems. Many studies have shown that experts in a domain structure their knowledge in ways different from novices (e.g., Chase & Simon, 1973a, 1973b; Chi, Glaser, & Rees, 1982; Larken et al., 1980). When attempting to solve problems, then, experts and novices build different mental models to guide their efforts.

> Our research suggests that the knowledge of novices is organized around the literal objects explicitly given in a problem statement. Experts' knowledge, on the other hand, is organized around principles and abstractions that subsume these objects. These principles are not apparent in the problem statement but derive from the knowledge of the subject matter. (Glaser, 1984, pp. 98–99)

An important aspect of mental models is that they provide a basis for reasoning. Because of their greater subject matter knowledge, experts in a domain tend to reason using specific, domain-based strategies. In a sense, their approach to problem solving is a matter of recognizing patterns that they have experienced before and matching these patterns to corresponding