

principles of cognitive psychology. In this chapter, we will take a more detailed look at this kind of permanent memory—memory for knowledge and information.

The first question that will concern us is how stored knowledge is organized. There are several distinct ways of arranging and storing information, and each way has different implications for ease of access and retrieval. An analogy to your bookshelves may help. Think about your books and how they are arranged. You may have a section for textbooks, a section for nonfiction, a section for mysteries, and a section for trashy romance novels. Or you may have all the books arranged alphabetically by author. Or you may have tall books on one shelf and paperbacks on another. Each possibility represents a different way of organizing, and each possibility has different implications for how you look for a particular book and how easy it is to find it. Suppose you want to find *Gone With the Wind*, but you've forgotten the author's name. If you've arranged your books alphabetically by author, you'll have a much more difficult time than if you've arranged them by title or category.

A variety of models have been proposed for how our knowledge is mentally represented and organized. Each model makes different predictions about how we search for particular pieces of information. Specifically, we will look at a number of proposals for how our knowledge base or bases are organized and the implications that organization has for the ways we access information. We will take a detailed look here

at semantic (as opposed to episodic) memory, a topic that was introduced in Chapter 6.

Next, we will turn our attention to concepts and categorization. We will discover that mental representations categories are called concepts, and the process used to assign individual examples to concepts is called **categorization**. Medin (1989) argued that “concepts and categories serve as building blocks for human thought and behavior” (p. 1469). Lamberts and Shanks (1997) argued that how things such as concepts are mentally represented is a central concern of cognitive psychology.

To illustrate, consider this real-life example of medical diagnosis. Suppose you wake up one day feeling achy, lethargic, congested, and feverish. Your symptoms could indicate nothing more serious than flu. Or your symptoms could be the harbinger of a much more serious illness. It is your doctor's job to make the diagnosis, which essentially means assigning your pattern of symptoms to a category corresponding to known diseases or medical problems. The categorization allows the physician to determine appropriate treatment and predict the course of recovery. To make the diagnosis, your physician must have an idea of the various categories (possible medical problems) to be considered and, presumably, calls on stored mental representations of these categories (concepts). By the way, physicians are not the only ones who categorize illnesses, as shown by a study of laypeople's categorization of forms of mental illness (Kim & Ahn, 2002).