

have the faculty of perception. However, it was most often the case that faculty psychologists or philosophers neither believed that faculties correspond to various parts of the brain nor used them to *explain* mental phenomena. Most often the term *faculty* was used to denote a mental ability of some type, and that was all:

The word “faculty” was in frequent use in 17th century discussions of the mind. Locke himself used it freely, being careful to point out that the word denoted simply a “power” or “ability” to perform a given sort of action (such as perceiving or remembering), that it did not denote an agent or substance, and that it had no explanatory value. To Locke and to all subsequent thinkers a “faculty” was simply a classificatory category, useful only in a taxonomic sense. (Albrecht, 1970, p. 36)

Although Albrecht’s observation that faculty psychologists used the term *faculty* as only a classificatory category may be generally true, it was not true of Reid. For Reid, the mental faculties were active powers of the mind; they actually existed and influenced individuals’ thoughts and behavior. For Reid, however, the mental faculties were aspects of a single, unifying mind, and never functioned in isolation. That is, when a faculty functioned, it did so in conjunction with other faculties. For Reid, the emphasis was always on the unity of the mind:

The most fundamental entity in Reid’s psychology is the mind. Although introspection reveals many different types of thoughts and activities, Reid assumed—in common with most other faculty psychologists—the existence of a unifying principle. This principle he termed mind or soul; the mind might have a variety of powers, but these are only different aspects of the same substance. (Brooks, 1976, p. 68)

To summarize, Reid believed the faculties were aspects of the mind that actually exist and influence human behavior and thought. All the faculties were thought to be innate and to function in cooperation with other faculties. After a careful review of Reid’s works, Brooks (1976) concluded that Reid had referred to as many as 43 faculties of the mind, including abstraction, attention, consciousness, deliberation, generalization, imitation, judgment, memory,

morality, perception, pity and compassion, and reason. In chapter 8 we will discuss how faculty psychology influenced the development of the infamous field of phrenology.

## Immanuel Kant

**Immanuel Kant** (1724–1804) was born on April 22 in Königsberg, Prussia, and never traveled more than 40 miles from his birthplace in the 80 years of his life (Boring, 1950, p. 246). Wolman (1968a) nicely summarizes the type of life that Kant lived:

Several armchairs played an important role in the history of human thoughts, but hardly any one of them could compete with the one occupied by Immanuel Kant. For Kant led an uneventful life: no change, no travel, no reaching out for the unusual, not much interest outside his study-room and university classroom. Kant’s life was a life of thought. His pen was his scepter, desk his kingdom, and armchair his throne.

Kant was more punctual and more precise than the town clocks of Königsberg. His habits were steadfast and unchangeable. Passersby in Königsberg regulated their watches whenever they saw Herr Professor Doktor Immanuel Kant on his daily stroll. Rain or shine, peace or war, revolution or counterrevolution had less affect on his life than a new book he read, and certainly counted less than a new idea that grew in his own mind. Kant’s thoughts were to him the center of the universe. (p. 229)

Kant was educated at the University of Königsberg and taught there until he was 73, when he resigned because he was asked to stop including his views on religion in his lectures. He became so famous in his lifetime that philosophy students came from all over Europe to attend his lectures, and he had to keep changing restaurants to avoid admirers who wanted to watch him eat his lunch. Kant’s death on February 12, 1804, and his subsequent funeral created gridlock in Königsberg. The city bells tolled and a procession of admirers, numbering in the thousands, wound its way to the University Cathedral. Kant’s famous books *Critique of Pure Reason* (1781/1990) and *Critique of Practical Reason* (1788/1996) set the tone of German rationalist philosophy and psychology for generations.



CORBIS-BETT MANN

Immanuel Kant

Kant started out as a disciple of Leibniz, but reading Hume's philosophy caused him to wake from his "dogmatic slumbers" and attempt to rescue philosophy from the skepticism that Hume had created toward it. Hume had argued that all conclusions we reach about anything are based on subjective experience because that is the only thing we ever encounter directly. According to Hume, all statements about the nature of the physical world or about morality are derived from impressions and ideas and the feelings that they arouse, as well as from the way they are organized by the laws of association. Even causation, which was so important to many philosophers and scientists, was reduced to a habit of the mind in Hume's philosophy. For example, even if B always follows A and the interval between the two is always the same, we can never conclude that A causes B because there is no way for us to verify an actual, causal relationship between the two events. For Hume, rational philosophy, physical science, and

moral philosophy were all reduced to subjective psychology. Therefore nothing could be known with certainty because all knowledge is based on the interpretation of subjective experience.

### Categories of Thought

Kant set out to prove Hume wrong by demonstrating that some truths are certain and are not based on subjective experience alone. He focused on Hume's analysis of the concept of causation. Kant agreed with Hume that this concept corresponds to nothing in experience. In other words, nothing in our experience proves that one thing causes another. But, asked Kant, if the notion of causation does not come from experience, *where does it come from?* Kant argued that the very ingredients necessary for even thinking in terms of a causal relationship could not be derived from experience and therefore must exist a priori, or independent of experience. Kant did not deny the importance of sensory data, but he thought that the mind must add something to that data before knowledge could be attained; that something was provided by the a priori (innate) **categories of thought**. According to Kant, what we experience subjectively has been modified by the pure concepts of the mind and is therefore more meaningful than it would otherwise have been. Kant included the following in his list of a priori pure concepts, or categories of thought: unity, totality, time, space, cause and effect, reality, quantity, quality, negation, possibility-impossibility, and existence-nonexistence.

Without the influence of the categories, we could never make statements such as those beginning with the word *all* because we never experience all of anything. According to Kant, the fact that we are willing at some point to generalize from several particular experiences to an entire class of events merely specifies the conditions under which we employ the innate category of totality, because the word *all* can never be based on experience. In this way, Kant showed that, although the empiricists had been correct in stressing the importance of experience, a further analysis of the very experience to which the empiricists referred revealed the operations of an active mind.

Because Kant postulated categories of thought, he can be classified as a faculty psychologist. He was a faculty psychologist in the way that Reid was, however. That is, he postulated a single, unified mind that possessed various attributes or abilities. The attributes always interacted and were not housed in any specific location in the mind and certainly not in the brain.

### Causes of Mental Experience

Kant agreed with Hume that we never experience the physical world directly and therefore can never have certain knowledge of it. However, for Hume, our cognitions consist only of sense impressions, ideas, and combinations of these arranged by the laws of association or by the imagination. For Kant, there was much more. Kant believed our sensory impressions are always structured by the categories of thought, and our *phenomenological experience* is therefore the result of the interaction between sensations and the categories of thought. This interaction is inescapable. Even when physical scientists believe that they are describing the physical world, they are really describing the human mind. For Kant, the mind prescribed the laws of nature. Kant, in this sense, was even more revolutionary than Copernicus, because for him the human mind became the center of the universe. In fact, our mind, according to Kant, creates the universe—at least as we experience it. Kant called the objects that constitute physical reality “things-in-themselves” or *noumena*, and it was *noumena* about which we are forever and necessarily ignorant. We can know only appearances (phenomena) that are regulated and modified by the categories of thought.

**Perception of time.** Even the concept of time is added to sensory information by the mind. On the sensory level we experience a series of separate events, such as the image provided by a horse walking down the street. We see the horse at one point and then at another and then at another and so forth. Simply looking at the isolated sensations, there is no reason to conclude that one sensation occurred before or after another. Yet this is exactly

what we do conclude; and because there is nothing in the sensations themselves to suggest the concept of time, the concept must exist a priori. Similarly, there is no reason—at least no reason based on experience—that an idea reflecting a childhood experience should be perceived as happening a long time ago. All notions of time such as “long ago,” “just recently,” “only yesterday,” “a few moments ago,” and so forth cannot come from experience; thus they must be provided by the a priori category of time. All there is in memory are ideas that can vary only in intensity or vividness; it is the mind that superimposes over these experiences a sense of time. Thus, in a manner reminiscent of Augustine (see chapter 3), Kant concluded that the experience of time could only be understood as a creation of the mind.

In fact, Kant indicated that Hume’s description of causation as perceived correlation depended on the concept of time. That is, according to Hume, we develop the habit of expecting one event to follow another if they typically are correlated. However, without the notion of before and after (that is, of time), Hume’s analysis would be meaningless. Thus, according to Kant, Hume’s analysis of causation assumed at least one innate (a priori) category of thought.

**Perception of space.** Kant also believed that our experience of space is provided by an innate category of thought. Kant agreed with Hume that we never experience the physical world directly, but he observed that it certainly seems that we do. For most if not all humans, the physical world appears to be laid out before us and to exist independently of us. In other words, we do not simply experience sensations as they exist on the retina or in the brain. We experience a display of sensations that seem to reflect the physical world. The sensations vary in size, distance, and intensity and seem to be distributed in *space*, not in our retinas or brains. Clearly, said Kant, such a projected spatial arrangement is not provided by sensory impressions alone. Sensations are all internal; that is, they exist in the mind alone. Why is it, then, that we experience objects as distributed in space, as external to the mind and the body? Again, Kant’s answer was that the experience of space, like that of time, is provided by an a priori category of thought.

According to Kant, the innate categories of time and space are basic because they provide the context for all mental phenomena, including (as we have seen) causality.

It must be emphasized that Kant did not propose specific innate *ideas*, as Descartes had done. Rather he proposed innate *categories* of thought that organized all sensory experience. Thus both Descartes and Kant were nativists, but their brands of nativism differed significantly.

### The Categorical Imperative

Kant also attempted to rescue moral philosophy from what the empiricists had reduced it to—utilitarianism. For Kant, it was not enough to say that certain experiences felt good and others did not; he asked what rule or principle was being applied to those feelings that made them desirable or undesirable. He called the rational principle that governed or should govern moral behavior the **categorical imperative**, according to which “I should never act except in such a way that I can also will that my maxim should become a universal law” (Kant, 1785/1981, p. 14). Kant gave as an example the maxim “lying under certain circumstances if justified.” If such a maxim were elevated to a universal moral law the result would be widespread distrust and social disorganization. On the other hand, if the maxim “always tell the truth” were made a universal moral law social trust and harmony would be facilitated. According to Kant, if everyone made their moral decisions according to the categorical imperative the result would be a community of free and equal members. Of course, Kant realized that he was describing an ideal that could only be approximated. He also realized that he was not adding anything new to moral philosophy. His categorical imperative was similar to older moral precepts such as the “golden rule” or “do unto others as you would have them do unto you.” Kant’s intent was to clarify the moral principle embedded in such moral precepts as the “golden rule.”

Whereas the empiricists’ analysis of moral behavior emphasized hedonism, Kant’s was based on a rational principle and a belief in free will. For Kant,

the idea of moral responsibility was meaningless unless rationality and free will were assumed.

### Kant’s Influence

Kant’s rationalism relied heavily on both sensory experience and innate faculties. Kant has had a considerable influence on psychology, and since his time a lively debate in psychology has ensued concerning the importance of innate factors in such areas as perception, language, cognitive development, and problem solving. The modern rationalistically oriented psychologists side with Kant by stressing the importance of genetically determined brain structures or operations. The empirically oriented psychologists insist that such psychological processes are best explained as resulting from sensory experience, learning, and the passive laws of association, thus following in the tradition of British empiricism and French sensationalism.

Although Kant’s influence was clearly evident when psychology emerged as an independent science in the late 1800s, Kant did not believe that psychology could become an experimental science. First, Kant claimed the mind itself could never be objectively studied because it is not a physical thing. Second, the mind cannot be studied scientifically using introspection because it does not stand still and wait to be analyzed; it is constantly changing and therefore cannot be reliably studied. Also, the very process of introspection influences the state of the mind, thus limiting the value of what is found through introspection. Like most philosophers in the rationalistic tradition, Kant believed that to be a science a discipline’s subject matter had to be capable of precise mathematical formulation, and this was not the case for psychology. It is ironic that when psychology did emerge as an independent science, it did so as an experimental science of the mind, and it used introspection as its primary research tool (see chapter 9).

Kant defined psychology as the introspective analysis of the mind, and he believed that psychology so defined could not be a science. There was a way of studying humans, however, that although not scientific could yield useful information; that way