

**Descartes** may be called the founder of the modern theory of knowledge, since he set up the critical investigation of claims to knowledge and the method of doubt as the first questions of philosophy. He believed that all the problems of mathematics, science and practical life were soluble by "the natural light of reason." He taught people to reject scholastic obscurities and think for themselves. Philosophy, if it is to have sure foundations, must press backwards, applying the method of doubt and rejecting every dubious statement until it arrives at simple, self-evident, undoubtable truths. Descartes found two such truths: his own existence (by means of the now famous "cogito ergo sum") and the existence of God. Using these two undoubtable truths, he then proceeded to show that we can trust our ordinary judgments of perception of the external world. Thus knowledge is possible. Descartes was the first major western philosopher to regard both sensory ideas and intellectual ideas as occurring wholly within the mind. Descartes thus made the individual mind and its ideas a realm separate from everything else. The most profound influence of Descartes on modern philosophy was to make many subsequent thinkers believe they must begin epistemology with their private states of consciousness and subjective ideas. Whereas for Descartes, his doubt allowed him to find a bedrock of certainty, it engulfed many later thinkers in a morass of skepticism.

**Spinoza** was a pantheist, a rationalist, a moralist, a determinist, and a systematic philosopher. He held that God or Nature is the only Substance. All other aspects of reality, including man, are attributes or modes of this single Substance. He made greater claims for pure reason than any other great philosopher has ever made. All problems are soluble by the use of reason. Naturally, he used rational proofs for the existence of God.

**Leibnitz** held that the universe contains a large number of spiritual substances, or souls, or monads (his term), arranged in a hierarchy, with God as the chief soul. Each monad is completely independent of all others; exists in and through itself; does not interact with other monads; knows only its own ideas; and causes no effects in the others. The rather obvious fact that humans appear to interact with one another is explained by postulating a pre-established harmony by which the monads spontaneously act in mutual conformity! Leibnitz proposed two principles for knowing: (1) the law of contradiction, by which we discover truths of reason (necessary, a priori truths); and (2) the law of sufficient reason, by which we are able to discover truths of fact (contingent, a posteriori truths). However, by "truths of fact" Leibnitz did not mean an external influence which comes into contact with a monad, for monads are "windowless." Although the experiences of two monads are so harmoniously adjusted that one seems to be experiencing the other, yet when one monad speaks and the other hears, the speaking does not cause the hearing. Instead, all ideas of everything that exists or