

se, in itself, apart from any and all particulars, Aristotle held that the form existed only in particular substances. Aristotle emphasized sense experience as the instrument of knowledge; and he said that true knowledge of particular substances was possible via sense experience of their inherent forms.

Epicurus (341-270 BC) held that all knowledge results from contact between atoms: those of which the soul is composed being struck by atoms from the outside world. Atoms affected the sense organs and produced sensations; mass stimulation of the sense organs resulted in a presentation or appearance (phantasis) to the soul. Sense experience in the more general sense occurs when an incoming presentation is fitted to a general conception or abstract idea, which itself results from repetition of sensations. Since sensations are the ultimate standard of judgment, there is no other source for a metaphysical theory of the world.

Thomas Aquinas (AD 1225-1274) propounded a dictum which was to become famous: nihil est in intellectu nisi prius fuerit in sensu (there is nothing in the intellect which was not first in the senses). Thomas was an avid follower of Aristotle in epistemology.

John Locke (1632-1704) has been called "the founder of empiricism in epistemology." Locke said that the mind has no innate ideas about the world; the mind is a clean slate, a blank tablet (tabula rasa). If any knowledge is to appear upon that slate, experience must print it. Inconsistent with this viewpoint, Locke claimed that our knowledge of our own existence is intuitive (following Descartes' "I think, therefore I exist"), and that our knowledge of God's existence is demonstrative by means of rational arguments.

Whereas Locke held that it is necessary to assume the existence of both a substantial mind that experiences and perceives, and substantial objects that are experienced and perceived, Berkeley took the next step. **George Berkeley** (1685-1753) argued that we never perceive objects or material substances, but only qualities such as colors, sounds, etc., and that these qualities are "mental" or in the mind. However, Berkeley said, since a divine mind exists, we can be sure not only that trees and rocks exist, but also that our sensory experience is reliable.

David Hume (1711-1776) developed to its logical end the view that all knowledge derives from sense experience. Hume held that knowledge is of two kinds: sense impressions and ideas, which are exact images of sense impressions. Taken together, impressions and ideas may be called perceptions. All that we know, said Hume, is our perceptions. We have no knowledge of objects outside ourselves, or of a substantial mind within ourselves, or of a "self" or a soul, nor even of substance or essence; we have only our impressions and ideas of them. Thus when we think that we are experiencing a chair "out there," we are really experiencing only our perception of a chair. We can never experience the chair itself, nor can we know whether such an item even exists!