

Descartes, René

(1596–1650) French Philosopher

Even though the seventeenth-century French philosopher René Descartes has been remembered primarily for his contributions to Western philosophy, he also showed a curiosity about many aspects of the natural world. His mechanistic and rationalistic methods have been criticized as often as they have been praised, but they provided a framework for subsequent scientific inquiry.

René Descartes was the leading French philosopher of the seventeenth-century scientific revolution. Although now best known, and commonly vilified, for his defense of mind/body dualism and for his quest for certainty in the theory of knowledge, Descartes was primarily interested in studying the natural world and the human body. His global influence as the intellectual point of origin of modern Western subjectivity, the evil demon of modern philosophy, is undeniable. But it masks the stranger work of the historical figure, who was as puzzled by meteors and by medicine as by metaphysics and method, and more interested in passion, psychosomatics, and perception than in rationality and the soul.

Born in La Haye (now Descartes) in Touraine, and educated at the Jesuit college of La Flèche, Descartes decided on a life of inquiry in his early twenties after studying mechanics and music, and after a series of powerful dreams. He developed a systematically mechanical account of nature, modeling his cosmology and physics on the behavior of fluids, which also plays a key role in his remarkable physiological theories. Descartes settled in Holland in the late 1620s; by 1632 he was in Amsterdam, "dissecting the heads of various animals" to "explain what imagination,

memory, etc. consist in" (Descartes 1985–1991,Vol. 3, 40). But when he heard of Galileo's condemnation in 1633, Descartes abandoned plans to publish works on the nature of matter and the body.

Descartes definitively rejected the Christian-Aristotelian idea that biological matter has intrinsic powers or built-in ends, claiming that its capacities arise rather from the complex configurations and combinations of physical particles in motion. He was concerned to defend the orthodox picture of the *soul* as nonphysical and immortal, but he denied that *life* was also due to immaterial powers. His posthumous work *L'homme* (*The Treatise on Man*) describes a fictional world of soulless "earthen machines," mobile automata like the hydraulic statues in "the gardens of our kings." Descartes' physiology relied heavily on "animal spirits," fast-moving but material fluids that flow through the nerves and the pores of the brain.

Descartes notoriously claimed that the human soul interacts with the body-machine by way of the pineal gland, swaying on its supporting network of arteries and directing the flow of animal spirits through the tubes of the brain tissue. Even in creatures without souls, he posited, ordinary cognitive processing involves the construction and reconstruction of patterned traces on the surface of this gland. Descartes had seen in dissection that nonhuman animals also had a pineal gland. So although he did argue that beasts are machines, he thought that these machines are capable of representation, memory, and even sentience and dreams. Despite the old story that he vivisected a dog on his kitchen table, Descartes offered no justification for cruelty to animals. Far from exclusively privileging the rational soul, his work substantially restricted its role and scope. The bodies of Each problem that I solved became a rule which served afterwards to solve other problems. • René Descartes (1596–1650)



Frans Hals, *Portrait of René Descartes* (1649). Oil on panel. Statens Museum for Kunst, Copenhagen.

the Cartesian automata are not mere objects cut off from the world, responding passively to the whim of the soul, but are fully and holistically embedded in the buzzing whirl of the fluid-filled cosmos.

Many readers encounter Descartes only through his writings on metaphysics and epistemology. In *Discourse on the Method* (1637) and the *Meditations* (1641), Descartes concocts a sequence of radically skeptical scenarios to challenge our trust in traditional beliefs, and to conclude that he can know with certainty his own existence as a "thinking thing" (rescogitans). These works have considerable literary and psychological power: the *Discourse* offers an autobiographical fable about Descartes' individualistic path to knowledge, while the *Meditations* brilliantly uses the jargon of scholastic Aristotelian philosophy against itself, in making theological space for the ongoing mechanistic investigation of the natural world.

In the seventeenth and eighteenth centuries Cartesianism (Descartes' philosophical doctrine) was attacked less for its incoherent dualism than for the specter of atheistic materialism that both conservatives and enthusiasts read into it. One story, circulated in the eighteenth century to blacken Descartes' reputation, concerned his illegitimate daughter Francine: having allegedly conceived the child with a housemaid in order to study reproductive processes at close quarters, the philosopher built and carried around a doll in the form of a life-size replica of the child after Francine's death from scarlet fever (which the historical Descartes called the greatest sorrow of his life).

In the 1640s, Descartes continued to work on recalcitrant problems about physiology and human nature. He constructed a sophisticated but bizarre embryology, and, under persistent questioning from his correspondent Princess Elizabeth of Bohemia, he further developed his views on psychosomatic interaction. In *The Passions of the Soul* (1649) he linked medicine and morality by attending to the individualized dynamics of the emotional life and the union of mind and body. Descartes, who had long been fascinated by schemes for prolonging longevity, died after a harsh Swedish winter tutoring Queen Christina.

Philosophers of many distinct persuasions have since defined their projects in opposition to a vision of Cartesianism as a philosophy of exact order, reason, and pure subjectivity; but modern scholarship strongly suggests that Descartes himself was not that kind of Cartesian.

John SUTTON
Macquarie University, Sydney

See also Philosophy, Modern; Science—Overview; Scientific Revolution

Further Reading

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