
DARWIN, CHARLES (1809–1882)

Charles R. Darwin was born on February 12, 1809. He first studied medicine at Edinburgh, and then ministry at Cambridge. His primary interests were, however, in natural history. Ironically, Darwin found his early academic experiences in natural history “incredibly dull. The sole effect . . . was the determination never as long as I lived to read a book on geology, or in any way study the science.” Clearly, later academic and field experience reversed Darwin’s early views. After graduating, Darwin became the naturalist on the HMS *Beagle* in 1831. It was on the ship’s 5-year voyage that he gathered much of the evidence that later formed the basis for his ideas on evolution.

Darwin’s most important intellectual contribution was his theory of evolution by natural selection, published in *On the Origin of Species by Means of Natural Selection* (1859). Darwin later published *The Descent of Man, and Selection in Relation to Sex* (1871), which focused on human evolution, sexual selection, and cognitive/behavioral characteristics in humans and other species. In *The Expression of the Emotions in Man and Animals* (1872), Darwin

focused on patterns and mechanisms of emotional expression in humans and other animals. Darwin died on April 19, 1882, and was buried in Westminster Abbey.

Darwin’s ideas about evolution, natural and sexual selection, and work on emotional expression emphasized the adaptive and functional aspects of structure, behavior, and even cognition. This generated developments in measurement in areas ranging from comparative psychology to later work on human emotional expression (e.g., Ekman’s coding system of facial displays). Because Darwin’s theory emphasized individual variations, it helped to generate work in measurement of human individual differences. This influence was most clearly expressed through the work of Darwin’s cousin Francis Galton. As Galton himself notes in an 1869 letter to Darwin, “I always think of you . . . as converts from barbarism think of the teacher who first relieved them from . . . superstition. . . . Your book . . . was the first to give me freedom of thought.” Galton referred to his own work as the “natural history of human faculty.” Galton’s work on testing led to a number of developments in statistics, and measures of human abilities, physical characteristics, and sensory acuities. Through Galton, Darwin indirectly affected many important figures in

the history of measurement and testing, including Cattell, Pearson, and Spearman. Darwin's work thus had important direct and indirect influences on the fields of measurement and statistics.

—*Matthew J. Hertenstein and Kevin E. Moore*

See also Galton, Sir Francis

Further Reading

Simpson, G. G. (1995). *The book of Darwin*. New York: Washington State Press.

Darwin: <http://pages.britishlibrary.net/charles.darwin/>

Galton: <http://www.mugu.com/galton/index.html>