
Patrick D. Hopkins (2005)

HEYTESBURY, WILLIAM
(before 1313–1372/3)

William Heytesbury, a fellow at Merton College in Oxford from 1330, belonged to the second generation of Mertonian “Calculators.” His work depends on Richard Kilvington’s Sophisma (1325) and Thomas Bradwardine’s Insolubilia and Tractatus de Proportionibus (1328). His technique was to analyze sophisma—ambiguous problematic statements whose truth or falsehood is to be assessed under specified assumptions—and apply supposition theory; a form of semantic–logical analysis, to the explication of their underlying logical grammar. He is particularly noted for his work on motion and the continuum.

Heytesbury’s most popular work was the Rules for Solving Sophisma (1335), which contains six treatises: “On Insoluble Sentences (Insolubilia),” dealing with self-referential paradoxes; “On Knowing and Doubting,” concerning reference in intensional contexts; “On Relative Terms,” considering the reference of relative pronouns; “On Beginning and Ceasing” and “On Maxima and Minima,” about continua; and “On the Three Categories,” on velocity and acceleration in changes of place, quantity, and quality.

In “On Beginning and Ceasing,” Heytesbury considers the sophisma “some part of an object ceases to be seen by Socrates,” given that the object is not now, but will, immediately after now, be partly occluded by an object passing in front of it. This statement may assert that there is a given part of the object that will, in every moment after this one, be entirely occluded, and if so, it is false. Or it may assert that at every moment after this present moment, there will be some part of the object entirely occluded at that moment (a different part for each moment), and then it is true.

The Rules became popular, and remained important on the European continent even after the Mertonians began to be ignored in Britain. It was taught at Padua and Paris through the early sixteenth century, influencing the Paduan school, the fifteen–century Italian logicians such as Paul of Venice (d. 1429), and the school of John Major at Paris. With the rest of medieval logic, Heytesbury’s work sank into obscurity after that. In addition to Rules Heytesbury wrote two collections of sophismata, in one of which the (obviously false) statement, “you are a donkey,” was repeatedly derived from seemingly harmless admissions. He also wrote some shorter works; for instance, “On the Compound and Divided Senses,” which deals with scope ambiguities similar to that involved in the preceding example.

In the sixth chapter of Rules, Heytesbury states the mean-speed theorem for uniformly accelerated motion: A uniformly accelerated body will, over a given period of time, traverse a distance equal to the distance it would traverse if it moved continuously in the same period at its mean velocity (one-half the sum of the initial and final velocities). Elsewhere, he points out, in a particular case, that a uniformly accelerated body will, in the second equal time interval, traverse three times the distance it does in the first. Domingo de Soto observed the applicability of the mean-speed theorem to free fall in 1555.

See also Bradwardine, Thomas; Kilvington, Richard; Medieval Philosophy; Paul of Venice.

Bibliography

WORKS BY WILLIAM HEYESBURY
Hentiseri de sensu composito et diviso, Regulae solveni sophisma (Venice: Bonetius Locatelli, 1494).
HICKOK, LAURENS PERSEUS

(1798–1888)

Laurens Perseus Hickok was America's first systematic philosopher and also won distinction as a theologian and educational administrator. He was born in Bethel, Connecticut, and was educated at Union College. He trained for the ministry under William Andrews and Bennett Tyler, who was a major spokesman for "old school" Calvinism. Hickok served well as pastor at Kent, Connecticut (1823–1829), and Litchfield, Connecticut (1829–1836). He then became professor of theology at Western Reserve College (1836–1844) and Auburn Theological Seminary (1844–1855). His alma mater, Union College, called him to serve as vice-president and professor of mental and moral philosophy (1855–1866) and president (1866–1868). In 1868 he retired to Amherst, Massachusetts, where he wrote several books over the next twenty years.

The core of Hickok's philosophic enterprise was the attempt to allow adequate weight to the claims of reason and experience in all domains of intellectual life. Ultimately, he was convinced, the rational and the empirical modes of thinking could not lead to contradictory conclusions; human intelligence might begin with general principles and rationally deduce facts or might begin with observed facts and gradually uncover general principles. In either case the facts were the same, and the principles were the same. Rational science is science as known by God; empirical science is science as learned by men. Different criteria of validity are to be applied to man's ideas in these two types of scientific thinking. In the empirical area ideas are tested by their experimental consequences; in the rational area ideas are tested by their congruence within a systematic pattern. Each type of thinking has, however, its proper place; the speculative mode should not be used when the investigative mode is in order, but neither should men become so enamored of empirical investigation that they neglect rational speculation.

Despite this careful balancing of empirical and rational method, Hickok did not regard the discoveries of empirical science as part of philosophy. His own work Empirical Psychology; or, The Human Mind as Given in Consciousness (1854) was an introspective study of the workings of the human mind. Hickok thought of this study as prephilosophic. He also published a philosophic work in the same field—Rational Psychology; or, The Subjective Idea and the Objective Law of All Intelligence (1849). Here no attention was given to the data of introspection; hence, this work was properly "philosophy." In all the other fields to which he gave consideration, Hickok's work was completely dominated by rational, speculative system building.

Although there was some trace of the ideas of Immanuel Kant in American philosophy before Hickok, he was the first professor of philosophy in the United States to attempt to make systematic use of Kant and the post-Kantian German rationalists. Thus, he was an important figure in the transition from the orthodox academic teaching of Scottish realism in the first half of the nineteenth century to the dominance of idealism in the latter part of the century.

See also Empiricism; Experience; Kant, Immanuel; Rationalism; Reason.

Bibliography

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Humanity Immortal; or, Man Tried, Fallen and Redeemed. Boston: Lee and Shepard, 1872.