

AMBROSIIUS ARNOLD WILLEM HUBRECHT
1853-1915

Hubrecht was born in Rotterdam on 2 March 1853, the son of the secretary-general of the Department of the Interior. His father came from an old patrician family, while his mother was related to the professorial family Van der Hoeven. From 1865 to 1869 Hubrecht attended the local HBS. In 1869 he enrolled at the Delft Polytechnic School, but a year later he transferred to the University of Utrecht to study biology. Among his teachers were F.C. Donders and P. Harting. In the academic year 1873-1874 Hubrecht studied at Leiden under E. Selenka, and later in Heidelberg under C. Gegenbaur.

Hubrecht received his Ph.D. under Harting on a study of the anatomy, histology and development of the worm group Nemerteans (*Aanteekeningen over de anatomie, histologie en ontwikkelingsgeschiedenis van eenige Nemertinen* [Utrecht, 1874]), based on collections at the Zoological Station in Naples, where he was the first Dutch student. Later studies on the anatomy and development of these worms (1875-1889) led him—as a convinced Darwinian—to speculate on the phylogenetic relationship between the Nemerteans and vertebrates. From 1875 to 1882 Hubrecht was curator of fishes at the National Museum of Natural History in Leiden. In 1878 he married Johanna Maria Molewater with whom he had two sons.

In 1882 Hubrecht succeeded Harting as professor of zoology and comparative anatomy at the University of Utrecht. Although he recognized his obligation to cover comparative physiology, Hubrecht had little interest in this area. Instead, he now began a series of studies on comparative embryology with the aim of seeking evidence for phylogenetic relationships between various organisms. In 1890 and 1891 Hubrecht traveled through the Dutch East Indies and built a large embryological collection, especially of insectivores (which were considered to be the most promising mammals for the study of mammalian phylogenesis) and lemuroid primates. Although Hubrecht's skills as embryologist were highly esteemed, his rather speculative theory of the phylogenetic derivation of mammals directly from amphibians met criticism in his later years. Hubrecht summarized his ideas in the Princeton lectures published as *The Descent of the Primates* (New York: Scribner, 1897) and *Die Säugstierontogenese in ihrer Bedeutung für die Phylogenie der Wirbeltiere* (Jena: Fischer, 1909).

Hubrecht resigned his chair in 1910 (and was succeeded by H.F. Nierstrasz) in favor of a specially created extraordinary professorship in comparative embryology that he held until his death in 1915. The Institut International d'Embryologie was founded by him in 1911. In 1912 and 1914 Hubrecht traveled in Algeria and the rest of Africa respectively, to collect embryos.

Hubrecht was active in many other fields of education and science. He was one of the moving forces in the Nederlandsche Dierkundige Vereeniging (Dutch Zoological Society) and established a permanent Zoological Station in Den Helder that was opened in 1890 (now NIOZ, Texel; Dutch Institute for Marine Research). Hubrecht had a life-long interest in fishery. He showed his interest in colonial science by his membership of the Maatschappij ter Bevordering van het Natuurkundig Onderzoek der Nederlandsche Koloniën (Society for the promotion of natural scientific research in the Dutch colonies, commonly known as the "Treub Maatschappij") and by his share in the preparation of the Siboga expedition, and expeditions to Borneo and New Guinea. Hubrecht was involved in the improvement of secondary education and the introduction of Middle European Time in the Netherlands. He wrote many articles in *De Gids*, a leading cultural and literary journal of which he was one of the editors.

Hubrecht was a member of the Royal Academy of Arts and Sciences (elected in 1883) and of many foreign scientific societies and academies. In recognition of his embryological work, he received six doctorates honoris causa. He died on 21 March 1915 in Utrecht.

Primary works

Incomplete bibliographies in Faber, *DSB*, and Keibel, 'Hubrecht' (see below).

Archive and collection Hubrecht at the 'Hubrecht Laboratorium. Nederlands Instituut voor Ontwikkelingsbiologie' (Dutch Institute for Developmental Biology) in Utrecht. Letters in the Royal Library in The Hague and the libraries of the universities of Leiden and Utrecht.

Secondary sources

R. Assheton, 'Dr. Ambrosius Arnold Willem Hubrecht', *Proceedings of the Linnean Society of London* (1915), sess. 127, 28-31; F. Keibel, 'A.A.W. Hubrecht. Ein Nachruf', *Anatomischer Anzeiger* 48 (1915) 201-203, with an incomplete bibliography; G.C.J. Vosmaer, 'Ambrosius Arnold Willem Hubrecht. Persoonlijke herinneringen', *De Gids* 79 (1915) II, 193-200; M. Weber, in: *De Amsterdammer* (28 March 1915); H.F. Nierstrasz, 'In memoriam. Prof. Dr. A.A.W. Hubrecht', *Tijdschrift der Nederlandsche Dierkundige Vereeniging*, 2nd series, 14 (1915-1916) 180-186; R.P.W. Visser, 'De Utrechtse zoölogie rond 1900: van morfologie naar vergelijkende fysiologie', *TGGNWT* 7 (1984) 49-59.
P. Smit, in: *BWN*, vol. 1, 256-258; *DMB*, 925-926; J. Faber, in: *DSB*, vol. 6, 535-536.

[L.C.P.]