

L. Cuénot: 1866–1951

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LUCIEN CLAUDE JULES MARIE CUÉNOT died on January 7, 1951, in his eighty-fifth year. In him France has lost one of her greatest biologists and, perhaps, the most versatile one of past generations. Cuénot's life was one of utmost simplicity. Born into a family of lower civil service employees, he received the standard education in a municipal college in Paris, and after his bachelor's degree entered the Sorbonne at twenty-one years of age for graduate work. Although originally tending toward paleontology, the influence of the colorful Lacaze-Duthiers attracted him to zoology. He took his doctor's degree in 1887 and after three years of waiting received his first job as Maître de Conférences in the University of Nancy in the province of Lorraine. Here he stayed for the rest of his life, since 1937 as emeritus. It has always been surprising to outsiders that this great biologist never had an appointment in Paris. In a short autobiographical note he writes: "The temptation to go to Paris which is so strong with the majority of French Scholars in the provinces did not touch me. I was happy in my work. I had a family, friends, a house, I loved Lorraine; thus why change?" This statement is in accord with the simple and retiring ways of Cuénot, whose tall figure and fine, dark-complexioned face were rarely seen at meetings or away from his laboratory or at an Atlantic marine station.

Cuénot is best known in this country by his work in genetics and evolution, though this was only a small part of his output. In his younger days he worked in almost all fields of invertebrate zoology and also in comparative physiology of invertebrates and experimental zoology. Most important among these studies was his work on excretion, the phagocytic organs, and the blood of invertebrates. He published many faunistic, protozoological, and morphological papers. In later years he covered practically the whole field of invertebrates, wrote monographs on sea urchins, comatula, phascolosoma; contributed monographs on sipunculids, priapulids, and tardigrades to the fauna of France; wrote chapters of a handbook of comparative physiology and others on animal geography; wrote the chapters on echinoderms, onychophores, tardigrades, and linguatulids for another handbook. All this and many other papers would have sufficed to establish him as a great invertebrate zoologist.

He himself was more proud of his work in genetics, where he actually was one of the outstanding pioneers. Immediately after the rediscovery of Mendel's laws, he started experimenting with mice and announced in

1902 his first case of simple Mendelian behavior. In a series of papers up to 1911 he laid the foundations of our knowledge of the genetics of this rodent.

In 1903 he took the first steps toward the understanding of the hierarchy of color genes; he further realized that albinos may carry other color genes and already understood the genic control of pigment in terms of chromogen and oxydase. In 1904 he developed the correct formulae for a number of color genes and the piebalds. In studying the latter he found different grades, which he assumed to be based upon different potencies of the piebald gene, and he tried to prove this by selection experiments. In 1905 a brilliant analysis revealed that homozygous yellows are lethal. More details were added in the following years, and a clear discussion of genotype and phenotype (*caractère unité et descriptif*) preceded Johannsen's work. In 1908 an interesting discussion with Morgan took place. Morgan attacked the explanation of the case of the yellow mice and proposed a complicated explanation, doubting the law of the purity of the gametes. Cuénot defended his (correct) view, and E. B. Wilson took sides with Cuénot. The last paper on mouse genetics was published in 1911, a comparative review of the nomenclature. Cuénot turned toward the study of the hereditary element of cancer in mice and was ready to publish his positive results when the first world war destroyed his work. In addition he suffered for years from a protozoan infection that he had acquired from his mouse stocks. Thus his genetic work came to an end.

In 1911 Cuénot had already published his first book on evolution (*The Genesis of Animal Species*), followed in 1925 by a book on adaptation (*L'adaptation*), a third one on the species (*L'espèce*) in 1936, and still another one, *Invention et finalité en biologie*, in 1941. A last volume, written with his assistant, A. Tétry, with the title *L'évolution biologique, les faits, les incertitudes*, is in press. His most important contribution seems to be the first and second of these books, in which he established the theory of preadaptation (his term) and immigration of the preadapted type into an empty environmental niche. His huge knowledge of zoological facts helped him to assemble and discuss the most interesting examples and to prove his point abundantly. In the succeeding books his interest was centered upon the complicated adaptations found in organisms. He studied in detail what he calls inventions, resembling in many cases human inventions: the suckers, the press buttons of the squids, the principle

of a certain three-pronged sugar tong repeated in the pedicellaria, and innumerable other "tools" of animals. A careful study of these convinced him in later years that their origin cannot be understood without a teleological finalistic principle. It is remarkable that a great zoologist, with unusual command of all aspects of the facts, simultaneously a pioneer of genetics and great contributor to recent evolutionary thought, felt himself constrained in the end to become a defeatist by

advocating mystical powers. Or did he think essentially in the direction of ideas touched upon since by Schrödinger and Bohr? It will be good to realize that his attitude was the result of a clear realization that the Neo-Darwinian doctrine does not lead beyond the confines of microevolution and that the best rebuttal of mysticism in this field will be the elaboration of new ideas that will bridge the gap left by Neo-Darwinism, without recourse to defeatist philosophies.



C. W. M. Poynter: 1875-1950

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C. W. M. POYNTER, seventy-five, dean and professor of anatomy, emeritus, of the College of Medicine, University of Nebraska, died on October 25, 1950, at his home in Omaha, Nebraska, after a long illness. Dr. Poynter's entire professional career was closely linked with the inception and growth of the College of Medicine in Omaha, for he was professor of anatomy and chairman of the department from 1912 to 1930. He became dean in 1930 and brilliantly guided the college through the drought and wartime years, reaching emeritus status in 1946. After his retirement he continued to be one of the most potent leaders in the successful efforts to build, equip, and maintain the Childrens Memorial Hospital adjacent to the University Hospital in Omaha.

He was a member of the American Association of Anatomists and of the Anatomical Society of Great Britain and Ireland. He served as secretary of Section

N (Medical Sciences) of the American Association for the Advancement of Science, 1929-31. He was very active in the Association of American Medical Colleges, being president in 1933 and executive counselor in 1934. He was also a member of the American Medical Association and the American Anthropological Association.

Dr. Poynter exerted a profound influence on the many generations of students who came under his direction. His great capacity for friendship, the tremendous breadth of his knowledge and ideas, his wisdom, and his executive ability left a deep, lasting impression on his associates in the faculty and the medical profession. The affection and esteem that students, faculty, and other friends felt for him is well shown by the Foundation bearing his name, established through their generosity to promote medical scholarship at the College of Medicine.

The National Paraplegia Foundation will continue its fellowships for research in spinal cord disease and trauma and in the complications commonly associated with such disease or injury. Application forms (returnable by *June 1*) for 1951-52 may be obtained from the Chairman, Medical Advisory Committee, 1108 E. 48th St., Richmond 14, Va.

Two new advisory groups on medical research have been established in the **NRC Division of Medical Sciences**—the Subcommittee on the Chemistry of Blood Coagulation and the Subcommittee on Shock. Members of the new blood chemistry group are Walter H. Seegers, chairman, J. Garrott Allen, Benjamin Alexander, Kenneth M. Brinkhous, J. H. Milestone, and L. M. Tocantins. Members of the shock subcommittee are Dickinson W. Richards, Jr., chairman, Philip H. Abelson, William A. Altemeier, R. Keith

Cannan, Robert D. Dripps, Richard V. Ebert, Jacob Fine, Samuel P. Harbison, Carl A. Moyer, and George W. Thorn.

Under the administration of the School of Nursing and in cooperation with John Gaston Hospital, a post-graduate course in anesthesia will be offered in July by the **University of Tennessee Medical Units**. Further information may be obtained from Miss Ruth Neil Murry, 874 Union Ave., Memphis.

The **Yale Summer School of Alcohol Studies** will begin July 7 and extend through August 3. It will be under the direction of Selden D. Bacon, associate professor of sociology. For further information address the Summer School of Alcohol Studies, Laboratory of Applied Physiology, 52 Hillhouse Ave., New Haven, Conn.