The Conceptual and Institutional Evolution of Probability in the History of Modern Greek Culture, 1888-1968

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Abstract

Probabilities appeared in Greece at the turn of the 19th century: they were of error theory and were presented, initially, at the Military School (1888), at the Polytechnic School (1893/1901) and at the Department of Physics at Athens University (1906). The first two exclusively probability books were published in 1911 and 1919. In this initial appearance of the probabilities in Greece, the corresponding stochastic knowledge presented was, for the most part, of French origin and probabilities were seen in the classic view.

The 1920s gave a new impetus to the development of insurance mathematics and statistics, in the context of the urban modernization of public administration. In 1922 the law "On compulsory insurance of workers and private employees" was passed and in 1925 the General Statistical Service was established at the Ministry of Economy. Thus, a book on Insurance Mathematics (1926), a book on Statistics (1931) and a book on Biometrics (containing Biostatistics) (1943) first appeared. In these cases, minimal probability data were used, based on the classical concept of probability.

In the 1930s a wide-ranging reflection on Modern Physics arose, with issues of uncertainty and causality causing controversy. In this context, probabilities played an important role. Thus, in one of the first Greek books on Modern Physics (1936), probabilities had their special place.

Around 1940 some important institutional changes occurred. In the Department of Mathematics of Athens University, Probabilities were taught for the first time, albeit occasionally, in the academic year 1938-9 and the first dissertation in this scientific field was given, in 1940. Probability and Error Theory began to be taught systematically at the University of Thessaloniki in 1940 and the relevant book was published in 1947.

Probability Theory was established also at the University of Athens since 1958. However, the scientific-research background of the teaching of probabilities in Greece was without foundations, because the university professors who taught the respective course were not research experts in this field of Mathematics. The corresponding manuals, used in the 1950s, were based on the classic concept of probability, with a hint of the additive property and a brief reference to the newer definitions of probability. Their authors were generally influenced by French mathematical culture.

During the period of the Modern Mathematics Reformation, in the early 1960s, two American probability books for school use were translated; these books presented the modern conception of probability as a set function. At the same time, a new professor of the University of Thessaloniki began to teach Probability, in a modern spirit. An important step was also taken at Athens University: in 1968 the first professor of Probability and Statistics with studies and research in this scientific field was elected. He taught Probability Theory and Statistics in a modern way and developed remarkable research in this mathematical field. It is considered to have been a turning point in the teaching and research of Stochastic Mathematics in modern Greek education.

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