

GEORGES DARMOIS, 1888–1960

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The death of Georges Darmois on January 3, 1960, has profoundly saddened the many friends whom the President of the International Statistical Institute numbered in all parts of the world. His personality was an harmonious synthesis, in which no element clashed with another. Mathematical statistics has had many theoretical contributions from him: he was one of the first to establish the form of those probability laws permitting a sufficient statistic; and the relationship often called the Cramér-Rao inequality, inspired by the work of Sir Ronald Fisher, can also be partly considered as introduced by Georges Darmois.

In the domain of relationships between random variables, the influence of Georges Darmois has also been strong: a number of his publications have formed an important contribution to extensions of Spearman's theory of a general factor.

Darmois undertook the study of random functions of time as early as 1929, and thus was among the first to develop the field of stochastic processes. But these theoretical studies never diverted his attention from concrete examples. He was a great teacher. In particular, he believed, almost eccentrically in our times, that the first quality of a teacher is to make himself understood to as large an audience as possible. Thus he always avoided complications of language, and so his thoughts have influenced many persons outside the scientific world of the academy. According to Geary, he was principally responsible for the great strides in French applied statistics. Darmois taught at the Centre de Préparation aux Affaires of the Chamber of Commerce in Paris. His last efforts, before being carried away by a merciless illness, were at the Institut de Statistique of the University of Paris. The Institut de Statistique had been founded in 1923 by a group comprising the greatest names of French statistical thought: March, Huber, E. Borel, C. Colson, C. Rist, Rueff. The orientation that these pioneers had given the Institut was essentially economic and demographic. While conserving this aspect of its activity, Georges Darmois added two other areas of interest, industrial applications of statistics and operational research. He leaves us at a time when, because of the extensions he himself achieved, the Institut is going to need new and larger quarters in order to accommodate a student body that has tripled in the last few years.

His statistical thought had style and conviction; he was, moreover, an excellent mathematician, and it was as a mathematician that he made his scientific debut. He was led to explore the theory of relativity, where he leaves a deep influence. It was indeed, the Section of Astronomy of the Académie des Sciences to which he was admitted in 1955.

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Georges Darmois was truly French. He was what we call "un homme de l'Est." Born at the foothills of the Vosges, he liked to explain that his name came from the land of the Armoises, on which his ancestors had labored and which had been, in the fifteenth century, the home of the false Jeanne d'Arc, Jeanne des Armoises. Far from thinking that his intellectual eminence separated him from his fellow countrymen, he valiantly performed his military duties in 1914, as again in 1939, when, with simplicity, he rejoined the military unit corresponding to his mobilization number.

But his patriotism did not prevent him from travelling to other nations. One of his greatest joys was his election, in 1953, as President of the International Institute of Statistics, a position that he held until his death. He was, in French University circles, one of those who most welcomed colleagues from abroad, aided by the smiling amiability of Madame Darmois. How many illustrious statisticians have I met at his home, near the Sorbonne, in the Odéon quarter, where the principals of the French revolution lived: Danton, Camille Desmoulins, Billaud Varennes? I think of the 1937 meeting of Sir Ronald Fisher (then simply Professor R. A. Fisher, F.R.S.) with Laugier, President of the Société Française de Biotypologie, and a Professor at the Sorbonne, who later became Adjoint Secretary General of the U.N.O.; I think of Mahalanobis, of Geary, Neyman, Kolmogorov, and Gini.

It is in this harmonious setting that I shall always imagine my master, discussing, with his jovial good-will and his deep competence, the latest youthful work that I had come to submit to him for presentation to the *Comptes Rendus* of the Académie des Sciences. For he was always passionately concerned with youth and with the efforts of young scientists to extend the scientific patrimony they had received. That is why his memory will be held in filial devotion by those of us who had the great privilege of knowing him.

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(The notation *C. R.* is an abbreviation for *Comptes Rendus* throughout.)

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