OCTAV ONICESCU 1892-1983

BIOGRAPHY



ctav ONICESCU, born on 20 August 1892 in Botosani (native place of poet M. Eminescu, composer G. Enescu and historian N. Iorga), goes to the Marchian Elementary School and, beginning with 1903, attends the courses of the A.T. Laurian High School in the same town. During his high school years, he is keen on sports ("oina", gymnastics, ski), literature, theater, music, mathematics (he is a contributor with solved problems to The Mathematical Gazette) and also learns French and German (by reading Goethe, Turgeney, Dostoievsky, Spinoza, Nietzsche and so on). In 1911 he takes his baccalaureate, reads Bergson's The Creative Evolution and signs up at the University of Bucharest. • He attends at the same time the courses at the Mathematics Department of the Faculty of Sciences (where his professors are Gh. Țițeica, Tr. Lalescu, S. Sanielevici, D. Pompei and A. Davidoglu) and those at the Faculty of Letters and Philosophy (delivered by C. Rădulescu-Motru, P.P. Negulescu, N. Iorga and O. Densusianu). At both faculties, he is a colleague of the future philosopher Nae Ionescu, whom he makes friends with. He will remain very close to him until the latter's death (also applying some of his ideas in logic). During his student years, he receives first the Hillel scholarship and then the Hillel Award (for solving a problem on elliptic functions). In 1913, he takes his degree in mathematics and is appointed teacher of mathematics at the elite military school at Mănăstirea Dealu (near Tîrgovişte). There, his students and disciples are Gh. Zapan, E. Carafoli and N. Georgescu-Roegen, who will become famous as experimental psychologist, airplane maker and mathematician-economist, respectively. He reads the philosophy of Plato, Aristotle, Augustine, Thomas Aquinas, Montaigne and Kant. In 1916, he marries Luiza Zorio, of Italian origin, whom he knew from Botoşani (and with whom he will live until his death). He is mobilized at the General Staff Headquarters, then he retreats with the army to Iaşi (Jassy). He is commissioned to train the aerostatic watch troops for guiding the artillery, and also gets the command of the hydrogen plant in Tecuci. • In

1918, he returns to Mănăstirea Dealu (where Nae Ionescu will also come as a teacher in 1920), and in September 1919 he goes to Rome where, in June 1920, he defends his Ph.D. thesis, Sopra gli spazi ensteinieni a grupi continui di transformazioni (unpublished), supervised by Tullio Levi-Civita. The thesis witnesses the beginnings of his interest in the relativistic mechanics, whose conceptions he will try to replace towards the end of his life. F.P. Cantelli's seminars familiarize him with G. Castelnuovo's probabilistic concepts and C. Gini's statistic ideas. Beginning with the fall of 1920, he attends in Paris the lectures of the mathematicians E. Picard and E. Cartan, while also taking part in the scientific seminars of P. Langevin and J. Hadamard from Collège de France, where he successfully presents Levi-Civita's absolute differential calculus (previously unknown there). • He returns to Bucharest at the end of 1921, he collaborates with C. Rădulescu-Motru, Nae Ionescu and St. Nenițescu in publishing the review Ideea europeană/The European Idea, and resumes the publication of the magazine Natura/Nature. From 1922, he teaches a course in mechanics and the theory of relativity at the Faculty of Sciences, and from 1924 he begins, for the first time in Romania, courses on the theory of probability and statistical mechanics. Among his students were Gh. Mihoc and N. Teodorescu. Beginning with 1925, he teaches the human body mechanics at the National Academy of Physical Training, where he will later hold the position of rector (between 1929-1940). In 1931, he is confirmed professor at the Department of Mechanics and the Theory of Relativity of the Faculty of Science, and beginning with 1935, he publishes, in collaboration with Gh. Mihoc, the papers that will make them famous on random chains with complete connections; these will be later gathered in [3, 5]. Between 1940 and 1942, he leads a scientific seminar on the philosophy of science, to which participated D. Barbilian, G. Moisil and other professors. • He lays the foundations of the School of Statistics in 1930, under the aegis of the Central Statistics Institute. This will become the Institute of Statistics, Actuarial Science and Calculus in 1941, and will be dissolved in 1947. He holds the position of professor in this Institute and, under his management, the specialists will process the data of the 1930 census, and organize the general census of 1941. He also becomes a member of the Romanian Social Institute (headed by D. Gusti) and of the Council of Social Assistance of the Ministry of Labour (where he helps in drafting a modern pension law), president of the General Pension Establishment in the Ministry of Finance and president of the Private Insurance Control Council in the Ministry of the Economy (with a contribution in the administrative and the legislative reorganization and modernization of this domain). In 1932, he founds the Romanian Institute for the Study of the Economic Conjuncture (dissolved in 1940) and contributes to the setting up of the Romanian Society of Science, whose secretary-general and then president he will be. He is also one of the founders, in

1934, of the Mathematicians' Balkan Union and president of the Italian-Romanian Friendship cultural association. He is also a deputy in the Romanian Parliament for some time. • In 1935, he is elected ordinary member of the International Statistic Institute and participates in its congresses held in Warsaw and Cracow (1931), and later in Rome and Florence (1943). He also takes part in the International Congress of the Mathematicians in Bologna (1928) and Oslo (1936), in the Congress of Balkan Mathematicians in Delphi (1934) and Bucharest (1937), as well as in the first International Congress on the Theory of Probability and Its Applications in Geneva (1937). In 1935, he delivers a series of lectures at the H. Poincaré Institute in Paris, in 1942 and 1967, in Padova, and in 1943, in Rome and Florence. • He is appointed professor of algebra and becomes a corresponding member of the Romanian Academy in 1938, and from 1948 until retirement is head of the Department of the Probability Theory at the Faculty of Mathematics and Physics, the University of Bucharest. From 1949, he is head of the Probability Theory Section of the Mathematical Institute of the Romanian Academy. In 1948, when the Romanian Academy is reorganized by the communist regime, he is expelled from it, but is re-elected full member in 1965. He sets up and heads the Seminar on the Applications of Statistical and Mathematical Methods to Economy, under the aegis of the Central Board of Statistics, in whose Scientific and Methodological Board he is also a member. • In 1968, he is one of the founders of the International Center for Mechanical Sciences in Udine, Italy, in 1976 is elected member of the Academy of Science in Torino, and in 1982, honorary member of the International Statistical Institute. • He dies on 19 August 1983, on the eve of his 91st anniversary, leaving his third volume of memoirs unfinished.

BIBLIOGRAPHY

- [1] Galileo Galilei and the Scientific Renaissance (in Romanian), Ed. Cultura Națională, București, 1923
- [2] Vector Calculus: I: Vector Operations in Two- and Three-Dimensional Spaces (in Romanian), Ed. Cultura Națională, București, 1928
- [3] La dépendence statistique. Chaîne et familles de chaînes discontinue (with G. Mihoc), Actualités Scientificques et Industrielles, Herman, Paris, 1937
- [4] Probability Calculus (in Romanian, with G. Mihoc), Fundația pentru Literatură și Artă "Regele Carol II", București, 1939

- [5] Les chaînes de variable aléatoire. Problèmes asymptotiques (with G. Mihoc), Études et Recherches, XIV, Acad. Roumaine, Bucarest, 1943
- [6] Principles of Scientific Knowledge (in Romanian), Biblioteca "Natura", no. 4, Ed. "Oficiul de librărie", București, 1944
- [7] Reflections on Science (in Romanian), Biblioteca "Natura", no. 7, Ed. "Oficiul de librărie", București, 1944
- [8] Calcul des probabilités. Études critiques et recherches, Inst. Statist. Actuariat Calcul Univ. Bucarest, 1945
- [9] Algebra, vol. 1 (in Romanian, with G. Galbură), the "Natura" collection, București, 1948
- [10] Probability Calculus (in Romanian), Ed. Tehnică, București, 1956
- [11] Probability Calculus and Its Applications (in Romanian, with G. Mihoc & C.T. Ionescu-Tulcea), Ed. Academiei, București, 1956
- [12] Lectures on Mathematical Statistics (in Romanian, with G. Mihoc), Ed. Tehnică, București, 1958
- [13] Games, Strategy, with Applications to Linear Programming (in Romanian), Ed. Academiei, Bucuresti, 1961
- [14] Random Numbers and Systems (in Romanian), Ed. Academiei, București, 1962; revised French translation: Nombres et systèmes aléatoires, Ed. Academiei & Ed. Eyrolles, București & Paris, 1963
- [15] Probability Theory and Its Applications (in Romanian), Ed. Didactică şi Pedagogică, Bucureşti; enlarged Italian translation: Calcolo delle probabilità ed applicazoni, Veschi, Roma, 1969
- [16] Mechanics (in Romanian), Ed. Tehnică, București, 1969
- [17] The Principles of the Probability Theory (in Romanian), Ed. Academiei, 1969
- [18] Principes de logique et de philosophie mathématique, Ed. Academiei, București, 1971
- [19] Mécanique statistique. Principes mathématiques, Springer, Wien-New York, 1971
- [20] Invariantive Mechanics and Cosmology (in Romanian), Ed. Academiei, București, 1974; revised English translation: Invariantive Mechanics, Springer, Wien-New York, 1975
- [21] Men of Science (in Romanian), the "Lyceum" collection, Ed. Albatros, 1975
- [22] Probability Theory on Boolean Algebras of Events (with I. Cuculescu), Ed. Academiei, București, 1976
- [23] Probability Theory and Stochastic Processes (in Romanian), Ed. Ştiinţifică şi Enciclopedică, Bucureşti, 1977

- [24] Elements on Information Statistics with Applications (in Romanian, with A. Ştefănescu), Ed. Tehnică, București, 1979
- [25] On Life's Paths [scientific essays] (in Romanian), Ed. Ştiinţifică şi Enciclopedică, Bucureşti, 1981
- [26] Memoirs (in Romanian), 2 volumes, Ed. Științifică și Enciclopedică, București, 1981
- [27] Random Functions Almost Periodical in Probability (in Romanian, with G. Cenuşă & I. Săcuiu), Ed. Academiei, București, 1983
- [28] Uncertainty and Economic Modelling: Information Econometrics (in Romanian, with M.C. Botez), Ed. Ştiinţifică şi Enciclopedică, Bucureşti, 1985; French translation: La naissance du futur en économie. Introduction à l'économétrie informationelle, Maloine, Paris, 1986

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