Romanian Personalities shaped the Science World

Nicolas Georgescu-Roegen(1906-1994)

Nicolas Georgescu Roegen was a Romanian American mathematician, statistician, and the economist, best known today for his masterpiece The Entropy Law and the Economic Process, published in 1971, considered today an "epoch-making" contribution in the development of ecological economics. In the history of economic thought, Georgescu-Roegen was the first economist of some standing to theorize on the premise that all of earth's mineral resources will eventually be exhausted.

Short biography

Georgescu-Roegen was born in 1906 in Constanta, Romania, and he studied mathematics at University of Bucharest. In 1927 he went to France to study at the Institute de Statistique, Sorbonne in Paris. Georgescu defended in 1930 his doctoral thesis on how to discover the cyclical components of a phenomenon. He passed with extraordinary honor. While studying in Paris, Georgescu –Roegen learned about the work of Karl Pearson, a leading scholar of his time, and he decided to continue his studies in London. Studying with Pearson for the next two years and reading Pearson's work on the philosophy of science, titled *The Grammar of Science*, further shaped Georgescu's scientific methodology and philosophy. Pearson encouraged Georgescu Roegen to pursue his studies in mathematical statistics. Georgescu was awarded a Rockefeller Foundation research fellowship grant in the US. In autumn 1934, Georgescu-Roegen went at Harvard University in the US, but the project that he wants to join, Economic Barometer, had been shut down because it failed to predict Wall Street Crash of 1929. Looking for a new research orientation, he met professor Joseph Schumpeter. Meeting Schumpeter at this point completely changed the direction of Georgescu's life and career. Schumpeter warmly welcomed Georgescu to Harvard, and soon introduced him to the now famous 'circle', one of the most remarkable groups of economists ever working at the same institution, including Wassily Leontief, Oskar Lange, Fritz Machlup, and Nicholas Kaldor among others. Not long after, Georgescu have decided to return to his homeland, and from 1937 to 1948 he lived in Romania, witnessing all turmoils of the World War II and the rise of communist power in the country. During his stay in Romania he was appointed as vice-director of the Central Statistical Institute, member of the National Board of Trade and he also participated in the diplomatic negotiations concerning the reassignment of Romania's national borders with Hungary. The political situation have determined Georgescu to leave Romania for a career in the US. He was welcomed at Harvard just the same, obtaining employment as a lecturer and research associate, collaborating with Wassily Leontief on the Harvard Economic Research Project . Looking for stability, when Georgescu was approached in 1949 by Vanderbilt University, he accepted the permanent academic chair as economics professor. Georgescu remained at Vanderbilt until his retirement in 1976 at age 70.

Georgescu has an impressive academic career, he held numerous visiting appointments and research fellowships across the continents and served as editor of a range of academic journals, including the *Econometrica*. In the 1970s, Georgescu had short cooperation with the Club of Rome After 1989, Georgescu was elected to the Romanian Academy in Bucharest.

Georgescu's contribution to Economics

Georgescu-Roegen was the first economist to discuss and to theorize on the premise that all of earth's mineral resources are limited. As he brought natural resource flows into economic modeling and analysis, Georgescu-Roegen's work contributes to a great extent establishing ecological economics as an independent academic sub-discipline in economics.

One of the Georgescu's well-known work is *The Law of Entropy and the Economic Process*, published in 1971, for this he was honored as Distinguished Fellow of the American Economic Association.

Looking at Georgescu-Roegen's work, it can identify his earlier work on consumer and production theory and later one concerning entropy and bioeconomics. His earlier work on pure theory was welcomed, but his later work was highly controversial, criticised by neoclassical economists. Same economists sympathetic to his later work argued that he „saw the light" and leading to his preoccupation with entropy and bioeconomics in the last 25 years of his life.

That common thread is his preoccupation with "valuation." The choices our species makes about resource use and the distribution of economic output depends upon our valuation framework. Georgescu-Roegen's work begins in the 1930s with a critical examination of the difficulties with the hedonistic valuation framework of neoclassical economics, moves in the 1960s to the conflict between social and hedonistic valuation, and culminates in the 1970s and 1980s with his examination of the conflict between individual, social, and environmental values.

Georgescu-Roegen died disappointed and bitter that his paradigmatic work did not receive the appreciation he had expected for it in his lifetime.