In Memory of Professor Zbyszko Chojnicki



Professor Zbyszko Chojnicki, one of the most eminent geographers in modern Polish geography, a recognised authority on the methodology and theory of geography, died on 5 June 2015 at the age of 87.

His entire scholarly life and didactic activity were connected with the Poznań University, later (in 1955) renamed Adam Mickiewicz University in Poznań. This path started during his studies at the Legal-Economic and Philosophical-Historical Faculties of the Poznań University in the years 1946–1952. He then studied with renowned professors: Czesław Znamierowski and Kazimierz Ajdukiewicz, and received diplomas of a master of the law and a master of philosophy. It was only on completion of those studies that he turned his interest to geography as a scientific discipline. In 1953 he found employment as a young faculty member in the Chair of Economic Geography, and worked there without a break for more than 50 years. With time the Chair transformed into the Institute of Socio-Economic Geography and Spatial Management of Adam Mickiewicz University.

He earned his doctorate in geographical sciences in 1960, and his postdoctoral degree in 1966 at Adam Mickiewicz University in Poznań. He was appointed extraordinary professor in 1972, and ordinary professor, in 1978.

What became Professor Z. Chojnicki's chief object of academic interest was broadly understood socio-economic geography. In his choice of research topics cog-

nitive considerations predominated over practical ones, and theoretical over empirical ones. He focused on the methodology and theory of geography. His excellent, all-round education had given him foundations for a sophisticated, up-to-date approach to those problems. Finally, an important factor that influenced his opinions and research activity was his visit in the USA in the academic year 1961/62: in the Department of Regional Science of the Wharton School of Economics (Pennsylvania University) in Philadelphia, and in the geography faculties of the Northwestern University in Evanston and the University of Washington in Seattle. In Philadelphia at that time Walter Isard developed new conceptions of modelling and theory in spatial-economic analysis and regional development as part of regional science, and in Evanston and Seattle eminent geographers (W.L. Garrison, M. Dacey, B.J.L. Berry, D. Marble) were involved in developing new directions in economic geography connected with location theory and statistical-mathematical methods.

From the very start of his scholarly activity Professor Z. Chojnicki was interested in quantitative methods and their application in geographical research. He understood quantitative methods broadly; he took them to include not only statistical methods, but also econometric, taxonomic and graph ones as well as mathematical modelling. He was the leader of geography's 'quantitative revolution' in Poland. His contribution to the development of quantification in geography embraced a methodological analysis of the foundations of the mathematical-model approach in this field as well as rules of the construction and concretisation of mathematical models and their interpretation. His work on the conception and application of gravity and potential models in geography had a novel character. He was also the author or co-author of many monographs concerning methods and applications of numerical taxonomy, multivariate analysis, regression models, Markov chains, and spatial distribution models in geographical research. He worked out an input-output model of the man-geographical environment metasystem.

What is worth emphasising is that, as part of his methodological reflection on mathematical models in geography, Professor Z. Chojnicki could see difficulties and conditions of their application that he called dilemmas of the quantification of geography. His achievements in this field won the recognition of the International Geographical Union (IGU), as proved by his being charged with the organisation of the conference of its Commission on Quantitative Methods in Poznań in 1972, a result of which was the book *Perspectives on spatial analysis* he co-edited with D.F. Marble (1973). Initiatives in the form of systematically organised all-Polish seminars and the output of the Professor as well as his pupils and collaborators in the field of quantitative methods paved the way for the creation of a school of modern socio-economic geography in Poland fully conversant with trends in world geography.

While continuing his activity in the field of the application of mathematical-statistical methods in geography, Professor Z. Chojnicki took up a study of its methodological and theoretical foundations. His works offering cognitive models and analysing the theoretical assumptions of geography played an important role in improving its logical and substantive structure. Among his notable achievements here were determining the subject matter and tasks of modern geography concerning its contribution to the solution of the central problems of science, and formulating a

research standard in geography in terms of three fundamental methodological tendencies: systemic, quantitative, and generalising. In his successive works on general methodology he analysed and reconstructed philosophical-methodological orientations in geography from the point of view of the ideals of rationality in science. As part of his research reflections, he presented methodological dilemmas of geography. He analysed the cognitive structure and functions of modern economic geography, and determined the stage in its methodological development. He dealt with the theoretical foundations of forecasting and its methodological schemata in economic geography. His original contribution to the development of general methodology was working out a model of a scientific discipline in the form of a socio-cognitive system providing the basis for a methodological characterisation of modern geography. In regional science he distinguished its basic methodological models. In the science of spatial economy he determined its methodological character and situation as well as the role of geography in spatial economic research.

Important among the Professor's achievements in the theory of geography is his conception of a territorial social system as a basic new category in the theory of socio-economic geography, and the development of the conception of a socio-economic region in a systems approach. In his research on development processes, Professor Z. Chojnicki made a philosophical-methodological analysis of the conception of space and time quoted by Elinor Ostrom, the winner of the Nobel Prize for economy in 2009. He determined the role of those conceptions in defining the research field of geography. He presented the character and cognitive functions of the notion of development in spatial-economic analysis, and examined socio-economic development taking place in the reality of postmodern changes and the socio-economic transformation.

His last works on the theory and methodology of geography contain a conception of an empirical-scientific model of modern geography, issues in socio-economic development in an axiological perspective, and chief conceptions and research fields of regional studies.

Professor Z. Chojnicki's most important works have been collected and published in Polish in two volumes: *Podstawy metodologiczne i teoretyczne geografii* (Methodological and theoretical foundations of geography, 1999) and *Koncepcje i studia metodologiczne i teoretyczne w geografii* (Methodological and theoretical conceptions and studies in geography, 2010).

Another important work is *Filozofia nauki*. *Orientacje*, *koncepcje*, *krytytki* (Philosophy of science. Orientations, conceptions, criticisms, 2000), a post-retirement publication presenting a critical approach to the possibility of using modern philosophical conceptions in building methodological models of individual scientific disciplines.

The most important articles by Professor Z. Chojnicki in the field of the methodology and theory of geography published in English include: "Some theoretical aspects of an application of mathematical models in economic geography" (1970); "Prediction in geography" (1970); "Some problems in the application of factor analysis in geography" (with T. Czyż, 1976); "Methodological problems in regional science" (1983); "Basic philosophical and methodological problems of space and

time" (1988); "A methodological model of a scientific discipline" (1991); "The region in a perspective of change" (1993); "Science in a global and a regional approach" (1996); "Socio-economic development and its axiological aspects" (2010); and "Empirical-scientific model of geography" (2011).

Of cognitive and practical significance are Professor Z. Chojnicki's works on Poland's spatial and regional socio-economic structure. With the change in its socio-economic system, in the last years his interest focused on an anatomy of the crisis in the Polish economy in the late 1980s, the country's socio-economic transformation, models of its territorial organisation, the spatial structure of science and education, and regional aspects of a knowledge-based economy.

Professor Z. Chojnicki played an important role in setting modern trends in Polish geography. He took active part in working out assumptions and programmes of the development of geography and conceptions of a further progress of its socio-economic branch. He was the initiator of many national geographical conferences, *e.g.* the organiser and creator of the programme of the Rydzyna conference in 1983. Its goal was to determine the methodological level of Polish geography vis-à-vis world geography and to formulate prospects of its further development.

The Professor's scholarly output, contained in some 250 publications, is greatly appreciated not only in Poland, but also abroad. He was invited to many renowned geographical centres abroad. He gave lectures and took part in academic discussions, *e.g.*, at the University of Michigan in Ann Arbor, the State University of New York in Brockport, Clark University in Worcester, the University of Florida in Gainesville, and the universities in Göteborg, Stockholm, Hannover and Kiel. He had broad academic contacts. He formed an exceptional intellectual bond, based on common scholarly interests, especially in the philosophy of geography, and a long friendship, with Prof. Gunnar Olsson (Uppsala University). In Poland he cherished cooperation with Professors Kazimierz Dziewoński, Andrzej Wróbel, Antoni Kukliński, and Teresa Czyż.

In his international activity, Professor Z. Chojnicki took part in many bilateral seminars, regional congresses and conferences of the International Geographical Union and European congresses of the Regional Science Association. His presentations on the world forum offered proposals and programmes of the development of geography and regional studies concerning new problem-related and methodological challenges facing them, and played an important role in popularising research advances made in Polish geography. As the head of the National Committee for IGU Matters he helped to promote Polish geography. He was an active member of the Commission on Quantitative Methods, the IGU Working Group on System Analysis and Mathematical Models, the International Regional Science Association, the Committee on Data for Science and Technology, and the Association of European Schools of Planning.

He was an excellent and highly esteemed academic teacher. He gave lectures to students of geography and spatial economy. He played a big role in the education of the young university staff. He was the supervisor of 18 doctoral dissertations standing out for their high academic level. Many of his pupils have acquired professorial titles.

The Professor contributed a lot of organisational work for his university and Polish science. He was a years-long director of the Institute of Socio-Economic Geography and Spatial Management, and a vice-rector of Adam Mickiewicz University.

He performed many honourable functions in Polish science. He sat in many bodies of the Polish Academy of Sciences. Since 1969 he was a member of its Committee on Geographical Sciences, and in the years 1990–2002, its chairman. For more than 40 years (since 1966) he was a member of the PAS Committee for Spatial Economy and Regional Planning, and in the years 1966–1984, the chairman of its Commission for the Methodology of Regional Studies and then the Commission on Theory and Methodology in this Committee. As a member of the Committee for Spatial Economy and Regional Planning, he was involved in many scholarly and publishing activities. His achievements in the research on the methodology of spatial studies and an in-depth analysis of modern problems of socio-economic geography and spatial economy had a practical value and contributed to the development of physical planning foundations. Professor Z. Chojnicki was also a member of ministerial scientific and opinion-giving bodies. In the years 1991–1995 he was part of a team of experts for the Council of Ministers' Office concerning Poland's territorial division.

Professor Z. Chojnicki occupies a high, well-deserved position in Polish science. His contribution to the development of the methodology of geography has been significant. Among his scholarly achievements, apart from innovative elements, were the special skill of a critical research reflection and a broad view of basic problems of socio-economic geography together with their effective solution. He was a scholar with an unusual personality and an outstanding creative individuality, a master and teacher of several generations of geographers. In the geographical circles he was, and will always be, a great authority owing to his scholarly achievements, great erudition, wisdom, and an unusual intellectual honesty.

He will always be kept in the grateful memory of all those who have met him.

Teresa Czyż