

Walter Isard, 1919-2010

The founder of the field of Regional Science and its most prominent early scholar in industrial location theory, methods of regional analysis and general theory, Walter Isard established an interdisciplinary movement on regional and urban research in North America, Europe and Asia. Isard died on November 6, 2010, at Drexel Hill, near Philadelphia, Pennsylvania, of natural causes. Through his determined leadership, Isard encouraged economists, geographers, sociologists and urban and regional planners to cross disciplinary boundaries, construct theories of urban and regional phenomena and apply methods of analysis to the emerging urban, regional and environmental policy issues of the mid and late 20th Century.

Isard was born on April 19, 1919 in Philadelphia to immigrant parents. By 1939, he graduated with distinction from Temple University, majoring in mathematics, and entered Harvard University as a graduate student in the Economics Department, then the leading economics department in the world. There, he developed a research interest in building construction, transportation development, the location of economic activities, and the ensuing cycles of growth and stagnation that characterized the 1920-1940 period. In 1941-42, he studied at the University of Chicago, where his interest in mathematics was rekindled. Subsequently, he was affiliated with the National Planning Resources Board, while quickly completing his Ph.D. Subsequently, he served in the Civilian Public Service as a conscientious objector; during the night hours at the state mental hospital where he was assigned, he translated into English the works of the German location theorists, including the works of the leading German location theorists Weber, Lösch and Predöhl.

During the post-war years, Isard accelerated his studies of industrial location theory, while working at W. W. Leontief's interindustry research project at Harvard, and honing his teaching skills at various part-time appointments including the first course on location theory and regional development ever taught at Harvard's Economics Department. In 1948, at the age of 29, Isard initiated meetings of leading economists, geographers, sociologists and demographers on interdisciplinary regional research. These efforts found a welcome audience among participants of annual disciplinary conferences, and continued intensively throughout the next six years. In December 1954 at the meetings of the Allied Social Science Associations in Detroit, he organized a conference program of 25 papers; at the business meeting, 60 scholars endorsed the idea of forming a separate association named the Regional Science Association. Nearly sixty years later, the association has about 4,500 members worldwide.

After establishing the field of Regional Science, Isard was Associate Professor of Regional Economics and Director of the Section of Urban and Regional Studies at M.I.T. In 1956, he became a professor in the Economics Department of the University of Pennsylvania and formed the Graduate Group in Regional Science. Two years later, he founded the Regional Science Department, as well as the *Journal of Regional Science*. In 1960, the first Ph.D. in Regional Science was awarded to William Alonso for his seminal study of urban location and land use.

Isard then expanded his horizons to Europe and Asia. In 1960, he visited many research centers in Europe where he organized sections of the Regional Science Association (RSA). The first European Congress was held in 1961. Sections of the RSA were subsequently established in

many countries throughout Europe and Asia as well as North America. During the mid-1960s, Regional Science summer institutes were held at Berkeley, and in 1970 the first European Summer Institute took place in Karlsruhe, Germany. Subsequently, summer institutes were held in Europe every second year. International conferences are now held every year in North America and Europe and every second year in the Pacific region. In 1989, the Regional Science Association was reorganized and its name modified to the Regional Science Association International www.rsai.org.

In 1978, the Regional Science Association established its Founder's Medal in honor of Walter Isard. The following year Isard moved to Cornell University as Professor of Economics, where he continued to teach until his recent retirement from active research. In 1985, he was elected to the (U. S.) National Academy of Sciences. Isard received several honorary degrees including those from Poznan Academy of Economics, Poland (1976), Erasmus University of Rotterdam, The Netherlands (1978), the University of Karlsruhe, Germany (1979), Umeå University, Sweden (1980), the University of Illinois at Urbana-Champaign (1982) State University of New York at Binghamton (1997) and University of Geneva (2002).

Walter Isard's research contributions were large and diverse. His interests in regional and urban phenomena were formed during his graduate studies, leading to his first major book, *Location and Space Economy* (1956). Next, he initiated research on the economic and social consequences of atomic power and industrial complexes and intensified his research on methods of regional and urban analysis, including interregional interindustry models, interregional linear programming models, and migration and gravity models, resulting in his second major book, *Methods of Regional Analysis* (1960), thoroughly updated as *Methods of Interregional and Regional Analysis* (1998). During the 1960s, Isard turned to more theoretical pursuits related to individual behavior and decision making as well as general equilibrium theory for a system of regions as presented in his third major book, *General Theory* (1969). Concurrently, he and his students undertook a major interindustry study of the Philadelphia region, which led to a fourth major book, *Regional Input-Output Study* (1971) and other empirically-oriented research.

Throughout his career, Isard also pursued policy interests related to conflict management and resolution, disarmament and peace science. He founded the Peace Research Society, later renamed the Peace Science Society, and founded the Graduate Group in Peace Science at the University of Pennsylvania. Several of his books, which number over 25, as well as many of his 300 published papers, concern topics in peace science.

Isard's accomplishments were more related to interregional constructs and relationships than intraurban ones. The general focus of his research concerned systems of cities and regions; even so, some of his thinking pertains to interactions among urban communities and neighborhoods. In fostering and developing the Regional Science Association, and various journals on regional science, he always welcomed contributions at any scale of region: neighborhood, city, economic regions, countries and the world. His orientation was generally theoretical and methodological. Policy issues, such as energy, environment and even conflict resolution, seemed to interest him more for their analytical challenges than their policy content.

David Boyce, Northwestern University d-boyce@northwestern.edu

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