

Walter Isard, 1919-2010

The founder of the field of Regional Science and its most prominent scholar in industrial location theory and methods of regional analysis, Walter Isard established an interdisciplinary movement on regional and urban research in North America, Europe and Asia. Through his determined leadership and insistent encouragement, Isard enabled economists, geographers, sociologists and urban and regional planners to construct theories of urban and regional phenomena and apply methods of analysis to the emerging policy issues of the middle and late 20th Century.

Isard was born in 1919 in Philadelphia to immigrant parents. By 1939, he graduated with distinction from Temple University and entered Harvard University as a graduate student in the Economics Department, then the leading 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 1941-1942, 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 August Lösch and Andreas Predöhl.

During the post-war years, Isard accelerated his studies of industrial location theory, while joining 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.

Having established the field of Regional Science, Isard served as Associate Professor of Regional Economics and Director of the Section of Urban and Regional Studies at M.I.T. In 1956, he accepted a professorship in the Economics Department of the University of Pennsylvania and formed a 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 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 two years. 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 and the next year Isard moved to Cornell University as Professor of Economics where he continued to teach until his recent retirement from active research. Six years later, he was elected to the (U. S.) National Academy of Sciences. Over the decades, Isard has 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), and Binghamton University (1997).

Walter Isard's research contributions are 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. This resulted in his second major book, *Methods of Regional Analysis* (1960), later 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 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 more than 20, as well as many of his 300 published papers, concern topics in peace science.

Isard's accomplishments are clearly more related to interregional constructs and relationships than intraurban ones. The general focus of his research concerns 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, interested him for their analytical challenges rather than their policy content.

David Boyce
Northwestern University

References

- Isard, W. 1956. *Location and Space-Economy, A General Theory Relating to Industrial Location, Market Areas, Land Use, Trade, and Urban Structure*, New York: The Technology Press of Massachusetts Institute of Technology and John Wiley and Sons, Inc.
- Isard, W., in association with D. F. Bramhall, G. A. P. Carrothers, J. H. Cumberland, L. N. Moses, D. O. Price, E. W. Schooler. 1960. *Methods of Regional Analysis: an Introduction to Regional Science*, New York: The Technology Press of Massachusetts Institute of Technology and John Wiley and Sons, Inc.
- Isard, W., in association with T. E. Smith, and P. Isard, T. H. Tung, M. Dacey. 1969. *General Theory, Social, Political, Economic, and Regional with Particular Reference to Decision-Making Analysis*, Cambridge: The M. I. T. Press.
- Isard, W., I. J. Azis, M. P. Drennan, R. E. Miller, S. Saltzman, E. Thorbecke. 1998. *Methods of Interregional and Regional Analysis*, Brookfield, VT: Ashgate Publishing Co.
- Isard, W. 2003. *History of Regional Science and the Regional Science Association International, Beginnings and Early History*, Berlin: Springer.
- Boyce, D. 2004. A short history of the field of regional science, *Papers in Regional Science*, 83, 31-57.