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HISTORY OF REGIONAL SCIENCE

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WHAT IS REGIONAL SCIENCE?

“... regional science as a discipline concerns the careful and patient study of social problems with regional or spatial dimensions, employing diverse combinations of analytical and empirical research.” (p. 2)

“The study of a meaningful region (or systems of regions) as a dynamic organism.” (p. 5)

(Walter Isard, *Introduction to Regional Science*, 1975)

HOW IS REGIONAL SCIENCE RELATED TO OTHER FIELDS?

Evolves around economics, geography, political science, sociology, anthropology, etc., but it is different in that “the regional scientist’s region or system of regions represents to him living organisms containing numerous and diverse behaving units-political, economic, social, and cultural-whose interdependent behavior is conditioned by psychological, institutional, and other factors” (Isard 1975, p. 3)

KEY PERIODS

Three periods for regional science

(Antoine Bailly and Lay James Gibson, *Regional Science: Directions for the Future*, in *Fifty Years of Regional Science*, 2004), with additions by Polenske

FIRST PERIOD 1950-1970: Post war regional adjustments

“Thinking regionally”

“Location matters”

“Cold war programs”

New programs in regional science, public funding. Importance of regional science in society: increasing

SECOND PERIOD 1980-2000: Globalization

“Thinking globally”

“Flexible space”

“Liberalism”

Suppression of programs in regional science, less public funding. Importance of regional science in society: decreasing

THIRD PERIOD Up to 2010: Environmental and Social Sustainability

“Thinking sustainable”

“Continental cooperation”

“Financial power and collapse”

“Political power: what is U.S. role in the global economy? Role of regions?”

New programs and new approaches, more or less public and private funding. Importance of regional science in society: increasing

KEY DATES—1949-1955

- 1949 Isard joins Leontief's Harvard Economic Research Project; introduces teaching of Location Theory at Harvard
- 1950 Isard and 28 others hold first Regional Economic Research meeting at American Economic Association meetings
- 1950-1954 Isard organizes numerous regional economic meetings at Association of American Geographers, Economic, Sociology, Political Science, and other social science annual meetings
- 1954 First meeting of the Regional Science Association
- 1955 Publication of Volume 1 of *Papers and Proceedings of the Regional Science Association*

KEY DATES—1953-1956

- 1953-1956 Isard appointed Associate Professor of Regional Economics and Director, Section of Urban and Regional Studies, Department of City and Regional Planning, Massachusetts Institute of Technology
- “There Isard gathered a group of graduate students including Gerald Carrothers, Robert Coughlin, Thomas Reiner, Eugene Schooler, Benjamin Stevens, and Thomas Vietorisz, who aided him not only in his expanding research activities, but also in his organisational activities” (David Boyce, “A Short History of the Field of Regional Science,” in *Fifty Years of Regional Science*, 2004)

Photograph of Walter Isard removed due to copyright restrictions.

Source: MIT Archive

KEY DATES—1956-1979

- 1956 Isard establishes PhD program in regional science at the University of Pennsylvania; Isard and Ben Stevens establish nonprofit Regional Science Research Institute in Philadelphia
- 1958 Isard founds *Journal of Regional Science*
- 1958 University of Pennsylvania establish Regional Science Department, with Isard as department head
- 1960 First meetings of European regional science scholars held at the Hague, Paris, Bellagio, Zagreb, Warsaw, Stockholm, and Lund
- 1960 William Alonso receives PhD
- 1962 First Latin American RSA Congress held in Caracas, Venezuela, with ~100 participants
- 1961-1971 Regional Science congresses held in Europe, Latin America, Japan, Scandinavia, India, Ghana, Argentina, Hungary, Australia, New Zealand
- 1979 Isard moves to Cornell University

KEY DATES—WORLD CONGRESSES

- 1980 First World Congress of RSA held in Cambridge, MA
- 1984 Second World Congress of RSA held in Rotterdam, The Netherlands
- 1989 Third World Congress of RSA held in Jerusalem, Israel
- 1992 Fourth World Congress of RSA held in Palma de Mallorca, Spain
- 1996 Fifth World Congress of RSA held in Tokyo, Japan
- 2000 Sixth World Congress of RSA held in Lugano, Switzerland
- 2004 Seventh World Congress of RSA held in Port Elizabeth, South Africa
- 2008 Eighth World Congress of RSA held in São Paulo, Brazil

EARLY PATH-BREAKING, REGIONAL-SCIENCE PUBLICATIONS

- 1956 Isard, *Location and Space Economy: A General Theory Relating to Industrial Location, Market Areas, Land Use, Trade and Urban Structure*, The MIT Press
- 1959 Isard, Schooler, and Vietorisz, *Industrial Complex Analysis and Regional Development: A Case Study of Refinery—Petrochemical, Synthetic-Fiber Complexes and Puerto Rico*, The MIT Press
- 1960 Isard, Bramhall, Carrothers, Cumberland, Moses, and Schooler, *Methods of Regional Analysis*, The MIT Press
- 1964 Alonso, *Location and Land Use: Toward a General Theory of Land Rent*, Harvard University Press
- 1964 Friedmann and Alonso, *Regional Development and Planning*, The MIT Press
- 1965 Miernyk, *Elements of Input-Output Analysis*, Random House
- 1968 Beckman, *Location Theory*, Random House
- 1969 Muth, *Cities and Housing*, University of Chicago Press
- 1969 Richardson, *Regional Economics*, Praeger
- 1972 Mills, *Studies in the Structure of the Urban Economy*, The Johns Hopkins Press
- 1975 Friedmann and Alonso, *Regional Policy: Readings in Theory and Applications*, The MIT Press
- 1980 Polenske, *The U.S. Multiregional Input-Output Accounts and Model*, Lexington Books, D.C. Heath and Company
- 1999 Fujita, Krugman, and Venables, *The Spatial Economy: Cities, Regions, and International Trade*, The MIT Press

REGIONAL SCIENCE KEY CONCEPTS

- **Interregional Input-Output Accounts (IRIO)**

Japan 9-region, 10-commodity set of accounts for 1960, 1963

- **Multiregional Input-Output Accounts (MRIO)**

USA 51-region, 79-commodity set of accounts for 1963

- **ISARD'S USA Location Studies**

Puerto Rico

Pittsburgh

Philadelphia

- **Industrial Complex Analysis**

- **Environmental and Energy Assessments**

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China and Brazil Regional Energy Intensity
Coke and Steel Technologies
Land Recycling in China