

Economic Geography at the University of Cincinnati, 1920-2006

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Economic Geography has been an integral component of the University of Cincinnati (UC) Department of Geography for at least 85 of the Department's first 100 years. This essay lays out a brief general outline of the development of economic geography as a sub-discipline and links the overview to the research and publications of UC professor and graduate students. Although always a small cadre of researchers, UC economic geographers have mirrored many, but not all, of the emphases of the larger community of economic geographers, and made seminal contributions in several areas. Of special note are the development of "geography of the firm" studies and the related use of the behavioral-decision making approach, regional economic development in Africa, Latin America and Asia, and the training of applied geographers.

Keywords: *Applied geography, behavioral geography, economic geography, geography of the firm, regional development, Cincinnati*

Economic Geography has been an integral component of the University of Cincinnati (UC) Department of Geography for at least 85 of the Department's first 100 years. This essay lays out a brief general outline of the development of economic geography as a sub-discipline of the broad field of Geography in Anglo-America during that time period. Then it links the overview to the research and publications of professors and graduate students who have passed through the UC Department of Geography, to provide a view of the contributions of the Department within the wider context of the development of the discipline. Although always a small cadre of researchers, UC economic geographers have mirrored many, but not all, of the emphases of the larger community of economic geographers, and made seminal contributions in several areas.

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THE DEVELOPMENT OF THE FIELD OF ECONOMIC GEOGRAPHY IN ANGLO-AMERICA

The Oxford Handbook of Economic Geography (Clark et al., 2000) and the *Companion to Economic Geography* (Sheppard and Barnes, 2003) contain views of Gordon Clark, Maryann Feldman, Meric Gertler, Allen Scott, Eric Sheppard and Trevor Barnes on the development of Economic Geography. There is considerable agreement in the identification of the major research themes that have been pursued by economic geographers since the early part of the 20th century. These emphases, some topical, some methodological, are:

Topics

- World commercial trade; trade routes
- Regions of economic production
- Spatial configurations of firms, industries, nations
- Regional economic growth, decline, restructuring
- Spacing and hierarchical order of settlements, patterns of urbanization
- Flows of goods and ideas and communications across space
- Spatial divisions of labor
- Globalization

Theory and Methods

- Location Theory, market forces
- Analytical approach
- Quantitative methods
- Optimization methods
- Behavioral approach
- Regulationist theory
- Umbrella approach (the “cultural turn”)

Economic geographers at the University of Cincinnati have been involved with many of these, most notably world commercial trade, spatial configurations of firms and industries (industrial geography), regional economic change, spacing and hierarchical order of settlements, flows of ideas over space, location theory and market forces, quantitative methods, and the behavioral approach.

Barnes (2003) traces academic Anglo-American economic geography to 1889 with the publication of George Chisholm's *Handbook of Commercial Geography* in Britain. The first English language economic geography textbook in North America was J. Russell Smith's *Industrial and Commercial Geography*, published in 1913. This mainly descriptive, fact filled emphasis on the commercial world came to the University of Cincinnati with the arrival of Earl Case in 1920. Leaping forward, some of the elements of regional commercial production are evident in the analyti-

cal regional economic development research in the Department. Several graduate theses and dissertations are regionally focused, often on the home areas of foreign students (see the list, below). From the faculty is the field work based research by Roder in Nigeria, Zambia, Southern Rhodesia and Swaziland, by South in Bolivia, Honduras and Mexico, and by Selya in Taiwan and Israel.

The spatial configurations of firms, industries and nations topics have been mainly represented at Cincinnati by emphases on the first two of these, which fall into the general category of industrial geography. The broad research themes of industrial geography are "(1) spatial patterns of industries and industrial sectors, (2) geographies of companies, (3) industrial places (spaces), clusters, districts, and regions, (4) process via location theory, old and new, (5) process via company decision-making, (6) process via social context, and the consumption of production" (Stafford, 2003). Of these categories, UC economic geographers have made significant contributions to research on geographies of companies, industrial clusters, and company location-decision-making.

Bob McNee's analyses of global oil companies were among the early research on industrial spaces via detailed examination of the geographies of oil companies. McNee's research was started before his 1963 arrival in Cincinnati, but was continued and contributed greatly to the reputation of the Department. This theme, research on corporate structures, remains strong in the broader discipline with examinations of such things as branch plants in relation to headquarters, and company responses to the product cycle, and the influences of corporate culture on the static and dynamic geography of the firm, including work by Cincinnati graduates.

The industrial clusters research follows the older "industrial districts" work, but it is perhaps even stronger now than ever, especially since industrial districts and clusters, conceptually at least, fit into regional economic development planning. The arguments for clustering in districts revolve around several factors, most notably "Marshallian" localization and urbanization economies of scale, the relative immobility of labor, and face-to-face interactions among creative people in creative companies (Stafford, 2003). There is a joining of the industrial agglomeration arguments with the urbanization models, and this melding is consistent with the Department's traditional emphases on both economic and urban geography. Professors Stafford and Liu and several graduate students at UC are pursuing research on industrial clusters (see the list of graduate theses and dissertations later in this essay).

The location theory theme has relevance for UC researchers. Logical and deductive reasoning, especially in relation to "basic" economic factors, may be broadly thought of as *location theory*. Historically, there are several phases in American geography starting with Hartshorne's work in 1927 and to which several other American geographers contributed in the 1920s and 1930s. The regional economists also made significant contributions, especially Walter Isard (1956) with industrial complex analysis. Very recently mainstream economics has made progress in dealing with imperfect competition and this has spawned a new surge of formal spatial

modeling that tries to derive spatial patterns from “first principles”, and some refer to it as a “new economic geography.” At the same time, there has developed another “new economic geography.” It is referred to in the above list as the “umbrella approach”, or the “cultural turn.” This alternative “new economic geography” is “located theoretically on the borderlands between geography, economics (typically political economy), cultural studies, and various kinds of sociology” (Barnes, 2001, 559). There appears to be a link back to the political economic geography and Marxist approaches that were a consequence of dissatisfactions with “regional science” research, but the canvas of inquiry is broader.

How do these two and different “new economic geographies” relate to research at UC? Although UC geographers have not made major contributions to location theory, it probably is fair to say that the more formal modeling mind set of the first group has had more influence on teaching and research than the alternative “new economic geography” that attempts to forge links between geography, political economy and sociology. However, while that is probably true for the influences of fairly formal location theory, at UC there also has long been a dissatisfaction with the limitations of formal models, and a willingness to include the influences of many forces, and to seriously examine how the real world works. UC has been a leader in taking a “behavioral approach” with research on the *location decision-making* processes of actual corporate executives. For manufacturing this approach has been characterized as the “geography of manufacturers,” as distinct from “manufacturing” (Stafford, 1972). The research utilizes interviews with corporate executives responsible for location decisions. The previously mentioned research of McNee as well as subsequent research by Rees, Stafford and several graduate students falls under the “behavioral approach”. This approach still remains strong, in the discipline and at UC, and, in a sense straddles both of the “new” economic geographies.

A focus on the real world has had a major impact on UC geography in another way. The Department has been more focused than almost any other in the US on applied economic geography. This is reflected in the nature of the theses and dissertations produced and by the disproportionately high number of graduates who have had careers as commercial consultants. They are active in such diverse activities as economic development strategists for American and Canadian native peoples, in evaluating the economic, environmental and social impacts of development projects, in airport planning, and, especially, in evaluating and recommending retail locations. These activities again reflect a melding of the two major foci of the Department in the last quarter of the 20th century, economic and urban geography. Indeed, the urban geography practiced at UC has been primarily economic geography in the urban context. As indicated in the above list, the study of urban geography examines the sizes and functions of urban places, and the spacing and flows between them are considered by many to be part and parcel of economic geography; this also has been largely true at UC. Flows of commodities have been examined by South in the Bolivian context, and flows of information are a research focus of Grubestic.

This sketch of the conjunction between the broad trends in US economic geography and the activities at UC can be made more explicit by looking more closely at the contributions of the faculty who have been mainly involved over the years.

ECONOMIC GEOGRAPHERS AT THE UNIVERSITY OF CINCINNATI, 1920-PRESENT

Case, Bergsmark, Hodgkins

Earl C. Case was the first bona fide geographer at UC, and served as professor until 1957 (Ryan, 1983). He was followed by another economic geographer, Daniel Bergsmark. Case and Bergsmark collaborated on a textbook, *College Geography* (Case and Bergsmark, 1932), and together published one of the first texts on the economic geography of Asia. Case and Bergsmark reflected the economic geography emphases of their time, on commercial and regional production. Later, Jordan Hodgkins followed in the same genre with his *Soviet Power: Energy Resources, Production and Potentials* (Hodgkins, 1961). For forty years economic geography at UC was mainly in the commercial and regional modes of those years, and was influenced by service to the College of Business Administration. UC scholarship in economic geography was produced by Case, Bergsmark and Hodgkins, in spite of their few numbers and relatively heavy teaching loads (Ryan, 1983). An explicit Departmental focus on economic and related urban geography and some different research perspectives awaited the arrivals in 1963 of Wolf Roder and Robert B. McNee.

Roder

Wolf Roder's research and expertise served as a bridge between the region focused economic geography of the previous era and the analytical, theory driven work popular beginning in the 1960's. While doing his Ph.D. at the University of Chicago, Wolf became interested in African development via work with Norton Ginsberg, in water resources via Gilbert White, and acquired mathematical spatial analysis skills and a focus on modeling from Brian Berry. He was the Department's first "mathematical geographer" and although now Professor Emeritus he still teaches spatial statistics part-time.

Wolf's publications related to economic geography can be roughly divided into three groups: Water resources and regional economic development in Africa, settlement patterns and economic development, and spatial statistical analytic techniques. In 1965 he published a book entitled *The Sabi Valley Irrigation Projects*. This theme was followed in his 1994 book, *Human Adjustment to Kanji Reservoir in Nigeria: An Assessment of the Economic and Environmental Consequences of a Major Man-made Lake in Africa*. This was an innovative look back examining what had hap-

pened over twenty years. Several articles deal also with water resources and drought. Representative of Roder's research on settlement patterns are "The Genesis of the Central Place System-A Rhodesian Example" (Roder, 1964) and "Growth Center Theory and Village Development" (Roder, 1973).

The central place pattern approach led to recognition of a statistical problem in existing techniques: How can spacing be evaluated when the points are basically linear, such as along a river? Wolf solved the problem and published "A Procedure for Statistical Assessment of Points on a Line" (Roder, 1974) and "A Procedure for Assessing Point Patterns without Reference to Area or Density" (Roder, 1975). Wolf Roder arrived in Cincinnati just a few months before another economic geographer, Bob McNee.

McNee

Just a few months after Roder began teaching, Robert B. McNee came to UC as the new chairman of the newly independent Department of Geography. He retired in 1987. During his tenure he served as an administrator, teacher and scholar, and in the process made important contributions to economic geography. Of particular note was his pioneering research in manufacturing location and interactions. His approach was to understand the spatial dimensions of industry via detailed examination of firms. The seminal, and widely referenced articles include "Functional Geography of the Firm, with an Illustrative Case Study from the Petroleum Industry" (McNee, 1958), "Changing Relationships of Economics and Economic Geography" (McNee, 1959), "Toward a More Humanistic Economic Geography: The Geography of Enterprise" (McNee, 1960), "Centrifugal-centripetal Forces in International Petroleum Company Regions" (McNee, 1961), "Economic Geography of an International Petroleum Firm," (McNee, 1964), "An Inquiry into the Goals of the Enterprise: A Case Study" (McNee, 1972), "A Systems Approach to Understanding the Geographic Behavior of Organizations, Especially Large Corporations" (McNee, 1974), and "One Perspective on the Enterprise Perspective" (McNee, 1986). Bob's research presaged extensive work in behavioral geography, and he was known as the father of research on the "geography of the firm."

McNee's *Primer on Economic Geography* (McNee, 1970) was a well-received introductory textbook. It reflected his theoretical concerns about the relationships between economics and economic geography (McNee, 1959). His conceptual strengths also were evident in his teaching. He published eighteen articles related to educational methodologies and philosophies. An especially important contribution was his outline for the mid-1960's High School Geography Project (HSGP). HSGP was an effort by college and university geographers to make easily available to junior and senior high school teachers and students the perspectives and insights of current geographic research. The National Science Foundation funded the project. There was a national competition for a substantive outline to guide the development of teaching modules. McNee's outline, organized around systematic

geography themes, was selected (*Settlement Course Outline, High School Geography Project* (McNee, 1966). Among the prominent units were those on agricultural and industrial geography and inter and intra-urban settlement patterns.

Stafford

Howard Stafford joined the University of Cincinnati geography faculty in 1965, and retired in 2005. He is an economic geographer with primary interests in the location of manufacturing facilities, and he occasionally dabbles in urban geography. Just before his arrival in Cincinnati he was selected to do the Manufacturing Unit of the High School Geography Project (HSGP, 1966). Although unplanned, there was an immediate link to Bob McNee, the author of the overall HSGP outline. Among the project's several benefits was the development of a behavioral approach to industrial research; this came about via simulation of location decision-making for students.

The industrial and location-decision making interests are evident in work on the "anatomy" of the industrial location decision via content analysis of case studies (Stafford, 1974), and *Principles of Industrial Facility Location* (Stafford, 1979, 1980), a book that discusses the principles of industrial facility location from the point of view of the manufacturer. In addition to where factories do, or should locate, there is research on where and why they close (Stafford and Watts, 1986; 1991; Stafford, 1991).

Research on the effects of environmental regulations on the location of manufacturing plants garnered popular attention because it asserted that enforcement of air and water pollution controls does not materially affect the location decisions of manufacturers, and enforcement of controls might even be in an area's favor (Stafford, 1985). Thus, the evidence informed the then hot national debate on the possible uneven impacts of environmental regulations on regional economic development in favor of the environment.

A broader look at the corporate geographies of retailing and manufacturing companies is evident in a *Corporate Geography: Business Location Principles and Cases* (Laulajainen and Stafford, 1995). Also, over the years, Stafford worked with several students on retail location research. These projects were a natural outgrowth of his urban-economic interests in central place theory and the functions of towns (Stafford, 1962; 1970). Current work is on high-technology and regional economic development, an interest previously explored with J. Rees (Rees and Stafford, 1986).

South

When Robert South came to Cincinnati in 1970 three other resident economic geographers, Roder, McNee and Stafford, greeted him. Now half of the faculty members were economic-urban geographers, and this was the locus of much of the

Department's research for the next quarter century, and the basis of its national reputation. McNee and Stafford were primarily industrial geographers for whom a specific region was of secondary concern, in contrast to Roder's interest in regional economic development and fieldwork in Africa. South's expertise and research bridge the two foci, an industrial geographer with research in a region, Latin America. South's Spanish language skills and his extensive list of unique contacts in several Latin American countries have enabled him to produce some hard-to-duplicate research.

Robert South's main claims to fame are his groundbreaking work on coca production, and on Mexican-United States boarder manufacturing. A major publication was "Coca in Bolivia" (South, 1977), which followed his examination of the economic organization of Bolivia (South, 1976). Interest in this subject continues, as exemplified by the joint research with his Ph.D. student, Christian Allen. In 2002 Allen completed his dissertation entitled "An Industrial Geography of Cocaine" which combined the agricultural and industrial spatial perspectives to better understand an important Latin American crop that has obvious implications for Europe and North America. Robert's penchant for applied research with immediate societal impacts also is evident in his research on Mexican industrial parks just across the US boarder (e.g., "Transnational Maquiladora Location") (South, 1990). The maquiladora phenomenon is part of the large international debate on industrial outsourcing, spatial divisions of labor, and globalization.

Selya

Roger Selya joined the UC Department of Geography in 1975. His interests are as much in cultural geography as economic. Here discussed are only those research activities that most directly relate to economic geography. Like South, Selya has foreign language skills and extensive foreign fieldwork experience, except that his languages are Hebrew and Chinese and his foreign regions are Israel and Taiwan.

Selya has written extensively on both the social and economic conditions of Israel and China, but most of his explicitly economic publications concern Taiwan. Three books look successively at industrialization in Taiwan (*The Industrialization of Taiwan: Some Geographic Considerations* 1974), the economic and social structure of Taipei (Selya, 1995), and the links between economic development and demographic change in Taiwan are explored in *Development and Demographic Change in Taiwan, 1945-1995* (Selya, 2004). There are additional articles on Taiwan that link economic development and the environment (Selya, 1978), and examine the locational orientations of foreign owned industries (Selya, 1983), economic restructuring (Selya, 1993), Taiwan as a service economy (Selya, 1994), and deindustrialization (Selya, 2006).

In addition to his regional economic research and his teaching and administrative duties, Roger is an accomplished musician. He applied his geographic analytical skills to his avocation in an analysis of the locational principles governing guild

industries, in this case violin making (Selya, 1982).

Liu and Grubesic

Following the leads of those who have overviewed the field of economic geography (above), this essay takes a broad view of its major themes. These include the locations of businesses, regional economic structures and change, central places (CP), modeling techniques, and spatial interaction-the flows of goods (trade), people and ideas (communications). It is in these last categories that more recent geographers on the UC faculty make their spatial economic theme contributions.

Lin Liu is an expert on the development and application of geographic information systems (GIS). Although many of his publications are more directly related to GIS, he has lent his modeling and technique skills to research in economic geography. In terms of locational choices, Liu developed a model for a local bank that permitted the identification of future AMT locations. Another important applied strand of research is analysis of claims of racial discrimination in traffic stops by police in Cincinnati. Lin also has supervised several graduate student research projects that utilize GIS in the analysis of retail locations (Table 1). Finally Lin collaborated with Lee and Stafford (2000) in identifying industrial districts using local linkage measures.

Tony Grubesic is concerned with information technologies, and in particular with telecommunications. Although he has interest in the location of retail facilities, his research primarily falls in the realm of the flows of information and ideas via broadband access. He has produced research on the interconnected infrastructures and the geographies of networks (Grubesic, 2003; 2006). Of great interest are spatial disparities in broadband access and the economic development implications. Since broadband access is nodal, Tony has also worked on non-hierarchical spatial clusters (Grubesic, 2002).

Corey, Ames, Hebert, Zannaras, Moundfield

Several geographers had relatively short tenures at Cincinnati. They were sometimes scholars who moved to other positions, or were visiting faculty for one year. Among these were several who were predominately urbanists, but whose work and graduate student research supervision included some economic geography (see Table 1). Kenneth Corey obtained all of his degrees in Geography at the University of Cincinnati; subsequently he joined the Graduate Department of Community Planning faculty at UC but retained close links with Geography until his departure in 1970 to become the Chair of the Department of Geography at the University of Maryland. David Ames was in the Department from 1967 until 1969. He was primarily interested in urban blight and planning. Peter Moundfield, a mainstream economic-industrial geographer served as a visiting professor during the 1966-67 academic year, while on leave from the University of Wales in Aberystwyth.

Budd Hebert was on the UC geography faculty from 1969 until 1971. His links to economic geography were through research on air transportation networks and linear programming models. His interests reflected those of his Ohio State University mentor, Edward Taffee. Georgia Zanarras (UC, 1974-78) also was trained at Ohio State University. Although primarily a cultural geographer, her expertise in spatial behavior informed economic geographers involved in behavioral approaches to the analysis of location decisions. Her research on the role of women in the spatial organization of society related to work on spatial divisions of labor.

ECONOMIC GEOGRAPHY DISSERTATIONS AND THESES BY UNIVERSITY OF CINCINNATI STUDENTS

The sketches of faculty research give a partial view of economic geography and central-place (CP) related research at the University of Cincinnati. A broader view of the scope of research, and the professor's involvements, are gained by examination of the topics tackled by graduate students in their M.A. theses and Ph.D. dissertations. The Table below presents a summary of these (PhD dissertations are marked "X"). It is worth noting that these 89 economic and/or urban geography themed research papers constitute over one-third of all theses and dissertations produced in the Department from 1931 to 2005.

Table 1: Summary of theses and dissertations in economic and urban geography in the University of Cincinnati, 1931-2005.

Name	PhD	Dissertation/Thesis topic	Date	Major advisor
Schaleman, H.J		Sand & gravel industry	1956	Coulter
Welsh, GM		Space & water for ind.	1956	Wolf
McKinley, WE		Cp of 3 centers SW OH	1962	Carol
Rothhaas, RW		Aluminum ind OH valley	1964	Roder
Williams, JA		Ind expansion, Mill Creek	1964	Cooper
Homenuck, P		Cinti pork industry	1965	Corey
Crowley, WK		Cinti brewing cos.	1966	Stafford
d'Aquin, GE		Cement industry in US	1966	Stafford
Hagner, CP		Movement of groceries	1966	Stafford
Oehm, PF		Air passenger hinterland	1967	McNee
Demko, D		CP in Blue Grass region	1967	Mounfield
Cowen, JB		Urban growth model	1968	McNee, HAS
Hoffman, LC		Strip mall development	1968	Ames
Price, RD		Manufacturing migration	1968	Stafford
Cohen, GL		Drive-in restaurants	1969	Hebert
Corey, KE	X	Urban houses	1969	McNee
Homenuck, P	X	United steelworkers	1969	McNee
Barlow, IM		CP & entropy analysis	1970	Roder

(cont.)

Name	PhD	Dissertation/Thesis topic	Date	Major advisor
Benn, M		Economic development	1970	Ames
Cooper, GM		Structure of Cincinnati	1970	Corey
Kithcart, P		Highway network	1970	Hebert
Monson, M		Urban hierarchy	1970	Stafford
Halvorson, P	X	Journey to work	1970	Stafford
Berlin, DJ		Brewing in two cities	1971	Stafford
Murphy, JE		Regional air systems	1971	Hebert
Ress, J		Ind. Location decisions	1971	Stafford
Roach, R		Redistribution of firms	1971	Stafford
Taylor, JW		Service stations	1971	Stafford
Thompson, AC	X	Intra-urban retailing	1971	Roder
Kipp, K		Manufacturing sites	1972	McNee
Lufadeju, O		Nigerian transportation	1972	South
St. John, A		Business occupancy	1972	Stafford
Nugent, G		Retail market systems	1972	McNee
Pettitway, L		Association linkages	1973	Stafford
Singh, G	X	Service centers in India	1973	McNee
Champer, L		Expansion of retail	1973	McNee
Griffin, B		Journey to work	1973	Stafford
Stephenson, LK	X	Journey to work	1973	Stafford
Markscheffel, L		Suburban offices	1974	Shelton
Turrentine, H		Road network evolution	1974	South
Sontag, D	X	Insurance home offices	1974	McNee
Futhey, CW	X	Real estate, Hamilton Co	1975	Roder
Francis, BM	X	Journey to work	1975	Wolf
Marino, J		Office suburbanization	1976	Selya
Parker, RT		Business districts	1976	South
Yee, W-CY		Travel demand	1976	South
Adomako, SJ	X	Migration, growth in Ghana	1976	Roder
Dietrich, J		Regional shopping centers	1977	Stafford
Mazey, ME	X	Urban activity systems	1977	Zannaras
Haake, J	X	Supermarket sales, location	1977	Stafford
Meir, A	X	Innovation transmission	1977	Selya
Whitmore, D		Urban manufacturing	1978	Stafford
Neumeister, EA		Industrial land values	1979	Stafford
Stempfer, RP		Industrial parks	1979	Stafford
Tunstall, RJ		Downtown retailing	1979	Stafford
Pack, S	X	Multiplant oil companies	1980	McNee
Ho, D		Retailing in 4 cities	1980	McNee
Lawson, DL		Cinti office locations	1981	McNee
Cheng, L		Highway impacts, Taiwan	1982	Selya
Nahalang, M		Japanese investment in US	1982	Selya
Gildein, RM		Retail, CBD & suburbs	1983	McNee
Green, PM		Location & retail success	1983	South
Ashwan, MS		Agriculture, Saudi Arabia	1984	Roder
Tavera, DS	X	Industry in Zimbabwe	1984	Selya

(cont.)

Name	PhD	Dissertation/Thesis topic	Date	Major advisor
Kennedy, R		Popular music tours	1985	Stafford
Kessey, TJ		Environment & refineries	1986	McNee
Srikam, W	X	Manufacturing in Thailand	1987	Selya
Dai, J		Industrial park location	1988	Stafford
Walpole, A		Plant closures	1988	Stafford
Wu, Q		Manufacturing change, Ohio	1990	Stafford
Dadswell, M		Business services	1990	Stafford
Hung, F-F	X	Industrialization, Kaohsiung	1993	Selya
Behm, M		Internationalization, IKEA	1993	Stafford
Wu, Q	X	Ind. location & incentives	1993	Stafford
Lee, R	X	Metallurgical coke plants	1995	Stafford
Diechmann, J		Investment, Czech Republic	1995	Stafford
Dong, W		Bank locations & GIS	1996	Lao
Allen, C		Investment & development	1998	Stafford
Leonard, J	X	Manufacturing & income	2001	Stafford
Ravuri, E	X	Growth poles & migration	2001	Selya
Butler, D	X	Airline networks	2001	Miller
Allen, C	X	Cocaine industry	2002	South
Xu, Y		Retail location & closure	2002	Liu
Nguyen, V	X	Urban population change	2003	Stafford
Gomersall, C	X	Access to public services	2003	Stafford
Parrillo, A		CP & land suitability	2003	Frohn
Zhang, X	X	Interaction, migration	2004	Liu
Huang, S		Illegal drug market locations	2004	Liu
de Socio, M	X	Retail location incentives	2005	South

SUMMARY

Over the eighty-five years economic geography has been taught and researched at the University of Cincinnati, a relatively small cadre of scholars has produced a significant volume of work. Often the research in the Department reflected the dominant themes in the discipline at the particular point in time, but UC's economic geographers also went in original directions. The early work on commercial geography coupled with regional emphases paralleled the fashions of the 1920-1950 periods. However, the regional emphases continue to the present, as does a concern for practical applications of geographic research and methods. The applied aspect is particularly evident in the topics tackled by graduate students; indeed, UC geography has long been a leader in training applied geographers, and especially at the MA level, for careers as location consultants and planners.

UC geography was a relatively early adopter of theory, modeling, and the use of quantitative techniques in research. Use of these continues, and technical re-

finements and new uses are being developed, especially in Geographic Information Science (GIS). These techniques are used across the spectrum of faculty and students, including cultural and physical geographers, to the benefit of the economic geographers as well.

UC has made especially strong contributions to the geography of the firm in particular, and to industrial geography more generally. UC also has been a leader in the use of the behavioral approach in economic geographic research. The decision in the mid-1960's to focus the Department on economic and urban geography produced scholarship on the economic aspects of settlement patterns, much of which utilized aspects of central place theory. Research on networks and flows continues, but with focus shifted to telecommunications and to network analyses using GIS techniques.

Although UC geography touched on many of the themes of the past 100 years, as outlined at the outset of this essay, some of the themes others found consuming have received little attention. UC geographers have made only small contributions to the development of location theory. Globalization and spatial divisions of labor have been largely derivative themes rather than main foci. Regulationist theory has been rarely invoked and the "umbrella approach" (aka, the "cultural turn") has yet to make major inroads.

The dates on the MA theses and PhD dissertations (see Table 1) provide a sense of the level of activity in economic geography at UC over the years. No student graduate research in economic geography was produced prior to 1956. In the 1960's and 1970's there was a significant increase in student research. This reflected a national and international upsurge of interest in economic geography, but even more the Department's decision to fly economic geography on its flag. In the high-water decade of the 1970's, 38 economic geography theses and dissertations were produced. The numbers declined in the 1980's and 1990's to 14 and 9, respectively. Halfway through the current decade the number stands at 11. If present trends continue the 2000's may be the second most productive decade for UC economic geography, but this will depend on whether two recent retirees (Roder and Stafford) are replaced, and if economic geography is a popular option among graduate students.

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