RETROSPECT ON FIFTY YEARS OF GEOGRAPHY IN THE OHIO ACADEMY OF SCIENCE¹

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ABSTRACT. Research by Ohio geographers over the 50-year history of the Geography Section of The Ohio Academy of Science (OAS) has been varied with respect to regional and topical themes. Research has closely followed the pattern of world events and social concerns. In the early years the areas of conservation, economic, urban and physical geography were popular. While urban and economic geography remained significant concerns over the 50 years, the past 15 years have had social and cultural concerns come to the fore.

The regional focus on Ohio and the United States has been strong throughout the years. Interest in other regions has tended to fluctuate in response to world events, especially in years of crises and change as evidenced by World War II and the independence movement in Africa. Whenever special sessions were organized on particular regions, interest, as gauged by papers presented at OAS meetings, sky-rocketed but then quickly subsided. In the near future it is likely that trends begun in the late 1970s in topical and regional themes will continue.

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INTRODUCTION

The year 1982 marked the 50th anniversary of the establishment of an independent geography section in the Ohio Academy of Science. However, the close association of geographers and the Ohio Academy of Science began much earlier. At the organizational meeting of the academy in December 1891, a paper presented by a high school geography teacher named H. P. Smith examined the coal supply of the world (Dexter 1966). Other geography papers were presented occasionally and in 1898, Prof. G. F. Wright, a geologist, gave the academy presidential address on the subject of "Geographical Teaching and the Geography of Ohio" (Dexter 1966).

In 1932 a separate geography section was established within the academy. Since then the research interests of Ohio geographers have changed significantly as has the level of research activity and participation at OAS meetings. This study illustrates the type of research facilitated by the presence of a state level organization in which

the discipline of geography has a strong place. The study also traces the shifts occurring in geographic research, both topically and regionally, over a half century.

FLUCTUATIONS IN NUMBERS OF PAPERS PRESENTED

From the inception of a geography section until the outbreak of World War II, between 12 and 15 papers normally were presented at annual meetings (fig. 1). No papers were presented in 1941 and 1945, at the beginning and end of the American involvement in World War II. After the war, the number of papers offered did not generally reach the pre-war levels until the late 1960s. The number of papers increased from 1945 to 1951 and then generally declined to 1957. An unusually large number of papers was presented in 1961, but this banner year was followed by 2 years in which only 6 papers were read each year.

Between 1968 and 1978, more geographers participated in OAS meetings than at any other period. Even the smallest meetings had 12 or 13 papers. Although

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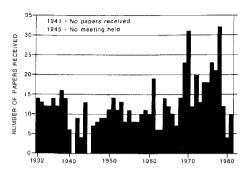


FIGURE 1. Number of papers presented at geography section meetings.

the largest session in the section's history occurred in 1978 (32 papers), attendance and participation dropped precipitously in the following years reaching a low of just 4 papers presented in 1980.

The pattern of participation at annual meetings is easy to determine, but the causes of that pattern are not at all clear. Several contributory causes may be suggested, although the actual influence of each factor cannot be determined precisely. Little attempt has been made to screen papers submitted so quality control is not likely to explain fluctuations. Likewise, the number of geographers in the state does not change rapidly, although the great expansion of university and college enrollments, and of faculty as a consequence, undoubtedly contributed to the "golden years" of the late 1960s and the 1970s. Furthermore, the location of the meetings does not seem important, except that meetings in the southwestern quadrant of the state are somewhat larger, normally, than those held elsewhere.

One of the reasons often cited for lack of participation in OAS meetings by geographers is the conflict or competition which exists in the scheduling of these meetings and the national annual meetings of the Association of American Geographers (AAG). Close inspection, however, fails to reveal any significant patterns. In years when the AAG meetings have been held in the summer so that no apparent conflict arises, the numbers of papers at OAS meetings have varied from a low of 6 to a

high of 31, with no apparent consistent relationship.

OAS meetings also have not competed with AAG meetings as far as availability of travel funds is concerned. AAG meetings held at distant locations have not resulted in any perceivable increase in papers delivered at geography section meetings of the OAS. Similarly those AAG meetings held closer to Ohio have not produced a decrease in geography papers at OAS meetings. However, the decline in number of papers presented since 1979 may well be related to the decline in travel budgets and travel restrictions imposed on academic personnel. Further research would be required to substantiate this hypothesis.

Probably most important in explaining the fluctuations in numbers of papers presented at OAS geography section sessions is the performance of the officers of the section. Enthusiastic, energetic and able membership chairmen and vice-presidents tend, by their aggressive efforts, to encourage others to attend and to present papers.

CHANGES IN RESEARCH ORIENTATION

Not only has the number of papers fluctuated during the past 50 years, but also the topics investigated by Ohio geographers have changed. These changes reflect not only the alterations which have taken place in the discipline of geography, but also the effect of larger events such as the Depression, World War II, the prosperity and internationalism of the 1950s, the social activism of the 1960s and the Viet Nam conflict, and finally the national regrouping of the 1970s.

Throughout the half century under review, certain subfields have maintained their importance (table 1). Most important has been urban geography, which comprised 17% of the papers delivered during the 1930s and just over 18% in the 1970s. The years between had a somewhat lesser emphasis on this specialization.

In contrast, physical geography has declined significantly in Ohio, as it has na-

TABLE 1

Classification of geography papers presented at the Ohio Academy of Science annual meeting by subfields, in percent, for various time periods.

	,		Years		
Subfield	1932-39	1940–45	1946–59	1960-72	1973-81
Physical	24.3*	15.6	17.4	10.3	10.6
Economic	20.6	31.3	31.9	47.3	32.5
Urban	16.8	12.5	11.6	17.4	18.5
Regional	9.3	6.3	8.0	3.3	2.0
Historical, cultural	8.4	9.4	9.4	8.7	11.9
Planning, applied,					
government agencies	8.4	3.1	.7	4.3	3.3
Air photos, remote sensing	6.5	0	0	.5	1.3
Political	6.5	9.4	6.5	7.6	5.3
Population, migration, settlement	3.7	6.3	10.1	11.4	7.9
Methodology & history of geography	3.7	3.1	.7	2.7	6.0
Cartography	2.8	12.5	1.4	2.7	1.3
Others	2.8	3.1	1.4	.5	.7
Social, medical	2.8	0	.7	7.6	21.3
Educational methods	1.9	9.4	7.2	6.0	0
Conservation, pollution,	ŕ				
resource utilization	.9	15.6	2.9	1.6	6.0
Research techniques	.9	6.3	5.1	4.3	2.0

^{*}Percents will not total 100 since some papers could be classified under more than one subject heading.

tionally (table 1). Prior to World War II, almost a quarter of all papers were devoted to this subject. Since 1960, only about 10% are so oriented. The discipline has moved away from a narrow consideration of man-land relationships toward a larger view encompassing all spatial phenomena and arrangements.

The case of economic geography, which includes a much broader range, and hence a larger number of papers, is quite different. More than twice as many papers in economic geography have been presented as in either physical or urban geography (table 2). Fully 33% of all papers given at OAS meetings have dealt with some aspect of economic geography. Emphasis has changed with the passage of time, however (table 1). In the economically troubled times of the Depression only 20% of all papers were in economic geography, whereas in the socially activist times of the 1960s and early 1970s almost half of all papers fell into the economic geography category. Ohio geographers apparently did not reflect national economic conditions.

Much easier to explain is the variation which occurred in the presentation of papers in conservation, pollution and resource utilization. The crisis of resource utilization during World War II stimulated research by Ohio geographers (table 1). Much later, in the 1970s, concerns over pollution and energy shortages are reflected in another concentration of offerings in this category. Little was done in the years between, however.

Papers in the population, migration and settlement subfield were particularly evident in the post World War II period up to the 1970s. Political geography, on the other hand, has sustained its position throughout the half century at a constant but rather low level, with somewhat greater emphasis during the war years of 1940–45. Papers dealing with applied geography, planning and government agency operations were particularly concentrated during the Depression years, reflecting the emphasis of the New Deal and state government on both economic and social planning. A related phenomenon can be

TABLE 2

Number of geography papers presented at Ohio Academy of Science annual meetings, by subfield, 1932–1981.

Subfield	Number of papers
Economic	212
Urban	98
Physical	90
Historical-cultural	59
Population, migration, settlement	53
Social	50
Political	41
Regional	32
Educational methods	26
Planning, applied	
government agencies	24
Conservation, pollution, energy	22
Techniques-field methods,	
location analysis	21
Methodology & history of geography	20
Cartography	16
Air photo, remote sensing	10
Others	8
Total	782

perceived in the variation in the number of papers offered in social geography. In the 1930s about 3% of the papers fell under this heading, but only a single paper was presented from then up to 1960. Since then, the number of papers in this specialization has steadily and dramatically increased (table 1).

Papers in historical-cultural geography have maintained a small but stable position on OAS Geography Section programs. Surprisingly, cartography has never occupied a significant position in Ohio geography research. Only during the years of World War II did cartography papers amount to more than 2-3% of the total. Rather closely related to cartography are air photo interpretation and remote sensing. A number of papers delivered in the 1930s explored the use of air photos in geographic research, an exciting new technique at that time. By 1940, however, air photo interpretation had become an accepted research technique and no subsequent papers on the subject have been presented. This does not mean, however,

that such techniques, have not been utilized, only that the techniques are no longer being described. In the 1970s, papers on remote sensing began to appear.

Studies of other research techniques and on methodology have never occupied a large place in OAS geography meetings. Investigations into methodology declined until they virtually disappeared in the post World War II period, but recently they have been making a strong comeback, accounting for 6% of all papers delivered since 1973 (table 1). The technique studies were concentrated in the periods from 1946 to 1972 and were mostly investigations centering on locational techniques.

The application of geography in education has not been discussed at OAS meetings since 1970. This lacuna may result from the use of National Council for Geographic Education meetings as a more suitable forum for such papers. Seemingly this most vital topic, which ultimately affects all geographers in Ohio, has been neglected at OAS meetings. Furthermore, few efforts have been made to establish a dialogue with secondary and elementary school teachers of geography. The geography section would do well to consider establishing a task force which would identify these teachers, structure meetings for their particular benefit, and provide for on-going contacts between the section and these individuals who are so important to the discipline.

The final topical specialization into which papers presented at section meetings can be divided is termed "regional." This rubric has been restricted to include only those papers that appeared to discuss the regional geography of various areas. The much larger number of papers, which were regional in the sense that they discussed phenomena of particular places, has not been included. Attempts to explain the regional organization of space and regional concepts were major motifs in geography from the 1930s to the 1950s, and Ohio geographers' papers reflected this orientation (table 1). Since 1960 the re-

gional emphasis has been sharply declining in research presented by Ohio geographers. This should not be interpreted to mean, however, that Ohio geographers are less interested in the various regions of the world.

REGIONAL TOPICS AT OAS MEETINGS

Regional geography, it seems, has always been an outstanding theme in geographic teaching and research. Consideration of phenomena in various areas through the years also has been central to Ohio geographers giving papers at the annual meeting (fig. 2).

As might be expected, papers dealing with Ohio always have been conspicuous. Over the entire 50 years, papers on Ohio have been most numerous, with United States topics in second place (fig. 3). The margin has always been by at least 2-1, with Ohio topics predominating over U.S. themes. Prior to World War II, Ohio and U.S. themes predominated in geographic research while Europe and Asia held some slight interest. The war years marked a hiatus in research activity as no papers were submitted in 1941, and in 1945 no meeting was held. Presentations of papers on Ohio from 1945 onward show a periodicity without apparent causality. Periods of activity were 1945–1955, 1956-1962, 1963-1971, and 1972-1981 where peak production is sandwiched between years when no papers were presented. Peak year for papers on Ohio themes was 1970 with 10 papers read.

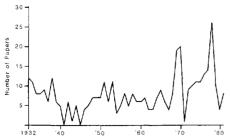


FIGURE 2. Number of regional geography papers (by year).

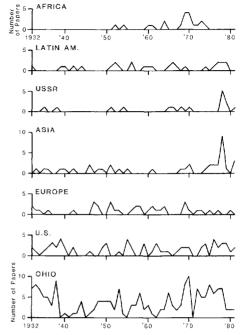


FIGURE 3. Geography papers by region.

Papers presented on the U.S. generally followed the Ohio pattern of peaks and valleys but with lower numbers overall. Whereas in most peak years there were at least 5 papers presented on Ohio, peak years for U.S. themes never reached that number.

Considering regional interest as a whole, in the year of its birth the section had 12 regional papers presented but then followed a downward trend to 1941 when none was read. Regional interest during World War II was minimal but began a recovery shortly thereafter to peak at 10 papers in 1941 and in 1953. A plateau followed from 1955 through 1968 with some peaks and valleys, but on the average 5 papers were read each year with regional themes. Then came 14 years of wild gyrations with all-time highs being reached and invariably followed by falls to base level. A pattern of a peak year followed by a plunge to near bottom was frequent as can be seen in 1970-71 and 1978-1980. It seems geographers presented their research efforts all in one year and the following year the "research well" was dry. It then took several years of effort for the number of regional papers to be replenished. The all-time high for the section was achieved in 1978 when 27 papers on regional themes were presented.

Interest in foreign regions has been at a lower level throughout, yet reflecting rather diverse interest of Ohio geographers. For no reason, other than convenience, regional classification was divided into Latin America, Asia, Europe, Africa, and Soviet Union realms since these seemed to recur frequently.

During the 1930s and 1940s Europe and Asia predominated owing possibly to world events of the times leading up to the outbreak of World War II. Following the war, Europe continued to hold a high degree of interest among geographers as the number of papers presented doubled in the 1950s and 1960s. Meanwhile, Asia declined slightly in interest while in the 1960s it was surpassed by Latin America. The 1960s marked a period of heightened interest in Africa possibly due to the end of colonialism on the continent and the emergence of nationalism and a host of newly independent nations. In that decade, 10 papers were read on African topics. By contrast, during the 1930s and 1940s, there appeared to be little interest in Africa.

During the 1970s an upsurge in interest in Asian and Latin American topics is evident. One might speculate that this is due in part to recent international events in those areas which directly affect the United States. Of particular note, is the sponsoring of a special section for papers on China at the meeting at Wright State University in 1978. This session resulted from the first visit of American geographers to postwar China, a landmark event sponsored by the OAS. The 1978 meeting also saw a large number of papers presented by other Asian specialists. Meanwhile in the 1970s, interest in Europe declined somewhat, while interest in

Africa remained stable. Interest in the U. S. S. R. has been an "off and on" thing as seen in fig. 3, but a special section held in 1978 drew a large response from geographers in the state.

The 1980s began on a low note with only 5 papers presented in 1980 and 10 in 1981. Ohio topics were as usual most numerous, the United States second, and Asia third. However, response was so meager that no clear trend in regions outside the U.S. could be seen.

What does the future hold for the 1980s and beyond regarding regional interests of Ohio geographers? One would speculate that a regional focus will remain central to much research and investigation, but the identification of which regions will be most popular in the future is more difficult to forecast. If the future follows the past, Ohio will remain the focal point with the U.S. close behind. One might conjecture that interest in the Third World or developing regions will heighten significantly as population increases, resource bases are exploited, and assessing progress toward stability and development in these countries becomes a concern of more American geographers.

PARTICIPATION AT OAS MEETINGS BY GEOGRAPHERS

The spring meeting of the OAS has been the forum for presentation of research results by a large number of geographers. Prof. James Beck's record of 14 papers and Prof. Eugene Van Cleef's presentation of 11 papers represent a long devotion to the OAS by 2 recognized geographical scholars.

Among the many geographers who have participated in OAS meetings are a number of leading members of the discipline, including 4 presidents of the AAG (Preston James, Arthur H. Robinson, Harold Rose and Paul Siple) and 2 presidents of the American Society for Professional Geographers (F. Webster McBryde, E. Willard Miller).

In addition to many American geographers, 2 distinguished foreign geographers, Hans Carol, a former president of the International Geographical Union, and Bernard L. Panditharatne, vice chancellor of the University of Peradeniya, Sri Lanka, have also presented OAS papers.

ORGANIZATIONAL AFFILIATIONS

A further aspect of the participation of geographers in OAS work is the degree of concentration of the professional affiliations of those who have served as OAS vice presidents. Only one individual, who served two vice-presidential terms, came from the ranks of secondary school teachers of geography. Ohio State University has produced the largest number of geography section vice presidents, although most of these served in the earliest years (fig. 4). Kent State University ranks next with active participation over a longer period. The University of Akron has contributed 5 vice presidents in the 17 years of its geography department's existence. All other vice presidents, with 4 exceptions, had

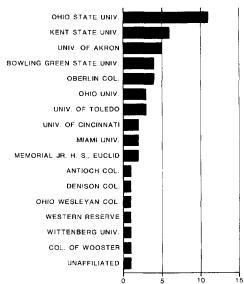


FIGURE 4. Affiliation of geography section presidents (1932–1982).

other university or college associations. One section vice president went on to become president of the academy.

GUY-HAROLD SMITH, OHIO ACADEMY PRESIDENT

The highest honor which the OAS can bestow is election to its presidency. Only one geographer has been so honored in the 50-year history of the geography section. Professor Guy-Harold Smith of Ohio State University served as president in 1961–1962.

Guy-Harold Smith had established a national reputation as an authority in several subfields of geography. He was known for scholarly works in demography, conservation and cartography. Born in Wisconsin, he received undergraduate and Ph.D. degrees from the University of Wisconsin, Madison. He taught at several institutions: Wisconsin, Pennsylvania, Illinois and Ohio State, where he was chairman for 29 years. He was perhaps best known for his innovative cartographic techniques in portraying populations by means of three-dimensional globes and of landforms by the use of physiographic diagram maps. He also pioneered the use of relative relief maps to show physical conditions rather than the altitudinal maps which had formerly been used. Nevertheless he modestly spoke of cartography as "more an avocation than a profession" with him (Smith 1962). At the same time, he chose cartography as the subject of his OAS presidential address. It seems ironic that a field so largely neglected by geographers at academy meetings would be thus elevated.

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