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*The*  
**Monadnock**  
*of the*  
**CLARK UNIVERSITY**  
**GEOGRAPHICAL SOCIETY**

DECEMBER 1946



*Geography is the science of place, its attributes, and their relationships.*

—Ekblaw

THE  
**MONADNOCK**

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FROM THE DIRECTOR

As new director of the Clark Graduate School of Geography, I take great pleasure in extending my greetings to the members of the Clark University Geographical Society. I want you to know that the staff—now containing many new names—is confident of being able to continue the work done under our former chief, Dr. Wallace W. Atwood, Sr., and make the School an institution of which the Alumni can be proud. This can be done only through the Alumni and with their cooperation, and I hope and trust that the ties of cooperation between them and the School will be strengthened. This can be done by personal contacts, through visits by me and other members of the staff and by keeping the Alumni informed of events or changes here, in which they might be interested, either by way of the MONADNOCK or by way of a news letter. Your cooperation and suggestions will be greatly appreciated. We all have one purpose in common, namely, to work for the good of our School.

S. VAN VALKENBURG

Clark University

## STAFF ACTIVITIES

During October, Dr. Samuel Van Valkenburg made a three week tour to contact alumni of the School of Geography, bringing them up to date on Clark activities, discussing their problems, and interviewing potential students of Clark.

The colleges, universities, and alumni contacted by Dr. Van Valkenburg are as follows: Oswego, Mrs. Hart; Syracuse, Messrs. Cressey, James, and Hanlon; Brockport, Mr. West; Buffalo, Mrs. Whettemore; Cleveland (Western Reserve), Messrs. Olson and Danklefsen; Detroit, Messrs. Wayne and Hudgins; Lansing (Michigan State), Mr. Morrison; Ann Arbor, dinner audience, before which he was guest speaker; Bloomington (University of Indiana), Mr. Switzer; Columbus (Ohio State), Messrs. McCune and Van Cleef; Athens (Ohio University), Mr. Cooper; Pittsburg, Messrs. Nystrom and Lenelar (here he also addressed the Conference of West Pennsylvania Teachers); Washington, a large group of alumni; Philadelphia (University of Pennsylvania); Bloomsburg Teachers College, Mr. Russell; Stroudsburg Teachers College, Mr. Minaire; Mont Clair Teachers College, Mr. Millstead.

Dr. Van Valkenburg's latest publication is "Whose Promised Lands," which was done for the Foreign Policy Association's Headline Series and is a political handbook to the Middle East and India.

Dr. Henry Warman spent approximately six weeks of the late summer in the Laguna District of northern Mexico. The District occupies a part of the Bolson de Mayrán and is one of the most important centers of commercial agriculture in northern Mexico.

The region is especially significant, since the government is attempting to modify the old system of land tenure.

Large estates have been expropriated, for which groups of Mexican farmers have had the right to petition. The farms are operated collectively, although the land is owned individually. This experiment in the development of co-operative agricultural districts was started by the government in 1936. The major purpose of Dr. Warman's trip was to learn what progress has been made in the system and the problems involved in its execution.

Results of the study will appear in print in the near future.

Dr. W. Elmer Ekblaw has been elected President of the Massachusetts Archeological Society and is, as usual, pursuing a very busy schedule of lecturing and writing.

He has several articles in preparation which will appear in the "Baltic Review", "The Bulletin of the Illinois Archeological Society", and two chapters entitled "Grasslands and their Conservation" and "The Useful Plants" which will appear in the Grollier's "Book of Science."

For the past ten years, Dr. Ekblaw has written an article on geography for Collier's "Yearbook," and a similar article will appear this year.

Dr. Raymond Murphy has been appointed to the staff of the Clark Geography Department, coming to Clark last June.

Dr. Murphy began his career officially in September and is teaching the Pacific Region, Problems of Economic Geography, and a course in Economic Geography to an undergraduate class.

Before coming to Clark, Dr. Murphy was on the staff of the University of Hawaii, which sponsored an expedition to the Mandated Islands. Through the University, members of the staff making the trip received permission from Admiral Nimitz to make

a reconnaissance trip in the area. For three weeks the members of the party held the rank of Civilian Technicians and visited several of the Mandated Islands by air.

Dr. Richard Lougee, Professor of Physiography, has been appointed to the Staff to succeed Major Wallace Atwood Jr., who is continuing his career in Washington. Dr. Lougee is at present concluding his work at Colby College and will come to Clark the second term.

Mr. Guy Burnham is still very busy and always helpful in assisting students and faculty members to obtain the "right map for the right purpose."

The family in the workroom this year is the largest on record, but Mr. Burnham manages to take care of them all.

Mr. Burnham is now receiving shipments, from the Army Map Service, of the fifty thousand maps which were allotted to Clark. The topographic maps cover all areas of the world and are a valuable addition to the map collection.

## SUMMER SESSION

The 1946 Summer Session in the School of Geography was attended by an unusually large group whose members desired to take advantage of the "accelerated program" which permitted them to obtain a full semester's credit in four courses in two six-week periods. A large percentage of the students were veterans. Courses included meteorology, cartography, South America, human geography, political geography, and economic geography.

Plans for the 1947 Summer Session will be announced in the May issue of the MONADNOCK. It is believed that the University will return to a "peace time" schedule, dropping the accelerated program.

## VISITING PROFS

Although Dr. Van Valkenburg has announced that the schedule of visiting lecturers has not been completed, some plans have been consummated.

Dr. Kirk Bryan, of the Harvard Geology Department, recently completed a series of five weekly lectures in the field of physiography, keeping the subject before the school until Dr. Lougee arrives for the second semester course in the subject. Dr. Bryan used as a basis for his lectures Dr. W. M. Davis' familiar cycle of erosion—youth, maturity, old age.

Dr. Charles B. Fawcett, Geographer in the University of London, will be a visiting professor during the second semester. As one of the world's foremost authorities on the geography of the British Empire, he will lecture in that realm. Both Dr. and Mrs. Fawcett are expected to be present. Alumni who sat under Dr. Fawcett's tuition in former years may desire to visit him during his stay in Worcester.

## CURRENT SEMINARS

Due to the record number of students enrolled in the Graduate School of Geography, the plan for conducting seminars has been modified from that of former years. Every other week, all students meet in the General Seminar while on intervening weeks only the doctorate-seekers meet with Dr. Van Valkenburg.

Programs for the General Seminar alternate between staff and students, giving one program to each about once each month. Topics include acquainting the students with geographical professional societies and publications, schools of geography, discussions on political questions, methods of research, and similar subjects.

Members of the Ph.D. Seminar are fortunate in being able to gain practical and valuable experience in the preparation of geographical material for outside agencies.

## THE 1946 FIELD CAMP

The 1946 Annual Field Camp was conducted this year in the Connecticut Valley, two miles southeast of Westfield, Massachusetts. Work during the seventeen-day period was divided primarily into four phases: Execution of intensive physiographic and land use maps of square mile areas; construction of similar maps of sections averaging fourteen square miles in area, which consumed the major part of the time; work on land use maps of particular areas in the city of Springfield; and "special projects." In addition to these, on the morning of October 3, the entire group carried out a micro-climatic study of Springfield by temperature readings throughout the city from 4 to 6:15 A.M.

As a first step, the group was divided into sixteen teams of two or three students each, which were sent out to do intensive mapping of square mile areas nearby. Physiographic and land use maps were prepared, and the inhabitants were interviewed concerning the economy of the region. In the mornings and evenings of the first few days, lectures were given by Major Atwood and Doctors Ekblaw and Lougee on the geologic history of the section and its present physiography and economic development.

On Friday, October 27, the major project began—investigating and mapping the larger areas, which continued for ten days except for the two days devoted to the urban mapping of Springfield. The maps constructed were similar to those done of the square mile sections, except that the scale was smaller (two inches to the mile as compared with eight inches to the mile on the former maps). Regular USGS topographic sheets were used as base maps, and land use and physiography were indicated by various colors.

At the close of the second week,

each team was assigned two small areas of the city of Springfield which were mapped on two consecutive days by coloring sections of a large city map. Executives of representative industries and commercial houses were interviewed and photographs were taken to supplement the material.

On the morning of October 3, the group was awakened at 2:30 and drove to Springfield for a research problem in climate under Doctor Van Valkenburg's direction. The program was to measure and record the temperature over a 2 1/4 hour period during which there would be the least amount of change in order to make a complete microthermal study. Actually, a difference of 15° F was recorded between the center of the city and a low area on the outskirts. Measurements were begun at 4:00 and continued until 6:15. At 7:00, a flight was made from a nearby airport in order to add a third dimension to the study. At take-off, the ground temperature was 43° F; at 2000 feet it was 61° F, and at 12,000 feet it was 34° F, indicating a sharp inversion at 2000 feet and a very stable lapse rate above.

For the work of the last four or five days, special projects were assigned to the various teams. Topics included phases of the tobacco industry, micro-regional studies of mountain and valley townships, orcharding, water-supply problems, and others of a similar nature.

During the last days at camp, information was transferred from the field maps to large master maps which will be kept in the Clark University Library as reference material.

The week following the return to Worcester was, as usual, devoted to preparation of reports, complete with maps, diagrams and photographs, the entire report averaging 80-100 pages.

The weather was very good during the entire trip. Rain prevented field work only one morning, with the sunshine returning the afternoon of that day. While it was cloudy and cold a few days, a warm sun was out most of the time. Because of this, the diurnal variation was particularly apparent. At 7 A.M. the temperature was often in the low forties and high thirties, rising to 55 and 60 during the early afternoon and falling to the forties again in the evening.

On Sunday, October 6, the entire group made a field trip by automobile convoy to points of interest throughout the area. The first stop was at the excavations of the Westfield Sand and Gravel Company where excellent samples of delta structure were observed. Continuing westward, the convoy climbed to Coble Mountain Reservoir, stopping at the purification plant en route to observe the aeration of water for the city of Westfield. The group paused at the Coble Mountain Dam and enjoyed the colorful grandeur of the autumn foliage on the surrounding hills. Turning eastward, the caravan passed through Granby, a mountain town whose economy has greatly suffered during the past years due to its relatively isolated position, and continued to a spot near Suffield, Connecticut, where the party observed an area of kame and esker topography. The last visit of the morning was to a region of intensive tobacco-raising and drying.

In the afternoon, the route led northward through Montgomery to a hilltop from which the New England Peneplain could be clearly seen, despite somewhat hazy conditions. Passing back through Montgomery, the convoy stopped for a moment at a small excavation where one could see residual soil being formed from the Longmeadow sandstone, and then continued to clay pits at East Farms which supply the material for a small brick kiln. It then turned northward through Southampton to see the

famous saltbox house before returning again to the camp.

Field Camp, like most serious endeavors, had its lighter side: There were the usual pleasures of becoming acquainted, the delights of entertaining visitors both formally and informally, and the many amusing incidents which arose in the field work itself, doubtlessly similar to those experienced in former camps.

The group was the largest in Field Camp history, but getting acquainted was no problem. The heterogeneity of the group encouraged quick amiability. There was the natural attraction of the men to the women. Foreign students were anxious to meet the natives, who in turn were eager to ask about conditions overseas. Veterans of all theaters—including the American—were ever ready to tell how they fought the war and to defend their theses that their outfit and branch of the service had been the sole determining factor in achieving victory. Misery bred friends, for, even though the women were cloistered in one wing of the lodge and the men were scattered interminably into the depths of the other, one and all clustered around the commons room fireplace, the sole source of heat on those chill October mornings and evenings. Team organizations broke down other barriers of strangeness. Members of the staff working with teams in the field and rendering individual assistance in the evenings furthered the process considerably. And if anyone possibly withstood the general trend of friendliness through the above channels, he eventually fell before the inner urge created by Miss Kerr's excellent cooking to be friendly with one and all.

Having developed a home atmosphere, the group was quickly ready to entertain. On Tuesday evening, October 1, the group held the tradi-



Standing: C. R. Kao, J. H. Dean, H. J. Retallick, J. F. Foley, G. B. Schilz, E. H. Bush, R. E. Specht, Mr. G. H. Burnham, C. deJonge, M. H. Lopez, E. M. Risley, L. M. Alexander, E. A. Stoneman, Dr. W. E. Ekblaw, D. C. Winslow, D. G. Brandon, S. C. Chao, C. C. Held, M. B. Hefny.  
 Seated: G. N. Parmenter, F. H. Bellinger, H. M. Latendress, N. E. Nason, M. P. Plante, D. E. Burton, L. T. Hearn, G. Clark, C. R. Roman, J. Moore, E. S. Dix, Dr. S. Van Valkenburg, Dr. H. J. Warman.  
 On floor: S. R. Abrahamson, C. F. Hess, T. J. Liard, J. A. Sobol, A. R. Sumner, F. J. Schadegg, M. F. A. Hebrawi, D. Kt. Lin, C. S. Williams, W. E. McIntyre, B. C. Reed, M. A. C. Vigo.

tional celebration of President Emeritus Atwood's birthday. Through song and individual greetings in Arabic, Chinese, Dutch, French, Spanish, and unvarnished American, best wishes were extended by all. On another occasion President Jefferson paid an informal visit, joining some groups in the field and all at dinner in the evening. The first weekend was devoted to general visitors, principally wives of the many married students.

Reflections on the camp recall numerous incidents in the work itself that stimulate chuckles. The early morning project in Springfield of swinging thermometers about the town raised many a sleepy eyebrow and led to several amusing situations. In general, however, the populace was content to accept the advice of one guardian of the law to his companion:

"Let 'em alone, Mac; they're all right—I think." Experiences with the country gentlemen in the land survey projects were equally amusing. Some farmers thought the teams actually intended to survey their lands. Some greeted them cordially, anticipating scientific assistance in improving the productivity of their soils; others attended them suspiciously, thinking they were probing for the OPA.

The traditional last night dinner was given over to bidding farewell to Dr. Wally, the man who ran the show. Dr. Van very nicely expressed the feeling of all—gratitude for his work and desire to wish him well in his new work.

And so reminiscences might continue. It was, as usual, a lot of work; but it was fun.

## IN AND OUT OF THE ALCOVES

*Sherman R. Abrahamson* (B.S., Duluth State Teachers College, 1943) was a navigator with the Eighth Air Force in the ETO from 1942 to 1945. He came to Clark the second semester of last year and is continuing work on his M.A.

*Lewis Alexander* (B.A., Middlebury College, 1942) was a weather forecaster with the Eighth and Ninth Air Forces in the ETO for two years. He is studying for an M.A.

*Frank H. Bellinger* (B.A., Wheaton College, Illinois, 1942) joined the Navy in 1942 and served as a carrier pilot in 1945-1946. He is working for an M.A.

*Lucienne Blanjean* (Licenciee en Sciences Geographiques, Universite Libre de Bruxelles, 1935) taught at the Ville de Bruxelles, Belgium, before coming to America to study

methods of land utilization and city and country planning so that she can assist the Belgian government in rebuilding damaged cities and country areas.

*Donald G. Brandon* (B.S. and M.A., Howard University, 1934) taught geography and was football coach at State Teachers College, Elizabeth City, North Carolina. He attended Columbia University to study methods of teaching geography and is now a Ph.D. candidate.

*Dorothea E. Burton* (B.S., Buffalo State Teachers College, 1940) taught English for two years in Puerto Rico and then became a Photo Interpreter for the Air Forces in Washington, later was a Marine Photo Officer in Hawaii. She is studying for an M.A.

*Everett H. Bush* (B.S., Westfield State Teachers College, 1942) served

in the Quartermaster Corps from 1942 to 1946 and spent two years in the ETO. He is now studying for an M.A.

*Chao, Sung Chiao* (B.A., 1942; M.A., 1945, National Chekiang University, Hanchow, China) was a Fellow in the Geography Department there. He is studying for his Ph.D. on a Fellowship sponsored by the United States State Department.

*Genevieve Clark* (B.S., University of New Hampshire, 1946) attended the University of Buffalo from 1942 to 1944 and in 1945 worked for the Curtiss-Wright Aeronautical Research Laboratory. She is studying for an M.A.

*John H. Dean* (B.S., Buffalo State Teachers College, 1946) served in the U. S. Weather Service and was attached to the Air Corps. He is studying for an M.A.

*Ernest S. Dix* (B.A., Pennsylvania State College, 1941) served from 1941 to 1945 in the Air Force and in the Field Artillery, was a pilot in the Troup Carrier Command. He is continuing work on his M.A.

*John F. Foley* (B.A., Massachusetts State College, 1944) served with the Navy from 1943 to 1946. He is taking an M.A.

*Lea T. Hearn* (B.S., Bridgewater State Teachers College, 1943) taught geography and English in Attleboro, Massachusetts, was also a Home Service Correspondent in the American Red Cross during the war. She is taking an M.A.

*Mohamed Fateh Akil Hebrawi* (B.A., Fouad 1st University, Cairo, Egypt, 1939; Higher Institute of Education, 1940) was a teacher in primary and secondary schools until 1944

when he became a Fellow in the Geography Department at Farouk 1st University. He is a member of the Egyptian Educational Mission sponsored by the Egyptian Government as a Fellow in Geography to the United States. He is studying for a Ph.D.

*Mohamed M. El Hefny* (B.A., Fouad 1st University, Cairo, Egypt, 1945) also is a member of the Egyptian Educational Mission as a Fellow in Geography to the United States. He is studying for an M.A.

*Colbert C. Held* (B.A., Baylor University, 1938; M.A. in English, Northwestern University, 1940) taught in Mississippi College and Tarkio College before entering the Air Corps in 1942, serving in Italy and the ETO. He is studying for a Ph.D.

*Clarke F. Hess* (B.S., State Teachers College, Indiana, Pennsylvania, 1937) taught in various high schools for five years before entering the Army in 1942 as a meteorologist. He did graduate work at the University of Pennsylvania during the summers of 1938, 1940, and at Clark in 1946. He is studying for an M.A.

*Kao, Chong-Rwen* (B.A., University of Nanking, 1937) was an instructor in Political Science at the University of Nanking. He was also a member of the Northwestern Investigation Group which was under the auspices of the Institute of National Industrialization. He is studying for an M.A.

*Hazel Latendress* (B.Ed., Rhode Island College of Education, 1946) is studying for an M.A. and plans to teach at the completion of her work here.

*Theodore J. Liard* (B.Ed., Rhode Island College of Education, 1939) entered the Army after teaching for three years in junior high schools in

Rhode Island. During the summers of 1940 and 1941 he studied at Clark. He is now studying for an M.A.

*David Kwante Lin* (B.S., Yanching in Peking, China, 1931; M.A., Northwestern, 1937) taught at Fukien Christian University, 1941-1943, and at Chinan University, 1943-1946. He is a member of the Geological and Geographical Societies of China. He is studying for a Ph.D.

*Manuel H. Lopez*, (B.A., Clark University, 1941) entered the Marine Corps, served in the Pacific. In 1943 he became an Intelligence Officer for CINPAC-CINCPOA. He is studying for an M.A.

*Wallace E. McIntyre* (B.Ed., Illinois State Normal University, 1940) taught in elementary school, after which he attended a summer session at Northwestern University. He was in the Army after that time and is now studying for an M.A.

*Jean Moore* (B.A., Texas Christian University, 1925; M.A., Texas Christian University, 1930) has been teaching at West Texas State Teachers College. During the summer of 1938 she studied at Oxford University. She is a Ph.D. candidate.

*Natalie Nason* (B.S., University of Maine, 1938) taught in Maine high schools and was principal of New Gloucester High School when she entered the WAVES in 1943. While in the Navy she was a Base Librarian and also worked in Communications. She is studying for an M.A.

*Guy Parmenter* (B.A., Nebraska Wesleyan University, 1942) is continuing work started last year on his M.A. and is now writing his thesis.

*Marguerite Plante* (B.S., Bridgewater State Teachers College, 1944) has attended Clark two summers and

is now studying for an M.A. She previously taught in junior high school.

*Benjamin C. Reed* (B.Ed., Rhode Island College of Education, 1942) entered the Army in 1943 and was a member of the Tank Corps until 1946. He attended the Summer Session of Clark in 1946 and is now studying for an M.A.

*Harold J. Retallick* (B.S., State Teachers College, Eau Claire, Wisconsin) attended Clark last year and is writing his thesis on the Quinnebaug River Basin.

*Edward M. Risley* (B.A., Clark University, 1946) attended the School of Advanced International Studies in Washington until June. Since that time he has been studying for an M.A.

*Candida Roman* (B.A., University of Puerto Rico, 1946) previously taught elementary and high school in Puerto Rico and plans to continue her teaching there at the completion of study for an M.A.

*Francis J. Schadegg* (B.A., Eastern Washington College of Education; M.A., Clark University, 1937) worked with the U.S.D.A. for seven years in land use planning, agricultural extension work, and agricultural economics. He was then a member of Photo Intelligence on Guam. He is a candidate for a Ph.D. and is writing his thesis on "Land Use Planning in the Colville Valley, Washington."

*Gordon B. Schilz* (B.A., Albion College, 1929; M.A. in History and Political Science, Columbia University, 1930) taught Air Force Geography at Iowa Wesleyan College and is on leave from Iowa to study for a Ph.D.

*John A. Sobol* (B.S., Fitchburg State Teachers College, 1942) was a Night Fighter Radar Observer with the

Sixth Night Fighter Squadron in the Pacific, was in the Air Corps from 1942-1946. He is studying for an M.A.

Raymond E. Specht (B.S., Oshkosh State Teachers College, 1940) was Assistant Athletic Director at Oshkosh in 1941. Later he taught geography in high schools and is now studying for an M.A.

Elvyn A. Stoneman (B.S., University of Nebraska, 1941; M.A., 1943) was a graduate assistant in geography at the University of Nebraska from 1942-1943. He served with Army Intelligence in the Mediterranean Theater and is now continuing his study for a Ph.D.

Alfred R. Sumner (B.A., Yale University, 1931; M.A., Clark University, 1933) taught on Long Island until he entered the Navy, where he was a flight instructor and later was in the Naval Air Transport Service. He is a candidate for a Ph.D.

Miguel A. C. Vigo (B.A., University of Puerto Rico, 1946) taught history at Arecibo High School in the summer of 1946. He is a member of a mission sponsored by the University of Puerto Rico, is taking an M.A.

Clarence S. Williams (B.S., State Teachers College, East Stroudsburg, Pennsylvania, 1939) was in the Fifteenth Air Force in Italy. Since that time he has been studying at Clark, is a candidate for an M.A.

David C. Winslow (B.A., University of Oklahoma, 1936; M.A., University of Nebraska, 1939) has returned to complete his Ph.D. He was Associate Professor at the University of Oklahoma during the spring term and summer session.

## ALUMNI RECORDS

On November 1, a News-Letter was mailed to every alumnus and former student whose address is on file in the School of Geography. Attached to the letter was an information blank which the recipient was requested to fill in and return in the enclosed stamped and addressed envelope, since that was the source to be used for material for the Alumni MONADNOCK next spring.

Many of the information blanks have not yet been returned to the MONADNOCK. If you have received the blank and have not yet filled it out and mailed it back, please do so at your earliest convenience. If you did not receive the form, a postcard request will bring it to you. It is devoutly to be hoped that every alumnus will be reported in the May issue, a hope which will manifestly be fatuous unless you have returned your questionnaire!

If you know the whereabouts of some alumnus whom you suspect we might have lost connection with, please drop a card to the MONADNOCK with the new address. In the May issue, space permitting, there will be published a list of those alumni and former students whose address is unknown.

Officers of the Clark University Geographical Society for 1946-47 were elected during the last week of Field Camp and included Elvyn A. Stoneman, President; Alfred A. Sumner, Vice-President; Frank J. Schadegg, Secretary and Guy Parmenter, Treasurer. Harold Retallick is the retiring president.

## MONADNOCK STAFF

COLBERT C. HELD ..... Editor  
LEWIS M. ALEXANDER Associate Editor  
GENEVIEVE CLARK .. Associate Editor  
JOHN F. FOLEY .... Associate Editor  
LEA T. HEARN .... Associate Editor  
M. F. AKIL HEBRAWI Associate Editor

## THE FIELD OF GEOGRAPHY

Due to our own scientific nature and the lessons learned during World War II, we geographers have recently subjected ourselves and our field to searching criticism. The self-examination is thoroughly commendable and is apparently requisite to a clearing of the geographical atmosphere so that we can more exactly define the field in which we should be working.

The literature is full of opinions regarding the legitimate field of geography, its nature, and its value. Nevertheless, no general agreement has been reached on the simple question, "What is geography?" While lack of agreement on that question is undoubtedly deplorable, the very nature of geography as practiced offers some explanation for the confusion.

For example, geography partakes of the nature of both a physical and social science—a duality which need not frighten geographers in the least. Acting as such a bridge between two great groups of studies gives geography one of its greatest values.

Furthermore, many geographers of late have been deeply disturbed over approaches in geographic studies and the validity of possible approaches. Whether a study is made from a "regional" viewpoint or a "topical" one seems to be assuming the proportion of the criterion as to whether the study is a valid geographic study or not. Surely there are more precise criteria than this.

Again, the question arises as to how far into "related fields" the geographer may wander and still make a sound, pertinent geographical study. What can be made a reliable boundary?

Before an answer common to these questions is suggested, we might well point out the realization which is gradually penetrating our "compartmentalized" thinking: All sciences

(social and physical), all studies, all phases of knowledge are interrelated; there are no more sharp boundaries in the realms of knowledge than there are among the field of Nature. We must not only cease putting the various sciences and humanities into isolated pigeon holes and forbidding intellectual intercourse; we must actively encourage interaction among them. Now that man has largely accomplished the prodigious, albeit unfinished task of analyzing knowledge and setting up his various disciplines, he must now equally painstakingly synthesize his disciplines and view the whole from a truer perspective. The world has equally great need of sound analysts and sound synthesists.

Now what shall be the basic criterion, the earmark, of geography? What is its *sine qua non*?

The essential element in geography is *place*. Place is the requisite discipline in geography as assuredly as time is in history or plants are in botany or the nerves are in neurology. Those realms which are not related essentially to place fall without the legitimate realm of geography. We may disagree and argue all we wish about the nature of geography, but we cannot escape *place* as the criterion for our basic discipline. Every sound geographic study starts with place as its basis, yet this simple fact is largely overlooked by most of us in the field.

Starting with place as a foundation, what, then, is the geographer to do? What about place? Place, *per se*, is merely a concept and must be clothed with something tangible to be a legitimate object for examination. Those particulars which accrue inherently to place are the actual objects of study, and these we may call *attributes* and enumerate as climate (every place on earth has a climate!), physiography (topography, configura-

tion, drainage—even if it is all water), fauna, flora, human envelope, soils, and natural resources. All places have some of these attributes, and most places have all of them.

Our study of place, then, which is geography, must study these attributes, their relationships with each other, and their relationships with other places. As in all other sciences, there is the implied duty to classify the objects of study, describe them, and interpret them. This, then, is geography: The science of place, its attributes, and their relationships.

Obviously, by concentrating on the "place" aspect, geography invades

many fields; such an invasion need not embarrass the geographer, since his approach is unique. Similarly, in discharging its obligations as a science, geography must call upon many other sciences—chemistry, physics, geology, botany, anthropology, pedology, and a host of others. But again, geography works with them in its own peculiar way, from the viewpoint of place. Above all, geography correlates and draws conclusions from its synthesis of the relationships of the attributes of place.

(Summarized by the Editor with the approval of W. Elmer Ekblaw.)

### GEO. H. PRIMMER

The many friends of Dr. George H. Primmer will be saddened to learn of his sudden death November 18, 1946. He had just accepted the position of Head of the Department of Geography at Bradley University, Peoria, Illinois, in September 1946. Formerly he was for many years head of the Department of Geography at State Teachers College, Duluth, Minnesota.

Dr. Primmer received his B.Ed. from Illinois State Normal in 1921, his M.A. from the University of Chicago in 1923, and his Ph.D. from Clark in 1933. Toward the end of the recent war he served on the faculty of Shrivvenham American University, England, and the USFA Command School, Vienna, Austria. His death is a distinct loss to the field of geography.