THE MONADNOCK

of the CLARK UNIVERSITY GEOGRAPHICAL SOCIETY



"... man is pre-eminently a creative animal, predestined to strive consciously for an object and to engage in engineering—that is, incessantly and eternally to make new roads, wherever they may lead."

FYODOR DOSTOEVSKY

PICTURE ON FACING PAGE: C.U.G.S., 1959

Left to right, first row, Dr. Henry J. Warman, Dr. Richard J. Lougee, Dr. Samuel Van Valkenburg, Dr. Raymond E. Murphy, Dr. Hans Carol, Mr. Guy H. Burnham. Second row, Kaniz Yusef, Aleta Grillot, Agnes Zetterman, Sister Marion Lyons, Lillian Kent, Sumitra Benoit, Richard Reseska, Robert Lingner. Third row, Tait Davis, Robert Dean, Philip Korn, Harry Stickler, Robert Black, Richard Sands, Robert Huhtanen, Aylwood Walnut, Fiske Rawden, David Brodeur. Fourth row, Robert Condon, Harry Neal, Robert Looker, John Rickert, Albert Mitchell, Lane Johnson, Reid Stewart, John Moulton. Last row, Arthur Lord, Joseph Hickey, Lester Unterberg, William Koelsch. Seated in front, I. Made Sandy.

THE MONADNOCK STAFF

Editor Fiske E. Rawden

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Mary A. O'Malley

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STAFF NEWS

As usual, the staff has planned anything but a leisurely summer.

Dr. Van Valkenburg will spend the summer doing field work in Burope in connection with the World Land Use Survey. Dr. Van published his latest article, "Land Use Within the Buropean Common Market," in the January, 1959 issue of Economic Geography.

Dr. Hans H. Carol will fly back to Switzerland to see his wife and family and to visit the University of Zurich. When he returns, he will tour through the western and southern states before taking up duties for his second year at Clark.

Dr. Richard J. Lougee has applied for an ONR grant to test his Unitary Glaciation theory. If his request is granted, he will have eight members of the workroom strung out across the country from Lake Eire to Puget Sound mapping

the various features and running levels. Dr. Lougee will be kept more than just busy visiting the field workers and conducting his own research.

Dr. Raymond E. Murphy plans to continue work on his urban geography text.

Dr. Henry J. Warman will be Visiting Lecturer at the University of Southern California.

Mr. Guy H. Burnham has two courses set up in cartography. He will also be doing the map work that goes into Economic Geography, getting set for the next issue and the winter rush.

Dr. Jack R. Villmow will be our new addition. Dr. Villmow comes from Ohio State University and will offer Clark's first course in the Geography of the Soviet Union.

THE DUAL RISE OF AGRICULTURE AND THE STATE IN ANCIENT CHINA

Piske E. Rawden

Preface

This essay is the first part of a paper tracing the history of Chinese agricultural land use. Because of the paucity of the materials at our disposal, one cannot state with absolute certainty as to what the earliest systems of land use were. This portion of the paper is intended to be a foundation for the development of later patterns of land use. The author welcomes any comments or suggestions that the reader may have.

The Chinese Centers

There are only two focal areas for the origins of Chinese history, a primary focus at the great bend in the Yellow River and a secondary focus in the middle Yangtze Valley. In time the areas overlapped and interacted and additional centers were established, but true Chinese culture originated within these two relatively limited and favored areas. Before man first occupied this region as an agriculturalist, this was an area of "genial parkland and meadow with lakes and streams fed by the melting glaciers of neighboring mountains." Unbroken forest united the Yangtze basin with the Himalayan and Indo-Chinese regions while continuous strips of woodland must have extended across northern China up into Manchuria. Loess, however, because of its cumulative nature, would strangle young tree growth and the loess plains included great tracts of grassland.

Why was this northern loess upland destined to become the central focus of Chinese civilization? The answer is not to be found in any one single reason, but in a variety of conditions, both physical and cultural. The climate and soils were such as to encourage the growth of a grass cover that provided both food for the plentiful game, and seeds as food for man. The soil was not encumbered by a heavy forest. It could easily be worked with such primitive tools the Chinese had and was responsive to the application of water alone without elaborate practices of cultivation and manuring. Further, those trees that did exist were small and stunted by the accumulation of loess, and were few in number, requiring little, if any clearing prior to planting a crop.

The Origins of Agriculture

The original inhabitants of China, the "proto-Chinese", practiced an extremely primitive type of milpa agriculture. Apparently they had only a single type of millet and had domesticated both the pig and the dog. All other elements entered China with the waves of immigrants from Manchuria and the Indian region.

Some Indian cultural elements entered China during and perhaps before the second millenium, B.C. These migrants brought with them other

millets, and upland or "dry" rice. India's most important gift was "wet" or irrigated rice. However, import was confined mainly to the Yangtze secondary focal center and did not spread further until the North had conquered the Yangtze basin.

Fowl were first domesticated in upper Burma, but since they are not so limited by climate nor are they stationary, they spread more rapidly and farther north than did rice. There is even a possibility that fowls were kept in China as early as the Neolithic.

The water buffalo, or carabao, and the zebu strain in the domestic cattle were also gifts from India as was the practice of taming elephants. The horse was not used in agriculture until fairly recent times since it was relatively scarce and therefore a "noble" animal.

Probably the art of metal working came from India. American plants such as corn, potatoes, especially the sweet potato, and tobacco did not enter China until two or three centuries ago and, even then, corn entered via the Indian-Yunnan route.

But, great as these contributions to China were, Bishop and Sauer both agree on the primary influence of the Northern Culture Route as the path by which irrigation entered China. No other import was to have as great an effect in China as that of irrigation. In time, both agriculture and the state were to rise upon the irrigated fields and their interconnecting canals.

Bishop, Wittfogel, Lattimore, and Ting all agree upon the importance of irrigation in the establishment of the Chinese agricultural society and the state, but none seems to be able to agree upon the origins of its practice in China. Bishop hints at an outside source of origin. probably from Mesopotamia, and carried across India and Burma, or to the north across the slowly drying plains of Central Asia. Lattimore presents a more novel and daring explanation. According to his thesis, the climate of the Yellow River basin was "...of such a kind that either the scarcity or the irregularity of the rainfall, together with the presence of running water (in the adjacent streams), would encourage the idea of bringing water a short distance to fields already planted but already suffering from the lack of rain." This theory, however, may be argued by the fact that there is no evidence of an evolutionary development of irrigation. Certainly the first few tentative efforts would have been destroyed by successive attempts at irrigated agriculture, but the discovery of complex systems of canals at Anyang in a high state of development with no evidence of earlier attempts seems to indicate an outside influence.

Once the concept of irrigation and its practice was known, the Chinese "revolution" literally exploded. Before this event, society in China was out of balance. Now it adapted itself to the new methods at a comparatively high rate of evolution. It could only go in one direction, and that direction was forward.

The Rise of Society

The effect of an assured and increased food supply was to improve the cohesion and social strength of those groups which were relatively large in number and who cultivated large fields continuously. This was sufficient within itself to cause a division in society between privileged and unprivileged classes. By Shang times, the use of bronze had been acquired. Since bronze was scarce and confined to but a very few, and its use in agricultural implements created tools capable of greater efficiency, as well as its advantages in warfare, bronze caused a very sharp awareness of class distinction.

Food surpluses created by the increased yields from improved techniques and the introduction of irrigation meant that food could be stored for use in lean times or as a trading advantage. The man who controlled surpluses of food was able to rise above his neighbor into the community of the privileged.

The rise of social classes meant a distinct shift from the small clan system of government. Now there was established a small ruling class which had the greater peasant mass under its control. This meant that there was a large working force available which was highly organized and could be employed in the mass projects of river embanking, diking, and flood control.

As a measure of social control, the privileged, or ruling class found it highly profitable to restrict the emigration of the peasantry. Large tracts of fertile, semi-arid land extended to the north and to the west of the loess uplands. To farm these lands, the population would have to become extensive and spread thinly over a wide area. This was undesirable both from the viewpoint of emigration which would cause a loss in the working force and a possible loss of control over that force and would permit the gradual imigration of non-Chinese peoples. Both of these possibilities were undesirable to the ruling class. To combat these tendencies, they encouraged, then enforced, the system of highly intensified agriculture. By this means, the labor force was kept relatively compact and easily controlled.

The system meant, however, that the land must feed more and more people per unit area. Centuries of experimentation showed which seeds were better, and methods of manuring the fields. It also had its attendent drawbacks. When land ownership by the peasants became common, extreme fragmentation of the fields resulted from inheritance. During years of flood, low water, drought, or pestilence, the overcrowded countryside suffered severely. The increasing population gradually demuded the forests for new land, fuel, and building materials and today few Chinese farmers are even aware of conservation practices beyond their own fields. On the credit side, one must admit that the enforced closeness caused the Chinese people to learn to live together in a harmonious society. This is a further factor in facilitating control of the people by the state.

Irrigation and the State

The actual origins of irrigation practices are of less concern than the effects which were of the most vital importance.

Undoubtedly the first attempts at irrigated agriculture were very primitive and crude. Indeed, they were so simple that they could only have occured in smaller tributary valleys of the Yellow River in the loess uplands where water could be more easily brought to the fields. By adding adjacent lands to the existing irrigated fields, the Chinese gradually expanded down on to the North China Plain and to the south.

In many areas of expansion, new lands were connected to the old not only by the rivers, but by canals. These canals became increasingly important in areas where the river was unmanageable either because of deep gorges or its swiftness. They served for transportation, irrigation, and drainage and flood control. As the system expanded, it affected the way in which regions were connected to one another. Because of the easy transportation afforded by the canals, new regions could easily and profitably be conquered and administered by a feudal nobility. These same conditions were later to make it equally easy for a strong personality to subordinate the nobles and their lands under his personal rule and thereby bring the entire country under a unified authority. When this event occured, we may say that the Chinese Empire came into being.

Generally speaking, much of the physical growth of the state was accomplished in areas where new lands were opened to farming. Needless to say, there were numerous instances where warfare served to attach new lands which were subsequently opened to farming. Warfare was the element that finally unified the nation into a single state. But in essence, the state grew not because of the warior ambition of a ruler, but because of the increasing pressures of the growing population within a system of highly intensive land use.

This state was supported by the taxes levied on the land and its produce. External relations and trade with foreign areas was kept to a workable minimum and the Chinese population was confined within the borders of the state except in those instances when the state expanded by a policy of deliberate settlement in adjacent areas. Its purpose was to cultivate the land. From the land came the revenues required to finance and maintain the state, and directly, the Emperor. In return, the state (Emperor) extended its powerful protection to the population that supported it.

When the throne became corrupt whether through weakness or excess, the system collapsed. The peasantry bankrupted the throne through refusal to pay taxes and support of rebellious nobles and warlords. But the system was so strongly entrenched in the Chinese tradition that one of the first acts of the new dynasty was to restore the old conditions. Rebuilding of the water conservancy projects and the re-establishment of agriculture were mertaken immediately. Put simply, the state could

not exist independently of the peasantry, nor in the long run could the peasants exist without the stabilizing influence of the state. Both were mutually beneficial and dependent upon the other. Both existed in a state of careful balance. If one upset the balance, the other reacted, but sooner or later, as long as the Empire lasted, the balance was restored and the system continued, perhaps altered, but it continued in the same functional manner.

Summation

In the course of this paper we have traced the evolution of the Chinese agricultural system down into the Han Dynasty. We have seen how the state arose, accompanying, and attendent upon the development of agriculture. Certainly this is not a unique development. What is unique is the system of enforced intensive land use as a means of governing and controlling the state and the length of time this system endured. To be sure, the Chinese won much of their country through warfare, but once the new areas were under Chinese control, they were subjected to the system and soon made a functional part of the Empire. Throughout most of its history, the Empire remained almost entirely independent of the outside world. The civilization to which this system gave birth was one of the greatest the world has seen. But it contained its own seeds of destruction in its enforced, intensive nature.

CLARK AFRICAN CLIMATE STUDY

The Graduate School of Geography is presently engaged in a study of the "Climate of Central Africa" under a contract from the Quartermaster R & E Center, Natick, Mass. The contract, which runs from October 6. 1958 until October 5. 1960. deals with Africa from 160 North Lat. to 160 South Lat. Similar regional climatic studies have been completed at Natick for much of the world. Such studies have a practical logistic purpose as they can be utilized in deciding the appropriate issue of military clothing for a specific region.

Monthly maps will be mape of all major climatic criteria. Natick wishes to have data for each "degree square" within the study area. After the climatic station data is mapped, isolines will be drawm, from which it will be possible to determine the needed information for each degree square. The final step will be to transfer the findings to IBM punch cards.

Several of the more unusual criteria to be studied include temperature lapse rates for January and July, monthly radiation values, and monthly temperature frequencies. A special study will also be done on the physiography of the region, determining the average elevation, relief, grain, and slope accessibility, following the method developed by Dr. Walter Wood of the Natick Laboratory.

The project is under the direction of Dr. Samuel Van Valkenburg with Dr. Henry Warman, and Mr. Guy Burnham as consultants. Student employees have included Lawrence Delliquadri, Joseph Hickey, Kaniz Yusuf, Albert Mitchell and Robert Huhtanen.

GUEST LECTURERS

This year C.U.G.S. was honored by the appearance of several distinguished guests. Hans Boesch of the University of Zurich was our first guest of the autumn. The subject of his talk was the Alps of Switzerland. Our second visitor was Richard J. Russell. Dr. Russell was here in consultation with Richard J. Lougee prior to Dr. Lougee's presentation of the unitary glacier paper in Washington last January. During the early part of the spring semester. Preston E. James came from Syracuse and spoke to us on two days. Dr. James spoke both days on South America. Later. Henry C. Darby of London spoke on the problems confronting the student in the matters and techniques involved in research in historical geography. Dr. Darby is currently at Harvard University for a semester and a summer session. Dr. Richard Hartshorne spent three days with us discussing the Philosophy of Geography and Climatology.

Each of the visitors was given a Tea either before or after his talk. Our Social Chairman, Agnes Zetterman, had the willing help of her committee and between them, the girls really transformed the Libbey Library. The floral decorations were a delight to the eye, and the cucumber and cream cheese sandwiches were a succes fou to the taste.

NEW AND RETURNING CUGS

This semester a few of the old CUGS returned to continue their studies. Myron Starbird was here for five weeks prior to taking his Ph.D. Orals. He passed them successfully and now has left us. Richard Sands is back to write the dissertation, but his face is anything but familiar since he has been in solitary splendor up on the third floor. Our new CUGS members are Robert Dean, Philip Korn. and Harry Sickler. Although none of these new men have undergone the purifying fire of Field Camp. their turn shall come, and we wish to say welcome.

ALUMNI NEWS

Agnes M. Allen (M.A. '34, Ph.D. '37) is head of the Science Department at Arizona State College.

George Beishlag (M.A.'37) is Coordinator for the National Council for Geographic Education and was recently elected Vice President of the Geography Section of the Maryland State Teachers Association.

Edward G. Benoit is currently working on a thesis, A STUDY OF JA-PANESE EDUCATION AS INFLUENCED BY THE OCCUPATION.

Shirley R. Van Blarcom is leader for the geography curriculum for Montgomery County schools in the Washington, D.C. area.

Hans H. Boesch (exchange student '34-35) is Professor of Geography and Director of the Geographic Institute at Zurich University. He plans to travel in Southeast Asia and the Far East.

Meredith F. Burrill (M.A. 126, Ph.D. 130) is Director of the Office of Geography of the Board of Geographic Names. He has recently returned to the U.S. after extensive travel throughout the Middle East and France and England. While in Europe, he was a delegate to the VIth International Congress of Onomastic Sciences.

Roger J.E. Brown is with the National Research Council, Ottawa. He is currently working on research in permafrost.

Margaret S. Chew (M.A.'37, Ph.D.'52) is Chairman of the Geography Dept., at Wisconsin State College and is engaged in research on the tri-state area of Wisconsin-Minnesota-Iowa.

Eugene Van Cleet (Ph.D.'26) Professor Emeritus of Ohio State University is currently engaged in studies of industrial location. He has been "scouting around" the New Jersey-Delaware area and in parts of Mexico and Texas.

George S. Corfield (M.A.'31), Chairman of the Geography and Geology Dept. at Wesleyan University has been elected to the Executive Council of the National Council for Geographic Education.

Brooke Cornwall ('57) is acting head of the Western Canadian Section of the Dept. of Mines and Technical Surveys, Geographical Branch, of Canada.

Clark Crain (Ph.D.'51) is currently studying "impac" areas for the USAF. These are studies of the influence of the rapid development of bases on the surrounding community. John B. Dornbach ('52) is cartographer for the Aeronautical Chart and Information Center in St. Louis and at the present has two papers on cartographic problems.

Richard Ellefsen (M.A.'58) is spending a year in India studying the modernization of the dairy industry of major Indian cities.

Francis E. Elliott (Ph.D.'52) is engaged in climatological studies of upper air circulation at Butler University.

Van H. English (Ph.D.'42) is a Professor at Dartmouth College.

Franklin C. Erickson (Ph.D. '35) is Professor and Chairman of the Dept. of Geography at Boston University.

George F. Deasy (Ph.D.'58) is Professor of Geography at Penn State University.

Wilma B. Fairchild (M.A.'37) is Editor of the Geographical Review and reports that, "... the research of other geographers keeps me busy, present and future."

J. Keith Fraser ('56) reports that he is conducting geomorphological research along the western sectors of the DEW line and on the Boothia Peninsula.

Kathleen M. Garrity (M.A.'34) says that her present position is "..at home."

Howard L. Green (M.A.'49) is Manager in the Store Research and Development Dept. of Montgomery Ward. Andreas Grotewold (M.A.'51) spend last summer in Europe. He and his wife, Lois, have recently published a paper, "Commercial Development of Highways in Urbanized Regions," in Land Economics.

Edna M. Gueffroy (M.A.'27) received her Ph.D. at University of Washington in '50 and is now at Illinois State Normal University.

George F. Harding ('31) has now retired and spent the summer with Mrs. Harding touring throughout Europe.

Dorothea B. Hawley (Ph.D.'49) is an Air Intelligence Specialist with AFCIN.

Emeline C. Highberg (M.A.'46) has recently completed her Ph.D. residence at the University of Connecticut.

Joseph B. Hoyt (Ph.D.'54) has recently been promoted to full Professor at the New Haven State Teachers College. His paper, "Cold Summer of 1816," was published in the June. '58 issue of the Annals.

Bert Hudgins (Ph.D.'30) retired as Professor Emeritus from Wayne State University and is now continuing his research on the rivers of Michigan.

Lois R. Keller (M.A.'29) is retired and spent the spring in Europe.

Harry B. Kircher ('51 and '57) is an economist with the Federal Reserve Bank of St. Louis and is currently working on his dissertation.

Esther Kistler (M.A.'38) is teaching at Nanticoke High in Pa.

George Langdon (Ph.D.'51) reports he is holding two teaching jobs besides producing a number of filmstrips on the geography of Pennsylvania, and has recently published a paper on the Mesabi in the Journal of Geography.

Harry Law ('42) has recently published an elementary grade text on the geography of Tennessee. At present he is the head of the Dept. of Geography and Geology at Austin Peay State College.

Urban J. Linehan (Ph.D.'55) reports he is working for the U.S. Government.

Harriet R. Long (Ph.D.'55) is Professor of Geography at Pennsylvania State Teachers College.

Walter K. Morrison (M.A.'52) is with the Cartographic Division of the National Geographic Magazine. He reports that they publish three to seven maps every month and are continually engaged in research for future maps.

Josephine Moyer (Ph.D.'55) is head of the Dept. of Geography at Kingston State Teachers College.

Salvatore J. Natoli (M.A.'57, Ph.D. res. '56-57) is Assistant Professor at Pennsylvania State Teachers College. He hopes to get his Ph.D. if he ever gets enough time to concentrate on his languages.

Herman L. Nelson (Ph.D.'54) is Associate Professor in Harth Science at Iowa State Teachers College.

Howard L. Ohman (M.A.'49) is currently a physical geographer with the Army Quartermaster Corps at Natick. Mass. Leonard O. Packard (M.A.'26) has retired and is revising his "Geography of the World."

Harry C. Parker (M.A.'38) is a Museum Specialist in the National Park Service in Washington, D.C.

Daniel F. Pawlikowski (Fellow '51-'52) is a city planner in Worcester. Mass.

Elaine J. Potter (M.A.'58) is at Mt. Holyoke College. She has travelled through the southern states and at the present is concentrating on Florida.

Paul L. Rawson ('50-51) besides being an Associate Professor at S.E. Missouri State College attended the University of Oslo last summer. He reports that most geography in Norway is concerned with city planning.

Anthony Sas (Ph.D.'57) is an Assistant Professor at the University of Maryland. He will have an article published in the September issue of the Annals.

Gerald W. Schultz and Jean L. Schultz (nee Salvi) were married at Everett, Mass. in August 1958. At present he is an instructor at the Milwaukee branch of the University of Wisconsin.

Joseph R. Schwendeman (Ph.D. '41) reports numerous activities that he is engaged in at the moment. Among them is Vol. IX of the Directory of College Geography in the U.S. He sent a copy for workroom use and we wish to take this time to thank him very much for his thoughtfulness.

Marjorie Shank (M.A.'23) says that she is still with Southern Illinois University. Earl B. Shaw (Ph.D.'33) of State Teachers College in Worcester reports that he is active in research in human and economic geography. Last summer he travelled in the Caribbean region.

James A. Shear (Ph.D.'52) returned last spring from Antarctica where he served as scientific leader of Hallett Station on the IGY program. He is now Associate Professor at the University of Kentucky.

Julia M. Shipman (Ph.D.'28) has retired, but in name only. Not only has she remained active on several educational boards in Arlington, Vermont, but she spent five weeks last summer in Europe.

Victor W. Sim (M.A.'57) is on leave from the Canadian Government at McGill University to complete his Ph.D. Last summer he was in the Melville Peninsula completing field research on the geomorphology of the area.

Phelps N. Swett reports that he is retired and taking things easy.

John L. Taylor (Ph.D.'53) is a Consultant on Territorial Affairs. The results of some of his work is well known to us by the successful passage of the statehood bills on Alaska and Hawaii. He has also served as President of the Clark Alumnus Association in Washington, D.C. for the past two years.

Ray W. Tobey (M.A.'53) has retired and is spending his time doing those multitudes of things we never seem to have the time to do.

Mildred M. Walmsley (Ph.D.'52) (nee Danklefsen) was married to William E. Walmsley in July, 1958 at Cleveland. The two spent their honeymoon in the British Isles. She is now Assistant Professor at Western Reserve University.

Nancy Waterman (M.A.'52) received an M.A. in Library Science at Columbia and is interested in reference work in connection with geography.

Bernt Lloyd Wills (Special '42) has completed the four-discipline "Williston Report," a study of the impact of oil on the Williston Basin. At present, he is with the University of North Dakota.

A. Joseph Wraight (Ph.D.'51) is Assistant to the Director, USGS. He is now preparing a book on the geography of land use.

Rose Zeller (Ph.D.'40) has now retired. Shespent the last two winters in Florida, but remained at home this year to continue reading.

Leo J. Zuber is a community planner with the Urban Renewal Administration in Atlanta, Georgia. In addition to his regular activities as a planner, he has founded and edited for the past two years, the SOU'BASTER, a journal of the American Inst. of Planners, Southeast Chapter.

*Due to late returns the Alumni News is appearing is two sections. Sherman R. Abrahamson (Ph.D. '49) is currently with the U. S. Government.

Richard and Rebecca Alberg ('55-'57). He is instructor at Bryant College and she is with the Rhode Island Development Council.

Lewis Alexander (Ph.D.'49) is on an ONR in Europe working on "Offshore Claims in Northeast Europe."

Esther S. Anderson (Ph.D.'32) is engaged as Geographer with the 1960 Census.

Mary Arendes ('54-'55). After extensive travel through the Philippines, she is now in England teaching at the USAF Burtonwood Independent School.

C. P. Barnes (Ph.D.'29) is Research Coordinator for the U.S. Dept. of Agr., and is a member of the Commission on the National Atlas.

Elizabeth Gregory Benedictus (M.A.'30) reports she is busy settling into an 18th century Chateau in Belgium and doing studies of Belgian endive production.

Bertrand P. Boucher ('51-52) is writing an article on Negro Distributional Patterns in 20 U.S. Cities at Montclair State College.

Lloyd D. Black (M.A.'36) reports that Lloyd D., Jr., was born in January 1958. He is working on the political geography section in the Encyclopaedia Brittanica.

Carl and Gertrude Bloomfield (M.A. '35) are both teaching in De-troit. They spent their Christmas vacation in Florida.

Adelbert K. Botts (Ph.D. '34)

reports one daughter is a graduate student at Cornell and the other is married.

Phyllis R. Boucher (M.A.'55) is teaching in Plymouth, Mass.

Hugh C. Brooks ('52) has a grant for a land use study of New Jersey.

Dieter Brunnschweiler (Visiting Professor '53-55) is investigating glacial moraines for studies in climatic morphology. His future plans are "many".

J. Herbert Burgy (Ph.D.'30) taught at the U. of Alberta in the summer and travelled in the western U.S.

Everett H. Bush (M.A.'47) will be heading the National Science Foundation's Summer Institute for high school teachers.

Robert G. Buzzard (Ph.D.'25) plans to retire after 50 years of teaching. He has recently acquired.

Henry L. Buzzard $(M_{\bullet}A_{\bullet}^{*}49)$ is with the AMS.

Harry H. Caldwell (Ph.D.'51) besides teaching geography at the U. of Idaho, is a planning consultant.

Robert D. Campbell has returned to the U.S. after a year at the U. of Peshawar as Fulbright Lecturer.

Albert S. Carlson (Ph.D.'39) is Professor at Dartmouth College.

Philip M. Caughey ('45-46) is assistant principal at Muzzey JHS in Lexingtom. Mass.

Phil E. Church (Ph.D.'37) besides teaching, is director of ten research projects, most of them with the government.

Catherine B. Cox (M.A.'42) is now stationed in Hawaii and plans to visit Japan.

George B. Cressey (Ph.D.'31) reports he is writing a book on Southeast Asia.

Harold F. Creveling (Ph.D.'5D) has planned much travel throughout the U.S., and is head of the Geography Department at Stroudsburg STC.

Floyd F. Cunningham (Ph.D.'30) conducted a geography travel study tour around the world during the summer of 1958.

Robert A. Davis ('50-52) is now completing his dissertation.

Neva McDavitt (M.A.'29) is Asst. Professor at Illinois State Normal University.

Veva K. Dean (Ph.D.'49) is a Professor at Fitchburg S.T.C., Mass.

Aubrey Diem (M.A.'56) returned to Sicily and has published an article on the Val D'Aosta.

Sigismond deR. Diettrich (Ph. D.'31) besides doing some work on the Florida citrus belt, is working with Erwin Raisz on the Atlas of Florida.

Bugene C. Dix plans to teach a course in the Graduate School of Bus. Admin. at Harvard.

John R. Dunkle (Ph.D.'51) had his book, <u>Historic Cities</u>, published.

Sidney E. Ekblaw (Ph.D.'34) is writing textbooks in economic and social geography in addition to many other actiwities.

Bart J. Epstein (Ph.D.'56) is a real estate representative with Stop and Shop in Boston.

Richard B. and Marcia D. Erickson ('57) are doing a population study of Cape May County, N.J.

Charles N. Forward (Ph.D.'58) is engaged in a study for the Canadian government on the feasibility of building a causeway across Northumberland Strait to Prince Edward Island.

Roland J. Fuchs (M.A.'57) moved to Hawaii and expects to do urban field work in either Japan or Formosa.

Woodford M. Garrigus (Ph.D. '58) is teaching at East Carolina College.

Alexander R. Gassaway ('57-58) is in Oslo. He has visited Holland, met many old Clark grads, and will be returning to the land of the Big PX next year.

Jon Glasgow ('56-58) says his present position is nil, but Uncle Sam changed that.

Joan Goodfellow (M.A.'55) is a graduate student at the Univ. of Toronto.

Frank Graves Dickey reports he is a member of the International Summer School Unit.

Neil Halkyard (M.A.'51) is Headmaster at Shepherd Knapp School, Boylston, Mass. and President of the Boston Taxpayers Assn. Alan Harris ('51-52) is Lecturer in Geography at Hull, England. He is currently engaged in agricultural studies of Yorkshire.

Willard C. Hessen (M.A.'50) is teaching history at Detroit Lakes HS, Minnesota.

George F. Howe (M.A.'24) reports a brand new grandson.

George M. Howe (Ph.D.'56) is a meteorologist for Travelers Insurance Co., and teacher at the U. of Hartford.

Frederick Hung ('51-52) has returned from Tokyo and is Visiting Professor at Carrol College. He is looking for a permanent position at the moment.

Esther K. Hunter (M.A.'40) returned from a year in the Netherlands, and is now fully occupied as the mother of five children.

Gilbert J. Hunter ('56-57) is finishing his M.A. thesis and will continue to work in urban planning.

Albert H. Jackman (Ph.D.'49) is with the Office of the Quartermaster General in Washington, D.C.

Olof G. Jonasson (Ph.D.'26) is currently publishing a book on economic geography and conducting studies in industrial development and localization in Goteborg.

William F. Kane, Jr. (M.A.54) is another of the Clark alumni in planning. He works in Pine Orchard, Conn.

Edward S. Kersch (M.A.'58) is working on a degree in urban plan-

ning at Wayne State U. and is with the Detroit Area Traffic Study.

Azra I. Rahman Khan (Ph.D.'53) is not only the mother of two young boys, but is also principal of a women's college in Lahore.

Clarence F. Koeppe (Ph.D.'29) has retired and is publishing a text Weather and Climate.

Rajnikorn Kunawat ('56-58) is a lecturer at Chulalongkorn Univ., Bangkok.

Louis E. Leipold (M.A.'46) is Chief of the Control Branch, AMS.

Minnie C. Lemaire (Ph.D.'35) reports no changes, she is at Mt. Holyoke College.

Raquel M. deLeon (M.A.'56) is holding down two big jobs. She is principal of the Liceo de Senoritas, and Professor of Geography at the University of Panama.

Theodore J. Liard, Jr. (M.A.' '48) is Regional Geographer for the U.S. Dept. of the Interior. His field trip to Puerto Rico and Virgin Islands was in connection with place name problems.

Dana A. Little (M.A.'56) is also a planner. He is working for the Dept. of Economic Development in Augusta, Maine.

Richard A. and Miriam L. Lockhart (M.A.'57) report themselves as planner and housewife.

Maria B. Maso ('53-55) is at Villanova U., Habana, and is also working for the National Planning Board.

Shannon McCune (Ph.D. '39),

Provost at the U. of Mass., is continuing to work on studies of Korea and the Far East.

Michael G. Mensoian (B.A.'49) is completing the Ph.D. requirements at the U. of Connecticut.

Frederick S. Merriam (M.A. '46) is Divisional Manager for Waddell & Reed in New York.

Wojciech Monkiewicz (M.A.'51) is doing research on rural settlements in the Soviet Union as well as separate urban, population, and transport studies.

Paul Cross Morrison (Ph.D. '41) contributed a chapter in Freeman and Morse, World Geography and is winding up his 28th year at Michigan State.

Norton Nichols, Jr. (M.A.'50) expects to remain as assistant to the Antelope Valley High School District in Lancaster, California.

J. Warren Nystrom (Ph.D.'42) is in International Relations with the U.S. Chamber of Commerce.

Anne K. O'Brien (M.A.'35) is "at home".

Ralph E. Olson (Ph.D.'46) became Danforth Associate at the U. of Oklahoma.

Guy N. Parmenter (Ph.D.'56) is an employee with AMS.

John W. Pawling (M.A.'56) reports he is a Ph.D. candidate at Michigan State.

Robert F. Perry, Jr. (Ph.D. '57) of Bridgewater STC completed extensive field work in the Maritimes. Canada during the summer.

Ada G. Piper (Summer Sessions '30-46) is Assistant Prof. at the District of Columbia Teachers Col.

Lawrence E. and Clara R. Randall (M.A.'50) report that he is a pilot for MATS, while she has completed an area study for the Maine Dept. of Economic Development.

Richard R. Randall (Ph.D.'55) signed in.

John W. and Gertrude M. Reith are doing a number of articles for various encyclopaedias. John will teach on board a ship taking a summer tour to Australia.

Edward Risley ('46-48) is now with the Joint Chiefs of Staff in the Office of the Secretary of Defense.

M. Catherine Roberts reports that she is retired and having a good time at it.

John Kerr Rose ('32) reports "only a second grandson" in addition to his work with the Legislative Reference Service in the Library of Congress.

Carl W. Ross (Summers '39-41) is a geographer with the Quarter-master in Natick.

Robert W. Rucker (M.A.'28) is at Bridgewater STC.

Richard D. Sands is back with us to complete his dissertation on the Climatology of Mexico.

Francis J. Schadegg (M.A.'37) plans to have his dissertation completed by 1959. At present he is with the Eastern Washington Col.

Gordon B. Schilz (Ph.D. '48)

has returned from Ethiopia after four and one half years. He is now at the U. of Omaha.

Sawat Senanarong (M.A.'53) has not returned to Thailand as yet, but is at Indiana University as a graduate student.

Ada M. Shawkey ('47-48) has written the teacher's manual for R. Glendinning's <u>Eurasia</u>, a part of the series, <u>Lands and Peoples of the World</u>.

Helen Boyer Smith (M.A.'38) has moved from Victoria, B.C. to Portland, Ore.

Helen L. Smith (Ph.D.'58) is at Wheaton College writing the city articles for Encyclopaedia Brittanica.

Chester E. Smolski (M.A.'53) reports his son, Michael, as his latest addition.

Raymond E. Specht (M.A.'47) has co-authored an article Taconite in the Lake Superior iron mining district.

Karl Stacey (Ph.D.'55) is a Fulbright Visiting Lecturer at the Tokyo Institute of Technology.

Myron Starbird ('54-55) recently left Clark after a five weeks stay. The outcome of his visit was the successful completion of the Ph.D. orals.

L. LeMar Stephan has completed a color filmstrip on the Geog. and Resources of Georgia distributed by SVB.

Mrs. R. N. Stickney (Hazel Latendress) logged in with us.

Alfred R. Sumner (Ph.D. '49)

conducted a tour of South America and the Amazon Basin and will be in Iceland this summer.

Grady O. Tucker, Jr.(Ph.D.'57) is a market analyst for Montgomery Ward in Evanston, Ill.

Sister Mary Ursula (Ph.D.'58) is at Mt. Aloysius Jr. College in Cresson, Pa.

James E. and Jean B. Vance, Jr. (Ph.D. '52 and '58) report a daughter born to them in November, 1958.

Wouter VandeBunt ('51-52) is with KLM, the Hague in Commercial Product Planning.

W. Van Royen has married Adrianna de Bruyn of the Netherlands. He is with the U. of Maryland.

Charles B. Varney (M.A.'53) has a new daughter as of last July. He has completed the manuscript for The Dakotas, an AGS publication.

Paul Vouras (M.A.'51) logged in with no changes reported.

Lillian H. Wallace (M.A.'41) is at STC, Westfield, Mass.

Seymour West (M.A.'41) writes that he has "four boys who are concentrating on growing up, very loudly."

Katheryne T. Whittemore (Ph.D. '36) is at SUNY College for Teach. in Buffalo. She presented a paper on geographic education at the NCGE last fall.

Marion I. Wright (M.A.'46) reports that the R.I. Coll. of Ed., where she is teaching, has moved its campus and the potentials of the new campus are tremendous.

We are indeed very happy to report that we have heard from David Kai-fu Lo (Luo Kai Fu). He received his Ph.D. in 1944 and is now a Research Fellow at the Inst. of Geography, Academia Sinica, West Suburbs, Peking. Although he says he is a "sad case" in so far as family changes and additions are concerned, Dr. Luo has undertaken a tremendous amount of work in physical geography in China. We hope to hear from him from time to time and will, of course, report any news in The Monadnock.