

THE MONADNOCK

of the

CLARK UNIVERSITY

GEOGRAPHICAL SOCIETY



“ . . . I am persuaded that there is a practical value in abstract considerations . . . even for younger men, and that if a general scheme of work in accordance with some broad and philosophical view of one's chosen science is formulated by a young geographer early in his career, he will profit greatly from it; for he will thus be led more surely and directly to detect all the facts that are pertinent to any inquiry he may enter upon.”

—WILLIAM MORRIS DAVIS

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MERRY CHRISTMAS

The Staff of the MONADNOCK extends its best wishes for a very happy Christmas to all former and present members of the Graduate School of Geography. At this time, we also extend our warmest appreciation for the contributions which have made this edition possible. The response to the questionnaire has been extremely satisfying. We would like to remind those who have not completed it to do so as quickly as possible. This is the only way we have of maintaining contact with CUGS members. With your coöperation we can continue to keep you informed of the activities of your former classmates and associates.

THE MONADNOCK STAFF

Editor

William Koelsch

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TRANSATLANTIC GREETINGS FROM DR. VAN

Although Dr. Van and his wife are apart from us this holiday season, the MONADNOCK staff knew you would not want to miss his annual warm best wishes. His letter follows:

From Zurich, Switzerland, Mrs. Van and I send our best wishes for a Merry Christmas and a Happy New Year to the alumni and alumnae and to the graduate students at Clark. It is nice to be in the city where Mrs. Van lived as a child and where forty years ago I obtained my Ph.D. degree, now lecturing where I once was lectured to. Meanwhile I have been trying to ascertain what changes in land use will occur in the six nations involved if the Common Market Plan becomes a reality. This is an example of co-operation which may grow and be followed elsewhere, and may eventually lead to a better and more geographic world. That is a hopeful note on which to end the old year and start the new one.

S. Van Valkenburg

GRAND FALLS

Joseph Hickey

The following article was written especially for The Monadnock. The author spent a month this past summer in the area, studying the mining industry of the Ungava peninsula.

Situated deep in the heart of the subarctic wilderness of the Labrador Peninsula of eastern Canada is one of the lesser known wonders of the world, Grand Falls. These falls, an estimated 316 feet high, are nearly twice the height of Niagara and mark the point where the Hamilton River plunges down off the Labrador-Ungava Plateau to the valley of the Lower Hamilton below.

Grand Falls was always avoided by the local Montagnais Indians as the home of evil gods, because of the great roar of the falls. The first white man to see Grand Falls was John McLean, a Hudson Bay Company trader, in 1839. Very few white men saw the falls in the next 100 years, as the Labrador wilderness remained one of the great "terra incognitas" of the world.

Since World War II central Labrador has rapidly become known. With the expected decline of the Mesabi iron mines attention has been focused on the Quebec-Labrador border area as a possible successor to the Mesabi. This interest in the Labrador ores has undoubtedly played a key role in favoring the construction of the St. Lawrence Seaway. By 1954 the Knob Lake iron mines were in operation and shipping ore. The immediate success of this venture stimulated further interest in the area.

One scheme involved the harnessing of Grand Falls for hydroelectric power. The Hamilton River

drops over 1000 feet in a few miles in the vicinity of Grand Falls and engineers estimate that there is a potential of over 4,000,000 HP here, one of the greatest natural power sites in the world. To open up the falls for development a road was built during the summers of 1956 and 1957 from the Knob Lake-Seven Islands railroad eastwards 104 miles to the falls. The developers are now trying to find customers for their power. The main drawback is distance -- the falls are over 200 miles north of the St. Lawrence. Nonetheless, engineers and economists insist that this plan to transmit power to the St. Lawrence is economically feasible and that industry will be attracted to this area by the abundant supply of power. As soon as a guaranteed market for power develops, the falls will be harnessed.

Unfortunately as part of the power scheme the water in the Hamilton River will be diverted upstream by canal around the falls in order to obtain a greater "head" and Grand Falls will be only a dry stream bed.

This past summer I was fortunate to see Grand Falls while it was still in its original unspoiled state. A party of six from the McGill University Subarctic Research Laboratory at Knob Lake decided to see Grand Falls before leaving Knob Lake for home. The party, all geographers, included Norman

Drummond, Professor of Geography at McGill; Graham Humphrys, of Bristol Univ., Kenneth Jones of London University, Ivan Hamilton of Queen's Univ., Belfast, Alan Cooke of Dartmouth College, and myself. Through a contact in the British Newfoundland Company (BRINCO), the developers of Grand Falls, we were able to arrange transportation from the railroad to the falls.

We left Knob Lake on one of the semi-weekly passenger trains to Seven Islands and travelled south seventy miles to Esker, the west end of the Grand Falls road and the BRINCO Base Camp. Our transportation consisted of a pickup truck with a canvas tarp stretched over the truck body for shelter against the constant showers. Fortunately for us, the road had just been completed and we had a passable motor route to within a half mile of the falls.

The road passes through untracked taiga forest with numerous large burns. Black spruce predominate, with white spruce on the better soil and tamarack in the swamps. The quality of this forest is very poor and it has no foreseeable commercial value. Reindeer moss (lichen) carpets the floor of the forest. Here, however, unlike Lapland, the moss is not used, as the native caribou are nearly extinct and no reindeer have been imported. The landscape is generally the typical monotony of an old peneplaned shield area, relieved only by occasional monadnocks. Although it was only late August several of the higher monadnocks to the north of the road were snow-capped. An unverified account said that snow had remained on these hills all summer long. (Subsequent study of a Canadian Government aeronautical map disclosed the existence of several hills about

3,000 ft. high in that vicinity, or about 1400 feet higher than the normal elevation of the plateau in this section.) Numerous outcrops of the underlying granite-gneiss complex were visible. Probably the most obvious feature of the landscape was the existence of a myriad of lakes. This area is called the Lake Plateau and in certain areas appears to be more water than land. Eskers were another common feature. Bogs were also very common, especially the so-called "string bogs" (named from the strings of peat crossing the bog and separating pools of stagnant water). A more unusual feature were the boulder fields (felsenmeer). We finally reached our destination, a field camp eight miles from the falls used by the construction firm building the road.

The next morning we were given a ride down to the end of the road, which stops at the banks of the Hamilton River. Eventually the river will be bridged at this point. The Hamilton River here drops over 100 feet in a series of wave-filled rapids above the falls, (see Fig. 1) becoming narrower, faster, and more powerful. As there is no well-defined trail down the valley, it was necessary to fight through dense spruce forest. At last we worked our way around the deep bowl-shaped basin into which the falls tumble and had our first glimpse of the falls. (Fig. 2.)

The torrent of water does not drop perpendicularly, but appears to shoot outward as though propelled by the terrific momentum it gained in the rapids above the falls. Clouds of spray and mist rise upward from the deep pit, helping to cause many lovely rainbows. The basin itself is about 500 feet deep and is incised deeply into the native granite-gneiss. The river



Fig. 1. Hamilton River Rapids



Fig. 2. Great Falls

takes a right angle turn to the left through deep, narrow Bowdoin Canyon with its precipitous walls. At the far side of the basin, directly opposite the falls, is a large semi-permanent snow bank, probably fed by the clouds of spray which provide abundant moisture and which also seem to keep down the temperature of this sheltered pocket sufficiently for the snow bank to remain through most summers. Near the snowfield is a cairn with the inevitable container for signatures. We added ours to those already present and thus became members in a very select fraternity. We were told that only about 325 people (barring any Indians who had been brave enough to overcome their superstitious dread of the falls) had ever seen the falls. Most of these were construction men who helped build the road. We also fancy that we were the first geographical expedition to reach Grand Falls -- "The 1957 McGill University Grand Falls Geographical Expedition".

We were very fortunate to see Grand Falls in its original state. Before this summer Grand Falls was too remote to be reached except by canoe or on foot. Light seaplanes afforded the only other way to reach this district. Grand Falls will be overrun shortly by tourists (as yet there are no old tin cans or cigarette wrappers littering the ground) or, more likely, will be gone completely -- a dry falls. Our civilization requires an insatiable supply of resources, especially ores and sources of power, and necessarily must encroach steadily on the most remote corners of the world to help appease this appetite. Still, I cannot help but regret this impending doom of one of the greatest natural wonders of the world.

HELP WANTED

The newsletters sent to the following CUGS were returned to the Editorial Office by the Post Office. Can you locate any of these people?

George MacGillivray
Jen-hu Chang
Stanley Mackun
Daniel Pawlikowski
Curtis Martin
Genevieve Clark
Capt. John McCollins
Frederick Hung
Harley P. Milstead
Ching Chieh Chang
Samuel Dashiell
Shirley Van Blarcom
Khattab Saggar Al-Ani
H. Harrison Russell
John H. Dean
Major Burke Beatria

IN MEMORIAM

We are sorry to report the deaths of two of our fellow CUGS in the past year. May they live long in the memories of those who knew them.

Ann Hanratta, M.A., 1928, of St. Johns, Michigan, on Nov. 28, 1956.

Carl L. Stotz, Ph.D., 1937, of Detroit, Michigan, on July 21, 1957.

1957-1958 CUGS Officers

Richard Ellefsen	President
Sandy Gassaway	Vice-President
Barbara Saydam	Secretary
Joe Hickey	Treasurer
Jean Salvi	Social Chairman
Bill Koelsch	Editor MONADNOCK

NOTE: When moving, send us a card with your old and new addresses

A REPORT ON FIELD CAMP ACTIVITIES

Page 134 of the 1957-58 Clark catalogue contains the following stark statement: "399a. Field Methods and Studies. Required of every graduate student. First Three Weeks of every year. The Staff." This masterpiece of Massachusetts taciturnity can hardly disclose anything of what the actual field camp experience was. As our readers know, field camp is all of a piece, like an eating-house stew, and as is usual in such cases, the fellow that orders it doesn't know what is coming. An advance letter from Dr. Lougee, Camp Director, shed more light, for it described the camp area, what we would do there, and above all, what to bring -- "Heavy sweaters", "stout shoes", "flashlight" etc. Finally the day came, the clan began to gather, and with everything from sleeping bags to photo-developing equipment set off for Sunny Connecticut in transportation running the gamut from red convertible to station wagon to Least but not last) Dick Ellefsen's Volkswagen. Unlike what is reputed to have occurred in previous years -- see back issues of this publication -- all members of the camp got there without going too far off course, except for a few wrong turns at the Charter Oak Bridge.

The camp site was Camp Sprague, belonging to the New Britain Girl Scouts (who had wisely gone home for the winter). It is located on the edge of Job's Pond, a filled kettle hole which gave the CUGS an opportunity for swimming and rowing by day and for feeling the effects of cold-air drainage in a kettle hole by night. The area of survey intersected both the Triassic formations of the Connecticut Lowland and the crystalline Eastern Upland, a physiographer's dream area for

the study of late glacial history and phenomena. In addition, the busy cities of the Connecticut Lowland offered a chance to sit on the sidelines and watch the fight between the real estate developer and the tobacco farmer, with all weapons replaced by cold cash and no holds barred. Dr. Lougee was kept perpetually on wheels visiting each team to examine potholes, explain deltas, discuss varved clays, and stimulate each student to realize the significance, in terms of the geological history of the area, of each feature to be seen. Another big mileage man was Ph.D. candidate Roland Fuchs, who gave enthusiastically of his time to fill the gap left by the resignation of Dr. Higbee. In addition to these studies our commuting instructor in climate, Dr. Warman, gave us some practice in weather analysis and instrumentation. For 15 days Camp Sprague boasted a weather station, with the most weasel-worded forecasters in the state of Connecticut enlightening the group in the morning that it was going to be warmer, in the evening that the forecast was for a drop in temperature, and when the roof leaked over the instruments that rain might be expected.

One of the annual special projects of the camp was the micro-climate study, an early morning temperature survey of New Britain, notable this year in that we were allowed to lie around in bed until 4 A.M. (we know, dad, things were tougher in the old army). We repeated our observations in the afternoon, taking in all about 120 readings. Later analysis showed enough variation within the city, caused by slope, nearness of manufacturing plants, changes in per-

meability of the ground surface, etc., to prove that one should not get upset when one's thermometer does not agree with the weather man's -- both could be right! A second special project, under Dr. Murphy's direction, was an attempt to delimit the Central Business District of New Britain, a sporting event roughly comparable to the Radnor Hunt, since for the trip to the city a change of shirt was de rigueur. Our CBD took us a whole day to hunt, and like the fox at Radnor the quarry was a bit smaller than the estimates of the local Chamber of Commerce would lead one to believe.

During our intensive session, broken only by quick flights to the nearest T.V. set during the period of the World Series, we collected a wantlepiece-full of everything from dinosaur tracks to Dutch Masters, and found time to show them to a large number of interested visitors. On the first Sunday our genial and talented cook, Walter Ledger, whom some of the CUGS will remember from previous years, prepared a turkey dinner which would to honor to Oscar of the Waldorf and which was attended by about seventy-five persons, including a contingent from Yale led by Stephen Jones, a group from the University of Connecticut and a delegation of wives, faculty, and friends from Clark, headed by President and Mrs. Jefferson. On the second weekend, Dr. Erwin Raisz came to teach us his new concept of "Geostenography" and to conduct a sketching class the results of which will go undisplayed in almost any of the world's great museums but which did uncover some hidden talents. Professor Caillieux of the Sorbonne lectured on his studies of pebbles in the reconstruction of geologic history; this lecture was attended by Mr. and Mrs. Shaler Dow of East Haddam, who are nephew and neice re-

spectively of the great American geologists Shaler and Pumpelly. That Sunday we held a grand tour of the area under study with an eight car motorcade, giving CUGS and guests a chance to see what the other teams had been up against.

As can be seen, the two weeks in the field and the subsequent one of writing field reports entailed a lot more activity than the catalogue might suggest. A principal value of the experience was to break the ice (the metaphorical ice as well as that in the washbasins), to get acquainted with one another, and to set the pace for a year of intensive activity. We found ourselves to be a pretty spirited group, and the 1957-58 Workroom crew is still running hard after the momentum of that auspicious start.

WEDDING BELLS

We congratulate the following CUGS in residence upon their June weddings:

Roland Fuchs, Ph.D. candidate, to Gaynelle MacAuliffe, June 15, 1957.

Elizabeth Dodd, Dr. Van's secretary, to David Alcorn, June 22, 1957.

Workroom Committees

Jon Glasgow	Grad. Student Assoc.
Dick Kopec	Chmn. Rules Comm.
Don Burstein	Rules Comm.
Art Lord	Sergeant-at-Arms
Paul Mika	Chmn. Workroom Comm.
Al Mitchell	Workroom Comm.
Kanis Yusuf	Workroom Comm.

The 1957-58 Visiting Lecturer program at the Graduate School of Geography was inaugurated in November by Dr. Harold H. McCarty, Professor of Geography and chairman of the department at the State University of Iowa, Iowa City. The speaker is the author of a number of works on economic geography, including the article on agricultural geography in American Geography: Inventory and Prospect. Dr. McCarty gave three formal lectures, and was available for consultation and discussion sessions with individuals and small groups throughout the three day period of his visit.

Dr. McCarty's first lecture, November 13th, was concerned with the relation of geography to human behavior. He noted that geography is fundamentally a problem-solving process, concerned with certain situations resulting from human activity, placing it among the social sciences. He outlined the steps in the solution of a geographic problem, and stressed the necessity for quantitative standards as being necessary for the advancement of geography as a science. In the investigation of geographic phenomena, the geographer must be guided by the assumption of an understandable order in the universe, taken from the physical sciences, and also by the assumption of multiple causation, taken from the social sciences. The geographer, recognizing the fact that situations in social science can be understood only in the light of a number of factors, must take each factor in turn, applying it to his problem and seeking in each case to what extent correlations exist between them.

A tea was held at 3 P.M. on

November 14th in Dr. McCarty's honor, attended by about 45 persons. After tea the guest of honor spoke on "Measurement in Economic Geography". He outlined the methods of research being developed in his department. In part this method consists of gathering all possible data on a problem and presenting it cartographically and statistically, including frequency distributions. Next the geographer studies the data and comes up with hypotheses ("scientific hunches") concerning factors which should affect his situation. Then he examines maps of other phenomena, beginning with the easiest possible explanation, and tries to measure their degree of association by correlating the maps, making a scatter diagram and plotting the deviations from the average relationships. He does this for all factors impinging on the problem, and eventually arrives at his solution. The whole must be based on some theory of human motivation, which can be the source of many hypotheses.

During his stay Professor McCarty held an hour session with the CUGS as guinea pigs with a set of maps he had brought along, testing the ability of trained geographers to discriminate among gradations of color or to make rapid visual correlations between maps. The third lecture, on Friday afternoon, developed further some of his ideas on map making and measurement. Dr. McCarty noted that different levels of generalization require different degrees of refinement in basic source material. Geographers must not be afraid to use county data on a map of national scale, for example, even though on the county level the phenomenon being measured

may not be uniformly distributed, since every science works with certain plus or minus tolerances. The speaker also discussed the topic of regions, warning that a region defined with one set of criteria cannot be correlated with a region based on different criteria.

The guest lecturer closed his series of lectures by challenging the group with the necessity of building geography to an intellectual unity, to advance it to a science where people can talk in the same terms and check each other's results, and where phenomena can be compared according to uniform standards.

STAFF NEWS

Dr. S. Van Valkenburg began a busy summer by teaching a summer school course called Problem Areas of the World: A Political Geographic Evaluation. He also worked on a high school geographic text which he is writing in association with Dr. Warman. In the middle of August Dr. and Mrs. Van left Worcester for a five-month stay in Europe. While there, he has been studying the possible effect of the proposed common market plan upon the economies of the participating countries. He has confined his studies in a large part to agriculture, and during his stay has participated in conferences on the subject in Rome, Paris, Bonn, and The Hague. He notes rather wryly that his English needs editing after all the languages he has spoken recently. During part of his stay he is lecturing at the University of Zurich, where he studied years ago. Dr. and Mrs. Van will return to the United States about the fourteenth of January, in time to prepare for

the second semester courses.

Dr. Erwin Raisz spent the spring semester at the University of Florida teaching a record class in cartography, working on the Atlas of Florida, and enjoying several excursions into the varied Florida landscape. At the Cincinnati meeting of the Association of American Geographers he gave a talk on "Geostenography", which he had developed in Brazil the preceding year as a technique for recording the landscape in regions without detailed maps. Last summer Dr. Raisz worked on a forthcoming textbook on cartography, and spent several weeks in New York City and in Washington, D.C., examining maps and air photos in preparation for a large landforms map of Mexico. Currently Dr. Raisz is working on a set of Baluchistan maps for the archeologist, Dr. Henry Field. He is also offering work in advanced cartography and map and air photo interpretation at Clark.

Mr. Guy Burnham is teaching the usual courses in cartography to undergraduate and graduate students. In addition to his classes, he is advising several CUGS on illustrative material for their theses and dissertations and is guiding two students in special projects for honors work. Last summer Mr. Burnham spent in keeping production high in the Salt Mine. When asked how productive his garden was, Mr. Burnham will only smile and observe that it was a dry summer.

Dr. Henry Warman had Northwestern University as the base of his operations during the summer term. While there he conducted a Workshop in Geography for teachers, supervisors, and administrators in the Chicago area. In August, Dr. Warman left Evanston for Miami, where he

enplaned for a trip which was to take him to Columbia, Ecuador, and Peru. Traveling by every mode of native transport available, Dr. Warman criss-crossed the Andes visiting capitals and port cities, and making numerous side trips including one to the ancient Inca cities of Cuzco and Machu Picchu. Since returning to Clark this fall he has addressed the Vermont Education Association on the possibilities of two-week workshops in geography for teachers at the end of the school term. He is also re-reading the final draft of the textbook which he is co-authoring with Dr. Van, tentatively titled Geography in Human Affairs. Present plans are for the book to be far enough along at the publishers to permit preliminary advertisements this Spring and marketing in time for the opening of school in the Fall.

Dr. Raymond E. Murphy is enjoying a busy semester, for in addition to his regular teaching and editorial duties he is Acting Head of the School of Geography while Dr. Van is in Europe. He is also currently head of a committee to set up census tracts in the towns around Worcester. Last summer Dr. Murphy spent in and around Worcester, working on his forthcoming Urban geography text. The town of Sturbridge is setting up a zoning By-Law, and Dr. Murphy also spent some time as an advisor on that project to the town's planning board. On January 18th, Dr. and Mrs. Murphy will leave for the University of California at Berkeley for a semester as Visiting Professor. While in California Dr. Murphy will offer upper division courses in primary production and urban geography, and conduct a graduate seminar in urban geography. The Murphys will return to the campus in June. During his absence, Dr. Murphy will have as his stand-in,

Dr. Robert C. Estall, of the London School of Economics.

Dr. Richard J. Lougee has returned from a fruitful half year of sabbatical leave. Much of the time was utilized in research and writing. Furthering his investigations into post-glacial uplift, Dr. Lougee and his son Gerry took the Rambler as far as the Canadian roads would take them and then went further by train to James Bay and to Northern Labrador. One of the high points of the trip was locating marine shorelines at altitudes of over 1000 feet in elevation. Since his return to Worcester, Dr. Lougee has directed the Fall Field Camp and has published an article, "Hanover in the Ice Age", in the November issue of the Dartmouth Alumni Magazine. He has also lectured to the undergraduate Geographical Society and shown slides and samples from his summer trip. Dr. Lougee will read two papers before the gathering of the American Association for the Advancement of Science at Indianapolis in December, one on "Pre-Wisconsin Peat in Millbury, Mass.", and the other on "Trench Diversions and Salton Basins".

CUGS PREPARE FOR LUNAR ERA

As evidence that this year's workroom group is not lacking in foresight, we print the following notice which appeared recently on the bulletin board:

CLARK UNIVERSITY GRADUATE SCHOOL OF LUNOGRAPHY

"Courses of instruction"

1. Areal distribution of Green Cheese
Moonglow Ellefsen
2. Physiography of Moon Cheese Deposits - Harvest Moon Pendelton
3. Russian Lunography New Moon Sherman

SCHOOL BELL RINGS; CUGS GATHER IN RESPONSE

The Clark School of Geography has opened its doors for the new term, and although the headmaster is absent the other masters and tutors are active as ever. As in the case with any opening school term, it is rather easy for the discriminating observer to characterize the various classes.

The FRESHMEN (those in their initial year of M.A. residence) are wide-eyed and innocent, snowed under by an avalanche of works they have never read by authors they never heard of. One can generally spot a Freshman as he scurries from class to class with his Hartshorne or his AGIP tucked tightly under his arm, and sporting the jacket or class ring of his undergraduate alma mater. Glamour girl of this year's Freshman class is JEAN SALVI, (B.S. 1957, Salem State Teachers College, Mass.) who comes from Everett. Jean, who kept cool in the cartography lab this summer, is interested in human and cultural geography. Jean's mother keeps her well supplied with cookies and cakes, which she shares unstintingly with the Workroom.

As a lover of fine cigars, DONALD BURSTEIN (B.S. 1953, Columbia College of Columbia University) brings a note of Ivy League sophistication to the Freshman class. Last summer was spent in the Cartography lab. Don's home is New York City.

Ranking member of the Workroom Officer's Club is ARTHUR LORD (B.S. 1955, Bridgewater State Teachers College, Mass.), who has just finished active duty with the Marine Corps. Art is interested in physiography and archeology, and in his young son. In honor of his military experience, Art has been named Sergeant-At-Arms of the Workroom.

WILLIAM KOELSCH (B.S. 1955 Bucknell University) comes to Clark from Transportation Corps offices at Brooklyn and Idlewild Airport. He is interested in political and cultural geography, Eastern Anglo-America, and geography in undergraduate liberal education. Bill wants to go on for the Ph.D. and teach in a liberal arts college.

Coming to us from a year of public school teaching in Maine is ALBERT MITCHELL (B.S. 1954, Farmington State Teachers College, Maine). Al is perhaps the most widely traveled of the Freshman class, having taken the Grand Tour of Japan and Korea at the taxpayers' expense. He is interested in human and political geography, and plans to teach again after getting his M.A. at Clark.

Runner-up for the most travel mileage is GERALD OVERSTREET (B. A. 1956, Northwestern State College, Oklahoma). Gerry comes to us as a Freshman with advanced standing, since he did graduate work at the University of Edinburgh last year and traveled in the British Isles and Europe. He is interested in human and educational geography, and hopes to return to Europe again at the conclusion of his year at Clark.

Still another contestant in the Freshman mileage contest is BARBARA SAYDAM (B.A. 1948, University of Denver). Barb is interested in the Middle East having lived in Turkey, and in cartography and historical geography. She plans to "find an interesting job" after finishing at Clark.

The SOPHOMORES (second year M.A. or thesis writers) are denoted by the easy assurance most Sophomores anywhere seem to carry as their birthright. They have undergone their baptism of fire (electric shocks from the workroom switchboard) and know that it is possible to get through that first year unscathed. One can generally find them behind a mass of books, data, and typewriter paper, putting together the evidence of their research skill into that last major hurdle, the thesis.

About half of our Sophomore class comes from Indonesia, a country with a rather different climate from that of Worcester. I MADE SANDY (B.I. 1954, Bandung Teachers College), guards the entrance to the Scholars' Cubicle. Last summer was spent in school at the University of Wisconsin. Sandy is interested in the physical side of geography, and will return to Indonesia and government work after completing his work here.

In front of the radiator in the Scholars' Cubicle one finds ELISABETH HUKA (B.I. 1952, Djakarta Teachers College). Elisabeth took cartography this summer in the cool Salt Mine. Interested in physiography, she plans to do research work at the Geographical Institute after returning to Djakarta.

Joining Elisabeth in the cartography lab this summer was MAARTINI KARNO (B.I. 1952, Djakarta Teachers College). Maartini is interested in economic geography, and is presently working on a study of Kansas City. She plans to return to her former position at the Geographical Institute, Djakarta.

The other male member of the Indonesian delegation is ZAINI NADIRSJAH (B.A. 1955, Gadjahmada University). He is interested in human and cultural geography and

plans to do research after leaving Clark. Last summer Dir saw parts of the United States, including Washington, D.C., and Niagara Falls.

Tropical climes send other students to the cold Northeast. RAJNİKORN KUNAWAT (B.A. 1953, Chulalongkorn University) plans to return to her native Thailand after finishing her M.A. work. Raj spent last summer intensively learning cartography, managing to retain her warm smile throughout.

NIDIA AVILA (B.A. 1955, University of Panama) took half of the cartography course last summer and is finishing it up this semester. Nidia is interested in economic geography. She was trained as a teacher, and plans to return to that profession after leaving Clark.

GEORGE CORINALDI (B.S. 1951, Washington Square College of New York University, M.A. 1953, *ibid.*) is currently engaged in a study of Africa, a continent in which he has a direct interest since he spent a three year term in Ethiopia as a teacher. He is interested in climatology particularly. After Clark and his second M.A. George plans to teach and do research in the arid zones of West Africa.

From Brooklyn, New York, comes JESSE PENDLETON (B.A. 1956, Central State College, Ohio). Pen is interested in geography's role in education. He plans to teach after disposing of his military obligation.

JOHN SHERMAN (B.S. Boston University) is currently working on his thesis after two years of course work. He is interested in population and settlement geography. After finishing with his writing, John would like to take a job with a planning agency or perhaps the Census Bureau.

The JUNIORS (year of residence for the Ph.D.) contain the respected leaders of the CUGS, men whose advice is carefully treasured by the Freshmen, who wonder if they will ever reach that exalted state themselves. As is common among Junior classes anywhere, we have a number of transfers from other schools. One of them is PAUL MIKA (B.A. 1953, University of Pittsburgh, M.A. pending, George Washington University), who maintains with Sandy Gassaway the continuity of GW students at Clark. He is interested in economic and political geography, and plans a research career after his Ph.D. Paul's bulldog pipe no doubt gave him solace as he worked on his M.A. thesis last summer.

RICHARD KOPEC (B.S. 1952, Shippensburg State Teachers, Pa., M. Ed. Pennsylvania State University) spent last summer as a draftsman for Underwood Corporation. His major interests are physical geography and his family. Rich comes to us from teaching in a private school in Connecticut, and plans to teach in college after Clark.

Coming out of the great Northwest is RICHARD PRESTON (B.S. 1955 Central Washington College of Education, M.A. 1957, University of Washington). Rich is interested in economic geography, and gets a chance to develop his ideas by teaching the elementary course in economic geography here. After further study in urban geography and transportation, Rich plans to teach.

HARRY KIRCHER (B.S. 1938, University of North Carolina, M.A., 1950 Washington University of Saint Louis) came on leave from the Federal Reserve Bank of Saint Louis. Harry's major interest is in economic resources. He plans to return to the research department of the FRB.

Also among the JUNIORS there are a number who might be termed the "Old Guard", since they have been in residence at Clark prior to this semester. One of these is RICHARD ELLEPSEN (B.A. San Jose State, Calif., M.A. pending, Clark), who is president of the CUGS this year. Dick is putting the final touches on his thesis, Displacement of Dairyland by Subdivision Encroachment in the San Francisco Bay Area. He is interested in agricultural geography, and his goal is college teaching.

ROBERT LINGNER (B.A. 1954, Clark, M.A. 1956, University of Maine) has his own office on the top floor of the geography building, where he is teaching the undergraduate geology course and taking courses toward his Ph.D. Bob is interested in geomorphology and climate, and in his spare time indulges a love for the organ. Last summer he taught in the summer school at Clark.

A world traveller and man of broad interests is ALEXANDER GASSAWAY (B.A. 1950, University of Virginia, M.A. 1957, George Washington University). In geography Sandy is interested in Scandinavia, climate, and urban, and got a chance to practice the last with Dr. Murphy last summer on the Sturbridge project. After Clark he hopes to work with a grant on the organization and promotion in research.

Representing Pakistan again this year is Miss KANIZ YUSUF (B.A. 1945 Islamia College, M.A. 1947, Punjab University). Miss Yusuf is interested in political geography, and her dissertation topic is concerned with the economic cooperation of Pakistan, Irba, and Afghanistan. Last summer she worked in the library and studied for her German exam, which she passed successfully in the fall.

JOSEPH HICKEY (B.A. 1954, Clark

M.A. pending) spent last summer doing research on the Ungava Peninsula, in preparation for his thesis Regional Study of Central Labrador. Joe is the man all the Freshmen turn to for advice on what Clark is like outside of the workroom. After his work at Clark is over, Joe plans to seek "the good life", which quest has been sometimes laid aside under the pressure of the academic year.

From the Old Northwest to the Cold Northeast comes JON GLASGOW (B.A. 1956, Miami University, Ohio, M.A. Clark, pending). Jon is interested in political and human geography. After disposing of his draft board problems, "Happy" hopes to teach.

WILLIAM THOMPSON (B.S. 1940, University of Washington, M.A. 1950, ibid.) is a part time residence student. Will works at the Quartermaster Research Center in Natick. He is interested in regional and physical geography and indulges in photography as a hobby.

Our last and most careful consideration must be reserved for the SENIORS, whose residence has been completed and who are now hardly ever away from their desks, drafting and redrafting that particular dissertation which is to add materially to the sum of man's accumulated knowledge. The lower classes view these worthies with that awe which is reserved for those intrepid souls who must shortly venture out into the world at large, which is reputed to be as cold all the time as the workroom is on weekends. Among these hardy souls is DONALD ATWELL (B.A. 1949, Denison University, M.A. 1952, Clark), who is presently on leave of absence from the I.C.A. Don is interested in human geog-

raphy and in history. He worked on his dissertation here last summer, which has for its subject the political geography of East Pakistan, for which he did field work last year.

ROLAND FUCHS (B.A. 1954, Columbia College of Columbia University, M.A. 1957, Clark) is writing his dissertation on Intra-urban Variations in Residential Values of American Cities. Last year was spent at the Russian Institute at Columbia under a Ford Fellowship. Roland is interested in urban and economic geography and in the Communist world, and plans a career of college teaching.

SISTER MARY URSULA, R.S.M. (B.A. 1946, College Misericordia, M.A. 1953, Catholic University) comes to us from her calling as a college teacher in Pennsylvania. In geography she is interested in human and regional aspects, but she also has a background in philosophy, music, and literature. Sister's dissertation is titled Historic Patterns of Catholic Population in Eastern United States.

Other "Old Guard" students here this year are:

WOODFORD GARRIGUS
RICHARD SANDS
LANE JOHNSON
LAWRENCE DELLIQUADRI

Remember, when moving to a new location, send us your old and new addresses.