Reproduced from the *Association of Pacific Coast Geographers Yearbook*

Geography at the University of Washington

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The Department of Geography at the University of Washington (UW) has played a significant role in the evolution of American geography. This summary presents the salient points of its contribution from its earliest beginnings 100 years ago. Geography instruction and research are closely linked with the history of UW. The university began in January 30, 1861 with pre-college- and college-level instruction. The pre-college program was discontinued 30 years later, when UW moved from downtown Seattle to its present site.

The Early Period

Geography is first noticed in the 1890 Report of the Regents. Political Geography is listed as a preparatory course and Physical Geography is included in the program for the second year at university level. President Thomas M. Gatch, one of the ten members of
The faculty, was responsible for Mental and Moral Science, and O.B. Johnston for Natural History. They most likely taught these geography courses. In 1893–94, geography is listed among the admission requirements for students entering without a high school graduation document.

In 1895, the university moved 4 miles from the old downtown site to the new campus on the hill between Lake Union and Lake Washington, at the end of the electric streetcar line. Denny Hall became home for all university functions, including the Department of Geology and Mineralogy. The instructional program was organized into twenty departments in five colleges. The Department of Geology and Mineralogy was first placed in the College of Literature, Sciences, and Liberal Arts; in 1913 it became part of a separate College of Science, which in 1934 was merged again to form the University College (later the College of Arts and Sciences). Geography, at the time taught in the geology department, moved from one administrative frame to another as a reflection of its role, or as an administrative convenience.

For the first years on the new campus, the university administration and instruction was confined to Denny Hall. When the new Science Hall (Parrington) was completed in 1902, Geology and Geography moved and remained there until 1930, when they relocated to Johnson Hall. In 1942, Geography moved into the new Social Science Building (Smith Hall) while Geology remained in Johnson Hall. Geography has occupied essentially the same facilities ever since.

President Mark W. Harrington was for years a distinguished professor at the University of Michigan, and had, shortly before his election to this position, vacated the position of chief of the United States weather bureau. In 1895–96, he offered courses in Theoretical Meteorology (using a German textbook), Elementary Meteorology, and Political and Commercial Geography. Other geology and geography programs were initiated with the arrival of Henry Landes. Landes became the head of the geology department in 1895 and taught courses in Terrestrial Physics and Geography as well as Physiology. The former was "recommended to students of geography and those who expect to teach in secondary schools." The geography program, considered an equal partner with geology, consisted of physiography, which together with meteorology and/or climatology formed the core of physical geography. It took a few decades for geography to be recognized as a separate field.

The Fourth Biennial Report in 1896 includes a budget for the Department of Geography; however, the department was not established at this time. President Harrington resigned in March 1897 and no meteorology or geography was offered in 1897–98. His legacy is the 500 books and periodicals on meteorology and climatology that he donated to the university library. In 1897–98, Landes offered Physiography (Origin and History of the Earth's Surface), and the following year Meteorology. In 1898, Dorsey A. Lyon was appointed assistant professor of geology and physical geography. Lyon was rapidly promoted to full professor, became dean of the School of Mines in 1901, and left the university the following year. Both Landes and Lyon held titles that included physical geography. Landes continued to teach Meteorology, which in 1908 was relabelled Climatology. Edward J. Saunders came in the fall of 1909, and in 1910, Landes passed instruction of Climatology to Saunders. Saunders had been professor of geology and geography at Washington State Normal School in Ellensburg from 1898 to 1905 and from 1907 to 1909; he had been an assistant in physiography and meteorology at Harvard and Radcliffe from 1906 to 1907 while working toward his M.A. with William Morris Davis. Both Landes and Saunders studied with Davis and were enthusiastic advocates of the Davisonian concepts of landscape evolutionary cycle. In Seattle, Physiography remained on the program for geologists and geographers until 1928, when the geography and geology programs were separated and reorganized. Saunders taught the course until his death in 1926.
Oceanography was first offered in 1900, and together with Physiography/Physical Geography and Meteorology formed a three-quarter sequence of a geographical coverage of the earth: land, water, and air. Beginning in 1912, Saunders offered an additional course, Physiography of the United States. In 1909, Landes began to teach Geology and Geography of Washington, which in 1912 was replaced by Economic Geography of Washington, taught regularly until 1924. It remained listed for 3 more years, but disappeared with reorganization of the program in 1928.

For 15 years, 1895–1909, Landes was the head of and sole instructor for the program. In addition to being the head of the geology (later geology and geography) programs, from 1913 to 1934 he was dean of science, and in 1914–15 was acting president of the university. When in 1934 the College of Arts and the College of Science merged to form the University College, Landes became a vice-dean. Saunders’ appointment in 1909 brought a major new asset, and Landes shared with him the teaching programs in regular terms as well as in the evening, Saturday, and summer programs.

The university already had established, in 1898, “free Saturday courses for the special benefit of public school teachers and others who could devote that day and no other to University work.” The programs included geography courses. When the offering was expanded to evening and correspondence courses, geography was again included. The summer program, which started in 1904 as an outgrowth of the Saturday programs, was aimed primarily toward teachers. In summer 1905, Mr. Landes offered three courses: Geographic Geology; Geography of Washington, a study of the physical, economic, and commercial geography of the state; and Geology and Geography, a course with geographical and geological field exploration—4 weeks of instruction on campus and a 2-week stay in camp at Paradise Park on the southern slope of Mt. Rainier.

The summer program focused on physiography and physical geography. New courses were added to reflect the specialization of visiting faculty: Frank Forest Bunker (1907) and William M. Gregory (in summer 1915) offered courses in Industrial and Commercial Geography, and Physical and Regional Geography. The early practice of adding visiting faculty for summer programs continued for decades. It enriched the programs and spread the department’s image throughout the country and abroad.

In subsequent years, Landes took the traveling summer school through western Washington and later from Seattle to Yellowstone and to Alaska. In 1930, Dr. Landes began to conduct extended travel courses to the Orient; in 1935, he passed the leadership to Professor Martin for the trip to the Philippines.

In 1912, the Transcontinental Excursion of the American Geographical Society, under the guidance of William Morris Davis, visited Seattle and was entertained “on the campus of the new University of Washington in a glorious suburb of Seattle.” E.J. Saunders accompanied the group of forty-three distinguished foreign geographers from 13 different countries, and an equal number of American scholars from Coulee City through Seattle, Portland, and San Francisco to Salt Lake City. Forty years later, as part of the 1952 International Geographical Union Congress in Washington, D.C., a transcontinental excursion of a similar group traveled through Washington accompanied by Marion Marts.

In the summer of 1919, Geography was for the first time recognized in the department’s title: Geology and Geography. The basic course received a new label—Fundamentals of Modern Geography, later called Modern Geography: an introductory study of the problems of modern geography—and description: “The scientific investigation of geographic environment and its influence; study and use of maps and charts; geographic control of production and trade; study of the major geographic features of the continents; study of modern texts and outlines of geography in grade and high school.” Saunders was responsible for teaching this course in addition to his basic course of Physiography. When Saunders died in 1926, George
Renner took his post. Geography, Physiography, and Climatology formed the geography track in the geology department. From time to time, Landes and Saunders taught additional courses such as Economic and Commercial Geography (1919); regional courses on Asia (Saunders 1919), Latin America (Saunders 1919), and Physiography of Europe (Saunders 1919); Oceanography (Saunders 1919); and Economic Geography of Washington (Landes 1919). The courses remained generally unchanged during Landes’ and Saunders’ era between 1910 and 1926.

Some geography was also offered in other departments. The Economics and Business Department, which later became the College of Business Administration, offered a course in Economic Geography beginning in 1908 using its own instructors. In 1928, the Geography faculty took over these teaching responsibilities. In the forestry program, Professor Winkenwerder taught Forest Geography (1924). The program in education offered a major and minor in geography.

In 1927, Grover T. Renner, Jr., became the university’s first professional geographer. He had just completed his doctoral dissertation at Columbia University. This energetic new faculty member found a well-established program, dominated by physical geography, within the Department of Geology. He immediately began expanding the geography offerings. Two new courses, Principles of Economic Geography and Principles in Human Geography, were introduced in summer 1928. Renner also obtained recognition for geography with the renaming of the department to Department of Geology and Geography.

In 1929, Seeman and Renner shared the general courses, Bauer taught Weather and Climate; and new courses in Problems in Political Geography (Renner) and the Undergraduate Thesis (Renner, Seeman) were added. Regional courses were approved, but not offered. The need for additional faculty became urgent.

In January 1930, Howard H. Martin came to the university as associate professor of geography. Albert L. Seeman was appointed assistant professor after completion of his Ph.D. dissertation. A new course on Conservation of Natural Resources was introduced in 1930. It survived 50 years with this or a modified title.

In 1932, Martin went on leave of absence, and Frances M. Earle came from the University of Vermont as a temporary replacement. In 1933, her position became permanent. George Renner left the University in 1933; the program was carried out by Martin, Earle, and Seeman, assisted by temporary lecturers and by graduate students. Frances Earle introduced in 1932 a course in Social Geography, subsequently replaced by Influences of Geographic Environment. The Problems in Political Geography, introduced by Renner in 1929, became Seeman’s responsibility in 1932. Regional courses on Europe, Latin America, Asia, and Africa-Australia were designed to cover the world.
The teaching of graduate courses began in 1922. The first graduate degree was awarded in 1928, after the geography degree program was authorized. Hubert Anton Bauer completed an M.A. degree in 1929; a year later he received the first UW doctoral degree in geography for his dissertation, "The Tide as an Environmental Factor in Geography." The second doctorate was awarded to Albert Lloyd Seeman for his dissertation, "The Port of Seattle: A Study of Urban Geography." Both dissertations were completed under George Renner's direction. The department remains the only one with a Ph.D. geography program in the state of Washington.

Although the department remained basically a teaching unit, individual faculty members engaged in scholarly research. Articles by Renner, Earle, Seeman, Martin, and Church are recognized. The bibliography of Publications of the University of Washington Faculty, November 4, 1861–March 31, 1936, compiled by Clara J. Kelly and published in 1937, lists eighteen articles by Renner, six by Seeman, five by Church, and one each by Martin and Earle. Seeman deserves special recognition for his contribution to the geography program, and for his perceptive research activities at a time when research was not at the forefront of the university's concerns. Faculty activities were noticed on the national scene: Renner, Martin, Earle, Seeman, and Church repeatedly gave presentations at the national meetings of the Association of American Geographers (AAG), and were active in the Association of Pacific Coast Geographers (APCG). A statement made by Donald Hudson in 1950 that he had never heard of any University of Washington geographer should be taken with reservation. In fact, at the 1934 AAG meeting, Martin presented his study at the same session at which Hudson reported on his just-completed dissertation.

The era of Landes and Renner came to an end. Dean Landes had been closely associated with the geography program at the University of Washington from its beginnings in 1895, and by the time of his death in 1936, the program that he had started with courses in physiology and later meteorology had grown into a separate unit with four regular faculty members (Martin, Earle, Seeman, Church), with a large undergraduate program and a respectable graduate program. Howard Martin and Frances Earle were active participants in the APCG, and both were charter members. In 1940–41, Earle served as APCG president, and also was editor of the Yearbook from 1957 to 1964.

Department of Geography: The Howard Martin Era

In 1835, Geography became a separate department with Howard H. Martin as the executive officer. The establishment of the geography department followed the reorganization of the university and the arrival of new president Lee Paul Sieg in 1934. The merger of the colleges of Science, Fine Arts, and Liberal Arts with nine semi-professional schools created a new University College. Edward Lauer, professor of German from the University of Iowa, became a new dean, and Landes vice-dean for 1935–36. Geography was placed together with history, philosophy, political science, and sociology into the Social Sciences division, separated from Humanities and Sciences. Geology, which had harbored the geography program for 4 decades, stayed with Sciences. Since geography was within social sciences, the meteorology and climatology program appeared to be out of place. It took 10 more years—and World War II—to remedy the inconsistency: a separate Department of Meteorology (now Atmospheric Sciences) was created in 1947 with Phil Church, who had joined the department in 1935, as its head.

The 1935 program covered the systematic fields; the regional courses, the world. Maxim von Brevern, instructor in the Department of Political Science, began to offer political geography courses in addition to his political science courses. Church soon expanded his program with new undergraduate and graduate courses. William E. Pierson joined the department in 1937 as a regular faculty member. Howard Martin was able to arrange the teaching of all these
courses by appointing temporary assistants and graduate students. His repeated requests for new faculty positions, however, were not granted.

Cartography appears on the program for the first time in 1930, although it was not offered as part of the regular program until 1938. The summer and Extension programs repeated some of the regular courses and offered some others. Carl C. Mapes and Willis B. Merriam, Ph.D. students in the department, taught Extension classes. In 1937, Arch Gerlach, graduate student and teaching associate, taught geography in the evening program.

The department took advantage of various opportunities to bring to the campus distinguished visitors to enrich the program and to enhance the visibility of Geography on campus and nationally.

World War II and war experiences created new demands on university education, including Geography. In 1942, the geography department moved into the fourth floor of the just-completed Smith Hall, or Social Sciences building. A number of faculty members were recruited into government service either for active duty or civilian war work. University enrollment was reduced, and programs were shifted and modified. The geography department was severely affected. Albert L. Seeman became the first war casualty—and the only faculty member killed in World War II—when, on January 15, 1943, his transport plane crashed in Surinam. Phil Church went on military leave from November 1941 to 1944 at the Institute of Meteorology at the University of Chicago. William E. Pierson went to Washington, D.C. in September 1942 to serve in the Office of the Geographer in the Department of State. John Sherman, at the time a student in the department, was hired in 1942 to teach courses in climatology and meteorology during Church’s absence. In October 1944, Church returned and resumed teaching. Sherman remained on the faculty as an instructor and was appointed as an assistant professor in 1947 after completing his dissertation.

The 28th biennial report of the Board of Regents relates that:

"Special instruction was offered by the Geography Department (bold in the original) for nearly all military training programs on the campus. These courses included meteorology, aerology, geography of Asia, economic geography for the Navy Supply Corps unit, and a course on "Islands of the Pacific" for the Marine Corps. All of the course work in climatology and meteorology was reorganized along lines approximating the U.S. Navy aerology course. 'Advanced Cartography' and "Weather Instruments" were added as war courses.

During the war, Maxim von Brevern assisted in teaching a variety of geography courses. In 1940, he introduced the first courses in Geopolitics as part of the Political Science program. Mary Jo Read, a Ph.D. from Wisconsin, came in 1943 to assist in teaching. She left at the end of the war. Joseph E. Williams came in 1943 from San Jose State College for the summer program; he was hired on a permanent appointment in 1946, and returned to California in 1950.

The end of the war brought many changes to the university. President Sieg was followed after 12 years of university governance by Raymond B. Allen. During his presidency, Edwin R. Guthrie served as dean of the graduate school and chief academic officer; he was responsible for the programs and for faculty employment. Edward Lauer, as the Dean of the College of Arts and Science, managed the day-to-day needs of the College. The proverbial isolation of Seattle slowly but consistently gave way to greater exposure and better linkages with academic institutions throughout the United States and the world.

For a brief period after the war (1945-47), Dan Stanislawski was on the faculty. In 1947, John Sherman joined Williams in teaching cartography. When Henry Leppard came to the department from Chicago in January 1951, he and Sherman developed a series of cartography and mapping courses. After 1954, Sherman became solely responsible for cartography. In the subsequent 30 years, he expanded it into one of the leading cartography centers in the country. He was assisted by Bill Heath from 1957 to 1972, who was hired first as a temporary assistant and later as a regular faculty member. Heath’s
considerable technical background was a major contributor to map compilation and production efforts of the department.

The need for technical assistance in cartography was met by acquisition of map production equipment, and by creating the map and atlas collection in the department. Organization of the departmental research library soon followed.

Howard Martin continued to direct departmental affairs, but had little success in obtaining authorization for new permanent positions to meet the needs of the expanded programs.

The 30th biennial report of the Board of Regents to the Governor for 1949 states:

The Department of Geography further strengthened its curriculum during the biennium by adding courses in mountain geography, geography of the U.S.S.R., and physical climatology. Its strongest claim to prominence in graduate study are in the fields of economic geography, cartography, and the Pacific Basin. Research included studies by Dr. Frances M. Earle, on sabbatical leave during 1948 for field studies in China, the Philippines, Siam, and in the Netherlands Indies, where work was performed with the cooperation of the Netherlands Indies government. Dr. J.E. Williams spent the summer of 1948 in Europe, doing field work in the British Isles and representing the University and the Association of Pacific Coast Geographers at the International Geographical Congress in Lisbon in September (p. 54).

Toward the end of his chairmanship, Howard Martin hired Marion Marts in 1946 and William Garrison in 1950.

Marts left in 1949 for Boise, Idaho, and the Bureau of Reclamation. He continued to work on his doctoral dissertation at Northwestern under Donald Hudson’s direction, and in 1951 returned to the UW. Graham H. Lawton (M.A., Oxford) joined the department in 1947 and stayed for 4 years. In 1951, he accepted the position of senior lecturer at the University of Adelaide.

In 1950, at the end of Martin’s chairmanship, the department’s program was conducted by six tenured members—Martin, Earle, Williams, Sherman, Lawton, and Garrison—and by temporary appointees Rankin and Tennant. In addition, graduate students offered regularly scheduled courses. At this point, Howard Martin and his colleagues agreed that the program be given new direction. Martin asked to be relieved of the chairmanship, and applied for a leave of absence for 1950–51. Professor Coombs from Geology became acting chairman. After unsuccessful approaches to Robert Hall and Fred Kniffen, the search committee recommended the hiring of G. Donald Hudson, then chairman of the geography department at Northwestern. Hudson negotiated the terms of his appointment with President Allen as well as with the dean of the Graduate School and Academic Officer Guthrie. They assured him of financial and administrative support for a restructured and expanded department. Hudson was appointed to the chair in summer 1950, but remained at Northwestern until late spring of 1951 and directed the department in absentia, with Coombs as the acting head.

**The Hudson Era: 1950–63**

Hudson was a prominent geographer. In 1950–51, he served as the first president of the newly enlarged AAG, succeeding Richard Hartshorne. Since 1939, he had been professor, and from 1945 chairman, of the new Department of Geography at Northwestern University in Evanston. Earlier, he had served as head of research division at the Tennessee Valley Authority.

Dean Lloyd Woodburne became Dean of the College of Arts and Sciences in 1950. Academic management of the college, faculty hiring, and financial obligations became Dean Woodburne’s responsibility, and Hudson found him very supportive. However, Hudson came to an established department that did not meet his expectations. His intervention became immediately evident: within 1 year, Williams and Lawton left, and Rankin’s and Tennant’s appointments were discontinued. A new group of geographers joined the department: Edward Ullman came from Harvard, Marion Marts returned from the Bureau of Reclamation in Boise, and Henry Leppard came to Seattle in January 1951 after he retired from Chicago.

The dichotomy of “old” and “new” was never more evident. The emphasis on instruction was replaced by advanced research. In addition, visitors on temporary appointments for a quarter or more came to fill the gaps due to research absences of the faculty. Ullman put the continuation of his outside research projects as a condition of his first appointment. Visiting scholars included: Leslie Curry, John Morrison, John D. Chapman, Forest Pitts, Jan O.M. Broek, Robert E. Dickinson, Norton S. Ginsburg, Louis Hamill, Preston E. James, Torsten Hägerstrand, E.H.G. Dobby, Henry C. Darby, Walter Kollmorgen, Marvin Mikesell, Roy I. Wolfe, J. Humlum, Clyde F. Kohn, Antony Kuklinski, and Ross McKay. Each came for a quarter or two, and left a noticeable impact on the department and its programs.

The departmental program consisted of four primary components: cartography, economic geography, Far East and Soviet Union, and Anglo-America. The expansion of these four fields absorbed most of Hudson’s attention: “Each staff member was expected to share in lower division courses and, with inevitable minor exceptions, each upper division course and graduate seminar is offered by a staff member to whom the field represented is an active research field.” This was achieved by hiring Rhoads Murphey for China, John D. Eyre and later George Kakiuchi for Japan, and W.A. Douglas Jackson for the Soviet Union. Regional courses on Europe (Martin), Africa (Sherman), Canada and Alaska (Marts), and Latin America were phased out. Hudson wanted also to expand the offerings of political geography, geography of manufacturing, and the philosophy and specifics of the scientific method—including statistical methodology. Physical geography was reduced to one introductory course. Students interested in other “elements” of the physical environment were directed to other departments for courses in meteorology, geomorphology, soils, and forests. Geography of Water Resources (Marts), Conservation of Natural Resources (Sherman), Political Geography (Jackson), and an upper-level course in Problems in Physical Geography were taught in 1957–58. Economic geography was expanded by seminars in urban and transportation geography, taught by Ed Ullman. The East Asia regional program was enhanced by the growing role of the Far East Institute and Russian Studies program, now the Jackson School for International Studies, which gave major support and financial assistance, especially during the long and energetic leadership of George E. Taylor. Senior faculty members Howard Martin and Frances Earle did not fit into Hudson’s scheme. Major gaps in a “total inventory” of systematic fields of geography, as well as the incomplete regional coverage, were justified by the small faculty. Physical and human-cultural geography were not represented.

Later changes in emphasis coincided more closely with faculty departures and retirements. The transformation of the department became associated with the “quantitative revolution” carried out in the late 1950s by William Garrison and his students Richard Morrill, Brian J.L. Berry, Waldo Tobler, John Nystuen, William Bunge, Duane Marble, and Michael Dacey, who, by 1959, had produced a substantive body of research in the positivistic and scientific “new geography.” Garrison’s course in Statistical Methods in Geographic Research was introduced in 1954. Some of Garrison’s students had come to study with Ed Ullman, but few of them finished under his supervision because of his extended research commitments away from the university.

The new orientation was not unanimously endorsed by the faculty, but Hudson nevertheless made it possible by providing necessary
financial and administrative support. An important vehicle for the spreading of “the new message” was the *Discussion Papers* (started in 1958 and discontinued after No. 43 in 1961). The series was an outgrowth of internally circulated papers duplicated under the label of *Citadella Geographica* in 1952–55. The circulation of such papers became a practice in other departments around the world, and accelerated the exchange of information between research institutions and individuals. When the students completed their degrees, their names were already known and recognized.

**Geography Library**

The need for a reference library was apparent already under Martin’s chairmanship. The collection began in the late 1940s with a skeleton of subscription of geographical periodicals, and with a collection of government publications, pamphlets, and special reports. A sizable collection was already in existence when Hudson arrived. In the spring of 1951, Hudson explored the possibility of a departmental library, to become part of the UW library system. In the fall of 1951, Ed Ullman negotiated the arrangement with Director of the Library Harry C. Bauer, and formal linkage with the university library system began in 1952 with the appointment of the first professional librarian. The library and the department shared responsibility for purchases of furniture and equipment, books and periodicals. They jointly managed the extensive wall map collection.

The geography library, one of Hudson’s and his faculty’s significant achievements, was threatened when Suzzallo Library was expanded in 1963. The director of the library advised the department in 1962 that the branch library would be discontinued. The attempt was in part a reflection of a general policy of collection consolidation, but also an indication that the earlier favored position of the geography program was coming to an end. The library remained, but its continuous existence was repeatedly endangered for fiscal and administrative reasons.

The map collection, consisting of sheet maps, air photographs, and atlases, was growing through purchases and through acquisition of duplicates from the Library of Congress, and later from the U.S. Map Service. The geography library was developed with the assistance of faculty advisors Ed Ullman and, later, Joseph Velikonja, and reached over 17,000 volumes and 575 periodical subscriptions in the mid-1970s. Financial restraints forced the reduction of subscriptions to 225 by 1990. The map and air photo collection soon outgrew the available space and was relocated to Suzzallo Library in the mid-1970s; there it became the base of the expanded Map Center.

**Theses and Dissertations**

The graduate program was authorized to begin in 1928; thirty M.A. theses and eight Ph.D. dissertations were completed in the first 20 years. Most of them were done under the direction of Howard Martin. During Donald Hudson’s chairmanship between 1950 and 1963, eighty M.A.s and forty Ph.D.s were completed. In the entire period of graduate programs from 1928 to the spring of 1994, 400 master’s theses and 212 doctoral dissertations were completed. In addition, seven non-thesis master’s degrees were awarded. The largest number of master’s degrees in any one calendar year (seventeen) was awarded in 1992, while the most Ph.D.s (eleven) were completed in 1970. The content of theses and dissertations reflects the transformation of the department from regionally and locally oriented research to general, systematic, and theoretical themes.

Hudson operated with a departmental executive committee. Faculty meetings were rare. The chairman was the executive officer, advisor of undergraduate and graduate students, a *factotum* of the department. He was an outspoken and determined advocate for the well-being of the department, its faculty, and its students. He maintained close contacts with more than two dozen geography departments around the country. This enabled him to recruit their promising students for the UW graduate program, and later to place
the department's graduates in prominent departments throughout the country. With Hudson's assistance, they obtained positions at Northwestern, Chicago, Columbia, Maryland, Iowa, Utah, Illinois, the University of Pennsylvania, Syracuse, and Michigan, and in this way contributed to the spread of new "scientific geography."

Rhoads Murphey went to the University of Pennsylvania in 1957, but returned to UW the following year. In 1964, he left for Michigan. The China regional field was subsequently covered by Kuei-sheng Chang, who came in 1966 from Wayne State. Urban studies and transportation became the domain of Ed Ullman; Marion Marts offered a program on water resources, and for awhile also taught the course on mountain geography, first introduced in 1947. The program in cartography absorbed the attention of Joe Williams and Henry B. Leppard, assisted by John Sherman and Willis Heath.

Major efforts were made in the second part of Hudson's chairmanship to secure financial support for research projects that would engage the faculty and graduate students. Ed Ullman brought with him a 3-year research commitment financed by the Office of Naval Research; later he joined a Stanford project on the Philippines, and later conducted extensive research in Sardinia. He directed the Meramec Basin Research project in St. Louis, and the Washington Center for Metropolitan Studies in Washington, D.C. Eyre was engaged in research in Japan, while Murphey conducted various research efforts related to China. Sherman supervised the Boeing "Moon Project," and, later, various efforts to construct maps for the blind. Garrison and Marts were responsible for the U.S. Highway Project, Richard Morrill researched settlement models, and Morgan Thomas conducted research on growth poles, while Douglas Jackson investigated Soviet agriculture. External support (from the Ford Foundation, Office of Education) sustained graduate student research. Jackson's students (Neil Field, Phil Pryde, Phil Micklin, Robert Jensen, Victor Mote, Kathy Braden, and Ihor Stebelsky) became leading experts in Soviet geography, and to this day hold various prominent positions in the United States. Jackson in 1967 directed the National Defense Education Act Institute for Teachers on Geographic Patterns of Soviet Development.

By the time Hudson had completed his 12 years as chair, the department had gained a national and international reputation, and was ranked as high as fourth in the country. This reputation was due to innovative research in scientific methods, and application of these methods in theoretical and empirical research; significantly increased numbers of faculty and student publications; and the stimulating Discussion Papers series; but most of all, it was due to careful management by Donald Hudson.

Richard Morrill in 1973 characterized the period:

in the 1950s, building particularly on earlier German and Swedish work, arose the conception of a scientific geography based on the role of abstract characteristics of space itself (area, distance, density, shape, patterns, network structure, etc.) on the behavior, arrangement and regional organization of both human and natural phenomena. The Department of Geography at the University of Washington played a major role in this fundamental transformation and expansion of the discipline.

Hudson reached 65 years of age in 1962; he stayed as chair until June 1963. Marion Marts was appointed to succeed him, but chose instead to accept the position of vice-provost, and later the deanship of the summer program. John Sherman took over as acting chairman, and was appointed for the regular term in 1964. Donald Hudson remained on the faculty for 3 more years, continued as the graduate advisor, and retired in June of 1967. He died on November 27, 1989 at the age of 92. In 1990, the department, with contributions from Hudson's heirs, established the Donald and Nellie Hudson Endowment Fund.

**The Sherman Era: 1963–73**

The 10 years of Sherman's chairmanship represented a difficult time for the university and for the department. The university went through enrollment expansion and also faced major confrontations.
Geography was often challenged to justify its role and its continued existence. Attempts to change the department into the Department of Regional Science were unsuccessful.

Sal Katz and Phil Cartwright followed Dean Woodburne as the deans of the college. With the change, the department lost one of its strongest supporters. The department was spared most of the confrontations and disruption of the late 1960s and early '70s. Students were encouraged to take part in departmental matters, to organize and to express their views; their representatives were invited to various departmental committees, including the faculty search committee. Nevertheless, the tense atmosphere on campus was not conducive to constructive academic endeavors.

The department continued to pursue the courses of study outlined during the Hudson era, with some alterations that reflected the changes of the faculty. The cartography program remained the focus of Sherman's interest, and he was assisted by William Heath until he retired in 1972. Joseph Velikonja came in 1964 from Southern Illinois University to be engaged in the Eastern Europe and political geography programs. The department also appointed four of its own graduates: Ronald Boyce and Douglas Fleming in 1965, William Beyers in 1967, and Günter Krumme in 1970. Beyers was hired to support the regional science and regional economic analysis program of Morgan Thomas, and to extend his interest in regional development. Krumme spent 4 years at the University of Hawaii and Columbia University before returning to UW. He gave major support to the program in regional economics, organization, and decision theories. The Washington program of economic geographers and regional analysts gained national recognition. They developed a micro-level interpretation of regional economies by focusing on spatial adjustments of firms and corporations. Thomas for a number of years served as the editor of *The Papers of Regional Science Association*. The greatest prominence achieved in the Sherman period was in the program in regional economic analysis, first initiated by Ullman and later led by Morgan Thomas. External financial assistance supported the work of students, and enabled them to complete major studies in growth pole analysis, information transfer, and regional input-outputs. The work of the faculty and the original research of graduate students pushed the endeavor into national and international prominence with major spill-over abroad, mostly through Ph.D. students. The research is identified by the work of UW graduates Parr, Beyers, Krumme, LeHeron, Erickson, Earickson, Smith, Cannon, Harrington, Campbell, and Hay. Thomas also served as the associate dean for academic programs in the Graduate School at the University of Washington.

The growing concern for environmental issues brought Richard Cooley to campus in 1965 from the University of Alaska. Cooley was a non-geographer who nevertheless played a major role in setting up environmental studies at the university. In the mid-1960s, the concern involving environmental issues provoked President Odegard to create an ad hoc committee to study the feasibility of expanded environmental programs at the university. Chaired by Cooley, the committee recommended creating an Interdisciplinary Environmental Studies program without the authority to grant degrees. Cooley left after 4 years to head a similar program at the University of California-Santa Cruz. The environmental program was not placed under geographers' wing. The interdepartmental and interdisciplinary endeavor was based on the cooperative efforts of a number of departments and individuals. Geography remained associated with the program in administration, teaching, and research, but most of the time played a secondary role.

The expanded concern for geography in education, stimulated also by the institutes for school teachers financed by the U.S. Department of Education, brought Phillip Bacon from Columbia in the summer of 1965. He became a member of the faculty in 1966. From 1967 to 1971 he was co-director (with John Jerolimek) of the Tri-University Project in Elementary Education-Social Sciences. In summer 1967, he directed an NDEA Institute on Regional and Ur-
A series of research projects sponsored by the National Science Foundation in the 1970s provided financial support for a number of research assistants: Thomas headed the growth pole project, Morrill researched theoretical surfaces and spatial structure of landscape, and Sherman conducted research on maps for the visually handicapped. Beyers participated in the input-output studies and examined spatial dimensions of interindustry linkages. David Hodge researched mass transit.

The department’s prominence was enhanced when the AAG met in Seattle in 1974. John Sherman was the leading organizer. Ed Ullman gave the welcoming address on “The geography of highest learning in America.” The monograph Views of Washington State, edited by Douglas K. Fleming, was published for the occasion. Richard Morrill became president of the AAG for 1981–82. In 1983, he delivered his presidential address on Responsibility of Geography at the annual meeting.

Morrill remained deeply involved in applied geography activities through consulting and advising. He was appointed to prepare the political redistricting of the state of Washington. His numerous interventions in state, county, and city advisory boards brought Geography to public awareness.

The reorientation of geography nationally and internationally, and the concern with philosophical and societal preoccupations, forced the progressive decline of positivistic and scientific geography in favor of behavioral and humanistic themes. Social concern brought forward the issues of environmental preservation, social justice, race and gender issues, resource allocation, and, on a regional base, concern with the underdeveloped world. Because of a very limited faculty turnover, this national reorientation was slow to be echoed in the department’s programs. The department, however, introduced new courses on Black America and on inequalities, etc.
Sponsored Research

The growth of faculty positions from seven at the beginning of the Hudson's chairmanship to seventeen at the height of Sherman's (this includes Marion Marts' association with the department when he served as a vice-provost and dean of the summer school) was subsequently reduced to thirteen de facto members. Nevertheless, undergraduate and graduate enrollment expanded. The number of undergraduate majors increased from about one hundred in the mid-1960s to more than two hundred in the early '90s. The number of graduate students expanded to reach 70 in the late '80s.

One of the characteristics of the UW graduate program was and still is the lack of required and prescribed curriculum. This aspect has been highly praised, but also severely criticized, by internal and external reviewers. While the program with no restriction encourages exploration and inventive search, it often provides inadequate structural support to students in need of continuous guidance. New graduate students were asked to take the introductory course to graduate students—and then formulate their own programs with courses taken in the department or elsewhere in the university. With minor alterations, the system is still in existence and has proven to be very beneficial to some, and not very helpful to others.

The Morrill Era: 1973–83

The research function characterizes the decade under Morrill's chairmanship. In the early years of his chairmanship, he formulated new schemes for the department's future; most of those expectations did not materialize because of the department's limited support from the university. The awkward measurements of departmental achievements by the legislature and by the university administration did not match the actual achievements and contributions of its faculty and students. Research endeavors received major external grants. The department very early realized the decline in potential academic jobs for its graduates, and began to pay greater attention to training students for non-academic alternatives. This meant a change in emphasis from strictly academic orientation to applied geography, without sacrificing the thoroughness of professionalism. The consequence was an increase in the number of students who completed their M.A. degrees, did some post-M.A. work, and then accepted positions in the private or public sector. Failure to complete their Ph.D. programs did not preclude obtaining respectable positions in public and private agencies.

The slow process of hiring the new faculty severely affected the department in the 1970s and 1980s. The faculty changes were due to departures. Bacon left for Houston (1971). The position was not filled. The program was continued for a while with Ann Jennings as the instructor. Willis Heath retired in 1972 and was not replaced. When Muehrcke left in 1973 for Wisconsin, Carl Youngmann, a graduate of Kansas (1971) and assistant professor at Ohio State, filled the position and continued the program of computer cartography between 1973 and 1983. The greatest achievement under Youngmann's direction was the publication of the Coastal Zone Atlas, combining computer graphics, data processing, and manual drafting into a superb product. Unfortunately, cost overruns had to be covered by the department, severely impairing the further expansion of the program.

The department had great turnover in the so-called "environment" position, which remained vacant for 2 years after Cooley left in 1969. Jacob J. Eichenbaum, a graduate of the University of Michigan, came in 1971 and left in 1975. Virginia Sharp, Ph.D. candidate from Penn State, came in 1974, and left in 1979 to accept a position outside academia. Susan Cutter filled the position in 1976–77. The vacancy was filled in 1980 by Jaime Kooser, a graduate of Berkeley, and she left in 1985 for Evergreen State College in Olympia. The redefined position made possible the hiring of Victoria Lawson in 1986.

The quantitative work and the urban field brought to the department David Hodge in 1975. In addition to the program in quantitative and analytical methods, he developed major work in urban social and political structure and functioning.
Ed Ullman's death in 1976 at the age of 63 left a major gap in the department, not so much for the teaching program, but mostly because of his pioneering research and advocacy of geography. He actually directed only a few theses and dissertations. By the 1950s, it had become apparent that his attitude toward teaching, research, and public service was different from that of his administrative superiors. He served as associate dean of the UW Graduate School from 1962 to 1965, and directed the Center for Urban and Regional Research in 1968–69. In 1974, President Nixon appointed Ullman to the Amtrak Board of Directors. Ullman's colleagues and friends, under the leadership of Ron Boyce, published a book of his works in 1970 under the title, Geography as Spatial Interaction. The department honored him by naming the geography library the Edward L. Ullman Library, and by establishing in his name an endowment to support graduate students.

Ronald Boyce left in 1976 to accept a deanship at Seattle Pacific University. The urban geography program of teaching and research was continued with David Hodge and Richard Morrill, with new stress on social and political urban issues. Jonathan Mayer joined the faculty in 1977 to provide additional support for transportation and urban studies. His interest in medical geography, however, took most of his attention.

Research and graduate programs were built around research specialties of the faculty: cartography added automatic mapping to the core program in cartographic design and production; economic geography expanded the urban studies component with the addition of social and political aspects; and regional development and industrial geography became a self-standing specialty with greater stress on regional development theories, regional policies, corporate spatial behavior, and transfer of technologies. Transportation geography focused on the analysis of networks and flows, especially water and air transportation systems. Environmental concerns and issues of natural resource management retained their broad scope in research, leaning on supporting programs outside the department. Social geography, with stress on settlement, migration, and welfare, grew from its start in the mid-1960s into a major arena of social concerns. These specialties are more evident in students' research achievements than in the titles of scheduled courses. Regional area studies were placed into a secondary role.

The Thomas Era: 1983–90

Morgan Thomas took over the chairmanship in 1983 after 15 years as associate dean of the Graduate School. The period is characterized by numerous substantive changes in the department's composition and programs.

The economic geography emphasis became the umbrella for established tracks of location theories and regional economic analysis, with explicitly identified expansion in public policies and simulation modeling, patterns of technological change, and domestic and international trade. A major addition within this frame was the expansion of medical geography, including environmental factors in health and health care delivery systems under the direction of Jonathan Mayer. Cartography was reshaped into computer-assisted cartography and geographical information systems (GIS) design and use. Urban geography expanded its social and political roles, including examination of alternative social theories. Regional geographical studies found a new niche under the label of international relations and foreign affairs. The regional concern was used for the application of geographical concepts in a regional context. During this period, Jaime Kooser left for Evergreen State College (1985); while John Sherman (1986), Marion Marts (1986), and Kuei-Shan Chang (1987) retired. Four new faculty members were added: Tim Nyerges (1985) and Victoria Lawson from Ohio State University (1986), Nick Chrisman from the University of Wisconsin (1987), and Lucy Jarosz from UC-Berkeley (1990). Thomas also succeeded in hiring Kam Wing Chan, who came from Hong Kong and began teaching in winter 1992.
When John Sherman retired in 1986, after 44 years of teaching, his cartography program was discontinued and replaced by computer graphics, and, more recently, by the GIS undergraduate and graduate programs. The program is led by Tim Nyerges and Nick Chrisman, and has already achieved national recognition.

The retirement of Marion Marts in 1986 also closed a chapter of the departmental program. For the more than 20 years during which Marts served in university administration, he remained an active participant in the departmental programs by teaching courses and seminars in resource management, by advising and directing students, and by supervising a number of theses and dissertations. During 1980–84, he also served as the university ombudsman.

In 1986, an external review of the department recognized its major achievements and identified a number of its shortcomings in program, faculty activities, and management. The report had a major impact on the future of the department. To improve the department’s image, The Chronicle, an annual report of the professional achievements of its faculty, students, and alumni was started in 1986.

The Thomas period is characterized by efforts to hire new faculty of great promise, and thus, reorient the departmental programs. The restriction of new faculty hiring to most junior candidates, the delay of approval of faculty replacement for retired members, and the reduction of faculty positions had a major restraining impact on the department.

The retirement of George Kakiuchi in 1990 meant the end of a vigorous Japanese studies program, mostly evident in the continuous flow of Japanese geographers through the department. George was honored with special recognition by his Japanese colleagues during an invited visit to Japan in 1992. The position was later discontinued. Douglas Fleming, who served with the department from 1965–92, developed an extended program in water and air transportation, and, with his association with the Institute for Marine Studies, remained the chief advocate of interdisciplinary transportation training and research at the university. His retirement in 1992 terminated this endeavor. Victoria Lawson brought into prominence new stress on social theory and regional analysis of Latin America. When Lucy Jarosz came in 1990 from Berkeley, departmental offerings in the field of political economy and regional development expanded with an emphasis on Africa.

William Beyers Chairmanship: 1991–Present

In January 1991, Morgan Thomas accepted the position of associate dean of the College of Arts and Sciences, and William Beyers assumed the chairmanship. The principal challenge of the department was to carry out a major modification of departmental orientation with reduced faculty. The university’s expanded undergraduate offerings in the evening program, and its two new branch campuses, had an impact on the department. Although geography was not included in branch campus programs, faculty retirements opened new potentials for program modification. Four faculty members, Kueisheng Chang (retired in 1987), George Kakiuchi (in 1990), Douglas Fleming (in 1992), and Joseph Velikonja (in 1993), were associated with regional geography programs. With their retirements, the programs on Japan, and Western, and Eastern Europe were discontinued. Only the Chinese field continued. Douglas Jackson reoriented his early Soviet regional research and became the leading organizer and promoter of Canadian interdisciplinary studies.

The newest faculty member, Katharyne Mitchell, came in the fall of 1993 after completing her doctorate at Berkeley. At the same time, David Hodge served in Washington, D.C. as the program director for geography with the National Science Foundation.

The Future

The future is unpredictable at this time. The university is faced with the retirement of President William Gerberding in 1995, uncertainty persists over state finances, and the retirement of additional departmental faculty will further diminish past glories and open new
challenges. Established geography offerings are giving way to new exploratory endeavors. GIS has replaced cartography, while political economy and social theory are taking the place of locational theories and scientific direction. Regional geography as an analytical field has been replaced by regional comparisons and world views. The once-praised objectivity has given way to engaged geography, the geography of social consciousness and of social dysfunction. Only new faculty will be able to meet these new challenges.

Sources

Unpublished correspondence, memos, and programs were consulted at the University of Washington Academic Record Center and at the University Archives, with permission granted by Information Officer Emily Hill. Permission to explore Ed Ullman’s papers was granted by Joan Ullman. The personal archives of Marion Marts and his advice is acknowledged. Correspondence and academic records were consulted where available. Personal files were used for the post-1964 history.

Published records consist of the university catalogs, and histories of the university and of various academic units. Published records include Donald Hudson’s obituary [Annals AAG 81/3 (September 1991): 515-518], report on his life and work in The Chronicle, articles by participants of the “quantitative revolution” Morrill, Berry, Getis, Garrison. Eugene Turner’s interview with John C. Sherman in The American Cartographer 14/1 (January 1987): 75-87 illustrates the cartography endeavor.

UW Department of Geography Faculty, 1927-94

Name                              Education          Appointment
George T. Renner, Jr.             Columbia, Ph.D., 1927  1927-33
Albert L. Seeman                  Washington, Ph.D., 1930  1928-42
Howard H. Martin                  George Washington, Ph.D., 1929  1930-62
Frances M. Earle                  George Washington, Ph.D., 1929  1932-67
Philip E. Church                  Clark, Ph.D., 1937  1935-47*
William E. Pierson                Washington, M.S., 1934  1937-46
John C. Sherman                   Washington, Ph.D., 1947  1942-86
Mary Jo Read                      Wisconsin, Ph.D., 1942  1943-45
Harold E. Tennant                 Washington, Ph.D., 1937  1944-51
Dan Stanislawski                  California, Ph.D., 1943  1945-47
Joseph E. Williams                Vienna, Ph.D., 1932  1946-50
Estelle A. Rankin                 Columbia, M.A., 1935  1946-52
Marion E. Marts                   Northwestern, Ph.D., 1949  1946-48; 1950-86
William L. Garrison               Northwestern, Ph.D., 1950  1950-60
G. Donald Hudson                  Chicago, Ph.D., 1934  1950-67
Henry M. Leppard                  Chicago, Ph.D., 1928  1951-54
John D. Eyre                      Michigan, Ph.D., 1951  1951-57
Edward L. Ullman                  Chicago, Ph.D., 1942  1951-76
W. Rhoads Murphey                 Harvard, Ph.D., 1950  1952-54; 1955-64
W. A. Douglas Jackson             Maryland, Ph.D., 1953  1955-94
Willis R. Heath                   Washington, Ph.D., 1958  1957-72
George H. Kakiuchi                Michigan, Ph.D., 1957  1957-90
Morgan D. Thomas                  Queen’s (Belfast), Ph.D., 1951  1959-
Richard L. Morrill                Washington, Ph.D., 1959  1960-
Joseph Velikonja                  Rome, Ph.D., 1948  1964-93
Richard A. Cooley                 Michigan, Ph.D., 1962  1965-69
Ronald R. Boyce                   Washington, Ph.D., 1961  1965-76
Kuei-sheng Chang                  Michigan, Ph.D., 1955  1966-87
Jacek I. Romanowski               Washington, Ph.D., 1970  1967-77
William B. Beyers                 Washington, Ph.D., 1967  1967-
Phillip C. Muehrcke               Michigan, Ph.D., 1969  1969-73
Günther Krumme                   Washington, Ph.D., 1966  1970-
Jacob J. Eichenbaum              Michigan, Ph.D., 1972  1971-75
Carl E. Youngmann                 Kansas, Ph.D., 1971  1973-83
David C. Hodge                    Penn State, Ph.D., 1975  1975-
Craig Zumbrunnen                  California (B.), Ph.D., 1973  1977-
Jonathan D. Mayer                 Michigan, Ph.D., 1977  1977-
Jaime C. Kooser                   California (B.), Ph.D., 1981  1980-85
Timothy L. Nyerges                Ohio State, Ph.D., 1980  1985-
Victoria A. Lawson                Ohio State, Ph.D., 1986  1986-
Nicholas R. Chrisman             Bristol (U.K.), Ph.D., 1982  1987-
Lucy Jarosz                       California (B.), Ph.D., 1990  1990-
Kam Wing Chan                    Toronto, Ph.D., 1988  1991-
Katharyne Mitchell               California (B.), Ph.D., 1993  1993-

* Church became head of new Department of Meteorology in 1947