# BERKELEY-ON-THE-BRAZOS AND OTHER PIPE DREAMS: HISTORY OF THE DEPARTMENT OF GEOGRAPHY AT TEXAS A&M UNIVERSITY

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#### Prehistory and Context at TAMC and TAMU

The modern department was founded in 1969, one of the last departments at Texas A&M University (TAMU) to be authorized by the Coordinating Board for Higher Education of the State of Texas as having a bachelor's, master's, and doctoral program from its inception. For some twenty years before that there had been a program in geography offering courses, although there was no degree program as such. From 1959 on this was headed up by an A&M graduate, the often lone but conspicuous geographer, George Wilhelm "Skipper" Schlesselman. During the early 1960s Schlesselman became acting dean, then associate dean of the then School of Arts and Sciences while continuing to teach basic course offerings of senior-level International Political Geography, Geography 401, and graduate-level economic geography, Geography 601. Schlesselman was joined from time to time by lecturers, the last of whom in the prehistoric period was Mr. John Richard Howard, a meteorologist, who taught both meteorology and climatology in the Department of Geography from 1956 until 1960.

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Together, Schlesselman and Howard offered eleven service-courses in Geography, including regional courses in the geographies of Europe, Asia, and South America.

The new department was founded in a university context very different from that of many other departments. The State authorized the formation of the Agricultural and Mechanical College of Texas (TAMC) under the Land Grant Act in 1876, before the founding of the state's other flagship university at Austin. For its early history, like many other southern land grant colleges, TAMC was all white, all male, and all military. Until the arrival of General Earl Rudder as President of TAMC in 1959, enrollment, despite peaks in World Wars One and Two, was in serious decline. As well as being a hero of World War Two and General Patton's favorite general, Rudder had begun a serious rise to power in Texas politics. He was a strong supporter and confidant of Lyndon B. Johnson's rise to power in the state. At the time he was appointed president of TAMC, General Rudder was Texas Railroad Commissioner. Upon arrival at TAMC he established a committee to recommend how the institution might be made to progress. That committee reported that the Corps of Cadets should be made optional and that minorities and women should be admitted. Although General Rudder initially reacted strongly to this suggestion those present at the time recall that was told by LBJ that, if women were not admitted, TAMC could not expect to feed at the federal trough. Under Rudder between 1959 and 1970, TAMC became the Texas A&M University, removed the requirement that all students be members of the Corps of Cadets, instituted a progressive improvement in the quality of incoming freshmen, admitted minorities and women, expanded its research programs, upgraded faculty standards, and initiated a \$100 million building program. The 58th Legislature of the State of Texas changed the name of the Agricultural and Mechanical College of Texas to Texas A&M University effective August 23, 1963. The upgrading that accompanied the name change

included a reorganization of the fledgling university's academic structure and the formation of the Geography Department in 1969.

## The Six Periods of Geography at TAMU

Geography at TAMU can best be understood as having transitioned through six periods of growth and change. This paper traces the department's history from its inception (The Planning Phase and Implementation – 1965-1969), through its early influences from the west coast (The Elite Period of "Berkeley on the Brazos" – 1969-1972), its coming of age (The "Joe College Period" – 1973-c.1989), its maturity (A Mature Department – c. 1989-1994), and management (An Unstable Interlude – 1995-1997), and maintenance of its health (Return to Stability – 1997 onward).

## The Planning Phase and Implementation - 1965-1969

Edwin Beale Doran Jr., Ph.D. University of California at Berkeley, was the first Head of the Department of Geography at TAMU (Figure 1). He came from the Navy missile facility at Point Mugu, California to join the faculty of the School of Arts and Sciences at TAMC in 1960. Doran quickly developed good links with the faculty of Economics and History and taught classes in physical geography to complement the classes taught by Schlesselman. The two of them were joined later by Professor Fred E. Smith, a longtime member of the Geology Department, who was assigned to a part-time position in Geography with the new title of Professor of Geology and Geography. These three constituted the department of geography until the formation of the College of Geosciences, at which time Geography was briefly merged into Geology. Doran, Schlesselman, and Smith were listed in the faculty of the Geology Department for 1966 and 1967. In 1967 Schlesselman retired and George Francis Carter, Ph.D. University of California at Berkeley, was invited to

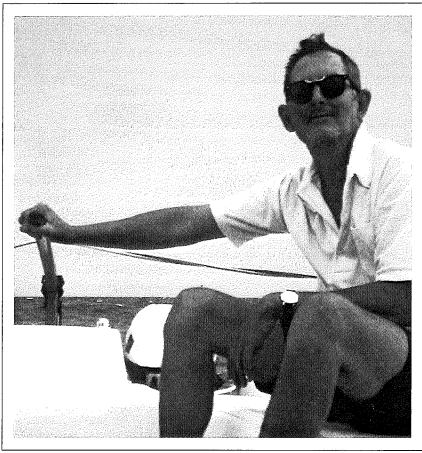


Figure 1. Edwin Doran was a founding member of the department and its first full-time head.

join TAMU as Distinguished Professor of Geography and to contribute to the planning for a new Department of Geography. Carter had formerly been chairman of the Department of Geography at Johns Hopkins University and was brought in as a senior hire to help with planning the new department and to contribute to the image of both the department and the new College of Geosciences.

Horace Byers was appointed the first dean of the new College of Geosciences in 1966. John Handin was recruited from Shell Research as associate dean under Byers and to head up the Center for Tectonophysics. Earl Francis Cook (Ph.D., Colorado School of Mines) was hired from the National Research Council in 1967 to replace Handin as associate dean and allow Handin to direct the Center for Tectonophysics fulltime. Cook, a geologist, also had ties to the National Science Foundation, and was given an academic appointment in Geology and Geography to cement the relationship between the two departments. In 1966-67, Ed Doran was appointed assistant dean of the College of Geosciences. In 1968 John Calhoun replaced Byers as dean and Handin returned as associate dean. Byers moved up to become vice president of TAMU.

When Byers was hired from the University of Chicago as dean of Geosciences his academic appointment was professor of Meteorology. But Byers' undergraduate degree was in Geography from the University of California at Berkeley, the institution from which both Doran and Carter held doctoral degrees. Byers and Doran talked and the result of their discussions was an invitation to form a Department of Geography in the College of Geosciences. The college was small, with only four departments, Geology, Geophysics, Meteorology, and Oceanography, and under 100 faculty. By 1967, Bob Berg headed a combined Geology and Geography Department within which there were two Geography faculty members, Carter and Doran. Geography became an independent unit in 1969.

The initial proposal to establish a Department of Geography at TAMU included "head-hunting" faculty of the Department of Geography at Riverside, California. In 1969, Geography at Riverside consisted of three tenured or tenure-track faculty and one ABD: Homer Aschmann (Ph.D., University of California at Berkeley), Harry Bailey (Ph.D., University of California at Los Angeles), Leonard Bowden (Ph.D., University of Chicago), and Clarissa Kimber (ABD, University of Wisconsin at Madison). Kimber, a graduate of the University of California at Berkeley, was not included because of her ABD status. This deal fell through

in early 1967. However, Doran and Kimber conversed at a national meeting of the Association of American Geographers that spring, and in the fall of that year, Kimber was offered a post to start the summer of 1968. Joe Sonnenfeld, a faculty member at the University of Delaware and a doctoral student of George Carter at Johns Hopkins University, was also invited to join the faculty in the summer of 1968. Together with Ben Everitt, a Princeton graduate who was a student of the distinguished geomorphologist, M. Gordon Wolman, at John Hopkins University, Carter, Doran, Kimber, and Sonnenfeld were thus the founding members of the department. Other than Everitt, each faculty member and Vice President Byers had ties to Berkeley.

During the academic year 1968-69, the five Geography faculty members constituted an official division within the Department of Geology and Geography, and Doran was assigned fiscal responsibility for the unit. The faculty undertook weekly seminars to share their research interests and fieldwork. These weekly discussions strengthened the unity of the group and gave a central purpose to the developing program. The following year, 1969-70, Geography was officially designated as a department and Doran was appointed head, resigning from his post as assistant dean of the College of Geosciences. Thus began the period of "Berkeley-on-the-Brazos," a nickname that played on the contemporary tag for the new university, "Sing Sing-on-the-Brazos." The university is located IN the Brazos River Valley, but not actually ON the river!

Because of concerns about duplication of existing programs in the state of Texas, the proposal to the Coordinating Board was couched in terms of specialization in physical geography with particular application to environmental issues. This was logical in light of the placement of the department in a College of Geosciences. This division of labor for academic geography within the state was discussed with Paul English who was chair of the Department of Geography at the University of Texas. It was agreed that this would not interfere with his department's

established strength in human geography and succeeded in landing all three programs in 1969.

Although the most of the geographers that the department hired had strong training in human geography, there was always the intention to focus on human/environment interactions rather than on human geographic issues alone. Over the next several years, this resulted in the gradual addition of a suite of undergraduate courses to the curriculum: Geography 330 ("Resources and the Environment"), Geography 309 ("Man and Energy") and Geography 380 ("Workshop in Environmental Studies"). These were intended to complement such existing courses as Geography 431 ("Geomorphology") and Geography 435 ("Principles of Plant Geography"). The geomorphologist, who was initially Everitt, was expected to teach courses in Geology as well as Geography. Very early, George Carter introduced Geography 606 ("Agricultural Origins and Dispersals") a course he later co-taught with Kimber. Geography 620 ("Man and Nature" later re-named "Resources and Environmental Decisions") was also added to the curriculum, as was Geography 624 ("Plant Geography").

Kimber remembers this as a hectic time. Faculty members were expected to be very flexible in what they taught, and often had to pick up a course in mid-stream. This situation continued through the "Elite" period and into the early part of the "Joe College" period. Loads were set at two courses per semester for full professors, three for assistants, and two/three for associates. However, there were years when overloads were common.

## The Elite Period of "Berkeley on the Brazos" - 1969-1972

The department began with twelve undergraduate courses carried over from the old School of Arts and Sciences, but concentrated on building a high quality graduate program. Standards were deliberately set high. Although there were few graduate students in the fall of 1969 there was a flood of applicants the next spring and the department at-

tracted a number of students in its first three years. Thereafter, enrollments quickly dropped away because standards had been set too high.

Doran taught two undergraduate courses, Geography 203 ("Physical Geography") and Geography 303 ("South America"), as well as two graduate seminars a year. Carter taught Geography 201 (then named "World Regional Geography") each semester and two graduate seminars a year. Sonnenfeld taught Geography 204 ("Economic Geography"), Geography 439 ("Behavioral Geography") and two graduate seminars a year. Kimber taught Geography 311 ("Cultural Geography"), Geography 435 ("Plant Geography"), and Geography 450 ("Field Geography"), as well as the new graduate "Seminar in Plant Geography," Geography 606. No new faculty members were added, but there were some minor additions and changes. In 1970, Cook was listed as thirty percent in Geography rather than fulltime associate dean. He developed a new graduate course, Geography 619 ("Man's Impact on the Environment") as a companion course to Geography 620 ("Man and Nature") and Geography 309 ("Man and Energy") at the undergraduate level.

Finding effective teachers for the introductory course in physical geography (Geography 203) continued to be a major problem for the department. Eugene Jaworski (M.S., University of Wisconsin) replaced Everitt in 1970. James McCloy (Ph.D, Louisiana State University) replaced Jaworski in 1971. And Houston Saunderson (ABD, University of Toronto) replaced McCloy in 1972. McCloy introduced Geography 210 ("Marine Geography") and Geography 627 ("Coastal Geomorphology") before moving to the Galveston Campus of TAMU, then called the Moody College of Marine Sciences. In 1972, John Griffiths (M.A., London) was added as a part-time member of the Geography faculty to teach climatology, but moved back full-time to Meteorology in 1973. Cook was again listed as part-time in Geography in 1972.

Negotiations began with Vaughn Bryant (Ph.D., University of Texas at Austin) in 1969 to bring cartography into the department. Mean-

while, there had been efforts on the part of the dean of the College of Liberal Arts to begin a Department of Anthropology, and he discussed that possibility with Bryant. Bryant came in 1970 with the understanding that he would move to Anthropology once that program was begun.

George Bass (Ph.D., University of Pennsylvania), a faculty member of the University of Pennsylvania Museum, joined the TAMU faculty in 1976 to develop a Nautical Archeology program. He brought with him the independent Institute of Nautical Archaeology, of which he was director. Because there were no doctoral programs in Anthropology or Archeology, Bass was given an appointment in Geography. Doran's interests in seafaring created a unique relationship that lasted well into the department's fourth phase, with all the graduate courses in Nautical Archeology listed as geography courses and one undergraduate course, Geography 316 ("Nautical Archeology") which was cross-listed with Anthropology once that program began. Bass's associate, Frederick H. van Doorninck, Jr., joined the university in 1976, but was not listed as an associate professor until 1979-80. Only one Ph.D. in Geography ever resulted from the relationship with Nautical Archeology: Don Keith graduated in 1987.

#### The "Joe College Period" - 1973-c.1989

John Calhoun was appointed dean of the College of Geosciences in 1968. Long known to favor "anything wet," Calhoun leaned toward the liquid geosciences, Meteorology and Oceanography. Soon after taking over as dean, Calhoun began to express concern about the poor showing of Geography in its numbers of undergraduate and graduate students. Doran was asked to increase enrollments and all faculty were asked to make their offerings more attractive, in particular to the undergraduate student body. In 1971, Calhoun was made vice president of TAMU and was replaced as dean of Geosciences by Earl Cook, whose academic appointment was in Geography. Cook began the search for a new head of Geography.

There were initially two candidates, Clint Edwards from the University of Wisconsin at Milwaukee and Sam Hilliard from Louisiana State University. The faculty favored Edwards, but Calhoun did not. When Calhoun offered the job to Hilliard. After a considerable delay, Hilliard turned it down, but recommended Campbell W. Pennington (Ph.D., University of California at Berkeley) who was then at the University of Southern Illinois at Carbondale (Figure 2). Cook appointed Pennington with the full endorsement of the Geography faculty. In one of their early meetings, however, Calhoun told Pennington that he had to turn the department around in two years or he would be removed and the department would be closed. As dean, Cook strongly supported Pennington in his subsequent efforts to change the image of the department.

Pennington pursued an aggressive recruitment campaign for majors and systematically sought to get geography courses built into curricula around the campus. He was successful in getting Geography 204 ("Economic Geography") added to curricula in the College of Business. He was aided in this by Kimber, who devised a new course, Geography 307 ("Folk Medicine Around the World"), to add to her undergraduate load of Geography 311 ("Cultural Geography") Geography 303 ("Geography of South America"), Geography 460 ("The Geography of Middle America"), and Geography 435 ("Principles of Plant Geography").

In the never-ending search for students, Sonnenfeld and Kimber designed Geography 380 ("Workshop in Environmental Studies"), and Geography 332 ("Thematic Cartography") was introduced. New regional courses were added, notably 202, 301, 305, 323, 399, and 460. Geography 399 ("The Tropical World") was introduced in 1974, coordinated by Kimber but taught by a multi-disciplinary team including faculty from the Colleges of Liberal Arts, Engineering, and Agriculture. Geography 202 (world regional geography described in terms reminiscent of Preston E. James as "The Divided World") was added in 1975, as was Geography 301 ("The United States"). In 1976, there were three



Figure 2. Campbell W. Pennington, the second full-time head of the department, came to Texas A&M as head from the University of Southern Illinois.

new additions: Geography 305 ("Geography of Texas"), Geography 323 ("Latin America"), and Geography 460 ("Middle America" meaning the area between the Rio Grande and South America proper, not the Middle America of the sociologists). Also in 1974, the environmental studies option was developed as a distinct curriculum drawing on the model of the department put forward to the Coordinating Board to appeal to activist students interested in the environment.

Pennington was particularly successful in building bridges to the College of Education, founding an enduring relationship with that college. A joint appointment was made with a member of the Curriculum and Instruction Department, James B. Kracht. In 1982, Jim Kracht was appointed part-time in Geography to develop Geography 355, a course in geographic education for education majors. Courses such as 201, 203, and 204 were re-designed to be more attractive to Education majors, and such new courses as 202, 301, and 305 were deliberately designed with this in mind. Pennington was responsible for 301, 305 and the revival of Geography 440 ("History and Nature of Geography"). At this time, geomorphologist Saunderson had to leave as he had come in from Canada on a United States visa that did not permit him to become a resident alien, and required him to leave the country for two years before he would be able to return. It was mutually agreed that a new permanent hire should be made. In 1974, that new hire was physical geographer John Ratzlaff.

Because of the continuing problems in teaching the introductory undergraduate course in physical geography and the development in the department of a significant research agenda, turnovers in the faculty continued. Ratzlaff was replaced by Kenneth L. White in 1976, a soils geographer trained in the Soils Laboratory of the University of California at Riverside but with a Ph.D. in Geography. This appointment finally gave some stability to the physical geography program. In 1976, an economic geographer was added as part of the ongoing re-orientation of the pro-

gram toward undergraduate instruction, Sent Visser, then ABD at Ohio State and a student of Emilio Casetti. The cumulative effect of these hires was to modify the "Berkeley-on-the-Brazos" style of the early department with faculty from other major Ph.D. departments around the country.

In 1978, the department replaced George Carter, who was retiring. After a long search at the senior level an entry-level replacement was selected. Peter J. Hugill (Ph.D., Syracuse University), then a visiting assistant professor at the State University of New York at Cortland was hired. Visser, who had not completed his dissertation at Ohio State in the time set for him, was replaced with Robert L. Bednarz (Ph.D., University of Chicago), an assistant professor at Northwestern University. These two appointments further changed the methodological direction of the department by bringing in faculty with strong backgrounds in historical/political and urban/economic/quantitative geography. Bednarz was asked to develop a new undergraduate course, Geography 306 ("Urban Geography"). "Berkeley-on-the-Brazos" had all but disappeared.

Doran chose to retire in the fall of 1978, although he continued to teach part-time in Anthropology. The department then entered a period of much needed stability, developing from the base created by Pennington. The fulltime core faculty now numbered six: assistant professors Bednarz, Hugill, and White, Associate Professor Kimber, and full professors Pennington and Sonnenfeld. Bednarz, Hugill, and White recall that Pennington made it very clear to them when they were hired that their first responsibility was to raise the enrollments in the undergraduate courses to which they were assigned. These courses were their assignments: 202, 204, and 306 for Bednarz; 201 and 301 for Hugill; and 203 and 332 for White. Except for Bednarz's new course, 306, which was taught once a year, these courses were taught every semester and enrollments rose steadily. Kimber taught 307, 311, 323, 399, and 435 at the undergraduate level and 606 and 624 at the graduate level. Pennington taught 305 and 440. Sonnenfeld taught 330 and 380. Other

graduate classes and small enrollment, upper-division undergraduate classes were taught by all, although the senior faculty taught most of the graduate load. Kimber took on much of the load and much of the responsibility for the graduate program after she was tenured in 1972.

Two more hires were made in this period, one of them an additional half-line. In order to develop the cartography program and allow White to develop courses in remote sensing, Christopher Mueller-Wille was hired in 1979 as an instructor to teach half-time and to run the Cartographic Service Unit half-time. His load was three courses a year, for which he usually taught 332 twice and either 306 or an advanced cartography class for the other. Mueller-Wille was one of Brian Berry's last students at Chicago, and came to TAMU ABD. The second person hired was Daniel Arreola who spent 1979 teaching in the department when he was ABD from UCLA to replace Sonnenfeld, who was on faculty development leave. Arreola took his first permanent appointment at the University of Arizona, then returned to a tenure-track job at TAMU in 1983. In 1981, Earl Cook stood down from the position of dean and went back to his first love, teaching. This allowed the department to expand its offerings in the area of environmental studies, especially at the graduate level through the sequence of 619 and 620. Earl Cook's untimely death on October 11, 1983 reduced this effort.

In 1978, van Doorninck was added to the faculty on a part-time basis to teach 316, his primary appointment was in Archeology. Charles L. Smith was added in 1981 on a part-time basis to develop military geography. His primary appointment was in the Center for Strategic Technology. The department grew substantially in this period, although the main focus was on successful teaching of and growth in the undergraduate service classes, not in the graduate program. Considerable emphasis was placed on acquiring majors, one of Pennington's favorite exhortations to the faculty being to use the "chicken hook." The chicken hook is a long stick with a small hook at the end with which to cut a

chicken out of the flocks that were common on almost all American farmsteads, especially in the South. As a result of the "chicken hook" approach, the department was able to cut 60 to 70 majors out of the flock of students and develop geography successfully as a general education major.

The graduate program developed only slowly, but quite successfully at the M.S. level. An M.S. non-thesis option was approved in 1978 to try and speed the progress of students. The large majority of the supervisory load, after about 1980, rested with Kimber, who, along with Sonnenfeld, taught most of the advanced graduate classes. A revision of the graduate program in the late 1970s saw the introduction of a new required course, Geography 605 ("Processes in Cultural Geography"). Two more "Processes" classes were added in the early 1980s: Geography 603 ("Processes in Economic Geography") and Geography 604 ("Processes in Physical Geography"). Bednarz, Hugill, and White taught these introductory graduate classes. Bednarz also developed a graduate class, Finance 660 ("State and Local Government Taxation"), for the College of Business, which established a market for M.S. degrees in this area. This happened at the time that the State of Texas was requiring tax appraisal districts to go to full valuation as the basis for taxation. Many of Bednarz's M.S. students from this period became county appraisers in the state. Hugill and White jointly revived Geography 650 (the graduate "Field Geography") as an overload class, first in Arkansas, then twice operating out of the old TAMU football camp at Junction, Texas, which is now run by Texas Tech. White taught the physical component of the course and brought the bourbon, and Hugill taught the human component and brought the gin. At the time, the parochial nature of Texas and TAMU was made evident to Hugill and White when they were ordered to stop spending the State's money travelling to such exotic "foreign" locations as Arkansas, which is why 650 was moved to Junction! The two were loath to abandon the delights of canvas and what even the State of Arkansas described as "primitive campgrounds" for the comforts of the tent cabins of Junction, although their consumption of antifreeze certainly dropped. Amongst many of the delights of Junction were the whitewater canoe trips along the Llano River. White and Hugill once earned submariners' badges for their exploits. White, then Hugill, then Bednarz, were tenured during this period, further cementing the stability of the department.

When Pennington stepped down from the headship in 1983, the department was considered in good enough shape to make an outside search for a new head. This resulted in the hiring of Brian W. Blouet (Ph.D., University of Hull) from the University of Nebraska (Figure 3). Cook had been followed in the dean's office in 1981 by Gordon Eaton, who came to TAMU from the United States' Geological Survey, and moved up to the provost's office in 1983 when he was succeeded by Mel Friedman, then associate dean. Friedman's concerns as a member of the Center for Tectonophysics were more aligned with Geophysics and Geology than with the rest of the college. The college was restructured in 1984 to have, at least nominally, two associate deans, one for the solid earth sciences (Geology and Geophysics) and one for liquid earth sciences (Meteorology and Oceanography). Under this "wiring diagram," Geography had to be force-fit into the solid division, and human geography was paid little attention. Thus Blouet, a human geographer, was in charge of what was perceived by the college as a more physically oriented department. Dennis Driscoll, a faculty member in Meteorology who had one degree in Geography, was assigned to Geography parttime, but returned to the Department of Meteorology within a year.

Pennington retired officially on January 1, 1984. Several new hires were made at the beginning of this period, notably John Richard "Rick" Giardino (Ph.D., University of Nebraska) from Texas Tech in 1984 (Figure 4). Giardino was given a joint appointment in Geology. A joint appointment with Archeology, fifty percent in each department, was developed for a person with geomorphological skills to help in dating.

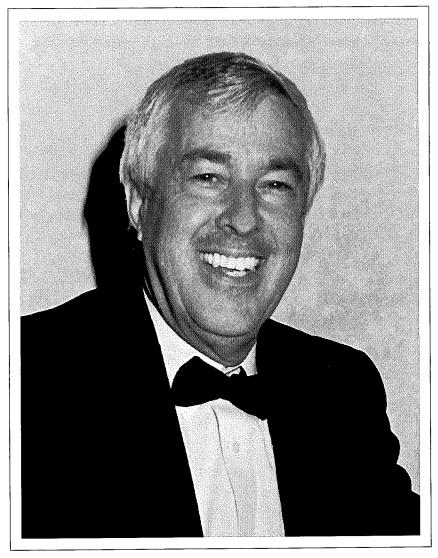


Figure 3. Brian Blouet, the third full-time head of the department, came to Texas A&M as head from the University of Nebraska.



Figure 4. John R. "Rick" Giardino, the fourth full-time head of the department, came from the North Texas State University as an Assistant Professor.

Vance T. Holliday (Ph.D., University of Colorado) filled this position in 1984. When Holliday left for the University of Wisconsin at Madison, Michael R. Waters (Ph.D., University of Arizona) filled the vacancy in 1986. One third of the position was assigned to Geography, and two thirds to Archeology. Also in 1984, Chris Mathewson of Geology was given a part-time appointment in Geography, which he held for one year. In 1986, there was a reverse flow, and White moved over full-time to Geology. Arreola was tenured in 1988, and Giardino was promoted to full professor in 1990.

Blouet, a human geographer, found the dean's office under Friedman less and less responsive to the needs of the department and moved to an endowed chair at the College of William and Mary in 1989. The faculty elected Giardino to replace him on the basis, among other things, that Dean Friedman might be more responsive to a physical geographer. The dean was also responsive to the need to increase faculty numbers. Because the department had taken an internal head, the dean agreed to the department's split of Blouet's line, creating two new positions.

## A Mature Department – c.1989-1994

In 1987 the full-time faculty was Arreola, Bednarz, Giardino, Hugill, Kimber, and Sonnenfeld. Part-time were Kracht, Mueller-Wille, van Doorninck, and Waters. Earl Hoskins, the new associate dean, had been added to Geography by 1984 as a part-time faculty member to cover mineral resources. He occasionally taught Geography 470 ("Mineral Economics"). There were then three appointments at the lecturer level, Virginia Duke, Jeff Fitzgerald, and Gordon Grant. The trend toward lecturer appointments was to help cover the steadily increasing undergraduate load with such a small faculty. Chuck Smith was no longer listed for 1987, having moved to Blinn College, the junior College based in Brenham, Texas but with campuses in Bryan that were taking an increasingly active role feeding students to TAMU. Smith, who devel-

oped Geography 302 ("Military Geography"), was replaced as a military geographer and Soviet Union specialist in 1988 by Ronald L. Hatchett, whose primary appointment was in the Mosher Defense Institute headed by the former TAMU president Frank Vandiver.

Dating the appearance of maturity is always problematic, but the department improved its position in the late 1980s and began to develop a much stronger technical emphasis on the base laid down by White. As head, Giardino took a successful leadership role in this and obtained considerable support in the dean's office to develop the department's first Geographic Information System (GIS) program. In 1988, Bednarz took over the editorship of the *Journal of Geography*, which greatly helped the name recognition of the department and provided a more solid base for the expansion into geographic education in the mid-1990s.

The main contribution to maturity from outside forces was the university's development of a faculty senate and the adoption by that senate of a core curriculum. Because of the hard work of the senators who were elected from Geography, White followed by Hugill; Geography established a very favorable position in the core curriculum. White was part of the committee that drafted the core and Hugill chaired the academic affairs committee of the senate during the implementation phase. Geography 203 became one of a small group of science classes from which all TAMU students were required to take two. The regional geography courses were accepted as humanities courses in the core, and many of the other human geography courses were accepted as social science courses. All TAMU students at that time were required to take two humanities courses and two social science courses, and the College of Liberal Arts, though excellent, was seriously understaffed. Enrollments in Geography courses skyrocketed, especially in courses that met humanities and social science core requirements. Although this produced a huge number of student credit hours for the college, it strained the faculty. Classes that had enrolled 80 to 100 students, and which the

faculty had considered big, such as 301 and 305, jumped to 300 to 350 seats and multiple sections.

The faculty became more fluid if not "wetter"! Vatche Tchakerian (ABD, University of California at Los Angeles), a desert geomorphologist, was hired in 1988 and moved to a tenure-track position in 1989 (Figure 5). He did much to reduce the damage to the physical geography program caused by the loss of White to Geology. Jonathan M. Smith (ABD, Syracuse University) was hired to broaden the program in cultural geography, as Hugill's interests were more in historical and political geography. Smith moved to a tenure-track line in 1991. A new economic geography position was defined and filled in 1990 by Steve Banks (Ph.D., Ohio State University). When Banks left for the private sector in 1993, Daniel Z. Sui (Ph.D., University of Georgia), whose skills were as much in GIS as in urban and economic geography, replaced him. This provided a stable basis for the development of the GIS program begun by Giardino, and allowed the economic and urban part of the human geography program to expand. A new biogeographer, Steve Jennings (Ph.D., University of California at Davis) was added in 1990. A new position in policy-oriented geography was defined and Jeffrey W. Jacobs was hired from the University of Singapore to fill the position in 1994. Jacobs had been an undergraduate geography major at TAMU before going on to get his doctorate at the University of Colorado under Gilbert White. Meanwhile, in 1992 Kenneth White had returned to Geography from Geology and developed a new graduate course, Geography 661 ("Digital Image Processing"), to bolster the department's increasing interest in technical courses. Three new faculty members were added. Bakama BakamaNume (Ph.D., University of Minnesota) had been in a medical research institute in New York City and was hired in 1993. Anne Chin (Ph.D., Arizona State University) came in 1995 from the University of Southern California. Sarah Bednarz (Ph.D., Texas A&M University) joined the regular faculty in 1995. She had been teaching

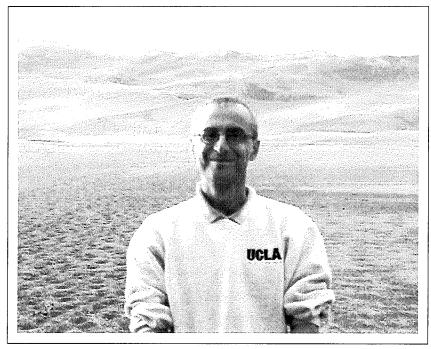


Figure 5. Vatche Tchakerian, interim head of the department between Rick Giardino and Jonathan Phillips, came to Texas A&M University as an assistant professor from the graduate program of the University of California at Los Angeles.

courses for the department as an instructor since 1989. Hugill was promoted to full professor in 1991 and Robert Bednarz in 1996.

#### An Unstable Interlude, 1995-97

A period of serious instability developed in the mid-1990s. Giardino resigned as head to become associate director of the Graduate College in 1996. Tchakerian replaced him temporarily as head, while the department made an outside search. At the same time, Kimber retired and Jennings was not recommended for tenure. Jacobs resigned in the summer of 1997. There was considerable discussion as to whether the department should de-emphasize biogeography in favor of geomorphol-

ogy. The decision was to continue biogeography. The faculty expressed serious reservations about high student loads, the consequent deterioration of the quality of their teaching, and the negative impact of such high undergraduate loads on the graduate program. Loads were reduced to two courses per faculty member per semester. Despite these problems the department continued to increase the production of graduate students at both the M.S. and Ph.D. levels throughout the period that began in 1987.

## Return to Stability - 1997 onward

In 1997 Jonathan Philips (Ph.D., Rutgers University) joined the faculty as head from East Carolina University, bringing several substantial grants with him (Figure 6). Smith and Sui were tenured in 1997. Jeff Jacobs left in the summer of 1997 to take a consulting position in the Washington, DC area. Philip A. Townsend (Ph.D., University of North Carolina) also joined the faculty in 1997 as a replacement for Clarissa Kimber, but moved to the Center for Environmental Science at the University of Maryland the following year. Three new faculty members joined the faculty in 1998. Paul Adams (Ph.D., University of Wisconsin at Madison) came to the faculty as a cultural geographer from the State University of New York at Albany. David Cairns (Ph.D., University of Iowa) came from the University of South Carolina to replace Townsend as a biogeographer. Andrew Klein (Ph.D., Cornell University in Geological Sciences) came from NASA, Goddard in Beltsville, Maryland with skills in the technical area of remote sensing. In 1999, Igor Vojnovic (Ph.D., University of Toronto in Geography and Urban Planning) came to the department from Halifax as an environmental geographer to replace Jacobs, but with his main interest in urban areas. His expertise in CAD further improved the technical offerings in the department.

The year 2000 saw two additions to the faculty and two departure. Hongxing Liu (Ph.D., Ohio State University) came to the department

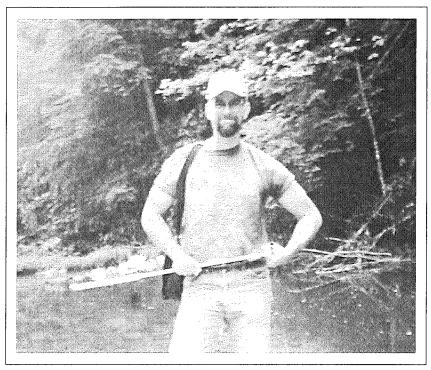


Figure 6. Jonathan Phillips, the fifth full-time head of the department, came to Texas A&M as head from East Carolina University.

from a post-doc at Ohio State. He is furthering the GIS and technical offerings of the department. Charles Lafon (Ph.D., University of Tennessee at Knoxville) was hired to expand the program in biogeography. Bakama BakamaNume left to take up a position at Prairie View A&M but retained a research association with the College of Veterinary Medicine on the TAMU campus. Jonathan Phillips left the position of head to return to his first love, teaching, and moved to the University of Kentucky. Hugill (Figure 7) took over as interim head and the department began another search for an outside head.

As of 2000, the department was fully developed and mature, with thirteen full-time faculty members, one one-third time faculty member,

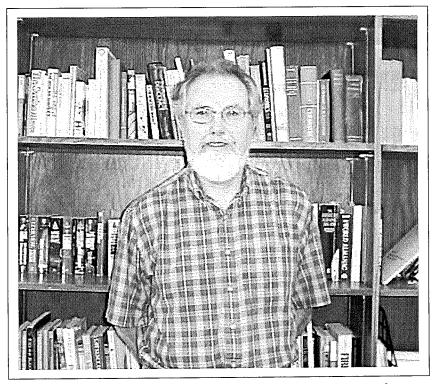


Figure 7. Peter Hugill, interim head of the department following the departure of Jonathan Phillips, came to Texas A&M University as an assistant professor from the graduate program at Syracuse University.

several instructors, a number of emeriti faculty, and several faculty and former faculty whose principal appointments were elsewhere and no longer teach Geography courses. At full strength the department will currently number fourteen faculty positions, the department head is currently open. As of fall of 2000 Adams, S. Bednarz, Cairns, Chin, Klein, Lafon, Liu, and Vojnovic were assistant professors, Smith, Sui, and Tchakerian were associate professors, and R. Bednarz, Hugill, and Waters were full professors, Waters a one-third time joint appointment with Archeology, his tenure home.

### Geography at TAMU Today

At present the department has 43 graduate students, 34 in residence. Twenty-three are seeking the M.S. and twenty are working toward Ph.D. degrees. There are about 200 registered undergraduate majors. The department currently has four general areas of research and advanced study (Table 1).

The department's record of research productivity has recently been very strong with a per capita rate of refereed publication competitive with any Geography program in the country or any other department at TAMU. In recent years, several faculty members have been particularly successful at getting grants. The department currently has over a million dollars in grant income from the Environmental Protection Agency, the National Aeronautics and Space Administration, the National Geographic Society, and the National Science Foundation. Although the undergraduate program is strong, 200 majors is large by the standards of many geography programs, the department also performs an enormous service-teaching role, routinely maintaining one of the highest ratios of student credit hours per faculty member in the university.

There are three characteristics pervading the department in 2000. One is demographic transition. Eight new tenure-track faculty members have been hired since 1997. Only one of the department's five staff members was present in 1998. A second major characteristic is a huge student load in undergraduate service classes, although these give the department a very high profile in the College of Geosciences and are clearly related to the current ability of the department to attract resources from the dean's office. However, the high levels of student credit hours generated in Geography courses strain faculty and staff resources, often necessitate a scramble to cover courses and meet student demands every semester, and limit the department's degrees of freedom in responding to other needs or initiating new programs. The budget allocation per student credit hour is among the lowest in the university. The

#### Table 1. Four general areas of research and advanced study in Geography at Texas A&M.

- Geographic Education: Social and earth science curriculum development and analysis, spatial cognition, geographic education infrastructure, and the role of information technologies in geography and earth science education.
- Geographic Information Sciences: Spatial analysis and modeling, application
  of geographic information technologies to substantive geoscience and social
  science problems.
- · Human Geography: Cultural, historical, political, and urban geography.
- Physical Geography and Earth Surface Systems: Biogeography, geomorphology, landscape ecology, and global and surface hydrology.

third characteristic is physical crowding. Despite significant improvements gleaned by Phillips during 1999, Geography is still experiencing a severe space crunch, which continues to limit the department's ability to achieve many of its initiatives. On the positive side, the department recently attracted its first endowed chair, given to the College by Bill Haynes, former CEO of Standard Oil, and assigned to the Department of Geography by the current dean David Prior. The department hopes to fill this chair early in 2001. A new initiative, which derives from the initial construction of the department, is to develop the environmental studies option into a proper major, with a B.A. in Environmental Management and a B.S. in Environmental Science to complement the regular B.S. in Geography.