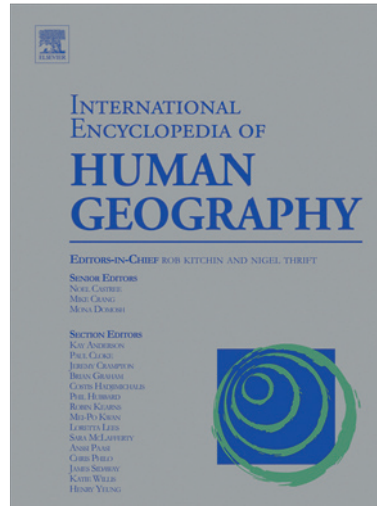


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Ivy League and Geography in the US

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Glossary

Ivy League Eight prestigious, private universities in the northeastern United States.

The Ivy League formed in 1954, but the study of geography at these eight Northeastern American colleges began much earlier. Although explicitly a sports conference, the Ivy League comprises some of the oldest and most prestigious academic institutions in the United States. Seven members date to the colonial period: Harvard (est. 1636), Yale (est. 1701), University of Pennsylvania (est. 1740), Princeton (est. 1746), Columbia (est. 1754), Brown (est. 1764), and Dartmouth (est. 1769). The eighth, Cornell, was founded in 1865. Each Colonial institution provided instruction in geography in the early days and most subsequently established undergraduate or graduate programs at one time or another – some more than once. Although many Ivies have geographers on their faculties or retain some aspects of the field in the guise of programs such as Urban Planning or Development Studies, Dartmouth is the only one with a Department of Geography. Geography's fate at these institutions has hinged on the activities of individual professors, the attitudes of key administrators, trends within the discipline, and events outside the field itself.

Pre-1830: From University Subject to School Subject

Mirroring instruction at Oxford and Cambridge at the time, the curricula of the seven colonial Ivy Leagues, included geography. Departments as we now know them did not exist and the study of geography (commonly referred to as 'the use of the globes' or 'mathematical geography') was part and parcel of teaching history, mathematics, and astronomy. Globes ('one celestial and one terrestrial') were central tools of instruction. A number of key texts complemented the study of the globes. Just as Isaac Newton did at Cambridge in the 1600s, Columbia, Dartmouth, Harvard, Pennsylvania, Yale used Varenus' *Geographia* (1650) to teach mathematical geography throughout the 1700s. In the mid- to late 1700s, Brown and Princeton used Martin's *Use of Both the Globes*, and Gordon's *Geographical Grammar* (1719) held pride of place at Harvard and Princeton. Brown, Dartmouth, Harvard, and Yale incorporated both Guthrie's *Geographical Grammar* (1770) and Morse's *Universal*

American Geography (1797) in their curricula of the late eighteenth century. (Grammar references a text organized by nation, as opposed to alphabetically – a gazetteer.) Like their university counterparts in Britain, the Ivies had few instructors dedicated explicitly to the subject; geography was typically embedded in the general study of natural philosophy or mathematics. Nevertheless, in 1784, arguably the first American professional geographer, John Daniel Gross, became a professor at Columbia.

Although the Ivy Leagues included geography in their early curricula, its presence began to wane in the early 1800s. The exact reasons for this remain unclear; perhaps 'mathematical geography' became more deeply ensconced in the intellectual areas we now know as mathematics, physics, and astronomy and a consensus emerged that the remainder – the grammar and gazetteer geography – was best taught in schools rather than at university. The decision to drop geography came first in 1816 at Harvard. That university had included geography on admissions exams since 1803, and continued to do so through most of the nineteenth century. In 1819, Dartmouth followed suit and eliminated the subject from a new curriculum. Both Columbia and Yale dropped instruction in favor of an entrance exam in 1825, and Brown and Princeton did the same soon after. By 1830, the University of Pennsylvania stood as the only college still offering geography and, although it began requiring an admissions exam in this year, it also began a new program to intensify its instruction in geography.

1830–1900: Slow Revivals

The elimination of geography from the curricula dealt a blow to its development and institutionalization in higher education. Moreover, its relegation to the status of 'school subject' may have seeded the perception of geography as an idiographic and nonintellectual subject. In the nineteenth century, universities evolved away from the notion that students had to master a certain knowledge toward the idea that students could have more choice in what they learned. As the course offerings at elite universities broadened and included electives, the Swiss evangelical environmental determinist, Arnold Guyot, sparked the interest of northeastern intellectuals when he gave a series of lectures in the US in the late 1840s (published in 1849 as *Earth and Man*). Ira Young, a professor of natural philosophy at Dartmouth, immediately picked up on these lectures and the associated monograph and in 1850

offered a course based on that text. In 1854, Guyot joined Princeton's faculty, eventually chairing a Geography Department there until 1880. Guyot's crude and theologically informed linking of nature and human activity, for better or for worse, helped leverage geography as an academic discipline, and the use of his text diffused from Princeton and Dartmouth to some other Ivies.

Darwin's theories of evolution stimulated new interest in the environment, furthering geography's recovery as a university subject in the Ivy League. Geography course work at Dartmouth, Pennsylvania, and Princeton became available, moving away from the early accents on mathematical geography and navigation toward understanding 'man-land' relationships. Harvard formally offered instruction in geography again soon after the Civil War and Yale reintroduced geography with Daniel Gilman's appointment as Professor of Physical and Political Geography. Gilman's appointment, it may be worth noting, occurred two decades before Halford Mackinder's selection as Reader in Geography at Oxford. An active scholar and teacher, Gilman left to take up the presidency of the University of California in 1872 and later headed Johns Hopkins University. His employment at Yale, nevertheless, led to growth in geography at that institution. Francis Walker (Professor of political economy and history) succeeded Gilman and taught regional and statistical geography. William Brewer soon joined Walker on the faculty. A polymath with a specific interest in fluvial geomorphology, Brewer worked on sedimentation.

The emphasis at Harvard in the late nineteenth century also inclined toward physical geography, a trend cemented in 1878 with the appointment of William Morris Davis as an instructor in geology. Davis became the most influential geographer of his time, building the program at Harvard, shifting the center of inquiry in US Geography to theories of physiography and causation, and more generally championing the discipline. In 1885, he oversaw geography's move from the Department of Natural History to the newly created Department of Geography and Geology.

As Harvard's program grew, the University of Pennsylvania's Wharton School of Business developed a rival approach to that of Davis' physiography. Wharton scholars under Emory Johnson focused on economic geography, as the study of human use of natural resources. With the emergence of the social sciences as fields of study in the late nineteenth and early twentieth century, the emphasis on physiography at certain institutions complicated geography's intellectual identity. Some programs, however, maneuvered between physical and human geography. At Dartmouth College, for example, President William Jewett Tucker pushed for the development of the social sciences throughout the 1890s and when the Department of Social Science split into Sociology and Economics, these new entities both sponsored

instruction in geography. In addition, Dartmouth's new Tuck School of Business Administration offered geography courses from the start. Brown revived geography around the same time with modest offerings in physical geography. Cornell's curriculum included geography for the first time in the 1890s; both economic and physical geography were offered. At Yale in the late 1890s, Herbert Gregory began strengthening the geography wing of the geology department. Columbia made its Geography Department independent in 1896.

1900–20: The Heyday of Ivy League Geography

By the turn of the century, geography was part of the curricula of all eight Ivy League universities. This period may have been, in some senses, the heyday of Ivy League Geography. The Ivies, and especially Harvard, produced the first generation of professional geographers in the United States. One of its graduates, Wallace Atwood, took a position at Harvard and subsequently moved to Clark, establishing the Graduate School of Geography at that institution. Clark now boasts the oldest sustained program in the US and one that has generated more PhDs in geography than any other. Another Davis student, Herbert Gregory, hired half a dozen geographers at Yale between 1900 and 1910.

The intellectual core of the discipline at this time largely centered on Davisian physical geography. Davis himself came to recognize, however, that the field was broader than this. He tried to get practitioners, especially his mentees, to develop a set of subfields like climatology, anthropogeography, and commercial geography under the rubric of what he called 'ontography'. Some of Davis' students, Isaiah Bowman (PhD Yale and on Yale's faculty 1905–15) and Ellsworth Huntington (also Yale), helped provide meaning for this new term, retaining a connection to Darwinian ideas of natural selection and evolution but assessing human activity in the context of the physical environment. Lurking in all this was, of course, environmental determinism. With roots tracing back to Guyot and some strong tendrils in eugenics, determinism's dark gravitational force continued to drag on the discipline.

The loss of a number of important intellectual leaders at Harvard, Cornell, and Yale checked much of the progress of the previous couple of decades. In 1906, Harvard physical geographer Nathaniel Shaler died and 6 years later, Davis retired from Harvard. His departure was a huge loss; none of his successors could match his energy and vision. With Atwood leaving in 1920, Harvard's program in geography was unquestionably weaker than 20 years earlier. In this period, Cornell's Ralph S. Tarr, a student of Shaler and Davis, died unexpectedly.

He had developed a burgeoning geography program through the Geology Department. Tarr oversaw Cornell's development as a center for research and graduate education, and eventually headed the new Department of Physical Geography in 1906. At Princeton, William Libbey, Guyot's successor, left the university's geography program in a reduced state. In 1915, Herbert Gregory, the champion of geography at Yale, became seriously ill and was forced to relinquish his chairmanship. In the same year, Isaiah Bowman – the Harvard-trained scholar-diplomat – became the new director of the American Geographical Society. The geography wing of the Geology Department was subsequently terminated. The University of Pennsylvania also suffered a major loss in 1919 when J. Russell Smith left for Columbia. A dedicated organizer, Smith oversaw the unification of geography and industry as a separate subdivision of the Department of Economics and Social Science at Wharton. He was recruited by Columbia's President to organize economic geography at the University's new School of Business, as he had done at Wharton. Three other established scholars also soon left. Given Wharton's previous loss of Walter Tower to the University of Chicago, Pennsylvania geography was substantially diminished. Brown's geography instruction terminated around 1914, leaving only Columbia and Dartmouth well positioned in the inter-war period. All this downsizing occurred as many English, French, and German universities institutionalized geography as a discipline, associated with both a new phase of empire building and pedagogic needs (for high school geography teachers). The absence of formal empire probably contributed to the erosion of the place for geography in the US during this period.

1918–45: Theory and Practice

World War I produced new attitudes about geography as a discipline. The large-scale employment of professional geographers by government agencies led to a push for the development of the technical aspect of the field over the theoretical. At the same time, its major theoretical foundation – environmental determinism – came under increasing scrutiny. Determinism had little international support as well as a skeptical domestic audience, yet some influential scholars, notably Ellen Semple (Chicago) and Huntington, continued to champion it. Although the late 1920s were marked by a new emphasis on the region, the regional concept failed to provide the unifying framework geography needed to maintain its prestige in the most elite institutions of higher learning. Historians of the discipline note that it was not intellectually strong in the first half of the century. 'Amateur' and 'mediocre' are two of the most damaging terms used to describe the scholarly state of affairs by both

commentators at the time and by those writing histories. At elite, influential universities, such frailty would be a particular problem.

Increased demand for practical education and the attack on environmental determinism was devastating for geography in the Ivy League universities; these institutions increasingly emphasized the importance of theory and held technical instruction in low esteem. In contrast, geography departments in the new land-grant colleges of the Midwest prospered in this environment. Because these universities were designed in part to support the Midwestern agricultural economy and serve the broader public, they welcomed the applied elements of geography. Thus, the considerable expansion of geography in the inter-war period occurred most significantly in the state universities and comparatively less so in the elite colleges of the Northeast. Ivy League geography programs – which were already vulnerable from major pre-war losses that exposed their still unsuccessful institutionalization – began to lose ground to Midwestern geography departments. Ironically, the earliest geography faculties at many land-grant universities were drawn largely from students trained at the Ivy Leagues, under the likes of Davis, Gregory, and Tarr.

Despite these shifts, Dartmouth and Columbia, the two institutions that had not suffered major setbacks in the pre-war era, fared relatively well during this period. At Columbia, J. Russell Smith managed the geography program and the university averaged a PhD per year in geography in the inter-war period. Dartmouth, which has historically focused on undergraduate education in the Arts and Sciences and has never formally offered graduate coursework in geography, continued to develop a program for undergraduates. Dartmouth's administrative leadership looked upon geography with favor, and in 1942 the discipline achieved department status.

1945–Present: And Then There Was One

World War II, like World War I, stimulated institutional interest in geography in the American academy. In the Ivy League, however, the picture was much more mixed. By the 1980s, every Ivy League program with the exception of Dartmouth's had been disbanded. The reasons behind these terminations vary around themes of weak faculty and the discipline's uncertain intellectual terrain. The adverse fiscal context faced by institutions in the aftermath of World War II probably made things worse. Although geographers can be counted among the faculty at Brown and Princeton (notably Julian Wolpert – the Bryant Professor of Geography, Public Affairs, and Urban Planning at the Princeton's Woodrow Wilson School of Public and International Affairs), these two institutions never developed programs in geography to the same

extent as their sister schools. The rest of the essay describes events at the remaining six universities.

The closure of Harvard's program in 1948 dealt a severe blow to Ivy League geography and to US geography more generally. Harvard's program had remained modest in the 1920s. Still part of the Department of Geology and Geography, geography had nevertheless begun to show signs of life. Kirk Bryan was appointed in 1926 to bolster physical geography; 2 years later, French geographer Raoul Blanchard and Derwent Whittlesley joined the faculty. These appointments were designed to build up the human side of the program and steer geography toward being a separate field. These appointments appear to have affected PhD production; Harvard granted two PhDs in geography in the 1920s (including the only one to a woman – Millicent Todd Bingham) whereas eight were awarded in the 1930s. The appointments of Edward Ullman (PhD Chicago) and Edward Ackerman (PhD Harvard) in the 1940s augured a new day for geography at Harvard – built on human geography. In May 1947, however, the *ad hoc* promotion committee agreed to promote Edward Ackerman to Associate Professor; conflict ensued when geologist Marland Billings protested the vote. Billings appealed to Provost Paul Buck, asserting Geology's need for the half position they would be losing by Ackerman's full appointment in geography as well as casting doubt on the intellectual merits of human geography as a field.

That year, an *Ad Hoc* Committee on Geography was formed, and included the President of Johns Hopkins, Isaiah Bowman. Bowman knew the President of Harvard well, and thus played an influential role in the decisions regarding the future of geography. Bowman had little respect for Harvard's geography program as it tended more toward the human side of the field and away from the physiography he enjoyed as an undergraduate at Harvard. Whittlesley, the only tenured human geographer, proved to be a poor advocate for the discipline; Edward Ullman did much more in the program's defense. Yet Bowman's lack of support probably sealed the program's fate. His inaction was perhaps a favor to President Conant, who likely already had geography's elimination as a set objective, given budget stresses at the university at the time and his personal disdain for the discipline. While protests from numerous geographers ensued, the Committee used selective evidence from Carl Sauer, who wrote the chairman, saying that the field of geography "is very poorly defined" and that geography has often been done best by nongeographers. Ackerman and Ullman were fired; Richard Logan, an instructor teaching introductory courses on a term appointment, was not rehired. Whittlesley was retained as the sole tenured geographer; Ullman departed Harvard for the University of Washington in 1951 to join William Garrison and some other (quantitative) revolutionaries in Smith Hall (*see*

Quantitative Revolution). Ironically, 15 years later when Harvard became the home for the Laboratory for Computer Graphics and Spatial Analysis (LCGSA), University of Washington graduates Waldo Tobler and Brian Berry figured among the first scholars to give papers at the new facility. Berry would return (1976–81) as an endowed Chair and Professor of City and Regional Planning and Director of the LCGSA. This laboratory developed SYMAP, the early computer mapping program and precursor to geographic information science (*see* Bowman, I.; Garrison, W.).

While many commentators recall Jean Gottmann's declaration that the closure of this department was "a terrible blow ... to American geography," the fallout from the demise of geography at Harvard was not immediate. One year after the events at Harvard, Yale reinstated Geography to departmental status. After the collapse of Yale's geography program in 1915, Ellsworth Huntington had returned as a research associate and the only geographer in the Geology Department. A few dissertations were completed at this time, and almost all of the doctoral work completed in the 1930s was in physical geography. In 1945, however, Stephen Jones, hired originally in International Studies, was appointed associate professor of geography. Although geography gained department status in 1949, and had hired several more geographers on faculty, Jones' efforts to fully institutionalize the subject were unsuccessful. The geographers he employed were not productive scholars and proved incapable of maintaining a coherent independent identity for the program in the face of competition for resources – especially from area studies. The department at Yale awarded one PhD in the 1950s and another one in the 1960s. In addition, *Time* Magazine's 1963 article on 'easy A's' highlighted the 'gut' geography courses at Yale mocking the political geography course that had no required reading. Yale terminated geography for the last time in 1967.

At the University of Pennsylvania, geography moved along an alternative trajectory with geography being organized through the university's business school, Wharton. Although the inter-war period had been marked by the growth of business administration with an emphasis on economic geography, the trend was reversed in the post-World War II years. Declining enrollments in geography resulted in a shift in business programs away from economic geography. In the mid-1950s, Walter Isard moved from MIT to join Penn's economics faculty, with the mandate to establish a regional science PhD program. Within 2 years, Isard was chairing a separate Department of Regional Science, which had links to geography. Michael Dacey, Duane Marble, Julian Wolpert, and Allen Scott were all faculty members at one time in Penn's Department of Regional Science and Regional Science at Penn has produced scholars who now occupy positions in

geography. In 1963, the University of Pennsylvania closed its Geography Department and shifted some faculty positions to Regional Science. Isard moved to Cornell in 1979; 14 years later, Penn's Regional Science department closed – having granted about 140 PhDs since its inception. Cornell's City and Regional Planning program contains the only Regional Science track in the Ivies. In the past two decades, Cornell has conferred 31 PhDs in regional science; some of these graduates have also obtained academic positions in geography.

Columbia University's excellence in graduate studies in geography went unmatched by the other Ivy Leagues for much of the twentieth century, but this did not prevent the department's eventual termination. After early success in establishing geography at Columbia, Russell Smith did not do enough to strengthen the program and consolidate its position at the university: he spent little time on campus and dedicated most of his efforts to writing textbooks. In later years, Columbia's graduate enrollment numbers were reasonable, but the best and most promising students were opting instead to study at expanding departments at Michigan, Wisconsin, or Chicago. With roots in Columbia's School of Business, the department also suffered from the decline of economic geography in the post-war period. Smith's retirement during this time was followed by the eradication of two tenured positions in the 1970s, appointments filled by junior colleagues on 3-year contracts. Another loss came when the department's chairman, William Hance, retired in 1981. Although graduate enrollments were still around a dozen each year in the early 1980s, the administration claimed that the quality of the students had declined. Undergraduate course requirements in geography were eliminated in 1985 and new courses in remote sensing were not permitted. Given the lack of popularity of geography courses outside the department, administrators felt that it was not fulfilling either its intellectual or its service function. The decision to close the department finally came in 1986.

The establishment of a full-blown Department of Geography at Dartmouth coincided with the appointment of a third professor of geography Van English; he joined Al Carlson and Trevor Lloyd on the faculty. All three held Clark PhDs. The curricula offerings in the 1940s reflected the times with a War Course as well as map interpretation as part of Defense Instruction joining the more regular fare of regional and physical geography. With the end of global conflict, war-related courses defaulted to more conventional rubrics of air photo interpretation and cartography. Robert Huke (PhD Syracuse) joined the faculty in 1953 and championed the discipline on campus. He was a beloved teacher and an energetic promoter of geography among students and faculty.

The department slowly grew to include six full-time lines by the mid-1970s. Laura Conkey became the first

woman appointed to a tenure-track position in the department and subsequently the first woman tenured in a Geography Department in the Ivy League. Between 2000 and 2005, the department added three new positions. Today the department includes nine full-time tenure-track faculty; two hold joint appointments (with Women's and Gender Studies and Environmental Studies respectively), and two others now hold endowed chairs – the first such appointments conferred on geographers at Dartmouth in its history. In 2007, women in tenure-track appointments in the department outnumbered men for the first time.

Why has this Ivy League department not only survived but also flourished when the others foundered? Without a doubt, Bob Huke's personality and tireless efforts on behalf of geography helped trump doubts about the department's viability and place in a liberal arts environment. The department always cared deeply about undergraduate teaching and developed consistently sound undergraduate enrollments. The department has also hired carefully, emphasizing teaching and research excellence as well as collegiality. In the last couple of decades, the department has only put forward strong candidates for tenure and promotion whose work resonates across campus and the discipline. Geography at Dartmouth has been opportunistic, open to moving in new directions when the chance arose. In addition, for decades, department chairs have steered a course that promotes the unique contribution of geography as a theoretically oriented discipline, and marking it as distinct from potentially competing campus programs in environmental studies, various area studies, and its sister social science departments – Anthropology and Sociology. The department also values and celebrates research collaborations between faculty and undergraduates – this article being one example among many.

The Geography Department at Dartmouth recently developed *ad hoc* postbaccalaureate and postdoctoral programs, which the faculty plan to leverage into a masters degree course sooner rather than later. Hopes for new Ivy League graduate programs in geography, however, do not rest entirely with Dartmouth. In 2003, Brown's initiative in spatial structures in the social sciences came on line; this interdisciplinary research cluster analyzes the impacts of spatial relations and contextual effects on social problems. Harvard's interdisciplinary Center for Geographic Analysis, opened in May 2006, also augments geography's (Ivy League) standing. Whether these new research centers seed new departments at Harvard and Brown or new programs in geography elsewhere in the Ivy League remains to be seen.

See also: Anglo-American/Anglophone Hegemony; Feminist Geography, Prehistory of.

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