I suppose I am an old-fashioned teacher. My subject -- diplomatic history and international relations -- could not be further removed from the avant-garde of post-modern cultural studies. My methodology is traditional, centering on the critical interpretation of documentary evidence and the logic of cause and effect in the belief that facts exist and falsehood, if not perfect truth, is discoverable. My lectures and books are in narrative form, because in political history sequence is critical to understanding why decision-makers acted or reacted as they did. And my assignments require students to demonstrate knowledge of at least the most important names, dates, and events because concepts and theories are empty unless one knows what factual evidence inspired them and what phenomena they are advanced to explain.

Old-fashioned, demanding, some would say boring -- and yet, my courses in diplomatic history draw hundreds of students, whereas courses with post-modern approaches often attract less than a dozen. Evidently, the collegiate consumers of history, not to mention the book-buying public, find more value and enjoyment in rigorous studies of the origins of wars and peace than in speculative studies of, for instance, the “gendering” of gravestones in 17th century France. The downside of having large classes, however, is that the only
students I get to know personally are those who come to my office hours and voluntary discussion sections. So it was that I was taken aback when one anonymous face from my 19th century European diplomacy lectures visited my office accompanied by a big, decidedly businesslike black Labrador dog. I was just about to make a joke, or a protest, when I looked up and realized the young man was blind.

He felt for a chair and asked for my help: he had received a B+ on the midterm, but was used to getting straight A's. His problem, he said, was with maps. He could understand the ideological or commercial motivations for the foreign policies of liberal Britain, Napoleonic France, the multi-national Hapsburg Empire, or reactionary tsarist Russia. But he had trouble visualizing the strategic, balance-of-power relationships among the various states. Suddenly I felt both wholly inadequate and ashamed of feeling inadequate given the courage he boldly displayed. If a student unable to read by himself could aspire to study history, it was incumbent upon me to assist him. So I pulled out a map of Europe, took the boy's finger in my hand, and traced for him the coastlines of the continent and the location and boundaries of the various states. I showed him where the mountains and rivers were located, and tried to convey their strategic significance. I described how large the countries were -- hoping that he had some notion of distance -- and told him how swiftly (or slowly) pre-industrial sailing ships and armies could move so that he might imagine how railroads and
steamships exploded the old equation between space and time. Never letting go of his finger lest he become disoriented, I repeated the lessons until he stopped me. His memory was extraordinary, and he soon displayed a better feel for the geopolitics of Europe than many, perhaps most, of my students blessed with sight. He would return periodically, however, for more information, such as the locations of the provinces of Italy and Germany that united into national states between 1859 and 1871, and I recall having an especially difficult time when the European colonialism of the 1880s ushered in the era of world politics. But he finished with an A in the course.

The blind student had to learn his geography in order to understand history. My own love affair with history began with a fascination for geography. As a youngster in the 1950s I enjoyed sports and games, but was transfixed by atlases, globes, stories of the explorers, my parents' "National Geographic" magazines, and travel and nature programs on television. I traced my own maps and prided myself on knowing all the countries and capital cities, highest mountains and longest rivers. By high school this thirst for information about the world turned into a thirst for history, including the origins of civilizations, the rise and fall of empires, the "lost worlds" of South America or Africa, the flora, fauna, and human cultures that characterized different climatic zones, the patterns of politics and military
strategy. If someone had asked me then to distinguish between geography and history as distinct academic fields I could not have done it. And I cannot do it today, any more than a blind person can explain European diplomacy without a mental image of the map. But I was not the whiz at geography I imagined, as I found out in graduate school at the University of Chicago. The professor asked our seminar on Central Europe why after 1918 the new nation of Czechoslovakia was uncomfortably dependent on Germany. Disgusted by the silence that ensued he gave us a clue: "Where does the only major river of landlocked Czechoslovakia reach the sea?" After a few flustered movements I replied, "But, the Vistula runs through Poland." The professor fixed a cold stare on me and hissed, "Look at a map!" The answer, of course, was the Elbe River, which runs from the Czech heartland to the great German port of Hamburg.

I learned then that one can never know enough geography -- or, to put it another way, one must learn more geography whenever one endeavors to learn more history. That is why it is so disheartening that most Americans emerge from their schooling as functional illiterates in geography despite the fact that 90 percent of U.S. adults consider some geographical knowledge a prerequisite to being a well-rounded person. The poll, conducted on behalf of the National Geographic Society, showed that only one-third of Americans could name a
single country in NATO and that half could not name any members of the rival
Warsaw Pact. The average adult could identify only four European countries
from their outlines on a map, and less than six of the fifty United States. One in four could
not find the Pacific Ocean.¹ What is more, the group that performed the worst in the survey
were those aged between 18 and 24, a finding
that would not surprise those of us who teach history in universities. For it appears that many American students were not even given a chance to learn much geography in their elementary and high school years. Why is that? Is it because educators have just been unaware of the importance of geography to many branches of knowledge, not least history? Is it because they once knew, but have forgotten? Is it because geography seems to involve rote learning of "boring" facts rather than development of the "thinking" faculties? Is it because the influential political-correctness and multiculturalist movements are suspicious of a subject that emphasizes distinctions among regions, invites unflattering comparisons and hierarchy among nations and cultures, and has been used in the past as an intellectual tool of empire? Is it because geography just seems passé in an era when communications technology, commerce, and ideas "transcend boundaries" and make the earth a "global village"? Or is it because geographers themselves have failed to define and promote their subject?
Whatever the answer (perhaps it is "all of the above"), the Rediscovering Geography Committee, appointed by the Board on Earth Sciences and Resources of the National Research Council in 1997, lamented not only the "astonishing degree of ignorance in the United States about the rest of the world," but that most people think of geography as a matter of memorizing place names. The committee rebutted, “A central tenet of geography is that 'location matters' for understanding a wide variety of processes and phenomena. Indeed, geography's focus on location provides a cross-cutting way of looking at processes and phenomena that other disciplines tend to treat in isolation. Geographers focus on ‘real-world' relationships and dependencies ....”²

That would seem to be such a common sense proposition that no one would challenge it. It is, in fact, the first fundamental reason why geography is indispensable to a sound school curriculum. We are all geographers, after all, from the moment we learn to navigate the playpen or find the bathroom and refrigerator, to the years we explore the neighborhood on our bicycles and take a family vacation, to the careers we pursue as adults. The general, admiral, or statesman is a

| The general, admiral, or statesman is a geographer, but so too is the common soldier or sailor, the corporate executive deciding where to build a plant and which markets to target, but so too the salesperson, not to mention the farmer, fisherman, miner, oil worker, pilot, engineer, truck or taxi driver, real estate agent, manufacturer, consumer or, for that matter, golfer. |
geographer, but so too is the common soldier or sailor, the corporate executive deciding where to build a plant and which markets to target, but so too the salesperson, not to mention the farmer, fisherman, miner, oil worker, pilot, engineer, truck or taxi driver, real estate agent, manufacturer, consumer or, for that matter, golfer. One Jimmy Sneed, a legendary caddie at the Pinehurst resort in North Carolina, was unschooled, but he knew his golf course and golfers so well that he invariably chose the right club to use for each shot ... until, after World War II, Pinehurst began to provide yardage markers on the fairways, whereupon "Steed's circuits blew." Numbers meant nothing to him, and his feel for club selection deserted him.³ The Polynesians who crossed thousands of miles of open-ocean to populate the Pacific Islands, and the Native Americans who navigated the trackless Great Plains in search of game likewise had no need of maps and instruments. But that only meant that they were natural, intuitive geographers all the more keenly alive to the sun and stars, winds and currents, landscapes and weather about them. So whether we steer our way through the world by feel and folklore or maps and instruments, geography is the context in which "we live and move and have our being" (to paraphrase the apostle Paul). You cannot argue with geography, as Ambassador Robert Strausz-Hupé liked to say, and geography in turn "does not argue -- it simply is,"⁴ as Hans Weigert put it. Geography concerns the way things are, not the way we imagine or wish them to be, and thus it is as fundamental to a child's maturation
as arithmetic, which teaches that 2 + 2 are 4, not 3 or 22.

Second, geography is fundamental to the process of true education in that it serves as a springboard to virtually every other subject in the sciences and humanities. Children, as a British government study observed, are like the mongoose in the Rudyard Kipling tale: "The motto of the mongoose family is ‘run and find out' and Rikki-Tikki-Tavi was a true mongoose.” Children's minds are much the same. They "will enjoy merely discovering what is ‘just round the corner' or finding out from pictures, and most will need no encouragement to explore the banks of the river or visit a farm or even to investigate the well-known streets of their own town .... So, too, when faced with glimpses of Everest, the Victoria Falls, the lonely deserts of Arabia, Tibet and Antarctica, they often find food for their sense of wonder and feeling for beauty." What happens next, usually in secondary school, is that the student who was originally enthralled just by the sheer variety of the world and its people, begins to ask, not only "what?" and "where?" but "why?" and "how?" Why are deserts or rain forests here and not there? Why do Asians eat rice and Mexicans tortillas, instead of bread? Why did the Europeans discover routes to China instead of the Chinese discovering routes to Europe? Why did democracy emerge in Greece and not Egypt? How did the colonial powers manage to conquer the world, and
how did today's two hundred odd countries emerge? What is a "country," for that matter, and why are some big, rich, populous, and mighty, while others are small, poor, or weak? Asking such questions inspired by geography opens up a universe of intellectual inquiry, because to answer them the student must turn to geology, oceanography, meteorology, and astronomy, anthropology, economics, comparative religion, sociology, and history. Geography is the window on the world of the mind as well as the senses, and can be dispensed with no more than reading, writing, and arithmetic. To educate, after all, means to "lead out" (educere, in Latin), and no subject leads the student out of the narrow, familiar, and "taken for granted" better than geography. That is the second reason why it is indispensable in a sound curriculum.

Yet a third reason why geography is fundamental to true education is that students without geographic knowledge are helpless when confronted by adult issues, whether in school or outside of it. Geography is vital to the examination of economic competition, poverty, environmental degradation, ethnic conflict, health care, global warming, literature and culture, and, needless to say, international relations. But the universality of geography's relevance has
perversely contributed to its demise as a subject in its own right. As Malcolm Douglass observes, "The strange fact of the matter is that the role of geography in the school curriculum is at once anomalous and ubiquitous. Geography lacks a clear identity.... Nonetheless, by its very nature, geography is integral to all human inquiry. It is difficult, or even impossible, to separate what is geographic from what is not. In this sense, then, geography is everywhere in the school curriculum. The major problem, both for geographers and geographic educators, and for all curriculum planners and teachers, is to find ways to acknowledge and act on this reality."6

The ways have always existed. They need only to be rediscovered.

The Mother of Sciences ... and Civilizations

The origins of self-conscious study of the human environment are buried in prehistoric times, but the exciting recoveries recently made of ancient shipwrecks in the Mediterranean, Red and Black Seas, indicate that human beings were engaged in seafaring and thus long-range commerce as early as 6000 B.C. The captains and pilots of those craft must have learned and passed on detailed knowledge of the coasts and waters they plied, just as the Sumerian, Egyptian, and Chinese sages made possible the first civilizations by linking their
observations of astronomical cycles to climatic cycles, and mobilizing labor for irrigation and planting of crops. These first geographers were highly pragmatic, but they were also mystics who believed that to understand this great and glorious home of the human race was the only way to understand humanity, the gods, and the relationship between them. The Aztec and Mayan temple observatories, the Celts' Stonehenge, the pyramids, and the mysteriously ecumenical Zodiac attest to the fact that culture and religion no less than material civilization were products of geographical curiosity and experience.

What might be confidently called scientific geography, however, was an invention of Hellenic civilization. The head of the great library at Alexandria, Eratosthenes (died c. 192 B.C.), calculated the circumference of the earth to an astonishing degree of accuracy, and is thought to have coined the word geography (earth-writing). Strabo (died c. 20 A.D.) compiled all that the ancient Greeks and Romans knew of the world in his 17 volume Geographica, and his student Ptolemy (died c. 50 A.D.) was the first to map the known world according to a latitude and longitude grid. It was Strabo who put into an aphorism what any emperor or warlord knew from hard experience, which is that geographical knowledge is power: "The greater part of geography subserves the needs of states; for the scene of the activities of states is land and sea, the dwelling place of man." Thus, a single tribe or tribal confederation might examine its immediate landscape and patterns of weather and soil, succeed in
farming and herding, and draw imaginative conclusions about its place in the earthy and heavenly order without ever seeking geographical knowledge beyond its own neighborhood. The state or empire, by contrast, by definition subject to ambitious rulers, lusted for expansion of dominion and wealth (either by trade or plunder), and worried in turn about foreign invasion. Knowledge of the size, shape, and characteristics of ever more distant regions of the globe, and the numbers, distribution, and customs of the people found there, was a highly political asset. Greek philosophers, moreover, speculated about the likely connections between topography and climate on the one hand, and political and religious institutions on the other. To Herodotus or Aristotle it seemed natural that the well-watered and isolated valleys of Greece gave rise to independent city states and democratic ideas, whereas the broad deserts and unbounded basins of the Nile, Tigris and Euphrates, and Oxus and Jaxartes spawned autocratic societies ruled by god-emperors. The ancient origins of political science, comparative religion, and sociology lay in geography, even as those modern disciplines stemmed from the speculations of philosophes such as Montesquieu about the relationship between climate and human institutions and customs.

Rome, of course, fell. And if a single explanation had to be given for the so-called "Dark Ages" that followed in Western and Central Europe, it might well be the loss of geographical information. Not only were the
ancient texts no longer available or understood, but early Medieval Europe itself was cut off from the world by the Atlantic Ocean to the west, the vast, forbidding, and pagan forestlands to the east and north, and the Muslim imperium to the east and south. To the extent that renaissances occurred in the Medieval millennium -- under Charlemagne and again during the Crusades, and finally in the great *quattrocento* of the 1400s, they resulted in large part from increased contact with the outside world and the recovery of ancient geographical texts.

The role of Christianity was undoubtedly important, though ambiguous. On the one hand, Christianity represented a revolutionary break in the ancient connections made between place and piety, as reflected in the religious value *(pietas)* Romans placed in patriotism *(patria)*, Jews placed in holy sites and the temple mount, and other cults placed in their "high places" and idols. The Chinese *hsiao* reflected a similar idea, and belief in the spiritual qualities of location survives to this day in the art of *feng shui*, not to mention Japanese Shinto. Even in the West this habit survived. Abraham Lincoln pronounced Gettysburg "hallowed" by the blood of the dead, and Shakespeare's Henry V asked, "If I should die, think only this of me/ That there's some corner of a

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foreign field/That is for ever England."  

But Christianity broke that connection. Jesus said, "Let the dead bury the dead," "store up treasure in heaven," "my kingdom is not of this world," claimed to be the living temple of God, and personified the Jewish commandment to worship the Creator, not the Creation. Thus, some zealous Christians could decry pagan learning as evil or hole up in monasteries and eschew the world.

On the other hand, Christians were instructed to "go forth and multiply," "subdue the earth," and "preach the gospel to all nations." Medieval theology was highly rationalistic, and the Church endorsed Ptolemy's cosmology. The most powerful tool of measurement, the mechanical clock, was invented by Cluniac monks, and while Christianity did not necessarily encourage curiosity about nature, neither did it declare worldly things debased as some Asian religions and gnostic cults did. The Christian roots of the Scientific Revolution are well documented.

What held Medieval Europe back was its loss of geographical knowledge and the ability to replace it by venturing far from their homes. Once it recovered that knowledge and ability, from Marco Polo's journey to the Crusades to the recovery (via Byzantium and Venice) of ancient Greek texts, and equipped themselves with the mathematics and astronomy of Araby, the compass and gunpowder from China, and forged cannons from the Ottoman Turks, Europe promptly launched the Renaissance that created the modern world.
The Age of Discovery and Birth of the Modern

Nothing illustrates better geography's power to catalyze other human pursuits than the great European Age of Discovery. Once upon the time the stories of Prince Henry the Navigator, the sponsorship of Columbus by Ferdinand and Isabella, Vasco DaGama's voyage to India, Magellan's circumnavigation, and the reconnaissance of North America and the Pacific by Spanish, Portuguese, English, Dutch, French, Spanish, and Russian explorers were styled as lofty adventures that demonstrated the dynamism of Western Civilization and the grit, skill, and courage of the explorers themselves. Nowadays, what most students learn from their textbooks and teachers is that greedy and violent people (men, really) from Europe got their hands on guns and cannons they did not even invent, and set out to murder and plunder all the other (presumably idyllic) peoples of the globe. There is no denying the ignorance, brutality, and less than pure motives of the explorers and colonizers and the monarchs and merchants who funded their exploits. But whether history classes present the Age of Exploration in a positive or negative light, or (as should be done) as an historical phenomenon and not a morality play, they lose everything if they fail to present it as a scientific, which is to say geographical, revolution. The need to navigate
beyond the sight of land and survive voyages of thousands of miles, to measure and chart one's route through strange waters so that others might follow, to map and describe discoveries so that rational decisions could be made about future expensive expeditions: all that sparked an explosion in European geography, oceanography, and cartography that culminated in the dramatic race to find a reliable means of finding the longitude. In the same fashion the commerce pursued by the Europeans in Asia and the Americas made the 16th to 18th centuries the first era of "globalization" and inspired the chartered company, joint-stock company, commercial insurance, double-entry bookkeeping, and ultimately the floating national debt: in other words, the foundations of modern capitalism and the world economy. The strange flora and fauna of distant lands were brought back to Europe, where scholars named and categorized them, providing the empirical base for the invention of modern biology. Hundreds of explorers' descriptions of strange foreign peoples also arrived back in Europe, inspiring rationally-minded philosophers to escape, not reinforce, their Eurocentric approach to religion, culture, society, and politics, and attempt to explain why customs varied so widely around the world.

Western literature was also reinvented thanks to the fact that Renaissance and Early Modern writers "reinvented the world". Dr. Johnson called on Englishmen to "view the world from China to Peru," but the very flood of information about the "real world" led others to imagine fantastic worlds that
parodied human reality such as Jonathan Swift's *Gulliver's Travels* and Daniel Defoe's *Robinson Crusoe*. And the greatest of all chroniclers of the explorations, Richard Hakluyt, determined "to reinvent both England and the world to make them fit for one another." Hakluyt was born in 1552 and took holy orders at Christ Church, Oxford before he fell under the spell of a cousin whose hobby was geography. Hakluyt then dedicated his life to propagation of geographical knowledge "always with the idea in mind of arousing Englishmen to enterprise overseas," and imagined great English empires arising in North America and India. The first volume of his magisterial series, *The Principall Navigations, Voiages, and Discoveries of the English Nation*, appeared in 1589, and was the great prose epic of the Elizabethan period, as influential in its way as Shakespeare's plays and Cranmer's *Book of Common Prayer*. Taken as a whole, "the effect of geographical literature on the Renaissance mind was as the raising of a curtain, a revelation made almost entirely by the printed book."  

The reference to Britain's imperial destiny was no isolated prophecy, prescient though it was at the time. For if the Age of Exploration gave Europe both the data and the incentive to expand its whole notion of possibilities in matters of commerce, inspired new inventions and new sciences, and forced Christian Europe to reexamine its place in history and the human race as a whole, so too did it prove anew the truth of Strabo's saying: "geography subserves the needs of states." Europe's kings and queens (and the Dutch
Republic) bankrolled exploration, competed with each for colonies and trade routes, and chartered the companies that invested in the new world economy. But above all, governments began to subsidize science.

Britain's Royal Society was founded in 1660, the French Academy of Sciences in 1666, and Prussia and Russia followed in the early 1700s. Numerous private scientific organizations sprang up in the shadow of the official ones, and universities began to be centers for geographical study: the first inroad into the classical and Medieval studies that dominated their curricula for centuries.

Why did the Europeans succeed in subduing the world, the youngster may ask? The answer, as Lesley Cormack brilliantly summarized, was geographical knowledge: 11 "The discipline of geography was thus important in two facets of early modern English life. Not only did it help create a shared ideology of the nascent English empire, but geography provided a meeting place for mechanics and philosophers, helping to change the protocols and values of the study of the natural world.... Geography combined a mathematization of the world, intrinsic in the development of a geometric grid in which to contain the hemispheres, with an inductive methodology and an ideology of utility and power through

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Strabo's saying: "geography subserves the needs of states."
knowing and classifying. Geography ... offered a synthesis of 'objective' and 'subjective' knowledge, empirical data and personal experience, thereby personalizing the world while legitimating personal experience with scientific understanding."

In sum, the Age of Discovery is the most exciting subject any student of geography or history can study. For however much it was sullied with violence and exploitation across cultural divides, that age was an intellectual triumph unique in history. As the great historian of the era, J.H. Parry, put it, the explorers "discovered that the world as a whole was larger by far than any then accepted authority, ancient or medieval, had taught. They proved that the salt seas of the world, with a few insignificant exceptions, were all connected, so that a seaman, with courage, adequate provisions, and a 'sufficient' ship, could in time reach any country in the world that possessed a sea coast. They encountered curious animals, unfamiliar plants, strange natural phenomena ...<and the> knowledge brought home by the explorers, and spread about by the new device of printing, affected every aspect of European life and thought. Geographical exploration is the most empirical of all forms of inquiry."12

Early Modern philosophers referred to geography as "the mother of sciences," and John Locke, in 1693, made explicit its identification with history: "Without Geography and Chronology, History will be very ill-retained and very
But it was just then, near the end of the 17th century, that the first signs of a counter-current emerged: geography's very success in spawning so many other paths of inquiry, and its own intensive empiricism, began to give some people the wrong impression of what it was about. In short, it was about almost everything, and so seemed to be about nothing. The brilliant Dutch geographer Bernard Varenius died at the age of 28 just as his monumental *Geographia generalis* of 1650 was being published in Amsterdam. But he bequeathed a lament and a plea for geographers in ages to come:

"Geography, called one of the mixed mathematical sciences, teaches those affections of the earth and its parts which depend on quantity, namely shape, location, size, motion, celestial phenomena and other related properties .... By certain people it is less strictly taken as merely the description of regions of the earth and their distribution ... By others, on the contrary, it is too widely extended, when they add a political description of individual regions. These however are easily excused since they do this to retain and arouse the interest of their readers, who are generally bored with a bare enumeration and description of regions without an explanation of the customs of the people."

Indeed, geography slid into the background in the first half of the 18th
century, in large part because the new sciences it had spawned or nurtured, such as natural history, biology, physics, and astronomy, captured the imagination of scholars, while the competition for new colonies which had done so much to drive state sponsorship of geography, fell into abeyance for some fifty years. It was the first, but by no means last period in which geography was snubbed as pedantic, descriptive, old-fashioned, or merely "popular" in favor of geography's own children among the more theoretical sciences.

But the fundamental sources of geography's importance never dry up, including its pragmatic applications to strategy and commerce, and its provision of indispensable knowledge to the study of humanity as well as of nature. Thus, geography as a tool of statecraft was picked up again by the governments of Europe in the mid-18th century when Britain and France especially fought a series of climactic wars between 1740 and 1763 that ended in British domination of North America and
the Indian subcontinent: Hakluyt's prophecy realized. In the wake of their stinging defeats the French launched another series of explorations in the Pacific, which the British countered by sending out James Cook and George Vancouver to open the last habitable quarter of the globe -- the remote North Pacific -- to commerce and settlement.

**Professionalization of a Discipline**

In the same decades, academic geography revived in the least likely locale, Germany. Disunited and functionally land-locked, the German states had not participated in exploration and empire, but German scholars showed an intense interest in the intellectual fruits of the discoveries, and pioneered the study of history through the lens of geography. The culmination was a work, little known today because of its author's far more famous philosophical treatises, by Immanuel Kant. His *Physische Geographie* of 1802 described geography as nothing less than the "foundation of history": not "an adjunct to," not "useful knowledge to have in the study of," but the very *foundation* of the political, economic, social, and cultural life of mankind. What is more, Kant did not consign geography to the role of "mother" of other sciences that were now maturing on their own, but instead wrote of "many geographies," including mathematical, moral, political, commercial, and theological geography. According to Kant, geography and history were the quintessential empirical
sciences and the bases for all human inquiry, because between them they "fill up the total span of knowledge; geography namely that of space, but history that of time." 

Two of Kant's successors in German Idealist philosophy completed the establishment of geography as formal academic discipline. The first was Alexander von Humboldt (1769-1859), the naturalist famous for his expeditions to South America and study of man's interaction with his natural environment. Humboldt spent many years in Paris (where Napoleon, a patron of science in the service of statecraft, had established a joint chair in geography and history at the Sorbonne in 1809) and helped to found the Paris Geographical Society in 1821. The other was Karl Ritter (1779-1859), whose *Erdkunde* grew to some 21 volumes and likewise concentrated on the interplay of humanity and geography. The two Germans differed in their governing assumptions. For Humboldt, human beings themselves were part of nature and shaped by it (echoing Locke's "nurture over nature" approach to personality formation and education, and anticipating Darwin, who published in the year Humboldt died). For Ritter, more under the influence of the Romantic movement, nature was God's creation designed a
priori to provide for the needs of mankind. Ritter therefore held that man was *sui generis* and acted upon the world, while Humboldt imagined the world an independent variable acting upon man. But both their methodologies emphasized the *Zusammenhang*, the logical "hanging together" of human and physical phenomena and the causal relations between them. Their ideas ultimately led to the coining of the term ecology by Ernst Heinrich Haeckel in 1868, and the invention of human ecology as a main branch of geography.\(^\text{16}\)

Scholarly disciplines need patronage, but even more than that they need institutions to promote the dissemination of knowledge and impose standards. With the French society as a model, Humboldt returned to Berlin, where his lectures inspired the Berlin Geographical Society, founded in 1828. Ritter, the first professor of geography at Berlin, was named the Society's president. Finally, a British Royal Geographical Society emerged in 1830, and the American Geographical Society based in New York in 1851. But Germany continued to lead, as the University of Leipzig created a second chair in geography in 1871, the year of German unification, whereupon the Prussian government decreed in 1874 that all its state universities establish professorships in the field. In the wake of France's defeat in the war of 1870-71, geography was made a core subject in the French educational system as well, inspired by Jules Simon, Minister of Education, geographer Frederic LePlay, and Emile Durkheim (another brilliant philosopher who saw geography as indispensable to
Over the course of the 19th century, geography also established itself as a mainstay of the nascent primary educational systems of Western Europe and North America. Benjamin Franklin was a brilliant amateur geographer who mapped and theorized about the Gulf Stream, and advocated geographical instruction in schools. Columbia University in New York taught geography formally beginning in 1784, a quarter-century before the first European chair was established in the field. George Washington himself urged the Continental Congress to vote funds for a Geographers' Department, and on July 25, 1777, the Congress empowered him to appoint Robert Erskine his official geographer and surveyor. From 1777 to 1783 the department produced 130 maps of the colonies. Thomas Jefferson, of course, was already famous for his sophisticated *Notes on Virginia*, and as president despatched Lewis and Clark across the continent to gather geographical knowledge, by which Jefferson meant *everything* there was to learn about the lands and their peoples.

In 1818 the U.S. Military Academy at West Point formed a Department of Geography, History, and Ethics (a magnificent conflation) under the Rev. Cave Jones, Chaplain, and U.S. Army explorers such as Zebulon Pike and John Fremont led numerous geographical expeditions into the West. Perhaps the
greatest of military promoters of science was the lame (hence shore bound) naval officer Matthew Maury, who planned numerous oceanographic expeditions such as the famous Charles Wilkes voyages to the Pacific in the 1840s. The first generation of American educators, led by Noah Webster and Jedidiah Morse, even imagined every young American to be a geographer, as befit a nation destined to expand. Morse's *Geography Made Easy*, first published in 1784, went through dozens of editions, and geographical drills were a familiar activity in America's "one-room schoolhouses." As the century advanced, great educational reformers such as Boston's Horace Mann (1796-1859) insisted that geography be placed in the core of school curricula, for its own sake and because it was so vital to the teaching of history and science. Taking their lead from the British, American reformers copied the practice of the famous Victorian schoolmaster Thomas Arnold, who said he taught 'so much geography as would make history and literature intelligible.' After the Civil War, geography became so unquestionably important that an 1880 study found that while 31,171 elementary school students in Ohio were studying American history, 267,618 were enrolled in geography. Nor did that imply a down-grading of history, because geography lessons then contained a good deal of history and introduced students to political and social issues which historians and social scientists would eventually claim for their own disciplines.
The Determinist Temptation

Therein lay the seeds of the next crisis for geography. Once again, geography was so prominent that it aroused the envy of other would-be professional disciplines, and it was vulnerable to attack for two reasons. First, as in the 17th century, it encompassed so much that it seemed to some not to focus on anything: it had no defining "methodology" but was instead a little bit geology, a little bit astronomy, a little bit history, a little bit economics, and so forth. Second, as a result of the revolutionary new theories in late 19th century geology, paleontology, and biology, and the concomitant attack on revealed religion, geographers themselves split into warring camps over what their discipline did, or ought to, entail. In brief, the old Humboldt/Ritter debate over the marriage of nature and humanity turned ugly under the influence of Darwin and Marx.

Charles Darwin's *Origin of Species* and later *Descent of Man* implied, of course, that human beings were nothing but products of natural selection, that is, the interplay of species struggling to survive in constantly changing (geographical) environments. Karl Marx and like-minded philosophers taught that history unfolded over the eons according to immutable social laws as "natural" as the physical laws discovered by Newton or Darwin. These radical notions of reality not only struck at the roots of revealed religion, they also challenged the assumptions of modern secular liberalism, which affirmed and
extolled the sovereignty of human reason. Geographers were caught in the middle of the great debate that ensued between various sorts of determinists and their critics. Some saw great merit in determinism and even believed its embrace would magnify the power and prestige of geography. Thus, Richard von Kuhlmann, observing the patterns of war and diplomacy among nations over time, asserted that "no matter what form of government has been instituted or what political party may be in power, the foreign policy of a country has a natural tendency to return again and again to the same general and fundamental alignment." And French historian/geographer Edmond Demolins went so far as to suggest that "if the history of mankind began again and the present surface of the earth were unchanged, that history would be repeated in its essential design."¹⁹

Geographer Friedrich Rätzel (1844-1904) was especially influenced by Darwinian schools of thought in Germany, and in his *Anthropo-Geographie* of 1882 and 1891 he set out to describe all the regions of the ecumene, the distribution of humans within them and their "dependency on the land," and finally the effects of the environment on individuals and social groups. In short, he began with geography and explained human nature and history in terms of it. His influence was profound, and spread to America through his students-disciple, one of the first female American geographers, Ellen Churchill Semple. Her 1911 book, *The Influences of Geographic Environment On the Basis of*
Räzel's System, postulated that "Man is a product of the earth's surface. This means not merely that he is a child of the earth, dust of her dust, but that the earth has mothered him, fed him, set him tasks, directed his thoughts, confronted him with difficulties that have strengthened his body and sharpened his wits, given him his problems of navigation or irrigation, and at the same time whispered hints for their solution."²⁰

Such determinism seemed quite persuasive, especially to turn-of-the-century intellectuals who had jettisoned orthodox Christian understandings of the nature of man and were, thanks to socialism and the anti-rationalism of Nietzsche, Freud, William James, and others, challenging liberal anthropology as well. But others rejected what appeared to them as a grotesque effort to turn geography -- presumably the most empirical of sciences -- into an ideology purporting to explain everything. Was environment an important factor in the evolution of human societies? Of course, but that did not make the outcomes -- the choices peoples and societies made -- predetermined. So the critics eventually countered with a theory called possibilism that granted the limits imposed by climate, topography, and so forth, but left room for human free will and power to expand the realm of the possible through technology.
This debate simmered throughout the first decades of the 20th century, and would eventually do considerable harm -- but not before geography reached the pinnacle of its academic prestige. That brief golden age began, paradoxically, with a "standards debate" over education in the United States that was in every way similar to the one that erupted in the 1980s and '90s. In 1893 the National Education Association's Committee of Ten, led by Harvard President Charles Eliot, criticized the lack of intellectual rigor in American high schools. Among other things, it found most geography instruction to be a barren exercise in memorization of place names and other facts devoid of the "why" and "how" questions that give the facts meaning and stimulate students to pursue "general and practical knowledge of botany, geology, zoology, astronomy, meteorology, commerce, government, and ethnology." The Committee recommended that textbooks stress physiography -- the evolution and processes of the earth -- and of man's place within it. 21

Authors and publishers responded immediately with a flood of new textbooks that proved that the richness and wonder of geography had not been forgotten. "It should be impressed upon every child," wrote Professor Spencer Trotter of Swarthmore College, "that Geography is a part of his everyday life, not a mere learning of the names of places, but a living reality. The imagination -- that quality of the brain which enters so largely into child life, peopling its wonderland with fairies and creations of fancy -- is the one element needful in
gaining the ideas of real things." Perhaps geography had become a deadly routine for teachers and students over the years, but Humboldt, Ritter, Darwin, Wallace, Lyell and other geologists had made the world come alive again and "bridged the gulf between the great Present and infinitely greater Past.... A new conception of the importance of Geography was at hand. Geography acted upon Biology and History, and they in turn reacted upon Geography." Trotter's advice to teachers was to cultivate the attitude that "The true spirit of culture and education is not in the amount of knowledge acquired, but in the attitude of thought toward a subject.... Learn to look for the significance of facts. Never lose sight of the cause and the effect. Facts are the raw material of thought, to be transformed within the man and reappear glowing with his personality."

The urging of the Committee of Ten and the dedication of teachers like Trotter received a tremendous fillip just five years after the standards campaign began. The Spanish American War broke out, the United States seized overseas colonies, and a new era began in which the United States emerged as a global political and commercial power. Responding to the campaign for the conquest of new markets for American products abroad, the University of Pennsylvania's Wharton School of Business began to teach economic geography in 1893. Five years later the University of California at Berkeley founded the nation's first stand-alone geography department, and in 1903, the first doctoral program in the field arose at the University of Chicago.
With support from government and business alike, academic geography flourished first in the high-powered universities and later at state colleges as well. But the emphasis in instruction changed, too. Progressives and Imperialists such as James F. Chamberlain pronounced physical geography to be "narrowly construed, irrelevant, and dry," and called for an approach that stressed human interactions with the environment and each other. In the years when the United States was manufacturing a new strategic and economic environment by digging a canal through Panama and the Wright Brothers were conquering the skies, it seemed incontestable that geography should stress natural resources, government works, commerce, and social studies writ large. Geography should illuminate human behavior, not just describe nature. Again, publishers supplied the demands of the moment with texts such as Commercial Geography, whose author derided America's "isolationist" tradition and merged commercial expansionism and humanitarianism in the manner of Teddy Roosevelt and Woodrow Wilson:

"Oppression in Armenia, or cruelty to natives in the Kongo,"
arouses the feeling and elicits the protest of the world, and
thus develops the common feeling of the human race in a
degree unknown before the days of modern commerce .... The
world sits in judgment, over every morning's paper, upon what
men and nations do.... Isolation has been called the mother of
barbarism, while communication and trade bring nations and
men together, often put evil to shame, and, by the light of
publicity, establish better things and promote the higher life of
man."

In the United States, no less than in Hakluyt's Elizabethan England,
geography was to be the education of a people destined to rule, if now for
democracy and global uplift rather than empire and exploitation.

**The Geopolitical Moment**

In the same years when Americans pored over maps of their new oceanic
possessions, read their *National Geographic* magazines (founded in 1888), and
began to think in terms of a global economy, a new and powerful school of
geography captured the imaginations of statesmen and armchair strategists from
Europe to America and Japan: geopolitics. It is customary to name the Swedish
professor of political science, Rudolf Kjellen (1864-1922), its founder, because
he coined the term in 1899 and systematized its theory of the evolution of states
Kjellen thus adopted the century-old notion of political units as organic (Edmund Burke had based his critique of the French Revolution upon it), and added to it the Social Darwinian mechanism of human competition and adaptation. In terms of influencing international relations, however, the real pioneer of geopolitics was the American naval captain Alfred Thayer Mahan. Summoned by Admiral Stephen B. Luce to Newport, R.I., to lecture at the new Naval War College, Mahan developed the themes he would elaborate in his blockbuster 1890 book *The Influence of Sea Power on History*. Upon reviewing military, political, and economic history from the ancient to modern eras, Mahan concluded that the determining factor in the rise and fall of empires was sea power. He considered the United States uniquely blessed with all the prerequisites for a great navy and merchant marine, and advocated an imperial policy based on a two-ocean high seas fleet, a Panama Canal, annexation of Hawaii, and bases in the Caribbean and Pacific. Mahan became the leading propagandist for American navalism and overseas expansion, influenced Theodore Roosevelt and the other Progressive
Imperialists, and was so respected as a scholar that the American Historical
Association elected him its president in 1902. More ominously, Mahan's
writings made a deep impression on the impetuous Kaiser Wilhelm II, who
launched Germany's bid to become a great naval power in 1897 and provoked an
arms race with Britain that helped to spark World War I.

The study of geography's influence on politics was, of course, as old as
Herodotus and Strabo, or at least Montesquieu and Kant. But where they had
been interested in speculating about the way topography, climate, and other
factors helped to inspire certain forms of government, the geopoliticians
explicitly or implicitly speculated about the way strategy might influence the
geography of world affairs. That is, they were the opposite of determinists and
endeavored to put geography in the service of the state. Halford Mackinder
"assumed that the crucial moment in historical change was the human response
to the environment -- in other words, how individuals and societies chose to
apply knowledge to the conditions before them. Through this dynamic, the
historical became intertwined with the geographical, transforming political
ground from a recitation of boundaries and capital cities into an interpretive
survey of modern nation-states based on their position, resources, and
diplomatic relations."26 Mackinder wrote that in a paper of 1904, just as the
colonial partition of Africa and Asia was climaxing and just a decade after
historian Frederick Jackson Turner had announced the "closing of the American
frontier." To many Europeans and Americans alike, it seemed that the era of territorial growth that began with Columbus was over, and that henceforth commercial and colonial competition among states was bound to intensify, and possibly grow violent. At the same time, European and American imperialists took for granted a racial hierarchy in the world, and believed they had the duty and right to uplift their colonial peoples and share the blessings of civilization: the White Man's Burden or mission civilisatrice. Thus, whether for reasons of national security and prosperity, or for reasons of morality and duty, young leaders in America, Britain, France, and the other powers must be educated in world geography. The result was a boom for geography not unlike the boom experienced in science education in the wake of Sputnik.

Mackinder was the greatest of the first generation of geostrategists, and at the inaugural meeting of Geographical Association of Great Britain in 1894, he spoke of "geography as the training of the mind." Sadly, he lamented, most people had "no use for a geographer who was not an adventurer and an explorer," and urged British schools to elevate geographical instruction above memorization spiced with travel tales and merge it with commerce and strategy in the national interest. He was also an historian. Invariably, Mackinder's writings and lecture courses had titles such as "The Relations of Geography to History in Europe and Asia" or "The History and Geography of International Politics." Geography and history were part of a larger whole, and neither could
be understood without the other for the reason that geography was not the basis for some determinism in the manner of Marx's class conflict or Rätzel's anthropogeography. Rather, human perceptions of geographical realities and possibilities were as important as objective realities. According to Mackinder, "the influence of geographical conditions upon human activities has depended not merely on the realities as we know them to be and to have been, but in even greater degree on what men imagined in regard to them.... Each century has its own geographic perspective." In the case of the 20th century, as noted above, the perspective was that of a closed system, a world already divided, and thus a politics of violent redistribution of lands and markets in which "every shock, every disaster is now felt even to the antipodes, and may indeed return from the antipodes."  

Mackinder made a brilliant contribution to geography when he asserted that it was not only knowledge or ignorance of the world beyond one's ken that rewarded or punished a given state or civilization, but how that knowledge was perceived and interpreted. The examples abound. The reason why Columbus was able to persuade the Spanish court to finance his voyage was precisely because he believed in Ptolemy's erroneous estimate of the circumference of the
earth, and then compounded the error with one of his own, leading him to believe Asia only a few thousand miles across the western sea. In the 18th century, the British came into possession of two Russian maps of the North Pacific that seemed to suggest the likelihood of a Northwest Passage through Canada. The maps were false, perhaps deliberately so, but they inspired London to send Captain Cook on his third and fatal voyage, the one that discovered Hawaii and opened the North Pacific. Even as Mackinder was writing, the U.S. Congress was reversing a decision in favor of a Nicaraguan canal on the basis of a postage stamp (circulated by the Panama advocates) that suggested Nicaragua was a land plagued by volcanoes and earthquakes. On a more profound level, as Mahan had chronicled, governments' perceptions of their nations' geographical place in the world and natural "destinies" profoundly affected their history. Thus had the French repeatedly lost out to the British in the naval and colonial realm because they insisted on pursuing competing ambitions on the European continent.

Finally, Mackinder offered a grand theory of global politics that was the very opposite of Mahan's. Where Mahan viewed the earth as a great watery planet speckled with continents, and therefore stressed sea power, Mackinder considered Eurasia, the "world island," the most prominent feature of the globe.
considered Eurasia, the "world island," the most prominent feature of the globe. He warned that whoever succeeded in controlling Eurasia's "heartland" would be able to control all of Eurasia, and whoever controlled all of Eurasia must inevitably control the whole world. That had not been possible in the past, but thanks to the railroads and telegraph it was becoming a genuine threat.

Mackinder was initially fearful of Russia, but by 1914 Germany would arise as the most likely candidate to control the "heartland." Indeed, Rätzel demonstrated the truth of Mackinder's insight in the most disastrous way when he looked at the place of Germany in the geography of Europe and the world, applied Kjellen's notions of the state as an organism that must grow or die, and concluded that Germans must be made "space conscious" if their nation was to survive. This notion gave birth during World War I to Friedrich von Naumann's dream of Mitteleuropa, a great German-dominated heartland, and after the war to Moeller van den Brück's and Adolf Hitler's concept of Lebensraum.

So who was right: Mahan or Mackinder? It would take two world wars and a cold war to find out, because "war," Kjellen wrote, "is like wine: it always tells the truth."\(^{30}\)

Twentieth Century Storms

Susan Schulten has written of geography before 1914 as enjoying "a calm before the storm."\(^{31}\) What she means is that geography as a school subject was
riding high and enjoying good weather, whereas after World War I it would experience a series of shocks from which it has never fully recovered. And in that sense she is right. But in another sense geography was enjoying an era of prestige and growth precisely because it was a "stormy" subject of interest to almost everyone. The old "gazetteer" geography with its place names and facts remained in the curriculum, but was joined now by all sorts of "new geographies" that stressed change over time: the natural history of the earth, the influence of geography on the evolution of life and humanity, the influence of human technology on the face of the earth, colonial geography with its racial hierarchies and social uplift, and the commercial and geopolitical geographies promoted by business and the military. What is more, practitioners of all the above found themselves in great demand when Woodrow Wilson took the United States into the war in 1917, and then sailed over to Paris in 1919 to construct a new world order.

"Tell me what is right," said Wilson to his battalion of geographers, economists, historians, and political advisers, "and I will fight for it." In the event, not even the victorious allies, not to mention the Germans, could agree on how to translate justice into the language of geography. Wilson insisted on national self-determination for all the peoples of the former German, Austrian, Russian, and Turkish
empires, but how could viable, let alone homogeneous, national states be fashioned from the intermixed ethnic groups of Central and Eastern Europe?

And what about the new democratic Germany that emerged after the abdication of the Kaiser? Should it be punished for its predecessor's "crimes" or did the Germans, too, have a right to self-determination? Wilson's geographers proposed all sorts of seemingly desirable frontiers based on ethnic, topographical, economic, linguistic, cultural, historical, religious, legal, or military considerations. But the result was a hodge-podge that no one considered "just", the Senate rejected the Treaty of Versailles and League of Nations, and the geographers went home with their confidence more than a bit shaken.

... the Senate rejected the Treaty of Versailles and League of Nations, and the geographers went home with their confidence more than a bit shaken. America was not yet "isolationist": in 1921, Wilson's chief geographer Isaiah Bowman helped to found the Council on Foreign Relations and its journal Foreign Affairs, and the Republican administrations of the 1920s remained closely engaged in world affairs. But given Americans' disillusion with the War to End Wars and its orgy of map-driven diplomacy, the prestige, practical value, and even definition of geography as a distinct academic field suddenly seemed unclear.

Ever since the Committee of Ten reports of the 1890s, the "social studies movement" had been cresting. It was derived from a notion, promoted by many
geographers themselves, that school curricula should illuminate, not the physical
world, but human interaction with the physical world. The reformist ethos of the
Progressive Era encouraged the movement, as did the advent of colonial and
commercial geography, and geopolitics. But if geography were valuable only
insofar as it served social studies, why teach it separately at all? Thus, the 1916
National Education Association report recommended that history, especially
American history, be taught from grades 7 to 12, but that geography be offered
only in the 7th grade as a half-year course, or as
a supplement to the history courses. For 8th
grade the N.E.A. judged geography to be merely
"incidental to history," and for high school
merely "related" to European and American
history and civics.\textsuperscript{33} This was an ironic development given that scholars from
Locke and Kant on down to Mahan and Mackinder stressed the synergy, if not
unity, of geography and history. Now their relationship was being turned into a
decidedly unequal one, with geography subservient and even in danger of being
swallowed up altogether by history or social studies.

What had happened to undermine the once unquestioned place of
geography in the curriculum? According to a prominent contemporary critic: \textsuperscript{34}

"Leaders of school geography are in large measure to blame....

The books appear filled with a heterogeneous aggregate of
facts about the earth, the water, the sky, the animals and plants, human beings, and their history and institutions. There appears only a dishing up of a great number of facts of every sort, facts which it was thought the children ought to know but for which there did not seem any other place. School geography is now undergoing a merciless examination and criticism on the part of the curriculum reformers and it must give a rational account of itself and a justification for its retention or it stands in danger of wholly or in large part disappearing."

That must have been stinging indeed! Geography teachers had been asked or told to teach "a great number of facts of every sort" and now were being chastised for it. Meanwhile, the methodological cleavages among geography professors were only widening as disciples of the determinist Rätzel clashed with possibilists, and geopolitically-minded scholars felt more at home with diplomatic historians than their own geography colleagues. Indeed, history faculties expanded rapidly in the 1920s, with economic and diplomatic history especially buoyed by the debates over the industrial revolution and origins of the Great War.

Geographers, by contrast, attended annual
conventions that more often than not exposed their identity crisis. What is geography? What is its proper methodology and subject matter? In 1934, A. E. Parkins just shrugged, "Geography is what geographers do," hardly a statement likely to impress university provosts and school boards. The most controversial statement of the crisis was Richard Hartshorne's in 1939. He acknowledged that geography could never be understood as a discrete science, but as a synthetic enterprise that aggregated data from the other sciences to create a larger understanding. But it was specific and unsystematic, he said, and ought to be focused on the regional and unique, not the universal, lest the very historical dimension of geography drain the discipline of its legitimacy.

As always, geography teachers were vulnerable to complaints about classroom instruction. To the high-powered professor or academic reformer armed with half understood directives from John Dewey, what went on in most grade schools inevitably seemed boring and trivial. As one study charged, geography teachers were usually young single women with a two-year degree from a normal school. They had little knowledge of the subject themselves and little interest in learning more since they were hoping for marriage. That was why Fairbanks insisted on the need for visual aids and anything else to supplement the offerings of an inadequate text indifferently taught: "The teacher should enlist in her aid all illustrative material possible, of whatever character, that will help to form real images in the minds of the pupils regarding the life
conditions of the region they are studying. Photographs and photographic reproductions ... lantern slides (their importance cannot be overestimated), travelogues and moving pictures, depicting primitive life or various industries ....”37 Another reformer inspired by Dewey advised administrators in 1931 that "the controlling idea in the modern teaching of geography is that causal relationships are of primary importance ... leading children to propose questions and problems, to collect pertinent data, and to reach valid conclusions. Teaching children to think rather than to memorize.”38

It seemed that geography teachers just could not do anything right, and were probably not up to their task anyway. Despite that, reformers demanded even more of them: they asked America's geography teachers to end hatred and violence, and spread peace and prosperity to the four corners of the globe. In 1933 the National Society for the Study of Education devoted its entire yearbook to geographic instruction, and insisted that it reflect and promote what today we call globalization, multiculturalism, political correctness, and the peace movement! Under the heading "The Machine Age and the New World of Closer Relations," it asked geography classes to stress how much world trade, investment, travel, and communications had knitted the world together and that international cooperation had already been achieved in more than 250 human activities. But "the big problems are not as yet settled." Therefore, geography must also "Prepare students for the New Citizenship," which meant teaching not
only knowledge but the right "attitudes toward life and toward peoples"
including "increased respect, sympathy, and understanding for others.... World
peace depends upon sympathy between peoples. Antagonism leads to war.... For
effective cooperation and peace we must have understanding. Prejudice leads to
friction and war.... If we know enough geography and enough history and
enough human nature, we shall find that the foreigner is neither queer nor
foolish, but that he has done very much as we would have done under the same
circumstances." 

Perhaps the most sympathetic voice in this time of troubles was that of
Isaiah Bowman himself, whose experiences at the Paris Peace Conference had
disabused him of the notion that geography and good will could remake human
nature and reform the world. He asked only that teachers remember that
geography is a sort of language, not an end in itself. "It is a language that has to
be learned, like any other language. Upon a single map one may find from
twenty to fifty 'signs' that 'save the mind an infinitude of words,' to use
Mackinder's phrase." Second, geography is a science, not a social science,
because "The earth's diversity is not haphazard but rational; the deserts are
where they ought to be in view of the distribution of lands and seas and the laws
of aerodynamics; the tropical forests are where we expect them to be.... The
winds and seas are 'inconstant' only in a local or a romantic sense. The
rationality of plant and animal life is similarly demonstrable." Third, Bowman
cited the Royal Geographical Society's report of 1886 and urged that it be studied in America today: "Too much importance is attached to books," it cautioned, and "too little to good maps, and the living voice of the teacher."  

Sad to say, social reform, especially when it borders on utopianism, is the enemy of geography and history, and they both suffered during the years of Depression, the New Deal, and isolationism. Sad to say also, the best friend of geography and history is war. Pearl Harbor resurrected geography, as millions of Americans turned again to their atlases to follow the ebb and flow of battles and perhaps locate their husbands, sons, or brothers. And once again, the immediate postwar era propelled world geography to prominence thanks to the maturation of the "air age" (illustrated by the new curved map projections that replaced the old rectangular Mercator projection), the "lessons of Munich and Pearl Harbor," which taught the folly of isolationism, and the hopes placed in the new United Nations. By 1946 courses in world geography were eight times more popular than the economic or commercial geography courses that dated from the turn of the century, and many American states mandated one or two full years of stand-alone geography courses. A United Nations-inspired "family of man" perspective permeated the new geography texts, and just as Mackinder had spoken of a "closed world" in which events in the Antipodes had repercussions worldwide, so now were
Americans told that peace and democracy were indivisible, and that the fate of peoples everywhere was intertwined with their own. The only difference was that the ideology of globalism had changed: instead of imperialism and racial hierarchy, the watchwords were democracy and collective security.

**Sudden Death: The Postwar Revulsion With Geography**

One might think that World War II, with its global strategies, might have served to boost geopolitics most of all. And it did -- but only so long as the war lasted. For inasmuch as the Nazis and Japanese seemed to have been driven by geopolitical "master plans" they gave the whole school of thought a putrid name. The Japanese had their Tanaka Memorial and "East Asian Co-Prosperity Sphere," and Hitler his *Mein Kampf* and Nazi *Neue Ordnung*. But the alleged evil genius behind the German onslaught was a bookish professor named Karl Haushofer (1869-1946). He had named Mackinder's 1904 article "the greatest of all geographical world views <Weltanschauungen>," and applied his analytical method to historical studies of Germany and Europe, the United States in North America, and even the Pacific Ocean. He understood the opportunities and limitations borne of Germany's central position in Europe, and he shared the
goals of almost all Germans regarding revision of the hated Versailles Treaty and restoration of Germany's Great Power status. But he was not a Nazi, did not advise Hitler, and certainly did not consider German strategy in World War II to be guided by sound geopolitical principles. Haushofer and geopolitics got a bad rap.

Geoffrey Parker has defined "meaning" in the geopolitical sense as "the detection of repeating patterns of activity to which the overall name 'order' can be given.... This is the essence of the 'reclaiming' of geopolitics in the interests of the earth as a whole rather than in the interests of particular segments of it." That was precisely what Haushofer knew. Geopolitics could serve the state as a source of strategy only insofar as decision-makers understood the limits imposed by the geographical relationship of states to each other and to the waters and lands on the earth. The theme of his Geopolitik des Pazifischen Ozeans (1924) was that one empire after another had tended to overreach in the vastness of East Asia and the Pacific and suffered rebuffs. Haushofer’s book thus should have been a warning not a war plan, for the Japanese. As for Germany, correct geopolitical thinking would have led to a strategy similar to that of Otto von Bismarck, who realized that the Balkans were "not worth the bones of one Pomeranian grenadier," and laughed at those who wanted overseas colonies for Germany. His reasoning was that Germany could never aspire to European hegemony without provoking the hostility of all
the other continental powers, and could not pursue sea power without incurring the enmity of Britain. Germany, therefore, must be cautious in its expansionism. That is why Strausz-Hupé called the first chapter of his book on geopolitics "the myth and the science" in order to contrast the bogus geopolitics, invoked by Hitler to justify what was really an ideological program, from the genuine article. Bogus geopolitics is a propaganda tool serving the ambitions of one state in the international system. Genuine geopolitics embraces the system as a whole and inspires policies of stability and prudence. As Francis Bacon put it in the 17th century, “in order to conquer Nature it is necessary to obey her.”

As it happened, geopolitics was lumped together in American minds with the rest of Nazi ideology and anathematized -- just as the Cold War was breaking out and the Truman Administration was concocting a strategy of containment that resembled nothing so much as a geopolitical defense against the Soviet Union's bid to control Mackinder's "heartland" and rule the world. Later, in the 1970s, geopolitical thought had a brief revival under the aegis of Henry Kissinger, but it was quickly reviled by the American Left and Right alike, so dominant was ideological universalism in the American strategic discourse. In any event, the emphasis geopolitics placed on position and space on the globe seemed superannuated in an era of jet and space travel, intercontinental missiles and hydrogen bombs, environmentalism and human rights, all of which encouraged a holistic view of the earth. In the postwar era it
seemed less important where some country was than whether it was democratic, communist, or neutral, and whether its government oppressed its own people or protected their rights. The reality, of course, was that geopolitical considerations continued to drive the strategies of both Cold War protagonists, and they suffered when they ignored them (e.g., the Soviets in Cuba and the United States in Vietnam). Likewise, sub-Saharan Africa remained immune from Cold War competition for decades because "the prospective costs of exerting influence and control far outweigh any expectation of benefit," and South America was quiescent because (as Kissinger quipped) it was a dagger pointed at the heart of Antarctica. Finally, geopolitics was never considered a true academic pursuit because geography and political science "tended to regard it as being a sort of illegitimate child of the other."

What then was the overall legacy of World War II for geography in the schools? Insofar as the United States was the "leader of the Free World" and engaged in a global contest with communism, it seemed imperative that Americans familiarize themselves with the politics, economics, and social stresses of an interdependent world, especially a world made increasingly complex due to decolonization. By the 1960s several dozen new countries
appeared on the map: Third World countries that might "go communist" if Americans did not reach out to assist them. But over the same years, say from 1945 to 1970, all the movements in American education that had challenged geography since the 1890s and 1920s joined forces and triumphed from Ivy League universities to local school boards. Geography, in and of itself, was held to be boring and meaningless unless subsumed into history, political science, economics, and sociology -- subjects which themselves were being subsumed, especially in the K-8 grades, into social studies. To be sure, the wealthy foundations and government agencies, and the "best and brightest" professors they funded, were fiercely internationalist and obsessed with issues of the Cold War, nuclear weapons, and Third World development. But decolonization and technological revolution also made history and the old-fashioned geographies appear irrelevant to the problems of the new age. Modernization theory drove educational reform, and modernization implied a wholesale break with the past. So when administrators, bean-counters, and faculty committees comprised of "real" social scientists and natural scientists asked geographers to describe and justify their discipline, the geographers flunked, at least in the judgment of their interlocutors.
The ax would fall later in the secondary schools, but geography's death knell sounded in 1948 when Harvard University abruptly abolished its Department of Geography. Other leading institutions followed suit, and the message filtered down in the two decades that followed. A friendly study from the mid-1960s tried to remind American educators of some ancient wisdom: that geography is the foundation on which other disciplines build; that it is of immediate relevance to the contemporary world and its problems (including the contemporary "conflicts in Asia"); and that the decline of geographical instruction was creating a generation whose knowledge is "appallingly insufficient." But, it concluded, "When leading institutions like Harvard and Stanford Universities abandoned their geography departments, the tumbling dominoes effect was pronounced. In the elementary schools, geography was almost forgotten in many state and local systems."49

Geography did not disappear from the thousands of modern brick schools that sprang up across America to accommodate the baby-boom children in the 1950s and '60s. But in most cases it survived only as a component of consolidated homeroom classes and social studies, leaving advocates of geography repeating the true, but now seemingly hollow mantras about its importance for "everything else" and its power to spark the imaginations of
children. In 1951, Wooldridge and East puckishly quoted the character from Richard Brinsley Sheridan's 18th century play: "'I would have instructed her in Geography,' said Mrs. Malaprop, 'that she may know something of the contagious countries.' This precept has now an added force -- in a world which is fast becoming one neighborhood." But, they moaned, "what kind of geography? For, as R.H. Tawney once put it: 'there are as many ways of writing geography as of writing history.'" Their plea -- and it hints at the end of our story -- was that geography be resurrected and raised up again on the shoulders of history. Between 1890 and 1930 it had been history, among other fields, that had benefitted from the assaults on geography, gaining "shelf space" on curricula and the staffs and budgets that went with it at geography's expense. Now, after World War II, the social studies movement devoured history in turn, reminding historians as well as geographers why they been married in the first place back in the 18th and 19th centuries: "Geography is in fact inseparable from the history which produced it" and the map, as Mikhaylov wrote in his Soviet Geography, "is a social document .... The lines on the map are the handwriting of history."  

The British Department of Education and Science also pronounced strongly in favor of geography and history in 1961: "To most people, geography is obviously about places. The commonsense justification for teaching it in school is simply that children must be helped to find out about the world which they
inhabit if they are to play an intelligent part in it and that, fortunately, they are by nature interested in finding out about it." The authors then cited Kant's classification of history as empirical knowledge ordered by time, and geography as empirical knowledge ordered by space. Together they filled the "entire circumference of our perceptions," and were the opposite of boring and irrelevant. Rather, any subject "in which millstone grit and London clay, podsols and isobars, Roman roads and invisible exports, the Brontes and the Celtic church can all find a place may have more to offer to our divided culture than is sometimes realized." Troubled American scholars likewise tried to strengthen the case for geography by hitching it to traditional history. A 1966 proposal for a curriculum imagined "a preschool child standing in the middle of his vast and dimly lit world. He is keenly aware that around him exists an exciting world of people, objects, institutions, and events. But for the most part these external forms and functions, bombarding his senses by the thousands during his waking hours, threaten him fully as much as they excite him." How could the bewildered child and his equally bewildered teacher be helped? "We select history as one highly luminous source, the bright light of the historical method and cause-effect relationships. We recommend history, geography, and fused history/geography." These eloquent pleas, with their allusions to Roman roads and Celtic churches, dimly lit worlds and children led into the light, are reminiscent of the
sublime appeals of Professor Trotter back in the 1890s. But eloquence and common sense proved less effective in the 1960s and '70s than educationist jargon backed by the Ford Foundation's Fund for the Advancement of Education and the clout of the National Education Association, whose Council for the Social Studies countered with desiccated tracts such as this:

"If curriculum planning is to be concept-oriented in the social studies, it must itself have a conceptual framework exhibiting coherency and consistency. Are those frameworks now emerging? There are many houses to place in order before a clear picture can be seen as to the role geography will have in the social studies curriculum of the 1970's."

The houses to be "placed in order" included such "conceptual frameworks" as location theory, cultural ecology, spatial interaction, systems and model building, the cognitive and affective learning of children, behavioral objectives in geography (sic), and inquiry models. That was the sort of gobbledygook produced by those who called traditional geography tedious and irrelevant.

We see the results of the progressive social studies movement in the surveys revealing the depth of ignorance of American students today. Back in 1845 Horace Mann was shocked by tests showing that "only" 60 percent of pupils knew that the waters of Lake Erie run into Lake

How many students today could even name the Great Lakes, much less sort out which is which?
Ontario rather than the other way around. How many students today could even name the Great Lakes, much less sort out which is which?

The Post-Modern War on Reality

Still, we may not have reached rock-bottom, because recent efforts to improve geographical literacy have encountered yet another, perhaps more formidable barrier to rigorous academic standards: post-modern deconstructionism. The promoters of this latest academic fad hold that no document or text (or map!) has any intrinsic meaning, and that all the categories and concepts traditionally used to order and interpret what they refer to as "so-called facts" are merely artifacts of "discourses" constructed and imposed on society by the dominant race, class, or gender. Entire literature and history departments at some universities have made this "linguistic turn," and even geography is not immune as the attempt to create a "feminist geography" attests.55

Perhaps the most erudite and logical of these post-modern geographers is David Harvey, who notes that as early as 1915 Durkheim asserted that our notions of space and time are not absolute, but social constructs, a finding confirmed by studies of primitive peoples who do not know "clock time" or measured distances. But "the social definitions of space and time operate with the full force of objective facts, to which all individuals and institutions
necessarily respond." These conventions also reflect hierarchies and power structures. As Edward Said argued in his provocative book *Orientalism* (1978), the identities of peoples can be shaped and manipulated through the connotations imposed by a name. Thus, Muslims were oppressed by the mere fact that colonialist Europeans referred to them as "orientals," thereby constructing a geographic discourse that privileged the European imperialists. Jacques Le Goff argued in *Time, Work, and Culture in the Middle Ages* (1980) that feudalism and capitalism had fundamentally different definitions of space and time since the hour was not invented until the 13th century, and minutes and seconds standardized only in the 17th century. The same was true in cartography. Not God or nature, but Renaissance trade and commerce dictated the acceptance of the Ptolemaic grid, while the French Revolution decreed the metric system. According to Harvey, the main thrust of capitalism has been to eliminate spatial barriers altogether and "annihilate space by time."

Harvey quotes the poet Heinrich Heine's response to the coming of the railroad to illustrate the "future shock" caused by a shift in a society's equation of space and time. "What changes must now occur, in our way of looking at things, in our notions! Even the elementary concepts of time and space have begun to vacillate. Space is killed by the railways. I feel as if the mountains and forests of all countries were advancing on Paris. Even now, I can smell the German linden trees; the North Sea's breakers are rolling against my door." In
the same fashion, the space age, communications satellites, and the Internet have obliged the construction of new concepts of space (geography) and time (history). Harvey concludes: "Historical geography in general, and the study of the historical geography of space and time, lies exactly at that point of intersection and therefore has a major intellectual, theoretical, political, and practical role to play in understanding how human societies work. By positioning the study of geography between space and time, we evidently have much to learn and much to contribute."

Post-modernism has even laid claim to geopolitics by asserting that the spatial representations and categories applied to mapmaking and the teaching of geography are constructs meant to serve the hegemonic state or elites of a given era. Thus, we read now that four geopolitical orders have shaped geographical discourse in the Late Modern Era: the British imperial order (1815-75) and its discourse of civilization vs. the backward; the rival European imperialisms (1875-1945) with its discourse of geopolitical competition; the Cold War order (1945-90) with its discourse of ideological geopolitics; and the U.S.-imposed Transnational Liberalism (1990- ) with its discourse of democratic capitalist Enlargement.

The burden of post-modernist perspectives for educational reformers is that even if everyone agreed on the importance of reviving geography, or geography/history instruction in the schools, widespread disagreement is bound
to arise over which of the many "geographies" or "histories" ought to be stressed. If geography as understood in the 19th century, or at the turn of the 20th century, or even during the 1960s, is now seen to be an artificial perspective supported by tendentious maps meant to inculcate students with notions of racial hierarchy, imperialism, or militant anti-communism, with what are we to replace it -- a geography constructed to serve the feminist or multiculturalist ideology? Or can something on the order of "traditional" geography, based on objective, scientific criteria, be resurrected?

**Six Myths To Be Dispelled**

The restoration of geography and history to their rightful place in the K-12 curricula of American schools will not occur until the public and the administrators of education are disabused of attitudes that trivialize the relevance of these subjects. Much of the public, it seems, has succumbed to what may be called "Jeopardy-zation" in that they think of geography and history as game show categories. "This great river's source is just 150 miles from the Pacific Ocean, but its mouth is on the Atlantic Ocean ... What is the Amazon!" Or "this leader of the abolitionist movement was the only ex-president to serve

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in the Congress ... Who is John Quincy Adams!" To much of the public these subjects are a "Trivial Pursuit," and that attitude is only reinforced when students can go through four year colleges that do not offer geography at all and do not require any history. As a result, graduates who specialized in business, pre-medical studies, computer science, or the humanities naturally conclude that geography and history must be elementary subjects: something kids take in grade school and of no importance to the "real world" of their careers. Education administrators think they, too, are being equally pragmatic when they imagine geographical and historical literacy useful only insofar as it serves a social agenda such as multiculturalism, diversity, and self-esteem. But not only does that undermine the empirical foundation of fact-based history and geography, it means that when given facts do not appear to serve the preferred agenda they must be expunged or even falsified in textbooks and teaching materials. And they are: in the same manner employed by Soviet schools in the past and Chinese schools today.

The way forward requires that the public and administrators alike somehow be disabused of the progressive myths that gradually stripped geography of its honored place in the schools. As we have seen, those ideas included the notions that geography and history are boring; that rote learning of place names and facts is a waste of time; that teachers who drill students on facts are probably incompetent; that geography must serve specific commercial, social, or political
goals in order to be worthwhile; that the failure of professional geographers to agree on a single intellectual purpose or methodology proves that theirs is not a real discipline; and that geography and history, when subsumed into social studies, are nonetheless capable of saving the world from war among nations, prejudice among ethnic groups and religions, and environmental disaster.

Let us take these myths in order, and examine the damage they do.

First, if geography and history are thought of as "boring" that is the fault of the textbook and teacher, not the subjects themselves. How do you make the French Revolution boring? How can the rain forests of Brazil, the snows of Kilimanjaro, or the Lewis and Clark expedition be made boring? Especially by comparison to long division and grammar? World geography is a wonderland of diversity and world history a pageant, adventure, epic, and tragedy. Teachers and administrators who declare them boring and subordinate them to lesson plans meant to be "relevant" to today's children are only ducking responsibility for having drained the life from the most fascinating subjects imaginable, and the ones that, if properly taught, can make even mathematics and sociology interesting to a child.

Second, the acquisition by students of a factual base, far from being a waste of time, is an indispensable prerequisite to the understanding, wonder, and
wisdom to be won through geography and history.

A student lacking any sense of the span of the Atlantic Ocean, the size and fragility of the 15th century caravels, and the ambitions, virtues, and flaws of the Spanish crusader culture shaped by a thousand years of war against the Moorish invaders, can scarcely grasp the glory and irony of Columbus's discoveries and Cortes's conquest of Mexico. Indeed, in the absence of real knowledge of what really happened to real people on our real earth, one might just as well attempt to educate youth through made-up tales of "long ago and far away." That is not to deny that fantasy is also a vivid tool of teaching. It certainly is, from the Iliad and the Odyssey to J.R.R. Tolkien's Lord of the Rings to the Star Wars movies. But fantasy is effective only when it holds up a mirror to reality: a reality that must be known if the fantasy is to have any meaning. What is more, to deny children any hold on reality is only to encourage them all the more to create "virtual realities" through interactive video games and Internet sites, with pathological results of which we are all too aware.

Finally, the learning of facts -- the names and characteristics of the continents and seas of the globe, the countries and states and their major cities and products, the basics of reading a map, and the outlines of American and
world history -- does more for students' true self-esteem than all the therapeutic "rap sessions" about ethnicity and "women's history months" put together.

Youngsters can tell in an instant when they are being taught behavior rather than knowledge, and nothing is more boring than listening to adults lecture on how to behave. That is the real waste of time, and it only renders the children cynical when they observe how allegedly "insensitive" speech is severely punished while disruption, drugs, and truancy are not. A command of facts, by contrast, is the source of true empowerment and civility, as any number of experimental private inner city schools that stress old-fashioned achievement have shown. And that is because true education endows children with the skills and the confidence they need to excel and succeed, and that in turn is what gives them a stake in the system.

Third, to dismiss teachers who emphasize factual knowledge as somehow second-rate is perhaps the most hypocritical of the canards against "old-fashioned" history and geography. To be sure, all drill and no discussion makes Jack a dull boy, and perhaps such was the case in a number of little red schoolhouses in rural America. But today it is far more often the case that the teachers who stress factual knowledge (a) know the facts involved in the subject they are teaching (whereas many of their colleagues do not, having never been taught them in their own schooldays); and (b) recognize that without a sufficient and commonly held body of facts their students will be incapable of thinking and
talking intelligently about anything. These assertions, too, might appear self-evident, but they are lost on many curricular mavens today. Imagine an English class in which each student was assigned a different book and given a different vocabulary list to learn. In such a class no exchange of ideas, no discussion or debate, would be possible, and the teacher could not communicate meaningfully with more than one student at a time. Yet that is often what happens in social studies classes wherein students have only a smattering of factual knowledge about geography and history, and even then a different smattering than their classmates possess. Under such circumstances the teacher has only two choices: go back to the basics and teach 7th grade material in the 11th grade; or give up trying to instruct altogether and just ask the students how they "feel" about Kosovo.

Fourth, the programmatic notion that geography (or history) is useful only if drafted into the service of a national social, commercial, or political agenda is pernicious as well as false. Post-modernists should have no trouble agreeing with that. After all, they denounce what they call "the Enlightenment project" as Western Civilization’s “construction” of geographies meant to serve the racist and exploitative goal of dominating the world. Today’s progressives, moreover, would have no trouble damning their turn-of-the-century Progressive forbears for promoting geography in the interest of winning colonies and markets abroad for American business. But in fact they see no contradiction in seeking to
construct new "geographies" in pursuit of their own anti-Western, anti-American, and anti-business objectives, as when the Marxist geographer David Harvey concludes: "But whatever course we take entails a political commitment as to what kind of space and time we wish to promote. We are political agents and have to be aware of it." 58

In sum, the burden of the newest scholarship as well as the older social studies pedagogy is that geography and history have not only been politicized in the past, but ought to be politicized in the present and future, this time under the control of the Left. That assumption, usually unspoken, rejects objectivity even as an ideal for historians and geographers, and makes the selection of facts -- the very existence of facts -- into stakes in a war to control children's minds. So in some American schools the facts that Aztecs practiced human sacrifice and African rulers participated in the slave trade are consigned to the memory hole in the same manner that Orwell's Ministry of Truth rewrote history to serve Big Brother. Of course, no human agency can undo facts, such as the fact that Vietnam lies to the south of China and the Vietnamese people have hated and resisted Chinese domination for a thousand years. But facts can go unlearned or ignored when political advocates decide they are inconvenient, as the United States found out to its sorrow. It is also the case that the selection and presentation of data can never be wholly objective. But to conclude that is therefore alright to promote falsehood or ignorance in a political cause is to kill
the whole notion of true education.

*Fifth*, the belief that geography does not or should not even exist as an academic discipline because professional geographers have been "all over the place" is a cop out. One cannot blame secondary schools and state school boards for following the lead of Harvard and Stanford when they abolished geography departments. But they were wrong to do so nonetheless because the mission of Harvard is decidedly different from that of Anytown High School, and the abolition of PhD programs in geography in no way reduced the importance of basic geographical knowledge for students interested in pursuing any number of other fields. What damned geography on the graduate level was its very catholicity. Was it a natural science? If so, what distinguished it from geology, oceanography, meteorology, etc.? Was it a social science? If so, what distinguished it from anthropology, sociology, economics, or history? That debate began in the 17th century, but only in our day have educationists embraced the *non sequitur* that since geography is undefinable, therefore it is illegitimate. In truth, geographical knowledge is essential for almost all other scholarly pursuits, and thus is the most legitimate subject of all.

*Sixth*, and finally, geography and history instructors must not succumb to the opposite myth to the effect that their subjects, far from being irrelevant, are ... the belief that geography does not or should not even exist as academic discipline because professional geographers have been "all over the place" is a cop out.
capable of “saving the world” if taught with the proper spin and passion. This attitude would seem akin to the cynical politicization of curricula on the part of the post-modernists, but it reflects instead the sincere messianism of constructionist, and merely modern, liberals. We do not think of the Liberalism of a Jefferson or John Stuart Mill as an ideology since it advances liberty and individualism rather than totalitarian controls, but 19th century Liberalism meets the teleological requirements of a full-blown ideology. History is the story of progress based on the progressive liberation of humankind, and will end in the creation of a kind of heaven on earth. But whereas Marxists and fascists hold that class or race conflict is the engine of history, and revolution or war the mechanism for change, liberals believe that the human struggle for freedom, peace, and prosperity is the engine of history, and that free enterprise, social reform, and above all education are the mechanisms of change. Liberalism has changed its tactics many times, with Christian missions, overseas commerce, untrammeled capitalism, regulated capitalism, small government, big government, social reform, isolationism, imperialism, and global crusades for democracy all being the tools of choice in one era or another. But liberals have placed their most abiding faith in education, for it is true path from darkness to light, and prepares people at home and abroad to grasp and hold dear all the

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other blessings of liberalism.

America is the quintessential liberal nation, and liberal beliefs have shaped its educational institutions at least since the 1890s. Thus, American students have always been invited, explicitly or implicitly, to believe in progress, in the United States as the vanguard of progress, and in an American mission to redeem the rest of the world. In Teddy Roosevelt's time the invitation was militant, and it became so again during the world wars and Cold War. But always the underlying goal was peace, freedom, and prosperity for all mankind, and always the method was education. The Germans and Japanese needed to be "taught" democracy; the Soviets needed to be "opened up" and exposed to Western ideas; the Third World needed to be "lifted up" by A.I.D. and Peace Corps volunteers. So it was that the N.E.A. in the 1930s, no less than the liberal foundations and lobbies today, urged history and geography instructors to "teach peace." This mindset places an impossible burden on schools and warps their mission by turning history and social studies into the secular equivalent of an evangelical church. It can also hamstring true intellectual and civic education if it glosses over the evidence suggesting that the natural state of mankind is conflict, the very struggle for liberty often requires war, and America's twin ideals of liberty and equality are in constant tension with each other.

The political dangers of liberal sentimentality are obvious: it can spawn a self-defeating pacifism as in the 1930s, a self-defeating militancy as in the
1960s, or triumphal self-righteousness as in the 1990s. But the educational dangers lie in the likelihood that students will be denied the unpleasant facts about other countries and cultures in the interest of tolerance and appreciation, or will be obliged to misinterpret the past and present in order to meet the implied requirement that they validate liberal ideology. (Imagine the fate of the high school student who dares write in an essay that hatred and fear are ineradicable in human affairs due to original sin, or that Darwinian evolution has "hard-wired" competition and a disposition to violence into our genes.)

Looking back on the steady decline of geography and history in schools over the last hundred years, it is tempting to conclude that Liberalism itself has perversely blunted the very tool – education -- it expects to use to improve the world. Thus, even liberal ideology and its high-minded ideals must not be permitted to interfere with the communication of knowledge about the world, the human race, and the relationship between the two. If Liberalism is true, the facts will speak for themselves. If Liberalism is true, then the process of acquiring knowledge and exposing falsehood needs no outside help. If Liberalism is true, education will be its own reward. As C.S. Lewis wrote of his faith in God: I believe not because I see the light, but because by it I see everything else.
What Is To Be Done?

Assuming a given state or school board is persuaded of the need to reintroduce geography into the K-12 curriculum, what principles should guide its planning?

First, teachers, textbook authors, and curriculum designers must restore an "old-fashioned" emphasis on basic topography, place names, and map reading. For whatever our ideological preferences, the grammar of geography is conventional and grounded in reality. The Earth, as Galileo insisted under his breath, does revolve around the sun and rotate on its axis, and that was not just his "point of view." The motions of the Earth and heat of the sun are what create climate, volcanism, erosion, and all the features of lands and waters. On some points we may argue, for instance whether Europe ought to have been considered a continent separate from Asia, or whether the term Middle East is a Eurocentric conceit. But the geographical and cultural distinctions that first inspired people to invent those terms were real and are also worth understanding. Likewise, the Mississippi River exists. Its name, like all names, is a social convention, but the river is real, and no student can claim to "know" American history without understanding the river's importance.

How much factual knowledge is "enough"? One useful exercise which...
teachers, textbook authors, and curriculum designers might try is to recall the history surveys they took in college, or study some syllabi from current surveys, and ask themselves what geographical knowledge is needed in order to master that material? Conversely, they might ask themselves what knowledge they would wish to assume their students possessed if they were teaching the course. Thus, in my Modern History survey I do not expect students to know anything about the political map of Central Europe during the Renaissance, but I am crippled if they do not even know that Venice is an Italian port city, that the Alps divide Italy from the rest of Europe, that Germany lies north of the Alps, that the Austrians speak German, that the Turks were Muslim and militant, that all Europeans were still Catholic, and that Rome was the historic seat of the papacy. If I must "go back to square one" to lay out such basics, then the best students will be bored and the poor will be paying Ivy League tuition for high school instruction. It is all very well to say that education should teach youngsters to think rather than memorize. But unless their "memory banks" are filled with facts and categories in which to deposit new facts, then their "RAM" will have no "data to process."

Second, history and geography should be kept as close as possible to each other, perhaps even merged, because so much of history is best approached through geography, and so much geography is taught best through an historical approach. The former point is obvious: the human stage is the world, and the
plot of the play is the activity of human beings in relation to their environment and each other. The latter point may be less obvious. What I mean can best be expressed by a comparison to courses in physics and astronomy that begin with the knowledge and theories prevalent in the ancient world and then march forward in time, teaching students their science in the same progression as Europeans (and others) learned it. Thus, one studies Galileo's experiments to learn the laws of mechanics, Kepler, Tycho, and Newton to learn orbital mechanics and the laws of gravitation, the experiments of Faraday, Ampere, Ohm, and Marconi to learn the formulas of electricity, and so forth through atomic physics. Geography ought to be taught the same way, however much that may seem to "privilege" Europeans who explored and mapped the world with their galleons and brigs and geodetic satellites. For in learning the progress of geographic knowledge from Ptolemy to the present the students will not just be memorizing names and concepts but witnessing an adventure story without parallel. They will "discover America," penetrate the interior of Australia and Africa, and race to the South Pole along with the historical figures, and the geographical knowledge they acquire will be linked to causes and effects rather than stand alone as trivia.

... history and geography should be kept as close as possible to each other, perhaps even merged, because so much of history is best approached through geography, and so much geography is taught best through an historical approach.
Third, history and geography teachers ought to convey to students how the realities of space and time have indeed changed over the millennia, centuries, and sometimes mere decades as a function of human technology, which is the nexus between the mankind and its environment.

From the first irrigation systems to the Space Age, the evolution of civilizations and their relationship to nature have been a function of tools. The history of technology might even be called the "third dimension" that rounds out our picture of the past.

Geography, the first dimension, describes terrestrial space. History, the second, describes change over time. Technology, the third, describes how human conceptions of space and time have evolved. But just as algebra students cannot handle solid geometry until they have mastered plane geometry, so history students are not ready to question human conventions of space and time until they know the "lay of the land" know how to "tell time" historically.

A Wise Friend

I have the pleasure of lunching one day a week with Harvey Sicherman, the president of the Foreign Policy Research Institute, and catching up on world
affairs. As an experienced expert and former speech writer for three secretaries of state, he is a ready source of inside information and insights that only later, or never, appear in the newspapers. Above all, Sicherman is a master of the geographical factors in war and diplomacy, and he amazed me several years ago by predicting exactly, and weeks before time, the internal boundaries that would define the settlement in Bosnia. "I've done the map," he announced, and proceeded to trace it out on a napkin. Since then I make it a habit when we are discussing the latest crisis to ask if he's "done the map."

My dream is that every teacher and student of history and geography, at the end of every block of instruction, can say proudly and knowledgeably, "I've done the map." Because that means they know who they are, where they are, and how to get where they want to go. That means they have had true education.

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37 Fairbanks, Real Geography, p. 197.
38 "Edwin H. Reeder, Geography for Public School Administrators (New York: Teacher's College of Columbia University, 1931), pp 3-5.
42 Parker, Geopolitics, p. 32.
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44 Strausz-Hupé, Geopolitics, pp. 34-35.
45 Parker, Geopolitics, p. 15.
46 Interestingly, geopolitics also revived in France in those years, and has remained influential. The journal Herodote founded in January 1976 was at first subtitled Strategies, geographies, ideologies -- an obvious echo of the rival Annales, which stressed socio-economic historical geography and was subtitled Societes, economies, civilisations. Later, Herodote was changed to the Revue de géographie et de geopolitique.
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