Public Scholarship:
A New Perspective for the 21st Century

By Stephen R. Graubard

Contents

Foreword

Knowledge comes but wisdom lingers.
—Alfred, Lord Tennyson

While we are told by countless critics, educators and pundits that we are living in the most "informed" of times—indeed, a time when we are bombarded by information from all sides, every minute, every hour of the day and night (and, perhaps even more worrisome, I'm sure there are those who are already working on ways in which they can have information reach us even while we sleep)—we are also, sadly, living in the least analytical and insightful of times. Thoughtful individuals, however, have almost always been concerned about how to transform raw information into useful, structured knowledge. According to Carlos Fuentes, for example, "the greatest challenge facing modern society and civilization is how to cope with and how to transform information to knowledge." And many of us will recall T.S. Eliot's complaint about modernity's penchant for thinking that the hefty weight of accumulated information can somehow add up to real understanding.

"Where is the wisdom we have lost in knowledge?" he asks. "Where is the knowledge we have lost in information?"

Compounding this dilemma is the fragmentation of knowledge that accompanies the current explosion of information, even within the traditional repository of scholarship and knowledge, namely, our higher education system. To meet the demands of progress, by necessity, the academy has been forced to effectively atomize knowledge by dividing it into disciplines and sub-disciplines, breaking it up into smaller and smaller unconnected fragments of academic specialization even as the world looks to colleges and universities for help in integrating and synthesizing the exponential increases in information brought about by technological advances.

Into this breach steps scholarship—or there it *should* step; there it should be welcomed for its capacity to reintegrate and reconnect the disparate, ever-multiplying strands of knowledge, to bring *meaning* to information and forge wisdom upon the anvil of changing times. Especially in 21st century America, where there are so many social, political and economic problems that require systemic solutions, it is critical to bring about a sea of change in the way we view and integrate scholarship into our national life. After all, the concept of "public scholarship," intertwined with a uniquely American dedication to "public service," was the marriage of ideals that helped our country take a giant step out of the post-Civil-War world when land-grant universities rose to meet new challenges in the fields of agriculture and industry, which were

propelled forward by cascading developments in science, technology and education. The advent of universal schooling and the burgeoning diversity of higher education became important vehicles to serve the nation, not only in terms of progress in industry but in the social domain as well, helping to promote tolerance and enlightenment, and creating a society where citizens were provided with new rights, benefits and social entitlements, where medical breakthroughs made us healthier, new inventions automated and upgraded our industries, new appliances and other creature comforts filled our homes and new weapons of terrifying efficiency protected our borders.

But, as Stephen Graubard asks in *Public Scholarship*, the essay contained in these pages, "…has the time not come for the concept of 'public scholarship' to be given new meaning as something more than useful scholarship intended to resolve specific problems that relate principally to *America*'s social, political, economic, and defense dilemmas?"

Echoing these concerns, in October 2002—a little over a year after the terrorist attacks of September 11th, 2001—in an interview I gave to *Philanthropy News Digest,* I said, "It is critical that Americans become more knowledgeable about the complex world beyond our borders. We must acquire a better understanding of how our national interests fit, or don't fit, with the national interests of other peoples." The importance of these issues, though certainly deepened and given greater urgency by the events of 9/11, has been

clear to me throughout my life. Indeed, it was my concern with understanding not only our rights as Americans but also our obligations to our nation and our communities that led me to establish a specific niche for scholarship at the Corporation by recognizing and supporting scholars of vision, with the intent not only of increasing knowledge but also to use the insights gained from the scholars' work to inform and enrich the foundation's programs beyond the directions they might take without the benefit of independent, thoughtful and perceptive research.

In 2004, after reviewing the fifth year of our Scholars Program, I am very proud of the various scholars who have participated and thus made major contributions in various fields. But review has also revealed that, in some fields, we may need a more concerted effort in order to develop a critical mass of knowledge. Hence, we are exploring whether every two-to-three years we should focus on one theme that is central to our mission, mandated by Andrew Carnegie, of advancing and diffusing knowledge that will uplift both our nation and humanity. Those themes might include areas such as Islam, nuclear and biological weapons, international justice, self-determination and nationalism. One thing is clear: more than ever before, in this age of globalization, Americans need to know more about diversity than uniformity; more about centrifugal forces than centrality; and more about other people's ideals, aspirations and anxieties in order to understand the rest of the world.

It is no surprise to me that my concerns should intersect with Graubard's, as we have known each other for many years, including much time spent together at Brown University when I was president, and where we also team-taught together. We share the conviction that ideas *matter,* that disciplined study, when combined with unfettered, wide-ranging curiosity and intellectual courage, can overcome the "dumbing down" that Graubard notes is becoming conspicuous in public life.

He makes this argument through the succinct analysis and cogent argument that are the hallmark of *Public Scholarship.* In his essay, Graubard, professor emeritus of history at Brown, who was also the editor of *Daedalus*, the journal of the American Academy of Arts and Sciences for almost forty years, and the author of numerous books (including one soon to be published by Basic Books on the American presidency in the 20th century), traces the rise of American scholarship and analyzes the ascendancy of the American university based, in part, on its elevation of scholarship to equal status with teaching. Large-scale educational reform and the refashioning of the nation's universities were spurred on by the aftermath of World War I in which concurrent economic and political upheavals resulted in, says Graubard, "undoubtedly the most important intellectual migration in the history of the republic." Franklin Roosevelt's efforts to preserve American democracy and infuse new vitality into the country's institutions and infrastructure, along with unprecedented federal support of research, particularly in the years leading up to and throughout World War II,

were also instrumental in creating an environment conducive to scholarly undertakings in both the social and basic sciences as well as in economics and related fields.

Writing of the period that followed, Graubard says, "During the four-and-a-half post-World-War-II decades, the years 1945 to 1991, four developments in American scholarship of immense importance need to be noted: the emergence of the United States as incontestably the most substantial contributor to scientific and social scientific inquiry; the expansion and proliferation of American universities, with many committing themselves to research in ways previously inconceivable; the creation of new foundations and 'think tanks,' different from those already in existence, expressing in many instances an unmistakable ideological commitment to specific political action programs, sometimes characterized as conservative; [and] the expansion of the federal government into areas it had not previously entered, with a substantial segment of its research kept secret for reasons of national security." However, he also warns that the primacy of American scholarship demands that its practitioners recognize new responsibilities and develop a broader world view that includes thoughtful and unprejudiced consideration of its international effects—as well as its shortcomings in that arena. He asks, "How do scholars abroad respond to the questions American scholars address today? Do American scholars sufficiently scrutinize the scholarship of societies fundamentally different from their own or is such scholarship largely unknown and,

when examined, too casually dismissed? Can the concept of public scholarship, for example, be extended to express an interest in what those not wholly convinced by the findings of American scholars deem important, and why their views differ so dramatically from those common in the United States?"

In *Public Scholarship,* Stephen Graubard has laid out a challenge for American educators, researchers, policymakers, as well as all informed citizens, that clearly must be discussed, analyzed—and in the end, *must* be met—if our exceptional nation, in this exceptional and unsettled age, is to thrive both domestically and on the world stage. Carnegie Corporation of New York is pleased to publish this seminal essay and joins in issuing its urgent call to reinvigorate the search for an inclusive wisdom that lights the way for all humankind.

Vartan Gregorian
President
Carnegie Corporation of New York

Public Scholarship: A New Perspective for the 21st Century

The United States, a negligible player in the scholarly world during the first seven decades of the country's existence, became an actor of growing consequence in the years after the Civil War when U.S. industry, agriculture and commerce achieved remarkable growth. America became more influential in a good number of scholarly disciplines in the early 20th century, and the preponderant actor on the world stage only after World War II. The 20th century wars, hot and cold, engaged in or threatened, gave the country military primacy, a development amply documented, but there are no analogous studies of how the United States came to enjoy comparable standing in the scholarly world.

The ghost of a renowned English philosopher, Alfred North Whitehead, hovers over contemporary scholarship, though few scholars today consult his works in the way many did in 1925 when he delivered his Lowell Lectures, later published as *Science and the Modern World.* That impressive tract included the important idea that "Modern science has imposed on humanity the necessity for wandering...The very benefit of

wandering is that it is dangerous, and needs skills to avert evils." Arguing that the "spirit of change" was as necessary to intellectual inquiry as the "spirit of conservation," Whitehead suggested that "mere change without conservation is a passage from nothing to nothing."[1] Believing that a good deal of the scholarship of his day was dominated by the prosperous middle classes who "placed an excessive value upon placidity of existence," Whitehead argued for "the need for intellectual reform imposed by the new knowledge." The problems he addressed, recognized to be acute in the years following the Russian Revolution and World War I, are no less vital today, a time of unprecedented international disorder. Whitehead's observation that "in the immediate future there will be less security than in the immediate past, less stability" has become almost banal, but few take comfort in the situation, and not many are bold enough to assent to his view that "the great ages have been unstable ages."[2] Such confidence came easily to someone born in tranquil Victorian England, but is uncommon for those who live with the knowledge of the devastating potential of weapons of mass destruction and who find disconcerting the strange uncertainties created by novel social, political and economic circumstances. Yet, the imperative to be critical of today's interpretations may be Whitehead's most important intellectual legacy to a world as different from his own as his was from that of the 19th century.

Whitehead's optimism—no other word so accurately defines his perspective—reflected his belief that "general cli-

mates of opinion persist for periods of two to three generations, that is to say for periods of sixty to a hundred years," and that the 19th century preoccupations with "struggle for existence, competition, class warfare, commercial antagonism between nations, [and] military warfare" central to 19th century theorizing would all give way in time. He believed that the "Gospel of Hate," the "Gospel of Force" and the "Gospel of Uniformity" would fall before an increasingly critical scholarship.[3] Whitehead, successful as a philosopher of the scientific enterprise, failed as a prophet. To a surprising extent, 20th century scholars, despite the range and novelty of their scholarship, continued to be largely preoccupied with 19th century issues, viewing them in novel ways but showing little disposition to be less attentive to them. Whether a new scholarly agenda will emerge early in the 21st century, and whether it will continue to be dominated by American scholarship, showing greater tolerance for the values and concerns of other societies, emphasizing those elements that make societies distinctive, in effect rejecting the 19th century "Gospel of Uniformity," is a question of the greatest moment.

An Indication of U.S. Creativity

Today "dumbing down" has become conspicuous in public life and the "polity of discussion" that relies on rational argument, and was valued by many of Whitehead's intellectual peers,

including Woodrow Wilson and other distinguished politicians, appears to be in precipitous retreat. Yet, some persist in believing, as Whitehead did, that styles of scholarship do change, that generational differences are crucial and that intellectual progress depends on criticism of the fundamental premises inherited from an earlier time.[4] Whitehead, emphasizing the importance of perpetual questioning, contrasted the quest for knowledge as the West pursued that objective for centuries with what was common in "classical" China in art, literature and philosophy. The most noted Asian creations, Whitehead wrote, the work of "acute and learned men patiently devoting their lives to study," showed a strange indifference to anything that might be mistaken for scientific inquiry, Europe's principal intellectual accomplishment. Scientific investigation, in Whitehead's view, remained a "practically negligible" enterprise in traditional Chinese civilization, with no prospect "that China if left to itself would have ever produced any progress in science."[5] The Chinese refusal to "wander" led to a traditionalism that proved intellectually stifling.

Alexis de Tocqueville, almost a century earlier, scarcely less admiring of Chinese civilization, argued in a similar vein, describing the surprise Europeans felt in observing an ancient kingdom so remarkable for the paucity of its scientific accomplishment. Tocqueville ascribed the deficiency to the "immobility" of the Chinese minds, to their conservative proclivities, saying, "...the Chinese could not change anything. They had to renounce improvement. They were

forced to imitate their fathers always and in everything, so as not to be cast into the impenetrable darkness if they strayed from the path these latter had traced."[6] Coming to the United States in 1835, Tocqueville found in the New World no comparable intellectual or aesthetic bondage to the past and dwelled on what he recognized as the fierce American determination to innovate. Deploring the absence of "an instinctive penchant...towards the highest spheres of the intellect," acknowledging that Americans had "not discovered a single general law of mechanics," he recognized the significance of the invention of the steamboat, "a new machine...that is changing the face of the world."[7] While Tocqueville never believed the invention of the steamboat could be equated with what the "transcendent lights of the human mind" had accomplished in Europe, he detected conditions that encouraged creativity in the nascent democracy that others, dismayed by American bumptiousness, self-satisfaction and vanity, failed to notice. Though Americans rarely cultivated the sciences for their own sake, many understood their practical importance, and Tocqueville wrote, "It is not to be believed that among such a great multitude some speculative genius whom the singular love of truth inflames will not be born from time to time. One can be assured that he will strive to penetrate the most profound mysteries of nature, whatever the spirit of his country and his times should be. There is no need to aid his ascent; it is enough not to stop it. All that I want to say is this: permanent inequality of conditions brings men to confine them-

selves to the haughty, sterile search for abstract truths, whereas the democratic social state and institutions disposes them to demand of the sciences only their immediate, useful application."[8] Tocqueville saw the United States and its intellectual prospects in ways few other Europeans dared to prophesy.

His judgment, a dramatic departure from the accounts of other European travellers at the time, who dwelled principally on the inadequacies of the American democracy as an engine of thought, contrasted greatly with the views expressed by one of his somewhat older Scottish contemporaries, Sydney Smith, a founder of the distinguished quarterly, the *Edinburgh Review.* Smith never visited the United States, but in 1820 published an essay that showed an undisguised contempt for America's intellectual and scholarly performance. He wrote: "During the thirty or forty years of their independence, they have done absolutely nothing for the Sciences, for the Arts, for Literature or even for the statesman-like studies of Politics or Political Economy." Having little use for "this self-adulating race," Smith became positively acerbic when he said, "In the four quarters of the globe, who reads an American book? or goes to an American play? or looks at an American picture or statue? What does the world yet owe to American physicians or surgeons? What new substances have their chemists discovered? or what old ones have they [analyzed]? What new constellations have been discovered by the telescopes of Americans? What have they done in the mathematics? Who drinks out of American glasses? or eats from American plates?

or wears American coats or gowns? or sleeps in American blankets? Finally, under which of the tyrannical governments of Europe is every sixth man a slave, whom his fellow-creatures may buy and sell and torture?"[9] While such European judgments were by no means universal, they expressed sentiments common before and after the Civil War, and in some instances, well into the 20th century.

American Universities Find Their Way

So long as Europe's universities appeared incomparable, with those of the Kaiser's Germany recognized as the leading research institutions in the world, their American counterparts seemed insignificant, teaching small numbers of callow and often rebellious youths, scarcely figuring in a world where theoretical scientific and applied scholarship were prized. While some Americans sought to rival the Europeans in their commitment to learning, were prepared to borrow from Old World models—more often English, Scottish and German than French, Russian and Italian—America's colleges and universities, learned societies and academies did not provide an example that a thriving and self-confident European intellectual culture imagined it needed to become aware of. That situation changed only very slowly after the Civil War, the first of America's "total wars" that had a profound impact on American scholarship. The unprecedented new wealth generated by an increas-

ingly thriving commerce, industry and agriculture allowed the United Sates to emerge as a leading economic power, able to compete with those in Europe claiming equal levels of investment and production. Europeans watched this growth with fascination and sometimes with alarm, noting especially America's extensive railroad construction and shipbuilding activity. While American industry and commerce commanded European attention, few gave thought to the higher educational enterprise that seemed to be showing comparable growth.

No one in Europe, for example, paid heed to the Morrill Act of 1862 that provided federal funds for instruction and research in agriculture, the mechanical arts and military tactics, areas deemed essential for the public welfare.[10] Indeed, Harvard, Yale and Princeton, the older colonial colleges, transformed and greatly expanded, were considered serious rivals to mighty Oxford or learned Heidelberg. In these conditions of "benign neglect," American scholars continued to borrow from Europe while showing an increasing disposition to develop their own distinctive interests and modes of inquiry. As Tocqueville correctly prophesied, learned Americans remained preponderantly attentive to "useful" investigation, with a few choosing to concern themselves with theoretical and abstract questions, initially in the natural sciences and, much later, in the so-called social sciences. Although the term "public scholarship" was never used, the concept of "public service," had great appeal, especially to state legislators and the wealthy donors who created new uni-

versities. Men like Leland Stanford and John D. Rockefeller worked closely with those who emerged as the academic leaders of a more vigorous and highly differentiated higher educational enterprise committed to scholarship as a principal university objective, scarcely less important than the teaching of young men and women.

If the United States in the last decades of the 19th century boasted "captains of industry"—entrepreneurs prepared to establish new business "empires"—another entrepreneurial class, scarcely less ambitious young academics, took charge of the new and old universities, giving them a scholarly cast that both replicated and departed from the established European models. Charles W. Eliot, the long-time President of Harvard, together with the first presidents of newly created universities—Daniel Coit Gilman of Johns Hopkins, William Rainey Harper of Chicago, Andrew Dickson White of Cornell and Granville Stanley Hall of Clark—recognized the potential for an educational revolution that would foster the creation of a new class of scientifically trained professors.[11] Johns Hopkins University, founded in 1876, explicitly dedicated itself to the adoption of teaching and research methods common in the great universities of Germany. While there were those who revelled in Hopkins' purported purpose to be a clone of the most distinguished European centers of learning, anyone who listened attentively to President Daniel Coit Gilman's inaugural address must have understood that these were not the words of a German rector but of an American educational

"reformer," expressing ambitions for his university in hyperbolic language no European would have employed. The opening of the University, Gilman said, "means a wish for less misery among the poor, less ignorance in the schools, less bigotry in the Temple, less suffering in the hospital, less fraud in business, less folly in politics; and among other things it means...more security in property, more health in cities, more virtue in the country, more wisdom in legislation, more intelligence, more happiness, more religion."[12] No European had ever argued that these were the principal purposes of the university, that scholarship existed to serve all these grandiose theoretical and practical ends. Gilman, never fancying himself boastful, expressed what he (and others) believed were the legitimate objectives of a more vigorous and dedicated American commitment to learning.

Because American reliance on European scholarship remained significant in many disciplines, and because not everyone accepted such grandiloquent notions of what the American university could be, the words of William James, America's most distinguished philosopher, are especially important. In his brilliant essay, "The Ph.D. Octopus," published in 1903, he called the doctoral degree "a sham, a bauble, a dodge," and could not imagine it would stimulate scholarship or "original research" in the ways the reformers intended. James, in unusually acerbic language, wrote, "It seems to me high time to rouse ourselves to consciousness, and to cast a critical eye upon this decidedly grotesque ten-

dency."[13] A different sort of criticism, voiced by Dean Frederick Woodbridge of Columbia University at a meeting of the American Association of Universities in 1912, expressed the dissatisfaction many felt with the readiness of institutions to refuse to be bound by older European conventions and instead bestow the doctorate on all manner of studies. In Woodbridge's words, "Since the [Ph.D.] degree is conferred in Sanskrit and in animal husbandry, in philosophy and highway engineering, for what does it essentially stand?"[14] All studies seemed "privileged" in the greatest number of American universities, and while such proliferation might be acceptable to some, others viewed it as educational heresy. The most searing criticism, perhaps, of not only the Ph.D. degree, but the entire expanded university enterprise was voiced by Thorstein Veblen in *The Higher Learning in America. A Memorandum on the Conduct of Universities by Business Men*, published originally in 1918. Veblen claimed that the undergraduate colleges simply cultivated the "genteel," while the graduate schools sought only to prepare their students for a vocation. Neither scholarship nor teaching was served by those university presidents Veblen called the "captains of erudition," men controlled by their prosperous and influential boards of trustees.[15] Criticisms of this sort, while not uncommon, never effectively challenged the dominant opinion that American universities were making significant strides as centers of research in a country that had become a major player in scientific scholarly enterprise, and that it was incumbent on those who financed,

administered or taught in universities to support such ambitious and promising intellectual enterprise.

It was precisely the willingness of American private and public universities to legitimate many kinds of theoretical and practical research as much as the generous funding individuals and state legislatures were prepared to make to construct essential libraries and laboratories that gave American scholarship its advantages. As A. Hunter Dupree emphasized, the American dependence on European scholarly example was substantially reduced, in part because the federal government, never backward in its support of research, initially in land exploration and agriculture, later in conservation, medicine and public health, also played a role. By the early 20th century, American universities and foundations created by two millionaires, Andrew Carnegie and John D. Rockefeller, helped to reduce the American dependence on European scholarly examples.[16] The support given by the Carnegie Foundation for the Advancement of Teaching—which for most of its history shared its officers and board members with Carnegie Corporation of New York—to the study that in 1910 led to the publication of Abram Flexner's *Medical Education in the United States and Canada,* transformed the medical profession. Less importantly, the Foundation's support of Alfred Reed's *Training for the Profession of the Law* and comparable post-World War I Carnegie Foundation studies of engineering and teaching made those professions more committed to research, but also to the pursuit of those intellectual and

social objectives deemed crucial for the United States.[17] The Rockefeller support for agricultural and health research proved equally important, especially in the control of two infectious diseases, yellow fever and hookworm.[18] With a research agenda claiming such varied support and committed to disparate intellectual and social purposes, America's scholarly accomplishments became both noteworthy and increasingly conspicuous in a universe that continued to emphasize research by German, British and French scholars.

World War I was a catastrophe for Europe; it led to the death or maiming of millions, including many young and able men, promising scholars who might have made contributions comparable to those in the pre-war period. The economic disorder of the early twenties that issued in the world economic depression, important in fastening new authoritarian regimes on Europe, had no comparably adverse effects in the United States. Mass unemployment only superficially damaged the established centers of research, and while their economic resources were substantially reduced, this did not prevent a number from welcoming the intellectual refugees compelled to flee from Nazi, Fascist and Communist tyranny. The extreme restrictions placed on European immigration by Congress in 1924 were never wholly relaxed, but tens of thousands of immigrants made their way into the United States in what must be seen as the most important intellectual migration in the history of the republic.

These events, tragic and unanticipated, created oppor-

tunities for American scholarship that none of the pioneers responsible for refashioning the country's universities and establishing the new incentives for learning could have foreseen. Though Germany, France and the United Kingdom retained their influence in science through the early 1930s, they paid a heavy price for their tragic manpower losses in four years of trench warfare. Though each continued to show its traditional prominence in scholarship, as witnessed by the Nobel Prizes awarded in physiology, medicine, chemistry and physics, the United States began to achieve modest recognition in all these disciplines, greatly exceeding anything it had previously known. (See page 46.) This became especially true following the rise of Nazism that for all practical purposes destroyed German scientific scholarship. The triumph of Bolshevism in effect contributed to a comparable decline of what was admittedly a less prominent Russian eminence. The forced emigration of scholars from the Nazi and Fascist tyrannies gave the United States new scholarly cadres, as much in the natural sciences as in the social sciences and the humanities.[19] For the first time, in fields as disparate as economics and sociology, fine arts and literary studies, not to mention the physical and biological sciences, the United States boasted a renown that put in the shade its many earlier accomplishments. The transplanting of men and ideas expressive of the genius that had so long given European scholarship its uncontested dominance was a boon that had an importance few would today contest.

Pioneering Study Focuses on Racism

The year 1933—more than 1929 or 1919—needs to be seen as the seminal year in the development of 20th century American scholarship, for what Adolf Hitler did to foster an emigration that enriched the nation he abominated and thought racially inferior, and for what Franklin Roosevelt did to preserve and alter the American democracy to give its political, economic and social institutions new vitality and purpose. The intellectual history of the 1930s waits to be written, but when its scholarly attributes are fully documented and acknowledged, Gunnar Myrdal's *An American Dilemma* may figure as paradigmatic of how the American democracy, as then conceived, saw itself and its problems. Myrdal's masterpiece, perhaps the most important study ever sponsored by Carnegie Corporation of New York, expressed the views of a European scholar, helped in his researches by American social scientists, including a number of previously unknown black scholars. The work, published in 1944, a year before the explosion of the atomic bomb over Hiroshima, expressed what W.E.B. Dubois first mentioned in 1906, that "the Negro problem in America is but a local phase of a world problem." Myrdal saw America's racial situation as a "moral issue," and more than that, as a "White Man's problem,"[20] incendiary propositions at the time. It is scarcely surprising that Frank Keppel, president of Carnegie Corporation, in his introduction to the book chose to describe it as a report that sought simply

to "make the facts available and let them speak for themselves," not undertaking "to instruct the public as to what to do about them."[21] Because the Myrdal volume raised the nation's consciousness about its race problem and was cited in the Supreme Court's 1954 *Brown v. Board of Education* decision to prohibit segregation in the nation's public schools, it represented the quintessential American scholarly concern to be useful, to inquire into social and economic conditions that cry out for remedy.[22] The work of a European scholar, helped by American collaborators, white and black, this was a unique testament to what international scholarship could contribute to the resolution of a problem thought at the time to be distinctively American.

A New Emphasis on Scientific and Medical Research

The unmistakable concern of American scholars to engage in inquires to provide useful knowledge for the resolution of major political, economic and social issues vied with the continuing interest, greatly expanded, to discover scientific evidence to improve health, extend life and create well-being for millions. If World War I contributed to the creation of a "new climate of opinion," in Whitehead's sense of the term, then the scholarship of the interwar years—by its explicit denunciation of war and its resolve to preserve the peace—gave new impetus to these concerns, substantially expanded and altered

by the events that followed from the Allied defeat of Nazi Germany and Imperial Japan. War and peace studies took on a new urgency by what A. Hunter Dupree chose to call "the great Instauration of 1940" that saw the American scientific community organize to create a weapon that gave the United States unprecedented military superiority.[23] Dupree, in his account of the American development of the atomic bomb, represented the accomplishment as the scientific community's commitment to the "national security goal of the government," reflecting the concern of physicists, chemists and engineers to advance both the country's theoretical and applied research capability.[24] George Kistiakowsky, President Eisenhower's scientific adviser, wrote that in his so-called "farewell address," Eisenhower spoke of the dangers of the military-industrial complex, expressing his concern that armaments "must never be allowed to dominate all science or curtail basic research." Eisenhower, Kistiakowsky argued, "was particularly anxious that educational institutions, whose task he [saw] as the support of free intellectual inquiry and the acquisition of new scientific knowledge, should not concentrate on large-scale military research and development contracts at the expense of their true scientific endeavors."[25]

Because the Cold War gave the federal government new incentives to support theoretical and applied scientific research, and because the medical revolution of the war years gave new impetus to biological and medical research that transcended anything known in the 1930s, Vannevar Bush's

hopes for the National Science Foundation, as outlined in his *Modern Arms and Free Men,* expressed ambitions characteristic of that confident post-war era. In language that soon became conventional, Bush wrote of the need for the federal government to support university research, to "provide fellowships for the brilliant," emphasizing that this would "go a long way toward providing that equality of higher educational opportunity which we need to superimpose upon our educational system as a whole, in order to adapt it for our true purposes in this world of threats."[26] Bush, responsible as any American for the creation of the atom bomb, saw the development of that weapon as a triumph of democracy, and thought it not an accident that both the Communists and the Nazis failed in their own war-time efforts to create such a weapon. In language that would be replicated many times by politicians, journalists and scholars, Bush wrote, "Dictatorship can tolerate no real independence of thought and expression. Its control depends entirely upon expressed adherence by all to a rigid formula, the party line. Its secret police must be ever alert to purge those who would depart from discipline and think their own thoughts, for departure would soon lead to a vast congeries of independent groups defying central authority, and the system would break. No true art, no true fundamental science, can flourish long under such a system, no matter what the individual genius may be."[27] Bush saw the atomic energy program as "not merely a matter of new physics and its incidental application—very far from it...It involved

the joint action of diverse groups, theorists, engineers, instrumentalists, designers, in the production of fissionable materials and in the construction of the bomb itself. It involved management that reached a new order of functioning to bring all those elements together in an intense race against time, where nerves were bound to be frayed and patience short."[28] Bush celebrated democracy, not war. He wrote critically of the "absurd restrictions of secrecy" that hampered the American effort, dwelled on the British and Canadian contributions and called the German organization "an abortion and a caricature…shot through with suspicion, intrigue, arbitrary power, formalism, as will all systems that depend for their form and functioning upon the nod of a dictator." In good American baseball jargon, he wrote, "[Germany] did not get to first base in the attempt to make an atomic bomb."[29]

This was triumphalism of a sort, however muted, as was *General Education in a Free Society,* the 1945 Harvard report that recommended a major curriculum reform. The report, written principally by humanists and social scientists, explored the intellectual roots of Western civilization, finding the contemporary realization of these values in the democratic societies that had recently defeated European and Asian totalitarianism. A committee dominated by historians that included classicists, philosophers, political scientists and biologists —professors who had spent the war years in Cambridge, Massachusetts—communicated the same message of hope in the unique virtues of democracy. In their report, submitted to

James Conant, president of Harvard, second only in importance to Vannevar Bush in the successful creation of the atomic bomb, the committee wrote of their concern to develop "a concept of general education that would have validity for the free society which we cherish." Their purpose was "to cultivate in the largest number of our future citizens an appreciation of both the responsibilities and the benefits [that] come to them because they are Americans and are free."[30] These sentiments, expressed before the start of the Cold War, survived into the period that followed, witnessing three developments of the greatest importance for American scholarship:

- the vast expansion of the American student population, initially through the Servicemen's Readjustment Act of 1944, better known as the GI Bill of Rights, making higher education an all-but-universal right;

- the expansion of universities, many like M.I.T., already greatly transformed by what it had done during the war, and the conversion of a good number of others to a preoccupation with scholarship in the natural sciences, the social sciences and the humanities;

- the creation of a new agenda of studies, that made issues like arms control, race relations, feminism,

environmental protection, urbanism and schooling prime subjects of social scientific study.[31]

Changing Times and American Scholarship

The euphoria about American scholarship did not survive the assassination of a President, John F. Kennedy, and the murder of a leading civil rights leader, Martin Luther King, Jr. War in Vietnam and race riots in many of the country's principal cities, together with student demonstrations and disturbances on campuses as distinguished as Harvard, the University of California at Berkeley and Columbia and others less well known, including Kent State and San Francisco State, contributed to the creation of a new dubiety about the American university research enterprise.[32] American scholarship in the social sciences, beginning in the 1960s and continuing to this day, showed an increasing skepticism about the value of what had once been thought incomparable studies of major issues, including those that touched the all-important questions of war and peace, subjects that commanded attention after 1918, becoming even more salient after 1945. Stanley Hoffmann, describing international relations as "an American social science," contrasted pre-World War II scholarship with what came later, suggesting that the earlier scholarship, with its utopian overtones, lacked "scientific analysis." Concerned with "how things should be improved, reformed, overhauled,"

the later scholarship, in his view, emphasized only the present, imagining that those conditions would also exist in the future.[33] An essay that a decade earlier might have been a celebration of all that American social scientific scholarship had achieved in war and peace studies ended with a grim warning; Hoffmann wrote, "Born and raised in America, the discipline of international relations is, so to speak, too close to the fire. It needs triple distance: it should move away from the contemporary, toward the past; from the perspective of a superpower (and a highly conservative one), toward that of the weak and the revolutionary——away from the glide into policy science, back to the steep ascent toward the peaks which the questions raised by traditional political policy represent."[34] Hoffmann, while never denigrating what American political scientists of his generation achieved in their study of arms control, conflict resolution and international organizations, mourned the absence of a historical dimension and all concerns with the ideas and principles of the great classic theorists.

A comparable study of biomedical science by Lewis Thomas showed similar tendencies: a no-less high regard for recent medical discoveries allied with a gnawing doubt that these were in any way sufficient. Thomas, analyzing how basic research in the 1930s laid the groundwork for the remarkable investigations made during World War II that led to a medical revolution that resulted in the discovery of antibiotics to treat infectious disease, wrote, "Overnight, we became optimists, enthusiasts. The realization that disease could be turned

around by treatment, provided one knew enough about the underlying mechanism, was a totally new idea just forty years ago." In a graphic example of the progress made, he said, "Without the long, painstaking research on the tubercle bacillus, we would still be thinking that tuberculosis was due to night air, and we would still be trying to cure it by sunlight."[35] Thomas understood the importance of the theoretical and practical advances that allowed medicine to become a truly revolutionary science in the middle years of the 20th century, and while giving all credit to American contributions, refused to exult as so many others did, asking why what "ought to be the best of times for the human mind...is not so." In his words, "All sorts of things seem to be turning out wrong, and the century seems to be slipping through our fingers here at the end, with almost all promises unfilled." Why, despite the extraordinary accomplishments, was this so? Thomas's explanation, an unconventional one, included an observation that became increasingly common in America's *fin de siecle*. He wrote, "Only two centuries ago we could explain everything about everything, out of pure reason, and now most of that elaborate and harmonious structure has come apart before our eyes. We are *dumb*."[36] Able to see only a single way forward, he said, "We need science, more and better science, not for its technology, not for leisure, not even for health or longevity, but for the hope of wisdom which our kind of culture must acquire for its survival."[37]

It is curious that decades remarkable for their celebration of all that the social sciences and the natural sciences accomplished through their more ambitious endeavors should have stimulated such grave misgivings about the limits of the scholarly enterprise, asking, in effect, whether the promise had indeed been fulfilled. A study like *Limits of Scientific Inquiry*, published originally in *Daedalus* in 1978, and republished as a book a year later, spoke of "the several kinds of unease...that have led to a questioning of the status of new knowledge and the effectiveness of society's arrangements for encouraging or restraining the growth of knowledge.[38] The climate of that day was perhaps best expressed by Don K. Price who wrote, "Entangled in the procedural constraints that go with government money, some scientists are almost tempted to regret the implicit bargain on which massive federal research support has been based since the end of World War II. The political strategy they have followed since Bush's classic report of 1945, *Science, the Endless Frontier,* may need to be thought through again in the light of new circumstances and new public attitudes."[39] America was changing, and attitudes common in the euphoric post-World War II period seemed suddenly antiquated, expressing the values of a more confident age.

With education figuring increasingly as the variable that more than any other determined income in the United States, the question of whether that finding had significance for a world where poverty was the norm seemed a not very

urgent matter in the late 1970s, a time of economic recession when the United States, exchanging Jimmy Carter for Ronald Reagan, seemed to belong to a world apart. Not surprisingly, American social scientists, especially economists, found reason for directing their inquiries principally into the prospects of relieving an unhappy social condition in the United States that had left so many destitute in the midst of privilege. The theoretical concerns of these scholars came to be reflected in arguments more fundamental than those that mocked the puported new remedies offered by "Reaganomics."[40] In these circumstances, scholars committed to the study of the so-called "developing societies" of Africa and Asia, known as "area specialists" in the decades after World War II, sought initially to comprehend the poverty of these societies and indeed to remedy those conditions. Other interests, however, soon intervened, giving way to a greater concern with why so many of these new states became authoritarian and why democracy failed to take root. Development studies, a flourishing social scientific discipline in the more heady days of early African and Asian independence, involving economists principally, but engaging also political scientists, sociologists and anthropologists, fell into a precipitous decline from which it never entirely recovered. The rise of Soviet studies, no less precipitous, showed a less dramatic decline, following the extinction of the Bolshevik regime in 1991.

When the United States, after World War II, confronted the Soviet Union in its Cold War rivalry, studies that originated

in inquiries into Nazi totalitarianism were gradually converted into analogous analyses of the nature of Communist authoritarianism. With so doughty a foe, American scholars heeded the call for new investigation into a society few had known at all well before World War II. As an ideological enemy, but also a potential military foe, the Soviet Union figured greatly in the development of major new scholarly industries, characterized by the mass media as Kremlinology, with its many subunits, none more important, perhaps, than "arms control studies." Much of this research, conducted in universities and think tanks, gained international renown, and indeed became the basis for the strategic arms limitation agreements and test ban treaties so important in the years following the Cuban missile crisis. The secret research conducted by the federal government in its own cloistered environments, but also in government-supported institutions like the Rand Corporation, remained closed to all but a handful of American scholars granted the security clearances that awarded them "the right to know" what other scholars could only imagine.

The interest in the Soviet Union, while incontestably pre-eminent, took almost second place among those American political scientists seeking to understand the world of the newly independent states of Africa and Asia. By comparison, the later concern with Communist China remained a more limited scholarly enterprise, not least because of the linguistic problems posed by the need to master a complex and difficult language. So, also, political scientists who lacked the linguistic

gifts that would have allowed them to make in-depth studies of these societies, where tribal, ethnic and religious divisions were paramount, took refuge in developing theories that compared the democratic Anglo-American political systems, increasingly associated with "modernity," with those that showed more authoritarian tendencies, labelled "traditional." In the United States "modernization theory" became immensely popular for a time and helped legitimate grants made by the federal government and the principal foundations to sustain scholarship on the emerging states, all seeking to guarantee their economic development, so as to remain free of Communist ideological contamination. Not surprisingly, political scientists and economists who did so much to foster studies of the "developing world" stressed their utility at a time when the United States was caught up in its Cold War frenzy.[41] Much of this research, read today from the vantage point of the early 21st century, seems utopian and dated, expressing views that came naturally to a generation still overwhelmed by what had happened during and immediately after World War II.

During the four-and-a-half post-World-War-II decades, the years 1945 to 1991, four developments in American scholarship of immense importance need to be noted:

- the emergence of the United States as incontestably the most substantial contributor to scientific and social scientific inquiry;

- the expansion and proliferation of American universities, with many committing themselves to research in ways previously inconceivable;

- the creation of new foundations and think tanks, different from those already in existence, expressing in many instances an unmistakable ideological commitment to specific political action programs, sometimes characterized as conservative;

- the expansion of the federal government into areas it had not previously entered, with a substantial segment of its research kept secret for reasons of national security.

A Transformed World Prompts New Questions

These institutions remain influential today, and though many would like to believe that the events of September 11, 2001, transformed America and the world, creating new imperatives for new kinds of scholarship, this has in fact not happened. In the terms Whitehead recognized early in the 20th century, there is an urgent need to consider whether the opinion common during and after World War II has not run its course, and whether a new impulse to scholarly endeavor is not required. Has the time not come for the concept of "public scholarship"

to be given new meaning as something more than useful scholarship to resolve specific problems relating principally to *America's* social, political, economic and defense needs?

Questions such as, "What would a Marxist think of this issue?" asked so insistently very recently, have to be replaced with more compelling ones: How do scholars abroad respond to the questions American scholars address today? Do American scholars sufficiently scrutinize the scholarship of societies fundamentally different from their own, or is such scholarship largely unknown, and when examined, too casually dismissed? Can the concept of public scholarship, for example, be extended to express an interest in what those not wholly convinced by the findings of American scholars deem important, and why their views differ so dramatically from those common in the United States? Finally, if scholarship in the natural sciences is truly international, with English having become for all practical purposes the *lingua franca,* does this situation obtain also in the social sciences? Are American scholars aware of how prominent scholars in Japan, China, Russia and India see the world, and are they too dismissive of the scholarship of those who live in societies less powerful, including many in the Muslim world, but also in Africa and Latin America?

In the natural sciences, the post-World War II American primacy remains virtually secure. The United Kingdom, once a major player, is now reduced to a secondary role, as the *Financial Times* recently indicated. Among Nobel Prize win-

ners since 1980, scholars in American universities have won 34 awards in physics, 31 in chemistry and 35 in medicine; the United Kingdom can claim none in physics, 4 in chemistry and 6 in medicine.[42] The situation is not very different in Germany or France, in Russia, China or Japan. In the most "scientific" of the social sciences, the country that did as much to invent economics as any other, Great Britain, has gained 3 Nobel Prizes since 1980; the United States is able to claim 28. In these highly competitive fields, America clearly leads the pack. While it would be possible to argue that a comparable American hegemony exists in other disciplines, philosophy, history, political science, anthropology and sociology, to name but a few, that judgment would be contested by many outside the United States. In these disciplines, American scholarship, brilliant and distinctive, competes with analysis that draws on other intellectual tradition and expresses a preference for quite different values. During the second half of the 20th century, it did not seem essential to consult this scholarship, thought by some to be less important than the American.

Yet, the views expressed by Alfred North Whitehead decades ago need to be considered. Has American scholarship in the social sciences, for all of its outreach, been centered too much on concerns more dominant in the United States than elsewhere? William Bouwsma, the historian of the Renaissance and Reformation, though never quoting Whitehead explicitly, subscribed to his views, when he wrote, in 1975, "The need for knowledge, and above all for new knowledge,

seems to be pointing to the formation of still another ideal. For the proliferating new specialties have at least this in common: that all are supposed to expand indefinitely through research; and a new conception of the educated man seems to be emerging precisely from this circumstance. It is closely related to the changing concept of the university, whose primary task is certainly no longer the formation of virtuous men nor the study of inherited learning, but the discovery of new knowledge. In this context, an educated man is above all a man who is open to new knowledge and able to advance it."[43] Extending this analysis, may the definition of a scholarship different from that predominant in recent decades not be one that shuns the "idols of the tribe," to use Francis Bacon's phrase, that turns its back on what Whitehead called the "Gospel of Uniformity"?[44] Is it possible that the most imperative need today is to acknowledge that the world is not becoming uniform, that national, religious, social, political, cultural and intellectual identities call for a kind of scholarship more respectful of difference, prepared to acknowledge complexity? If this is indeed the most urgent requirement, does it not compel a reconsideration of what any individual society can by itself do to encourage such scholarship, and does it not call for the kinds of international exchange so beneficial in the natural sciences? Has the social scientific scholarship of recent years, so linked to the specific needs of American society, created a parochialism that needs to be addressed and criticized? Is a new kind of international scholarship not

called for in which the Americans, still principal investigators, work more closely with those prepared to entertain different views and priorities, who do not normally publish in English?

While the term "public scholarship" does not in itself express the total ambition of a venture that goes beyond the practices of the 20th century, it implies that there is a public, more extensive than the one that exists in the United States, that needs to be served by scholarship less wedded to the needs of a single society. At a time when words like transnational and transcultural are discounted, and indeed in some quarters, discredited, there is a compelling obligation to support scholarship that accepts the reality of insecurity, but insists, as Whitehead did, that the "great ages have been unstable ages." This approach would invite research efforts rarely pursued in the more pacific 19th century or in the ideologically charged century that followed the two World Wars.[45] We live in a new world, made so not by Islamic terrorists, but by the incomparable scientific and technological knowledge created in the last century. It behooves us to understand that world in all its diversity, seen as something other than a new political and economic creation that has eradicated all previous historical roots. It is right to honor the American scholarship of the 20th century, to pay tribute to its discoveries, while showing respect also for those who understood its inadequacies and criticized it, but this is not the only intellectual task that beckons. A strenuous effort must be made to engage

a larger company of scholars across the world to investigate national, ethnic, religious, social, cultural, political, economic and intellectual diversity, to take account of myths that circulate today, those that have their origin in the United States no less than those spawned elsewhere. *Social Science and the Modern World* may be the appropriate title for an inquiry that acknowledges what is being achieved, not least in the United States by the plethora of institutions that exist to advance learning, while emphasizing the need for more deliberate and imaginative wandering. Never has the world been more accessible to scholars willing to master the skills and languages to allow them to inquire into societies only superficially resembling the American. Such a venture would have two immediate benefits: it would provide greater knowledge and understanding of diverse societies abroad. Inevitably, it would throw light on what makes the United States politically and intellectually exceptional, explaining why its ideas have not in fact conquered the world, though patriotic fervor may wish, on occasion, to claim the contrary.

Nobel Prize winners in all areas
for U.S., Germany, France and Great Britain
for the years 1930-35

	United States	Germany	France	Great Britain
1930	1 (medicine) 1 (literature)	1 (chemistry)		
1931	2 (peace)	2 (chemistry) 1 (medicine)		
1932	1 (chemistry)	1 (physics)		2 (medicine) 1 (literature)
1933	1 (medicine)	1 (physics)	1 (literature)*	1 (physics) 1 (peace)
1934	1 (chemistry) 3 (medicine)			1 (peace)
1935		1 (medicine) 1 (peace)	2 (chemistry)	1 (physics)
TOTAL	10	8	3	7

*A Nobel Laureate who was stateless at the time of the award but lived in France.

Notes

1. Alfred North Whitehead, *Science and the Modern World,* New York: Mentor Books, 1948, p.18.
2. Ibid, pp. 207-8.
3. Ibid, pp. 18, 206-7.
4. Ibid, p. 18.
5. Ibid, p. 6.
6. Alexis de Tocqueville, *Democracy in America,* translated, edited and with an introduction by Harvey C. Mansfield and Delba Winthrop, Chicago: University of Chicago Press, 2000, p. 438.
7. Ibid, p. 437.
8. Ibid, pp. 437-8.
9. Sydney Smith, *The Works of the Rev. Sydney Smith,* Boston: Sampson and Company, 1856, p. 141.
10. Patricia Albjerg Graham, *Community and Class in American Education, 1865-1918.* New York: Wiley, 1974, pp. 182-3.
11. See Bernard Berelson, *Graduate Education in the United States,* New York: McGraw-Hill, p .9.
12. Ibid, p. 13.
13. William James, "The Ph.D. Octopus," *Writings 1902-1910,* New York: Library of America, 1987, pp. 1111-18.
14. Berelson, op cit, p. 19.
15. Thorstein Veblen, *The Higher Learning in America. A Memorandum on the Conduct of Universities by Business Men,* New York: Sagamore Press, 1957.
16. A. Hunter Dupree, *Science in the Federal Government: A History of*

Policies and Activities to 1940, Cambridge, MA: Belknap Press of Harvard University Press, 1957, pp. 299-301.

17. Ellen Condliffe Lagemann, *Private Power for the Public Good: A History of the Carnegie Foundation for the Advancement of Teaching,* Middletown, CT: Wesleyan University Press, 1983, pp. 59-94.
18. Dupree, op cit, p. 267.
19. Bernard Bailyn and Donald Fleming, editors, *The Intellectual Migration; Europe and America 1930-1960,* Cambridge, MA: Belknap Press of Harvard University Press, 1969.
20. Gunnar Myrdal, *An American Dilemma: The Negro Problem and Modern Democracy,* New Brunswick, NJ: Transaction Publishers, 1996, see Introduction, pp. lxxvii-lxxix and lxxxiii-lxxxiv.
21. Ibid, p. lv.
22. Ellen Condliffe Lagemann, *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy,* Middletown, CT: Wesleyan University Press, 1989, pp 123-46.
23. A. Hunter Dupree, "The Great Instauration of 1940: The Organization of Scientific Research for War," in Gerald Holton, editor, *The Twentieth-Century Sciences,* pp. 443-4.
24. Ibid, p. 464.
25. Ibid.
26. Vannevar Bush, *Modern Arms and Free Men: A Discussion of the Role of Science in Preserving Democracy,* New York: Simon and Schuster, pp. 247-8.
27. Ibid, p. 201.
28. Ibid, p. 205.
29. Ibid, pp. 205-8.

30. *General Education in a Free Society,* Cambridge, MA: Harvard University Press, 1945, pp. xiii-xv.

31. See, for example, Christopher Jencks and David Riesman, *The Academic Revolution,* Garden City, NY: Doubleday, 1968; Clark Kerr, *The Uses of the University,* Cambridge, MA: Harvard University Press: 2001; John Burchard, *Q.E.D.; M.I.T. in World War II,* New York: Wiley, 1948; two famous and one scarcely known work in a literature on universities that is vast, encompassing literally hundreds of titles.

32. See Stephen R. Graubard and Geno A. Ballotti, editors, *The Embattled University,* New York: G. Braziller, 1970, also, Seymour Martin Lipset and Philip G. Altbach, editors, *Students in Revolt,* Boston: Houghton Mifflin, 1969.

33. Stanley Hoffmann, "An American Social Science: International Relations," *Daedalus: Proceedings of the American Academy of Arts and Sciences,* Summer 1977, pp. 43, 58.

34. Ibid, p. 59.

35. Lewis Thomas, "Biomedical Science and Human Health: The Long Range Prospect," *Daedalus,* Summer 1977, p. 164.

36. Ibid, p. 170.

37. Ibid, p. 171.

38. Gerald James Holton and Robert S. Morison, editors, *Limits of Scientific Inquiry,* New York: Norton, 1979, p. ix.

39. Ibid, p. 75.

40. See Alexander Stille, "The Case For and Against Inequality," *Correspondence, An International Review of Culture and Society,* Issue No. 10, Winter 2002-2003, p. 33.

41. See David Ciepley, "The Concept of Totalitarianism and Theories of

Modernization and American Democracy," *Research Reports from the Rockefeller Archive Center,* Fall 2002, pp. 23-7.

42. Martin Wolf, "Britain Risks Betraying Its Future," in *Financial Times,* October 3, 2003, p. 21.

43. William J. Bouwsma, "Models of the Educated Man," *The American Scholar,* vol. 44, Number 2, Spring 1975, p. 207.

44. Whitehead, op cit, pp. 206-7.

45. Whitehead, op cit, pp. 207-8.