The Wedge Driving Academe's Two Families Apart

Can STEM and the human sciences get along?

Harry Campbell for The Chronicle Review

By David A. Hollinger

More than one scientist friend at the University of California at Berkeley has complained to me recently that the stuff coming out of English departments seems pretty wacky. And whenever there is some silly petition before the faculty senate, these friends observe, it is the humanities types who show up to support it, so the scientists and engineers have to go to the meeting to vote the damn thing down. My friends in the English department also whisper in my ear. Those characters in the STEM fields will do anything the corporations want so long as it keeps their labs going. They don't have any feeling for the function of universities in advancing critical thinking; they just want to advance their own careers and train more techies.

These often ignorant and misguided, but sometimes justified, common complaints from the two major families in the American academic world would not be worth talking about if the grousing did not illustrate the vulnerability of academe to a wedge being driven between the two groups by outside forces. That wedge threatens the ability of all modern disciplines to provide—in the institutional context of universities—the services for which they have been designed.
The wedge pushes apart the natural sciences on the one hand and the human sciences on the other, or, speaking in terms more often used today, the STEM disciplines (embracing medicine) and the social sciences and the prodigious expanse of inquiries that we group together for administrative purposes as the humanities. That there are two such families of academic practice is apparent in multiple settings. Ask an incoming president: A scientist will have to decide if his or her provost can come from the STEM side of the campus, too, or must come from the other side, perhaps an English professor or philosopher or political scientist, and vice versa. Professional schools outside of engineering and medicine complicate the picture somewhat. Journalism and law often find themselves grouped with the social sciences and humanities, while public health is counted among the STEMs. The professors of business are frequently shunned by both families and sob about their rejection all the way to Davos.

It will not do merely to see the current situation in the terms of the Two Cultures conversation associated with the name of C.P. Snow, engaged with such intensity 50 years ago. Juxtaposed to the sciences in that conversation were the arts, chiefly, and more narrowly, the modernist literary canon of Dostoyevsky and Lawrence and Gide, and to some extent that canon's academic champions in literature departments. The social sciences had relatively little place in the two-cultures discourse, and almost nothing was said about the large and strategically important disciplines of history and philosophy, neither of which was accused of the contempt for reason and democracy that Snow found in canonical modernist texts and criticized in the name of science.

Moreover, the entire two-cultures conversation was carried out within the complacent context of what now seems to be the extraordinary security of all the relevant parties: The early and mid-1960s were a period of prodigious growth for higher education and the disciplines housed within it. Undergraduate majors in English were climbing to an all-time high. In 1966, Walter Lippmann published an essay in The New Republic on "The University," observing that scholars and scientists had become the ultimate arbiters of virtually every question faced by humankind—and a good thing, too. That a Florida governor could today recommend downgrading the humanities, that members of Congress would try to cut NSF funds for the entire discipline of political science—well, Lionel Trilling and his contemporaries faced nothing remotely like that.

If the wedge today owes relatively little to the old two-cultures arguments, it owes a great deal to the so-called culture wars of the 1980s and 1990s, keyed by Allan Bloom's The Closing of the American Mind, in 1987, and later by the energetic criticisms of the curriculum and faculty of the American Council of Trustees and Alumni, founded in 1995. The most pertinent feature of this episode was the vigorously voiced complaint that the intellectual content of the social sciences and humanities was ideologically driven from the left. That was a striking change in the political relations of higher education from the 1950s, when allegations that chemists and mathematicians had Communist sympathies were at one with comparable accusations of sociologists and philosophers.

The new political discourse focused not on the private political activities of professors, but on the intellectual content of what they wrote and taught. To be sure, there were anti-evolution and anti-climate-change yahoos who found fault with the natural-science side of university faculties, but rarely on the opinion pages of The Wall Street Journal; it was the human scientists whose ideas...
were most at issue. Hence the wedge: Natural scientists were invited to stand aside as their colleagues in English and history and political science and sociology were accused of substituting political correctness for professionalism.

And why not? some chemists and biologists and physicists wondered. After all, hadn't the sociologists and historians and literary professors and philosophers brought it on themselves? So what if political science was decimated? And do we really need all those professors of foreign languages and literatures?

Well, it would be so much easier if it were just a matter of getting some of the humanists to clean up their act. But silliness and irrelevance are widely distributed. The responses of scientists and engineers to the other disciplines underestimate their own capacity to make fools of themselves. We should not be deceived by the fact that some fields are more accessible than others, leading outsiders to exaggerate their comprehension of what goes on within them.

When Immanuel Kant called on people to "have the courage to use their own understanding," to "dare to know," he had in mind a broad expanse of inquiries, including those in the arts and sciences, and even the testing of truth claims offered in the name of religion. Although Kant wrote before practitioners of the various inquiries distinguished themselves from one another as physicists, historians, chemists, biologists, literary scholars, economists, geologists, metaphysicians, and so on, these several Wissenschaft were nurtured significantly by the same Enlightenment imperative, by the same broad cognitive ideal. That ideal, directing us toward truths that are discovered, not divined, that are grounded in evidence and reasoning rather than tradition or intuition, is the most important common heritage and resource of the entire modern professoriate.

The conversation about the two great academic families has been badly skewed, I fear, by the recent report of the Commission on the Humanities and Social Sciences, "The Heart of the Matter." Sponsored by the American Academy of Arts and Sciences to bolster the humanities and social sciences, it intoned that those disciplines were "a source of national memory and civic vigor, cultural understanding and communication, individual fulfillment and the ideals we hold in common." That is true, of course, but the much-publicized report largely ignored the deep kinship between humanistic scholarship and natural science.

Also, social science itself, ostensibly a central part of the commission's charge, was almost entirely bypassed, further treating the humanities as a thing apart rather than as integral to a single academic enterprise devoted to the production, critical assessment, and dissemination of truth claims.

The humanities deserve support not because they always get things right—often they do not—but because they are the great risk takers in the tradition of the Enlightenment. Nothing could be further from the uncritical preservation of traditional culture so often advanced by nonacademics under the sign of the humanities. The sprawling report included so great a range of ideas that partisans of this or that cause have been able to cherry-pick their own favorite recommendation and ignore the rest. That deprives the report of any singular force and renders it primarily an
instrument for the various interests represented on the commission. There were some excellent scholars there, but their labors were too often lost in the shuffle of concerns about national competitiveness and grade-school education.

The commission enacted yet again the reluctance of humanities professors to acknowledge the vitality and political efficacy of kinship with the natural sciences. When I read many of today's efforts to defend the humanities, I wince at the anti-science rhetoric, which further advances the portentous wedge we face. But I wince even more when I hear colleagues from the STEM disciplines hold forth with insufficient appreciation of the social value of the risk taking that is a necessary part of the successful operation of the human sciences.

The academic humanities and social sciences in the United States have long constituted a major apparatus for bringing evidence and reasoning to domains where the rules of evidence are strongly contested and the power of reason often doubted. These domains, on the periphery of an increasingly natural-science-centered academic enterprise, embrace the messy, risk-intensive issues left aside by the methodologically narrower, largely quantitative, rigor-displaying disciplines. The human sciences are at the borderlands between Wissenschaft and opinion, between scholarship and ideology. Here, in the borderlands, the demographic and cognitive boundaries of the entire academic enterprise have been the least certain; here it is the greater challenge to act on the great Kantian imperative to dare to know, to have the courage to actually use one's understanding instead of running from all that messiness back to less risky inquiries.

In these borderlands, the human sciences have managed in the last half-century, sometimes through what were called "studies programs"—black studies, women's studies, Latino studies, gay-lesbian studies, and so forth—not only to incorporate members of historically disadvantaged demographic groups at a faster rate than the STEM fields, but also to confront epistemic challenges attendant upon the cultural diversification of the United States. To what extent was scholarship expected to reflect the ethno-racial, religious, or gender group of which a scholar was a member? On what basis was this or that idea, text, project, or social group included or excluded in a discipline's scope? The human sciences found themselves deeply engaged with such questions. And they took chances.

Consider an important case from the University of Michigan at Ann Arbor. In the late 1960s, the university brought into its faculty a black writer who did not have a Ph.D., and indeed had never completed college, as a full professor of history. He was Harold Cruse, a former member of the Communist Party who, in 1967, had published a vast book, *The Crisis of the Negro Intellectual*. Some 45 years later, it is remembered as one of the great landmarks in the study of African-American history. Michigan did the right thing. Cruse brought evidence and reasoning to his discussion of black intellectuals and their relation to white leftists. Although his "black nationalism" called for African-Americans to go their own way, resisting many integrationist programs of his era, what most impressed scholars of all political orientations, then and later, was Cruse's detailed and sophisticated account of the history of African-American intellectuals in the early and middle decades of the 20th century.

Did every initiative taken in the borderlands by departments of history and English and sociology and political science in the anxious 1960s and after work out so well? Of course not. But the
United States as a whole, and American universities in particular, are better off because the human sciences were not afraid then, and are not afraid now, to take some chances.

It is the work of the human sciences in such borderlands between Wissenschaft and opinion that generates the countless anecdotes that David Horowitz, Dinesh D'Souza, and other critics of political correctness like to throw at us. But over all, the human sciences promote the critical thinking necessary to a democratic society. John Stuart Mill and John Dewey and the Harvard Red Book of 1945 were right about that. Those Texas Republicans who for a while had a platform that called for the end of a critical-thinking component in public education because it might lead students to doubt the authority of the family and of their inherited religion were also right, and for the same reasons. The Texans understood what education in the human sciences means. They knew full well who their enemy was. Colleagues in the natural sciences would do well to imagine what society would look like with a significantly diminished place for the human sciences. Techies yes, critics no.

The wedge being driven today has all the more welcoming an opening because of the gradual but escalating salary differentials between the two major academic families. Our basic operating principle is that those colleagues who can most easily make money outside academe are paid the most money by universities, and those colleagues whose careers are the most narrowly tied to the distinctive mission of universities are paid the least.

This is not simply a matter of professors of medicine and law being able to get nonacademic jobs that pay high salaries. In play here is also the ability of colleagues in a number of fields to make money on the side through consulting or their own entrepreneurial activities, often owning their own profit-making companies. The escalation of salary gaps between fields is one of the most striking and portentous indicators that the solidarity of academe may not survive a crisis. The old notion that being a professor was a calling in itself is less and less powerful, replaced more and more often by the de facto understanding that the university is merely a site for the carrying out of a career that is defined in some other arena. The market inside the university looks more and more like the market outside.

I want to emphasize both the increased size of the salary gap and the speed with which that gap continues to grow. When I chaired a salary-policy task force at Berkeley, 15 years ago, I reported that some professors of business, economics, computer science, law, and molecular biology were making salaries about twice as high as those of colleagues of comparable stature in classics, philosophy, history, anthropology, and East Asian languages. Today we have at Berkeley professors of law who make salaries more than three times what colleagues of comparable stature in those other disciplines make. Today, within the human sciences, the economists and the quantitatively oriented political scientists and sociologists have now joined STEM and law and business colleagues in this salary escalation, while the rest of the human sciences remain as before.

Yes, this is part of a national situation, and no single campus can go against the market. If Berkeley stopped meeting offers from Harvard or New York University, we'd lose all our economists. I like to imagine that university presidents will form a cabal against such thinking—Sherman Antitrust Act be damned. If the airlines can do it, why not the captains of our own
industry? What if Drew Gilpin Faust, Mary Sue Coleman, Nicholas Dirks, Teresa Sullivan, John Sexton, Lee Bollinger, and others like them agreed on salary limits? But of course, we are all realists. We all know how naïve it is to challenge the market.

One might think it would go the other way: Colleagues whose particular disciplinary skills enable them to start their own profit-making companies or do extensive consulting on the side might demand lower salaries from universities, but that is not the way it works. The lowest salaries by field are the most exclusively academic. The highest salaries are paid to the colleagues whose work is the least exclusively academic. American universities are said to be the best in the world, and indeed the best in world history, but they have remarkably little confidence in themselves as universities and as corporate entities—rather than simply as sites where lots of independently valuable things happen.

I doubt if that confidence, even if restored, could provide genuine salary equity, although I suppose it might arrest the growth of the gap and perhaps deliver some minor repairs. Yet restoration of confidence might take other valuable forms. It might encourage professors to recognize their common commitments and to achieve the political solidarity necessary to defend universities against the anti-intellectual forces that threaten them. It might enable academe's leaders to resist the wedge that threatens to disaggregate universities into fragmented fiefdoms responsive to different social, economic, and political interests.

Restoration of confidence might increase the determination of academic leaders to more deliberately explain to the public and various political and economic elites the social value of higher education in terms of the old Kantian cognitive ideal. Economically and technologically focused justifications for universities are the easy way out. They sell us short, invite donors and trustees and voters and prospective students and their parents to think of us in more narrowly utilitarian terms than our ideal mission actually requires. They reduce our resistance to the wedge.

It is too easy to assume that the public cannot understand grander aspirations and more-capacious visions of life. Not everyone can be expected to get it. But some will. By running from, instead of proclaiming, the role of the liberal arts and sciences in bringing received wisdom and vested interests under the scrutiny of critical thought, we risk further diminishing the public's ability to appreciate it.

Half of the American public, I read the other day, believes that scientists are equally divided as to whether climate change is real. Many people believe that evolutionary theory is simply one opinion among many. Many people think that the book of Exodus tells a basically true story, with a few mystical embellishments, although many scholars know that the story has no historical foundation, and that the ancient Hebrews may never have lived in Egypt at all. Neo-Confederate mythology about slavery and the Civil War frequently confronts American historians. There are many such examples where evidence and reason yield conclusions very much at odds with popular understanding. We are too timid in acknowledging that our practices have a critical edge, are driven by warranted truths rather than by ideology and authority, and make society better by enabling it to know and confront the world as we discover it to be.
All of us, as scholars, have a responsibility to patiently and repeatedly explain the social value of what we do, in common, as children of the Enlightenment. We are the people of Newton and Locke; we are the people of Darwin and Mill, the people of Einstein and Oppenheimer, of Dewey and Arendt and Habermas. We have defined the terms of science and scholarship in the North Atlantic West and beyond since the 17th century. We serve society by placing its inherited pieties and entrenched interests at risk, not in some iconoclastic mode, but rather by way of ensuring that beliefs and entanglements survive only when they are strong enough to meet the most empirically warranted of challenges.

We ought to be able to say that about ourselves without arrogance, yet with genuine pride. If we don't say it, the public will never hear it.