FEATURED REVIEW ESSAY

The Great American University

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"Save Our University!" chanted the students (and some faculty) at the University of California, Berkeley as they valiantly protested the rise in student fees and the corporatization of the university. Their chant raised the question of who controls the university and for what ends? The Regents of the University of California? The business community? The legislature in Sacramento? The growing administrative apparatus now being restructured through "operation excellence"? Or the faculty and students the actual educators and educated? Whose university is this after all?

These rhetorical questions recall the Free Speech Movement and the 1960s protests that followed, which also condemned the university, its bureaucratization, its massification, and its ties to corporate capital. In those days, Clark Kerr, President of the University, was vilified as the devil, architect of the mass university, which he christened the multiversity. Today he is redeemer and radical. To chant "save our university" is to endorse his vision of access plus excellence for Californian higher education—a vision enshrined in the 1960 California Master Plan, now in shreds, a utopia from another epoch.

What has happened in the last 50 years to turn a devil into a redeemer, a liberal into a radical, to make state policy as unthinkable now as it was unquestioned then? The simple answer is that the university, worldwide, has entered a three-fold crisis. First and foremost, there is a *budgetary crisis*, occasioned by the withdrawal of public funding, that prompts universities to seek donors, build collaborative relations with industry, cash in on discoveries through patenting, increase part-time teaching, dilute education The Great American University: Its Rise to Preeminence, Its Indispensable National Role, Why It Must be Protected, by Jonathan R. Cole. New York, NY: Public Affairs, 2010. 616pp. \$35.00 cloth. ISBN: 9781586484088.

through distance learning, strip and outsource non-academic staff and, of course, above all, increase student fees and, where possible recruit high-paying foreign students. The resources of each university determine what combination of strategies it can deploy. The result is, indeed, that the university—public and private—looks ever more like a profit-seeking corporation with growing managerial ranks and salaries to match. These changes began with the broader turn to market fundamentalism, long before the current economic crisis sent shock waves through higher education and so much else.

The budgetary crisis stimulates state surveillance over the way universities use their public funds. Governments are increasingly suspicious of the university's lax managerial practices. Ironically, therefore, falling public funds coincide with more rather than less state surveillance and interference. A regulatory crisis ensues, compounded by the universities' own pursuit of prestige to attract high-paying students as well as extra-mural funds. To this end universities register themselves in national and international leagues that rank them according to their performance, productivity and reputation. There is no opting out, with the result that an audit culture sweeps into the university distorting the way it conducts teaching and research,

shrinking time horizons, and degrading the academic enterprise, except at the most elite levels.

There is a third crisis—a legitimation crisis-that underpins the budgetary and regulatory crises, namely the growing lack of public confidence in and comprehension of the university and the enormous funds it absorbs. As public universities dramatically increase student fees and as they pursue private funding, so the public wonders why it should be paying taxes to support higher education. A vicious cycle is set in motion as declining state expenditures intensify the search for private money which justifies further state withdrawal, and so on. The original social contract-taxes for free education-lies in tatters. Hitherto immune from legitimation problems, now, along with other public institutions, its sanctity is challenged, and its profligacy attacked. How have academics responded?

The Rise to Preeminence—A Whiggish History

Much soul-searching there is. A veritable cottage industry of books, many of them reviewed in Contemporary Sociology, has appeared that analyze and lament the decline of the university, not just in the United States, but across the world. These works document the evaporation of the Golden Age when universities were the pride of the nation-an essential and unquestioned feature of the national landscape. Where some lament, others see the crisis as an opportunity to exploit the market and develop the entrepreneurial university. Into this ferment wades Jonathan Cole, ignoring the critical literature to proclaim the preeminence of the American university. Playing with his title, The Great American University, Cole implies he is celebrating the "American university" in general, whereas he is only concerned with the top 100 U.S. research universities, and for the most part only with the top 10. How does he justify the concentration of resources at the apex of the vast complex of higher education, here and also abroad? How does he make the case for its indispensability and its necessary protection?

To establish the top 100 research universities, Cole draws on the Shanghai Jiao Tong University Ranking (SJT) created to evaluate the progress of Chinese Universities in relation to the world's best, but now used globally in the competition for "world class" status. The league table is constructed out of four factors with different weights:

- Quality of education measured by the number of alumni who have won Nobel Prizes or Fields Medals (10 percent)
- Quality of faculty as measured by the number of faculty who have won Nobel Prizes and Fields Medals as well as the number of highly-cited researchers in 21 fields (40 percent)
- Research output as measured by number of articles published in *Nature* and *Science* and the number of citations in Science Citation Index Expanded and the Social Sciences Citation Index (40 percent)
- Academic performance as measured by the foregoing indices adjusted according to the number of faculty in the institution (10 percent)

The United States dominates the rankings with 17 of the top 20, 40 of the top 50, 54 of the top 100, and 84 of the top 200. In contrast to the QS and Times Higher Education rankings, SJT is skewed toward the natural sciences and research, which suits Cole's purpose perfectly since for him the "greatness" of the American university is not its teaching but its research.

Part I of The Great American University gives us a short history. Drawing on European traditions and especially the great German universities of the nineteenth and early twentieth centuries, the American research university developed through the first half of the twentieth century and came into its own in the post-war period with the exponential expansion of the system of higher education, especially its research apparatus, much of it from federal funding. The superiority of the American university is measured by countless discoveries and inventions across all disciplines that have transformed everyday life. The values that underpin the great university are multiple

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and here Cole extends the four advanced by Robert Merton (1973[1942]) in his definition of the scientific ethos to a list of 12: universalism, organized skepticism, creation of new knowledge, free and open communication of ideas, disinterestedness, free inquiry and academic freedom, international communities, peer review, working for the common good, governance by authority, intellectual progeny, vitality of community. These values are represented by such great leaders of the American research university as Robert Hutchins of Chicago and James Conant of Harvard and, in the post-war period, by Frederick Emmons Terman who turned Stanford into a premier research university and Clark Kerr whose vision for California combined access and excellence, making the University of California a world leader in research.

As former Provost of Columbia University (1989–2003) and a sociologist of science, Cole is in a good position to evaluate the research conducted by great universities, which is just what he does in Part II of the book. He contacted presidents or provosts of the top 50 research universities and asked them for lists of discoveries over the previous four decades. In the first chapter of Part II, he ranges over the ever-more important medical and biological sciences concerned with health, food, and genes. In the second chapter he turns to the physical sciences and engineering: developments in physics and astronomy that led to lasers, radar, transistors, MRI technology; developments in earth sciences that brought advances in understanding earthquakes, volcanoes, hurricanes, global warming, and ozone depletion; and then, of course, the birth and development of computer technology, the emergence of the internet, nanotechnology, artificial intelligence, GPS (global positioning system), and surveillance. In the third chapter he turns to the humanities and social sciences, but here he has to rely on his own judgment as the presidents and provosts at the top universities did not pay much attention to these areas. Here he proposes five areas of advance: decision-making and reasoning; values and opinions; culture, economy and society; ourselves and our sensibilities; and thinking about thinking (philosophy and literary theory). If the reader wants a longer list of discoveries and contributions, he or she can find them at http://university-discoveries.com.

This Whiggish history sees the contemporary university as the ineluctable product and producer, creator and guarantor, of U.S. progress:

In the future, virtually every new industry will depend on research conducted at America's universities. American higher education represents one of the few sectors of the U.S. economy with a favorable international balance of trade. These universities have evolved into creative machines unlike any other that we have known in our history—cranking out information and discoveries in a society increasingly dependent on knowledge as the source for its growth. Thus, a threat to the American research university is a threat to the health and well-being of our nation (p. 4).

To be sure there have been a few awkward moments, but these are mere wrinkles on the surface, slight reversals in an otherwise smooth trajectory that assumed takeoff proportions after World War II. To threaten the research university is to tamper with American greatness. However, this is not everyone's view or the university would not be in such crisis, and Cole would not have to mount such an exhaustive accounting of the university's contributions to society.

Discoveries that Alter Our Lives—Is the University Worth It?

Cole does offer us an impressive array of discoveries. But at what cost? As he outlines in Chapter Six, since WWII there has been an exponential growth in the number of scientists on the planet (90 percent of all everexisting scientists are alive now), the number of published papers doubles every decade, and he notes there is an ever greater concentration of productivity in a few individuals at the very top universities. University budgets have grown astronomically. Columbia's operating budget has increased from \$11 million in 1944-45 to some \$2.8 billion in

2007, more than doubling every decade.¹ The National Science Foundation's budget increased equivalently from \$40 million in 1957 to \$6.9 billion five decades later. The National Institute of Health's budget increased from \$71 million in 1954 to \$29.5 billion in 2009. Today, a junior scientist who requires labs and equipment needs a million dollars in start up costs.² The question is this: are we getting value for money? Impressive though the list of discoveries is, they come at a staggering financial cost. For how long could university funding increase at an exponential rate? One can see why legislatures raise their evebrows, demanding that universities should tighten their belts, and that those great discoveries should pay their way through patenting, collaborations with industry, and the development of joint ventures. The danger of putting universities on a hard budget footing and making knowledge proprietary, however, is that this might limit the freedom of inquiry necessary to make the break throughs in the first place.

Whether he does not want to sully the waters, or because he is at a private university where the profit nexus is taken for granted, or he genuinely believes it is a problem at the margins, Cole passes lightly over the commodification of knowledge. Instead he steams ahead with those great contributions. He even tries to justify research in the humanities and social sciences in terms of the novel understandings they bring, but he is not very convincing. In the field of sociology, for example, he puts his teacher, Robert Merton, at the center-his self-fulfilling prophecy, his notion of unintended consequences, his focus group, and his theory of anomie-followed by Blau and Duncan on social mobility, Riesman's lonely crowd, Stouffer's study of the American soldier

and the idea of reference group behavior, and Lauman's study of sexuality. It is all a bit parochial, quaint and dated and, with the exception of Lauman, a throw-back to the sociology of half-a-century ago. If the funding of sociology depended on Cole's account of its discoveries, I think we would disappear. The same applies to the humanities. We can not rest our laurels on Chomsky's linguistics, Said's literary criticism and Rawl's philosophy.

Economics, of course, is another storyhere we have the development of a discipline that has proven very effective in disseminating its ideas about monetary policy, and efficient investment, the theory behind derivatives that propelled us into the Great Recession. But is our society better off as a result of neo-classical economics? Starting in the 1970s, the neoliberal era has been justified and propelled by the conventions of market fundamentalism, with few dissenting voices. A reasonable argument has been made-from Naomi Klein to Joseph Stigltiz—that shock therapy and structural adjustment have contributed to the destruction of economies and societies. Even if we do not worry about other countries-and Cole does not-neoliberal economics has hand-cuffed one administration after another, the pretext being cutting government spending and reducing taxes, especially on the rich. As Keynes once said, the ideas of economists rule the world, and politicians are unwittingly the "slaves of some defunct economist."

What is missing here is, a sociology of the university, a closer examination of the new societal context within which it operates and within which its products are received, a study of "unintended consequences" that have come home to roost in the "risk society" of the twenty-first century. To be sure the revolution in information technology has transformed many people's lives, but for better or worse? And for whom? Cole writes that as a sociologist he is committed to studying the production of knowledge as a social process (p. 204), but the reception, application and consumption of science is also a social process, which can no longer be easily separated from "discovery." Cole tends to assume that the existence of a discovery that transforms everyday life is ipso

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¹ Assuming all these figures are in real rather than constant dollars, they still represent exponential increases.

² When writing of the inequality among the elite universities, Cole asks who will be able to fund world-class scientists whose recruitment packages run to "\$40 or \$50 million price tags, not including the investments of hundreds of millions of dollars in new laboratory buildings, scientific equipment, and highly trained personnel" (p. 476).

facto necessarily good, but as sociologists we know that any new technique or invention has consequences determined by the social relations into which they enter.³ Nuclear power in the wrong hands can lead to massive destruction as we know from Hiroshima and Nagasaki, not to mention Three Mile Island, Chernobyl and Fukushima. What about the contributions of university research to biological warfare? Or the DNA revolution and genetic engineering with its many troubling aspects? Organ transplants, one of Cole's great medical inventions, are utilized to the disadvantage and exploitation of helpless donors in the Global South. Indeed, many medical discoveries are used by pharmaceuticals to make exorbitant profits that often benefit only the few.

Not only economic but also political interests define the context of reception. We may be better able to predict hurricanes but that did not stop the catastrophe that hit New Orleans. Many of our inventions create the disasters we live through, and global warming is obviously one. While it may not end the human race it will certainly kill off the vulnerable. Cole highlights the new technologies of surveillance as a weapon against terrorism, but they also are used to curtail civil liberties, even to impede scientists from pursuing their inquiries as Cole himself tells us in Part III of his book. Gone are the times when we can assume that science is benign, and the more a university depends on private funding the more likely it is to become malignant.

The Great American University in Context

The context within which the research university functions cannot be ignored. This applies to the reception of discoveries, and

to the higher education hierarchy itself. While Cole announces the importance of the overall system of higher education (p. 5), his actual interest lies with the top 100 research universities, and even here he tends to focus primarily on Harvard, Yale, Princeton, MIT, Columbia, Stanford, Chicago, and the University of California. Left unexamined is the relation between the top 100 and the approximately 4,200 institutions that were created to protect the research university from the massive influx of students in the decades following World War II. These "non-elite" institutions-two-year colleges and state universities that do not award doctoral degrees-experience falling salaries, expanding workloads, casualization of employment, deskilling through on-line teaching as well as increased student fees. Impoverishment of the lower tiers supports improved conditions-ever higher salaries and lower teaching loads-in the top tier. Even within the top tier, tenured faculty are becoming an ever-shrinking proportion of the teaching staff.⁴ Maintaining the research university comes at the cost of the degradation of university education more broadly. Perhaps there was a time when the elite, or better the dominant class of universities could present their interests as the interests of all, but with shrinking budgets, class compromise gives way to increased polarization, wealth at one pole and poverty at the other. And at all levels students are receiving less while paying more.

Instead of paying attention to the widening gap between the elite and the non-elite universities, Cole is concerned about the widening inequality *within* the top tier of research universities where private universities sit on huge and expanding endowments, while the vaunted public universities suffer annual budget cuts. Indeed, the concentration of resources around just a few Ivy League universities (Harvard dwarfing everyone) is astonishing. Thus, Cole reports that as of 2008, Harvard had an endowment of \$37 billion, Yale \$23 billion, and Stanford

³ As Robert Merton (1973 [1938]: 263) wrote long ago: "There is a tendency for scientists to assume that the social effects of science *must* be beneficial in the long run. This article of faith performs the function of providing a rationale for scientific research, but it is manifestly not a statement of fact. It involves the confusion of truth and social utility which is characteristically found in the nonlogical penumbra of science."

⁴ Overall the proportion of faculty in the tenure system has dropped from 55 percent in 1980 to 31 percent in 2007. See, Dan Clawson, "Tenure and the Future of the University," *Science*, Vol. 324 (29 May, 2009), p. 1147.

\$17 billion. At \$6 or \$7 billion Chicago and Columbia's endowments are about the amount Harvard added to its endowment in 2006! Not surprisingly, the former Provost of Columbia is concerned about the concentration of resources at Yale and Stanford, and especially Harvard. This situation, Cole avers, endangers competition—the goose that lays the golden eggs.

We can study polarization within the system of higher education, but we should also look at implications for inequality in the wider society, inequality in access to the university. Cole points to increasing student enrollments with two-thirds of school leavers attending some form of higher education, but he overlooks the attrition rate and the debt accumulated en route to their degree.5 Moreover, school leavers end up in very different places in an ever more differentiated hierarchy of higher education. The intensification of struggle for places in the "best" universities, where the costs can be crippling, notwithstanding the growth of scholarships, advantages students with cultural as well as economic capital. Cole does not look at the way elite universities continue to reproduce a dominant classthe line of argument taken by Jerome Karabel or Pierre Bourdieu. This is relevant to his concern with the survival of the research university, since endowments flow most easily to the elite universities that secure the reproduction of the dominant class.

Nor should we confine our attention to the national scene. The ascendancy of "the great American university" has increasing repercussions across the globe as it becomes the standard by which countries measure their own higher education. Cole's approach is to look for potential challenges to the supremacy of the American research university. He looks in the obvious places, the home of traditionally excellent universities-France, Germany, and Britain-and concludes in each case that they do not. Apart from limited funding, the best research, at least in the case of France and Germany, takes place outside universities in research institutes that, so he avers, could

never compete with U.S. research universities. Their relative backwardness is reflected in the number of published scientific papers: individually Britain, France, and Germany do not publish more than 6 percent of the world's output compared to the United States' 29 percent.⁶ Then, Cole considers China, one of the few places in the world that is pouring money into higher education, but even here, he argues, there is little chance of China catching up in the foreseeable future. It started from a low level of scientific research and is handicapped by limited academic freedom. Despite its rapid expansion of higher education, China still only contributes 6 percent of the world's scientific papers as determined by the Science Citation Index.

Of course, quantity does not imply quality. Still, by any measure, the concentration of global knowledge production in the United States is staggering. The total annual spending on higher education is \$360 billion, which is 7 times the amount of the next big spender, Japan. In the SJT ranking system, 84 U.S. universities appear in the top 200 with the United Kingdom coming second with 23, and after that Japan with 9. Even taking into account all the biases of the Shanghai audit, this points to an extraordinary domination by the United States. Of course, by virtue of English becoming the lingua franca, U.S. and U.K. academies start out with a major advantage. They define the terms of global competition by controlling the vast majority of journal publications. In 2001, the United States produced between a quarter and a third of the world's scientific papers and accounted for 44 percent of the citations due, in part, to the prestige of their papers but also because U.S. scholars tend to cite each other. The United States had 3,885 "highly cited researchers" (the top 250 to 300 scholars in each field) while the next

⁵ According to Sandra Ruppert (2003), the United States had fallen from first to thirteenth place in terms of college participation rates.

Policy makers, on the other hand, who do not measure universities by the number of published scientific papers but by technological innovation, have been more skeptical of the superiority of U.S. science over that of other advanced industrial societies. See Michael Dertouzos et al. *Made in America* (Cambridge: MIT Press, 1989).

country, the United Kingdom, can claim only 443.⁷

The domination extends to the recruitment of students world-wide. In 2004 of the 2.7 million students enrolled outside their own country, 22 percent came to the United States, followed by 11 percent to the United Kingdom. Significantly, one-third of the U.S. in-take is at the doctoral level, 4.5 times the intake of foreign PhDs in the United Kingdom. Between 1977 and 1997 the proportion of foreign-born U.S. PhDs rose from 13.5 percent to 28.3 percent overall, and in engineering from 32.1 percent to 45.8 percent. Moreover, in 2001, 96 percent of Chinese students and 86 percent of Indian students graduating with an American PhD in science and engineering remained in the United States. Cole is all too well aware of U.S. dependence on foreign students, proudly announcing that the university sector has a positive balance of trade. Indeed, in 2001 for example, foreign students brought in \$11.5 billion. He has concerns, therefore, with the effect of visa and travel restrictions on the continued supply of the world's best students.

Cole takes U.S. domination in higher education for granted without considering the consequences for the countries being dominated. It is a special form of domination, not "hegemony" in which the dominant take into account the interests of the dominated, but "distinction" in which the dominant do not even recognize the interests of the dominated—fed, in this case, by the desire of foreign students and faculty to join the U.S. super-league.

So what *are* the consequences for the rest of the world? The most obvious is an enormous drainage of the most talented students and researchers to the United States. No less serious are the consequences for national systems of higher education. The SJT and Times Higher rankings have an increasing grip on the national imagination of the "world class university." In aspiring to attain a place in the global arena, nationstates try to advance one or two of their universities into the top 500. This requires concentration of enormous material resources. Those countries that cannot compete may abandon their commitment to the research university as unsustainable and instead send their students abroad for PhD training. In this, they are encouraged by such international agencies as the World Bank. The data show that many students do not actually return. Those countries that do compete in the world rankings create a deep polarization within their own country, replicating the one inside U.S. academia, with lavish funding for one or two universities at the cost of minimal investment in the rest. An enormous gulf is created between, on the one side, the leading universities that are linked in to the lower levels of a global hierarchy and draw on the children of the wealthy and, on the other side, the large number of "second class" universities that are excluded from the global and rooted locally. The American Universities of Cairo and Beirut are prototypes of the elite side of this bifurcation.

The uneven investment of resources has multiple ramifications, one of which is that the educational elite, oriented to issues staked out in the United States and Europe becomes ever more detached from national and local problems. This is especially costly in the social sciences and humanities where submitting articles in English to Northern journals, not only puts them at a disadvantage vis-à-vis their Northern colleagues but draws them into the vortex of Northern frameworks, questions, and issues and away from pressing national and local problems. Sari Hanafi (2011) has described the dilemma of the Global South as "publish globally and perish locally" versus "publish locally and perish globally." Few countries have the Brazilian state's resources and confidence in their own scientists and scholars to mark their own journals as world class and evaluate scholars in terms of their rank ordering of those journals, whether they appear in international citation indices or not.

In short, the ranking system has the effect of polarizing higher education within the United States, between the United States and other countries, and within other countries; for those countries which cannot compete it may mean the disappearance of the

⁷ Data in this and the next paragraph are taken from an excellent article by Marginson and Ordorika (2011).

university as we have known it. So long as there is a single model for the university and that model is the U.S. research university, higher education around the world will necessarily suffer.

Trouble in Paradise—The Assault on the Public University

The first two parts of *The Great American University* celebrate the American research university—its rise to preeminence and then its contributions. The third part, focusing on the challenges, turns from the transformative powers of the university to the assault against the university.

For Cole, the biggest threat to the American University is the U.S. state itself. We are treated to three passionate chapters. The first defends academic freedom both as an intrinsic right and a condition of inquiry, citing the two Red Scares during and after World War I and McCarthyism, the evils of Stalinism and the Lysenko affair that destroyed Soviet genetics, and the public attacks on Columbia faculty for their criticisms of Israel. The second chapter catalogues state interference in the conduct of university affairs after 9/11 through the Patriot Act that extended FBI surveillance of research in biotechnology, visa applications, library records, and political views (such as the infamous hounding of the Ford Foundation for supporting Palestinian groups, leading Ford to require that recipients of their grants sign a loyalty oath). The third chapter, entitled "Political' Science," documents the ways the Bush administration interfered with scientific projects that were deemed "politically sensitive"embryonic stem cell research, global climate change, and reproductive health connected to HIV/AIDS. Finally, the administration monitored the content of university curricula through Title VI funding for area studies centers and tried to manipulate the peer review system for some federally-funded projects.

The fourth, and concluding chapter, is entitled "Trouble in Paradise?". It lists the various threats to the university—global competition and the concentration of resources in a few elite private universities—to which I have already referred. Only here does Cole express concern about the commercialization of knowledge production. He writes of academics whose research is affected, and even distorted, by their economic interests, engineers who own their own companies, medical scientists who have a vested interest in pharmaceutical companies, and physicians who exploit their base in the university to make millions of dollars. In Cole's account, however, the marketization of the university is less threatening than political interference, which perhaps reflects his position as Provost of an Ivy-League University, having to deal with the immediacy of major public cases of interference with academic freedom and taking for granted the search for funds as the *modus vivendi* of any private university.

In practice, the political and economic are closely intertwined, but the economic has the greater long-term consequences. The marketization of the university began in earnest with the Bayh-Dole Act of 1980, allowing universities to own the knowledge produced by faculty and funded by government research grants. Until then it was assumed that knowledge produced in the university was publicly accessible to all. Once the university could cash in on its discoveries, then the state could legitimately look upon it as a private enterprise and the demand for public funding began to lose its credibility, setting in motion not only the commodification of knowledge production but also the commodification of knowledge consumption (teaching) and dissemination (journals, books, media).8 Competition turns from the hallowed motivator of originality and distinction evaluated by a community of peers to become the drive for proprietary knowledge, leading to secrecy and control over publication, thus threatening academic freedom and the open

See, for example, Geiger (2004), Kirp (2003), Bok (2003), Slaughter and Rhodes (2004). The pricing of journals, especially in the hard sciences is an astonishing example of commodification. Preying on the absence of competition and the dependency of researchers on gaining immediate access to scientific papers, publishers appropriate public resources to charge exorbitant fees of access. Open access journals have hardly made any in-roads into this area.

exchange of ideas. Still, this can be exaggerated. The writings of Walter Power, Diana Rhoten, and Jason Owen-Smith have emphasized that commercialization through patents is still confined to a few top universities and concentrated in certain fields, especially bio-medicine.

Nonetheless the market invades the university in other ways, often facilitated by regulatory mechanisms. University ranking systems, for example, now affect revenue: highly ranked universities (including measures of the jobs their students obtain) can justify hiking student fees, or they can be used in appeals to industries to support research. Donors, whether for research or the football stadium, usually have their own priorities. On the cost side, the decentralization of accounting through such schemes Responsibility-Centered Management as (RCM) turns departments into "profit centers." Faculty and degrees too are increasingly rewarded according to their market value, thereby creating enormous disparities in incomes between universities, but also between disciplines within universities, as well as within disciplines. Contrary to conventional wisdom, Christopher Newfield (2008) argues that the disparities within the university come from the exploitation of the humanities and social sciences by the natural sciences and professional schools whose research is not covered by their grants, but depends on revenues garnered by those who do the most teaching.

Whether one sees the assault on the public university as a project of the dominant classes designed to destroy a new middle class whose incubator was the public university (viewed as a hotbed of subversion), as Newfield argues, or whether it is better seen as the result of the inherent conflict between university and society that has unraveled under fiscal austerity and new forms of knowledge production, the university as we know it and the ethos that underpins it are imperiled. Each one of Merton's principles is called into question: *universalism*, by external regulation whether indirectly through ranking or directly through state and public interference; *disinterestedness*, by economic ties to commercial establishments; *communism*, by the privatization of research; and organized skepticism, by the fear of government sanctions and short-term horizons. Does this mean we should reassert Merton's values, as Cole assumes, or should we forsake them as belonging to a bygone era when the university was segregated from society? Is it not time to replace Merton's scientific ethos, designed for an era when fascism loomed large in the political imagination, with a new set of values corresponding to the integration of the university into society—values that pay close attention to the accountability of the university to society, that recognize the movement toward the contextualization of scholarship and teaching, and that oppose the destructiveness of markets?

What is to be Done?

Cole's focus is on the top 100 universities rather than the whole system of higher education that supports it, and within the top 100 on the super-league, on discoveries rather than their reception, on research rather than teaching, on the United States rather than the world. In taking this partial view, he can sustain the euphoria of the third quarter of the twentieth century, the world of Jencks and Riesman's Academic Revolution. For him, the "trouble in paradise" is a temporary anomaly that he hopes Obama will rectify. It does not mark a new era of the university wherein the once thick membrane between university and society has been thinned, so that the university is not simply an agent of change, but is itself transformed by the society within which it swims. He does not consider the novelty of the reflexive relation between university and society, such as the view advanced by Nowotny, Scott and Gibbons in their widely discussed, Re-Thinking Science. Cole is so different from Clark Kerr who, until his dying day, revised his optimistic scenario in The Uses of the University (1963), wrestling with the enormous challenges he had never anticipated.

Instead of rethinking it, Cole celebrates the great American research university. No doubt the super-league will survive as elites tend to reproduce themselves, but in what form and at what cost to the rest, especially the public universities? Here we must return to the Berkeley students' chant, "Whose University? Our University!" They are nostalgic

for the public university of the past, with open access and academic autonomy. This university, however, is vanishing. We have to reconsider or re-imagine the public university. As the walls of the university are battered down by budgetary and regulatory forces, the university must fight back, designing its own engagement with the wider society. The university cannot simply declare itself off limits for outside intervention, as though it were some pristine, delicate flower; it has to advance into society, making itself publicly accountable but on its terms, not those of predatory states and corporations. It has to earn the trust and respect of the public. Moreover, it has to recognize that it is not the only sphere swamped by market fundamentalism, it is part of an archipelago sinking under a tsunami. It can no longer stand aloof but must partake, if not lead, a concerted countermovement that embraces a variety of publics and institutions.

In redefining the public university, we have to reintroduce what Cole side-steps, namely teaching. We have to rethink the meaning of teaching-to think of students as a public that educates us as we educate them. It means thinking of students who carry their own distinctive experiences into the university and partaking of their (re) interpretation and elaboration through disciplinary engagement. It means constituting a dialogic relation not just between students and teachers but among students themselves in a process of mutual education. When asked why he regularly came to teach at Berkeley, Michel Foucault used to say it was because the public sphere that is created within the university was abysmally absent in French universities. But the public sphere cannot be confined to the university. Teaching must also involve orchestrating a dialogue between students and secondary publics in society. This university extension can be enhanced by the use of digital media in a positive enriching way rather than the massification of education through "distance" learning. In this project the humanities and social sciences inevitably take the lead, correcting the imbalance in Cole's account.

We are living in a time of the university in crisis, and rather than harken to a presumptive Golden Age, we have to plan alternative visions. This applies to those Berkeley protestors as much as to Jonathan Cole. It is always tempting for academics when writing about the university to defend their turf, and in this we are no different from any other profession. Because we are so deeply invested in our disciplines, we harbor many illusions and partial understandings of the very place we inhabit. For this reason, we should be vigilant in recognizing and interrogating the assumptions we make, we should be doubly committed to "organized skepticism" with regard to our own claims. Otherwise it is just sales talk. Listening to the critics of the university, from without as well as from within, should be our first task in building a meaningful dialogue with wider publics. As sociologists, we are in a particularly strong position to go beyond simply the defense of the old, and forge a reflexive encounter with what could he

References

- Bok, Derek. 2003. *Universities in the Marketplace*. Princeton, NJ: Princeton University Press.
- Bourdieu, Pierre. 1996 [1989]. *The State Nobility*. Stanford, CA: Stanford University Press.
- Clawson, Dan. 2009. "Tenure and the Future of the University." Science 324: 1147–48.
- Dertouzos, Michael et al. 1989. *Made in America*. Cambridge, MA: MIT Press.
- Geiger, Roger. 2004. Knowledge and Money: Research Universities and the Paradox of the Marketplace. Stanford, CA: Stanford University Press.
- Hanafi, Sari. 2011. "University Systems in the Arab East: Publish Globally and Perish Locally vs Publish Locally and Perish Globally." *Current Sociology* 59(3): 291–309.
- Jencks, Christopher and David Riesman. 1968. *The Academic Revolution*. Garden City, NY: Doubleday.
- Karabel, Jerome. 2005. The Chosen: The Hidden History of Admission and Exclusion at Harvard, Yale, and Princeton. New York, NY: Houghton Mifflin Harcourt.
- Kerr, Clark. 2001. *The Uses of the University*. Cambridge, MA: Harvard University Press.
- Kirp, David. 2003. Shakespeare, Einstein, and the Bottom Line: The Marketing of Higher Education. Cambridge, MA: Harvard University Press.
- Marginson, Simon and Imanol Ordorika. 2011. "El central volumen de la fuerza': Global Hegemony in Higher Education and Research." Pp.67–129 in Diana Rhoten and

Craig Calhoun (editors), *Knowledge Matters: The Public Mission of the Research University.* New York, NY: Columbia University Press.

- Merton, Robert K. 1973 [1938]. "Science and the Social Order." Pp.254–66 in Merton, *The Sociol*ogy of Science: Theoretical and Empirical Investigations. Chicago, IL: University of Chicago Press.
 - —. 1973 [1942]. "The Normative Structure of Science." Pp.267–78 66 in Merton, The Sociology of Science: Theoretical and Empirical Investigations. Chicago, IL: University of Chicago Press.
- Newfield, Christopher. 2008. Unmaking the Public University. Cambridge, MA: Harvard University Press.
- Nowotny, Helga, Peter Scott and Michael Gibbons. 2001. *Re-Thinking Science: Knowledge and the Public in the Age of Uncertainty.* Cambridge, UK: Polity Press.

- Powell, Walter and Jason Owen-Smith. 2002. "The New World of Knowledge Production in the Life Sciences." Pp.107–30 in Steven Brint (ed.), The Future of the City of Intellect. Stanford, CA: Stanford University Press.
- Rhoten, Diana and Walter Powell. 2011. "From Land Grant to Federal Grant to Patent Grant Institutions." Pp.315-41 in Diana Rhoten and Craig Calhoun (editors), *Knowledge Matters: The Public Mission of the Research University.* New York, NY: Columbia University Press.
- Ruppert, Sandra. 2003. Closing the College Participation Rate: A National Summary. Denver, CO: Education Commission of the States.
- Slaughter, Sheila and Gary Rhoades. 2004. Academic Capitalism and the New Economy. Baltimore, MD: The Johns Hopkins University Press.