

LSE Research Online

Craig Calhoun The specificity of American higher education

Article (Accepted version) (Refereed)

Original citation:

Calhoun, Craig (2000) The specificity of American higher education. <u>Comparative social</u> research, 19 . pp. 47-81. ISSN 0195-6310 DOI: <u>10.1016/S0195-6310(00)80020-4</u>

© 2000 Emerald Group Publishing

This version available at: <u>http://eprints.lse.ac.uk/42561/</u> Available in LSE Research Online: March 2013

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (http://eprints.lse.ac.uk) of the LSE Research Online website.

This document is the author's final accepted version of the journal article. There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

6 September 1999 revised 11 March 2000

The Specificity of American Higher Education

Craig Calhoun

Department of Sociology New York University 269 Mercer Street, 4th floor New York, NY 10003-6687

Remarks to the conference, UNIVERSITIES IN MODERN SOCIETIES: TRADITIONS, PROBLEMS, AND CHALLENGES, University of Oslo, Sept. 6-7, 1999. Forthcoming in *Comparative Social Research*.

The Specificity of American Higher Education

Leaders of Norwegian higher education—in common with others in the Nordic countries and to varying degrees around Europe—have lately been urged to "Americanize" their institutions. Just what this might mean is often unclear; perhaps the most common thread of meaning is simply that those who control government purse strings wish to foot less of the bill. There are also suggestions that European universities might become more "productive," either in research or teaching.

My task here is not to assess the merits of these proposals, but to make more explicit some features of the American higher education system for the sake of clearer comparison. I will not provide an exhaustive description, let alone a detailed analysis. Aside from establishing a basis for more precise comparison, I want to suggest three significant points. First, American approaches to and institutions for higher education are extremely diverse. There is no single American model. Second, focusing especially on the research universities that are perhaps most similar to European counterparts, I want to suggest that the American approach to higher education involves a system. This should be obvious to social scientists but sometimes is not obvious to policy-makers. The system does not reflect a rational design or function perfectly, but its various parts are interdependent. One of the problems with some proposals to "Americanize" European higher education is that they propose to lift certain features out of the complex whole, for example to achieve American-style emphasis on faculty productivity without creating American-style job markets.

After establishing some of the general characteristics that distinguish the American system of higher education, I will take up a third point. The U.S. system has undergone recurrent structural transformations and is in the midst of one of these now. Many debates about American colleges and universities are less productive than they might be because they neglect transformations in the character of specific institutions and the sociology of the overall field of higher education. This is particularly true of a recent wave of critiques that approach curricular change without attention to structural transformations (often exaggerating not only the influence of the academic left, but the

extent to which what goes on at the most elite institutions sets the model for the whole system). ¹

Of course, some of the criticisms do hit home. Colleges and universities do have problems with accountability, with maintaining appropriate reward structures, and with motivating and reviewing faculty after the tenure stage. Doubts about how well undergraduates are served are eminently reasonable. So too are questions about whether all the research produced is valuable. It is more than just possible that there are problems with the internal governance systems (and external regulatory regimes) that have produced rapidly rising costs and swelling cadres of administrative staff. A striking feature of both the criticisms and the self-analyses and defenses of educators and administrators, however, is that they are cast at a very general level. They do not focus with adequate seriousness on the differences in mission and nature that distinguish America's colleges and universities. Likewise, they are commonly historically naïve, operating with reference to an unspecified "golden age" when classes were small and all taught by the best faculty, when students were attentive and all found good jobs on graduation, and when the content of courses was at once intellectually stimulating and universally inoffensive.

Though the golden age is mythical, American higher education has indeed been powerfully transformed in the postwar era. First, the field grew enormously. Second, the balance and relationships among different types of institutions were altered during this expansion. Third, the balance shifted also among teaching, scholarship, and research as basic components of academic work. These changes were linked, and each mattered greatly. Without comprehending these changes, it is impossible to give sensible answers to questions about the place and quality of teaching in today's schools.²

¹ See, among many, Bloom (1987), D'Souza (1991), Kimball (1990), Smith (1990), Sykes (1990). These (and other) major book-length critiques launched a wave of investigations and attacks from foundations and local interest groups. Articles appeared in a range of publications for policy makers, legislators, and the general public. The peak phase of the attacks—like that of the "culture wars" and rebellion against a changing literary canon with which both were associated—had passed by the late 1990s. Repercussions continue, however, as do efforts to accommodate the criticisms in policy reforms. See, for example, the criticism of the City University of New York and attack on open access higher education in Schmidt, et al, (1999).

² See Calhoun (1999a, b) and more generally Pescasolido and Aminzade, eds. (1999). For a general historical account, see Cohen (1998).

Distinctive Features of American Higher Education

American higher education is a complex system. When comparisons are made to higher education in other countries, it is important to recognize the nature of the overall system. Among other things, attempting to emulate specific organizational features without considering their relationship to the overall system is a potential source of problems and disappointments. More systematic comparative research would be helpful.³ The present effort is limited to summarizing several of the basic systemic factors that make U.S. higher education distinctive.

Institutional differentiation. No single feature of American higher education is more distinctive than its very diversity of institutions. Research universities, multi-branch state university systems, undergraduate liberal arts colleges, technical institutes, careeroriented colleges, two-year community and junior colleges, universities wholly-owned by corporations and still more different kinds of institutions mingle in the broad field of American higher education. It is hard to generalize accurately.

Indeed, one kind of inaccurate generalization plays a significant ideological role. Americans tend to view bachelor's degrees as a more or less homogeneous achievement, underestimating the status and labor market differences among them. However, the contributions to future income and class position made by different sorts of degrees from different kinds of institutions vary enormously. Coleman and Rainwater (1978) studied the impact of college graduation on lifetime earnings potential (from paid employment, that is, already putting aside the question of where those with inherited wealth went to gain education commensurate with that wealth). The 15% of students who attended the country's most elite private institutions could expect to earn 84% more on average than those who had not graduated from college. The 45% who attended the next tier of still somewhat selective private colleges and leading state university campuses could expect an earnings boost of 52%. But, those who graduated from the rest of the country's colleges and universities could expect, on average, no net earnings gain compared to

³ See, e.g., work such as Rothblatt and Wittrock (1993) though the emphasis is on earlier periods.

those who didn't complete college. The differences remained significant even when controlled for father's education, race, and region.

This pattern has changed in two crucial respects (though there is no new study with comparable data to document changes precisely). First, the gap between the average earnings of college graduates and the rest of the population has widened. This is a result of both credentialism and of the disappearance of well-paid (especially unionized) manual jobs in favor of often poorly paid service sector work. This means that less prestigious colleges may pay off better than before compared to failure to attend college.⁴ Second, however, there has been an increasing inequality in earnings of college graduates which has increased the advantage of elite education compared to non-elite. This operates independently of choice of major (though of course some majors also result in higher earnings; Kominski 1990). Rewards flow very disproportionately to those at the top of most lines of work (Frank and Cook 1995). These top positions go disproportionately to graduates of about ten percent of America's colleges and universities (and indeed, disproportionately to the most prestigious within that ten percent). The shift away from educating elites—either those of inherited position or those who aspired to become elites through entering learned professions-has thus happened in most of the higher education sector, but not in its most prestigious institutions.

Beyond status differences, course, there are also different niches, mandates and missions. Some colleges are 100% residential, others house none of their students. Some enroll mainly 18-22 year olds, others cater heavily to adult students. Some specialize in specific fields, others offer a wide variety. Probably the biggest distinction is between schools that emphasize "general liberal arts education" and those that specialize in terminal bachelor's degrees in direct preparation for specific careers. This reflects a long-standing (but recently accelerated) pattern in American higher education. Many "practical" subjects that were not taught in universities in Europe have been important to colleges and universities in the U.S. Since the Civil War, many universities have had this as a central part of their mission. These have ranged from elite private institutions like the

⁴ Research is needed on this point. It seems likely that if tendencies toward polarization of the labor market continue, the extent to which degrees from nonselective colleges will qualify graduates for "middle class" jobs will decline.

Massachusetts Institute of Technology and Cornell University (both founded in 1865) to the broad range of public universities supported in part by federal land grants following the Morrill Act of 1862. Technical education in agriculture, engineering, and a variety of other fields, thus, has long been the province of American universities.

In many cases, however, technical training was combined with "liberal arts" education—a broad, general education in philosophy, history, literature, rhetoric, and science. Many American colleges and universities were founded with a focus on training members of the clergy, and this sort of training joined with theology as part of the core of their studies. As the teaching of law became more dominated by universities, it was based on similar foundations. But the pattern came to be to expect students concentrating in nearly all fields of study to devote approximately half of their undergraduate educations to study outside their primary field of study. This set a pattern for the combination of a "major" with "general education" that remains distinctive of America.

From the late 19th century, it became normal for majors to be identified with the kinds of research subjects and scholarly fields that formed the basis for PhD degrees—specific sciences, social sciences, or humanities disciplines. Concomitantly, it became increasingly common for professional education—especially in the most elite professions—to be organized through postgraduate degrees. Medicine, dentistry, law, and theology were all organized this way by the early 20th century. Increasingly, other fields seeking professional status followed suit, including both education and business, though in neither case did graduate degrees become as exclusively predominant as in the older elite professions. The result was that the normative undergraduate education in the US was conceived as a broad sort of preparation appropriate not simply to a gentleman or a citizen (though these ideals informed the pattern) but to someone who would gain specific career skills through a postgraduate degree. Thus a future lawyer might study political science as an undergraduate major, a future physician biology, a future minister philosophy, and so forth. This conception of the liberal arts degree coexisted with provision of first professional degrees, sometimes in the same institution.

Predictably, however, institutional differentiation was common. It took two main forms. First, in universities the teaching of liberal arts and science subjects was commonly organized through a "College of Arts and Science" or similar unit. This was typically closely related to the graduate teaching of research fields. Over time, professional schools in a growing range of fields have been added to the original arts and science core of most universities. It is now common for the professional schools to award a majority of all degrees—especially postgraduate degrees--in major universities. In addition, the professional schools have often claimed a growing autonomy within the universities and have been successful in raising greater funding than the arts and sciences (both by charging fees for specialized courses and by soliciting gifts from benefactors with an interest in their specific fields of work). Once basic to the conception of the university, the arts and science fields are now in many cases minority pursuits concentrated in one or two specialized colleges within the larger university. Even where liberal arts subjects enroll a majority of students, the proportionate power of and budget for professional schools has increased.

Second, many American colleges chose not to become universities, offering neither research degrees such as the PhD nor professional degrees. They specialized in the liberal arts (including science). Indeed, independent "liberal arts colleges" are among the most distinctive American institutions of higher education (with some historical pedigree in Oxford and Cambridge but minimal analog elsewhere). Many of these schools were founded by religious denominations, or by individual philanthropists who commonly mandated a religious orientation, but a large percentage have become secular. Most of the liberal arts colleges date from the 19th century or earlier, but some continued to be founded well into the 20th century.

Recent years have seen a substantial decline in the number of liberal arts colleges.⁵ While community colleges and large universities grew during the 1960s and 70s and gained substantial new resources, most liberal arts colleges did not. This left many vulnerable when the economic and demographic environment grew less favorable during the 1980s.

⁵ How steep the decline has been depends on the definition one uses. Between 1970 and 1987, there was a decline from about 715 to 570 in the number of private, independent four-year schools (Carnegie Commission, 1987). Most of this was due to reclassification, as many grew large and came to be incorporated into universities. Quite a few others simply closed their doors.

Those colleges that remained small and autonomous were divided into two groups by the Carnegie Commission on Higher Education. The first—about 140 of the total-consisted basically of those that offered primarily liberal arts bachelors' degrees and were more or less highly selective in admissions. Prestigious examples include Amherst, Carleton, Reed, and Williams. These schools were also often relatively well endowed financially, and in any case are able to attract students willing to pay high tuition because of the educational experiences they offer (curricular and extracurricular) and their success in placing students in graduate and professional schools.

The second group of liberal arts colleges had offered a similar mix of degrees historically, but were generally not very selective in admissions and had much lesser financial resources. A key result was that they came into direct competition with what the Carnegie Commission calls "comprehensive universities and colleges," particularly the less selective branch campuses of public university systems but also a number of relatively small private universities. Competition over tuition costs was debilitating to many small colleges, as students and their families chose less expensive public institutions or attended private ones only when they could get financial assistance. More transformative, however, was competition over courses of study. The less selective small colleges moved away from their traditional emphasis on the liberal arts, adding more and more courses and majors in business and other directly job-related fields. As Breneman (1990) puts it, most of what have commonly been called liberal arts colleges transformed themselves into 'small, professional college[s]'. Breneman estimates, in fact, that no fewer than 317 of what had been liberal arts colleges stopped granting even 40 percent of their degrees in liberal arts subjects. This reduced the total number of "real" liberal arts colleges from 540 to 212.⁶

This was one dramatic institutional manifestation of the general rise in popularity of professional, career-oriented baccalaureate programs. This combined with the growth of community colleges to mean that the majority of students in American higher

⁶ Breneman's figure of 540 small colleges (before deducting those no longer classifiable as liberal arts schools) is slightly lower than the Carnegie Commission's because of differences in classification. A common criticism is that some such colleges teach material that should be taught in high school. A somewhat oblique support for this comes in Arum's (1998) finding that states that spend more on high school vocational programs spend less on college level ones, and *vice versa*.

education—and the majority of those taking sociology classes—was no longer comprised of liberal arts students. The bulk of the public debate about changes in higher education since the 1960s, however, continued to center on an image of "liberal arts" education. It is in this context that pundits have debated whether 'political correctness' has changed the teaching of history, whether 'tenured radicals' have dominated the social sciences and humanities, and whether poststructuralist theory has driven out the proper teaching of literature. Whatever the merits of such charges, the debate has missed—indeed, obscured—the much more basic changes brought about by the rise of career-oriented, non-liberal arts higher education. Liberal arts degrees are now clearly a minority pursuit and mainly an elite one. Considerations of the future of American higher education (and comparisons of it to that in other countries) need to be clear about this and analyze its implications.

To sum up, it is important to keep in mind both very high levels of inequality (in resources as well as student abilities and prestige) and wide differences in mission and institutional character.

Scale. Behind the diversity of institutions lies the sheer scale of American higher education. More than 65% of American youth at least start college, and close to two thirds of those eventually graduate. Well over a million bachelor's degrees are granted each year, more than 400,000 master's degrees, and some 43,000 PhDs. There are nearly a million full-time college professors in the US (National Center for Educational Statistics, 1996, 1997; *Statistical Abstract of the United States*, 1998).

This represents a dramatic growth during the 20th century. The most dramatic phase of growth in the system came after World War II. Over half the colleges and universities operating in the U.S. today did not even exist before the War (Lucas 1996: 12). The pattern of growth is, however, longstanding and deeply woven into American expectations for democracy, culture, and above all social mobility. Growth was more or less continuous until the 1980s, when a combination of economics, demographics, and politics brought it to an end, and even produced some retrenchment. It is worth considering current struggles over the curriculum (e.g., the "canon wars"), and over

"market-driven" higher education against the background of earlier changes that accompanied the expansion of the system.

Fewer than 3% of the nation's population at the close of the 19th century had ever attended college, let alone graduated. A pattern of rapid growth was already underway at the turn of the century, but it was only after World War II that higher education really became a mass phenomenon in the US. Returning veterans supported by special government funding (the GI Bill) flooded American colleges and universities, helping to spark expansion even in relatively hard times. On a smaller scale, the same thing happened after the Korean War. But more dramatically, the veterans of both wars (and their generational cohorts) produced a sustained baby boom. This, combined with economic growth and advancing technology, led to an explosion in demand for higher education during the 1960s. New colleges and universities were founded and existing ones expanded. In 1947, there were 2.3 million students in U.S. colleges and universities, up from 1.5 million before the War; by 1994, the number was 14.2 million. The proportion of young adults graduating from high school rose from less than 7% at the turn of the century to half at the end of World War II, peaked at 77% in 1968-69, and though it has fallen back remains over 71%. The proportion of these high school graduates going on to college rose from 45% in 1960 to 65% (exclusive of vocational and trade schools) in the mid-1990s. Some 43% of high school graduates go to 4-year schools and another 22% to 2-year colleges. Well over a million bachelor's degrees are granted each year. To offer these higher levels of education, the number of faculty grew from 246,000 in 1949-50 to nearly a million today. Graduate education grew commensurately. As late as 1920, only 615 PhDs were awarded in the US. Today more than 43,000 are awarded each year (US Bureau of the Census, 1976; National Center for Educational Statistics, 1996, 1997). Both the educational meaning and job market value of college degrees changed, as did the relationship of higher education to social class and social policy.

This story of growth has profound but surprisingly often overlooked implications. To start with, between the 1940s and 1990s, students became more diverse, less exclusively upper and middle class, more commonly immigrants and members of minority groups. Of at least equal importance, however, they are not in any similar aggregate sense an elite. Neither is a college degree training them for membership in an elite. A college degree is increasingly *standard*—at least for the middle class--rather than a mark of distinction. Having one only sets one apart from a little more than half of one's generation. As we know from studies of credentialism, college diplomas are increasingly required for positions that were earlier held by high school graduates or even dropouts (Collins, 1979). This does not in itself mean that students gain only the same level of education in college that previous generations gained in high school (a common but false assumption). Today's college students learn a great deal. There is, however, as we noted above, a bifurcation between liberal arts majors and students whose first degrees are directly and narrowly career-oriented.

The largest part of this growth has come in public institutions. As Oakley (1992: 79) sums up, "Almost 90 percent of the institutions enrolling more than 10,000 students are public, whereas 87 percent of those enrolling 1,000 or fewer are private". The very large public university—Ohio State or the University of Minnesota—accounts for part of this growth. Many state universities have metastasized into systems with several campuses each enrolling 10,000 or more students. Often one or two of these are seen as flagship research institutions, but there is common governance and funding for the whole system. The most rapidly growing subsector has not been big state universities, however, but two-year institutions (community or junior colleges). These have expanded dramatically to account for nearly 40% of total U.S. enrollments. Some of their programs are geared towards students who will transfer to universities or four-year colleges, but most are more immediately aimed at career needs (see discussion in Brint and Karabel 1988).

In short, American higher education needs to be understood as a very large system. It serves a substantial majority of the population and does it through a complex and increasingly differentiated range of institutions. The connections among these different kinds of institutions are often problematic, but nonetheless they do tie each to the system as a whole. To abstract one kind of institution from this context is to miss ways in which each depends on or is shaped by the broader system. A simply example is the extent to which research universities depend on graduate students for both teaching and research labor, as well as for enrollment. The graduate student population is made possible, however, partly by the existence of a job market for college teachers in the rest of the system. Shifts in this market have dramatic implications for research universities.

Role of private money. From a European point of view, the substantial role of private funding is also a crucial feature of American higher education. This appears distinctively in the range of private colleges and universities. Most of these are established as not-for-profit organizations, commonly with distinctive state charters, and almost always with exemptions from taxes. An increasing number, however, are (or are owned by) for-profit companies. The proportion of private institutions is greater towards the more prestigious end of the American system, with the elite liberal arts colleges and the top tier of research universities. Private institutions exist at all levels, however, even though the percentage of students enrolled in them is smaller at the lower end. It is also important to note that public institutions receive a good deal of private money. Major state research universities like the University of Michigan receive substantial state support, but the majority of the annual budgets of many is actually paid from private sources (including tuition, foundation grants, alumni and other gifts, sports revenues, and research contracts with business corporations).

Benefactions from wealthy individuals and families are central to private support. The amounts involved are quite large: in the last five years, Harvard University has received an additional \$2.3 billion in gifts to add to its already large endowment. While Harvard is distinctive, all major research universities in America—including those owned and operated by states--have private endowments of at least several hundred million dollars. So do perhaps thirty colleges whose missions focus overwhelmingly on undergraduate education. In addition, privately funded foundations (e.g., the Ford Foundation, the Mellon Foundation) are major sources of financial support for research and sometimes for the development of new academic programs. Their combined inputs into university budgets far outstrips that of the National Science Foundation.

The payment of tuition and fees is also important. The cost of attending an elite private college or university is now about \$25,000, simply for tuition payments, not

including housing, food, or incidental purchases such as books. Even at state-funded universities tuition for in-state students commonly exceeds \$5000 per year and for out-ofstate students runs up to three times that. Scholarships and other financial support are available for many students (most of a need-adjusted basis, some on 'merit' or competitive bases). Two critical variables distinguishing institutions are the extent to which they must 'discount' their tuition costs with financial aid to fill their student rolls, and the extent to which they can afford to use scholarships to keep the overall quality of their student bodies (and indirectly their institutional prestige) high. While the nominal tuition for graduate students is comparable, in most reputable PhD programs few graduate students pay full tuition and most have it waived entirely and are paid modest stipends from fellowships or in compensation for work as teaching assistants. Master's degree programs are often significant revenue sources for colleges and universities.⁷ Some of these are applied degrees oriented to specific careers (e.g., the MBA). Many others have come under criticism for being poorly thought-out intermediaries between undergraduate and PhD education; they persist in part because of the tuition revenue they bring in. In most schools, however, it is undergraduate tuition that contributes most importantly to overall budgets. What students and their families purchase with these payments is not only teaching but prestige. The higher tuitions at research universities help to purchase the intellectual reputations of faculty members who may actually devote a minority of their time—sometimes none—to teaching undergraduates.

⁷ Relying on specific programs for revenue to subsidize others is common in American universities and the pattern of cross-subsidies produces predictable tensions. Those units that produce the revenues would like to control more of them. The rationale for the transfer of funds is commonly that the overall institutional mandate (and prestige) is served by expensive fields that produce lower revenue. In addition, the revenue-producing programs (which include extension divisions as well as professional schools and occasionally specific arts and science departments) employ the university's "brand name" when marketing their programs; the cross-subsidies are in a sense a payment for this or at least an investment in it. Thus, schools of education often enroll more students per unit of faculty cost than liberal arts programs, partly because of the research investments of the latter. They thus subsidize arts and science faculties. This produces not only resentments within education faculties, but a pressure to admit large numbers of fee-paying students. This in turn makes it harder to raise the quality of education programs by making them more selective or (as many have argued should be the case) by requiring that future teachers have arts and science undergraduate majors supplemented by pedagogical training. As a result of the disparity in admissions standards (and a perceived disparity in faculty research, itself influenced by the resources made available), arts and science faculty who are beneficiaries of the subsidies often look down on the education faculty who produce it.

Gifts and tuition payments have traditionally accounted for the vast majority of private money in American education. An increasing role is being played, however, by corporate purchases and investments. Contract research has a long history, as university faculty undertake specific projects for companies. Most of the proceeds of this have flowed to the faculty and their research programs, though in recent decades universities have become more adept at recovering parts of it for their overhead budgets. Corporations have also made gifts from which they derived some business benefits—naming buildings, lecture series, or fellowship programs, for example—but these have been only modestly different from other sorts of gifts. Similarly, colleges and universities decades ago began to market their "brands" in cooperation with private businesses—selling Harvard sweatshirts, for example, and University of Florida sunglasses. This has extended to profit-sharing agreements in the provision of food to students, the selling of books, the operating of housing facilities, and other areas.

More dramatic changes, however, come with major investments in scientific research. Private, for-profit firms have entered into business arrangements that build scientific laboratories and pay for research. A very rapidly growing proportion of scientific research in the US is conducted through partnerships between universities and private corporations. The infusions of money into universities are enormous. In some cases, such as that reached between the University of California at Berkeley and the Novartis Corporation, whole departments are committed to integrate their research programs with those of their capitalist sponsors. Sometimes these sponsors own or claim proprietary control over this research; other times they simply have right of first refusal on any inventions or discoveries that may have market value. This raises a variety of questions. How does it affect academic freedom? How does it shape the relations between units of universities that receive such funding and those (commonly in the liberal arts and sciences) that do not? Not least of all, does it portend (along with the rise in corporate research) an end to the distinctive American pattern of locating most scientific research in universities and seeking to keep it closely related to teaching?

Location of research in universities. The location of most scientific research in universities is among the major distinctions of the American higher education system from many others (including in varying degree those in Europe). While there are research institutes operated by the US government, these operate in a relatively small number of fields and conduct a small minority of research. There have been American proposals for a nationally operated scientific research establishment—most notably after World War Two. These were defeated, however, in favor of decentralization into the universities. Federal funding was deemed acceptable, close federal direction was not. In effect, American universities adopted the German model in the late 19th century, and then took it further. In the U.S., university based research was never complemented to comparable degree by an organization like the Max Planck Society, let alone France's CNRS.⁸

The location of research in universities introduced various complexities. First, it created a need for funds and helped to encourage an orientation towards gaining external funds. Universities providing space and faculty for research, as well as administrative services, began to demand "indirect cost recovery". These overhead charges became an important part of university budgets. While some of the funds received were closely related to the actual administration of research, or returned to the investigators for their continued work, administrators also drew on overhead income to subsidize other projects.

Secondly, the location of research in universities created hybrid institutions.⁹ The two signs of prestige for American universities through most of the 20th century were (a) emphasis on liberal arts degrees, and (b) research performance. If tradition placed the former first, the second has grown more rapidly in importance. While some faculty are hired exclusively as research professors, this is uncommon. Somewhat more are hired exclusively as teachers (usually at relatively low pay and with low job security). Most full-time, tenure track university faculty are expected both to teach and to do research. The latter, however, becomes the most readily marketed skill. The result is that though faculty are pulled in two ways, research performance is the primary basis for high mobility options and accordingly, relatively high salaries. Predictably, this has generated divisions within faculties, with those who do the majority of the undergraduate teaching

⁸ On the history of the American research university, see Geiger (1986, 1993).

often rewarded much less than those who do the majority of the research and publication. Add to this increasingly heavy reliance on graduate students as instructors, and one finds not only divisions within university communities, but the basis for a critique from students, parents, and outside constituencies. To many of the latter, it looks as though research-oriented faculty have feathered their nests at the expense of undergraduate students. Despite this, research universities remain very attractive to undergraduates, and many of the most talented in each year's cohort of high school graduates choose research universities over liberal arts colleges in which they would receive more attention from faculty members, but where those faculty would be less well known researchers.

It should be noted that although many more institutions declare their commitment to research, and attempt to gain financial resources for it, about 50 major universities account for the considerable majority of significant research (and large scale government and foundation funding). It is not at all clear what agendas are served by trying to hold faculty at all sorts of institutions to the standard of research productivity. Certainly it does result in increased publications, but most of these lack influence or significance in their fields.¹⁰ Faculty are not entirely irrational in this, however, for they know that publication is usually the best way to increase their value on the labor market (see Lewis 1996).

Decentralization of educational policy. Not only research, but the entire system of higher education is quite decentralized in the U.S. Federal policy direction is minimal. While federal funding is significant, it is far from dominant and in any case comes in diverse forms from a variety of agencies with different missions. The Department of Agriculture, the National Institutes of Health, and the Defense Department each, for example, contributes more to college and university budgets than the National Science Foundation or the Department of Education. It is the fifty states that are the primary sources of public funding for colleges and universities and that took the initiative in creating public higher education in America. The extent of their support varies. In some

⁹ For consideration of some of the tensions this hybridity produces, see the essays in Ehrenberg (1997).

¹⁰ A separate question concerns what implications the dramatic increase in volume of publications may hold. It is already straining library resources. It may increase pressure to move away from traditional print publications towards electronic media. Certainly it makes it harder for individual scholars to cover the literature in any relatively broadly defined area.

cases, like Massachusetts, the private system preceded the public one and to some extent limited its development. In other cases, the state universities are as old as the states. The state universities of Georgia, North Carolina, and Virginia vie for the distinction of being the oldest in the U.S. All are 18th century creations, some chartered in the very constitutions that created the states. In general, as one moves away from New England the role of the public institutions grows larger.

A corollary to the very diversity of institutional forms, however, is the differentiation of sources of educational policy. Many American colleges and universities were founded by churches or other religious organizations-initially mostly Protestant but later also Catholic. While some have either shed their religious affiliations entirely, or come to be managed in largely secular fashion at arm's length from denominational sponsors, others remain actively engaged in religious missions and their teaching is shaped accordingly. American colleges and universities are generally structured legally as autonomous or semi-autonomous corporations, with governance entrusted to a board of trustees. The latter may be selected by external bodies (as state legislatures name members to public university boards or religious organizations to those of churchaffiliated schools). Existing board members may name new ones from among benefactors, alumni, or public figures. In nearly all cases, a common feature is that boards of trustees mainly represent constituencies outside the faculty and current administration of the university. They draw in businesspeople, most prominently, lawyers and professionals, politicians and other public figures. There are occasionally but not always student representatives. Alumni are almost always represented. Although boards are not always interventionist, their composition symbolizes a conception of higher education institutions as directly responsive to broader constituencies and not self-sustaining creatures of their academic members.

Boards then typically appoint a president as the chief executive officer of the university or college. The terminology of CEO is not accidental; the business imagery has become increasingly predominant, and reflects a shift in the function, peer group, and even background of presidents. These are mainly mediators between the university and its external constituencies: legislators, regulators, donors, and alumni (to the extent one

considers them external rather than internal). Many presidents now come from nonacademic careers in business or government, and they spend much of their time on the road. The University of Virginia board, for example, recently chastened its president. The latter had wanted to remain actively involved on campus and even to teach a course one semester a year. His board ordered him to spend more of his time on the road raising money and tending external constituencies.

To handle internal affairs, presidents typically appoint a Chief Operating Officer, most often labeled a provost. This is the office at the apex of most academic policymaking, though of course presidents are also involved, and most day-to-day decisionmaking. Sometimes the provost is also designated Vice-President for Academic Affairs. In any case, alongside the provost (or the equivalent) there are apt to be several other vice presidents. The most powerful will be that in charge of business operations (ranging from the physical plant of the university to its financial management and contractual relations). There may also be vice-presidents of student affairs, community relations, and so forth. Under the vice-president for academic affairs or provost, there will be deans of various schools. The traditionally central one will be a college of arts and science (or something similar to this). This is the base of liberal arts undergraduate education, most PhD studies (though there may be a graduate school with a separate dean, the faculty will usually be appointed and departments governed through the arts and science college), and the vast majority of non-medical research. Increasingly, however, professional schools have become important and powerful, often able to raise substantial endowments of their own, to claim varying degrees of autonomy from the central administration, and to resist subsidizing the arts and sciences even though they do benefit from association with the university "brand" created by the core arts and science programs. Medical schools and health sciences are often extreme cases, and universities with substantial investments in the health area often have an entirely separate division to manage this, commonly with its own vice-president. This division may well include teaching hospitals, health management organizations, nursing care facilities and the like. Through most of the postwar era, medical schools commanded such large and growing fiscal resources that they were able to demand substantial autonomy. With reorganization of U.S. health care in recent years, however, many have become fiscal drains or their host universities or at least more problematic to administer. Suffice it to say that I have barely scratched the surface of potential complexity in this and indeed in other aspects of governance.

When it comes to research and the production of knowledge, decentralization and competition rule the system. The universities (and to much lesser extent, some colleges) compete with each other directly for funds to support research, and also for researchbased prestige that indirectly shapes funding for the future (not only by attracting grants but by attracting tuition-paying students and gifts from private benefactors). Even within each university, there is usually little central management of research priorities. This is somewhat less true where scientific projects with very large price tags are involved. The dominant pattern, however, decentralizes formal decision-making to departments or research centers. In fact, for most practical purposes, the decision-making is still more decentralized since administrators are seldom able to guide faculty research priorities effectively even if so inclined. For the most part, individual faculty or the heads of labs make decisions about what kinds of research to do and where to seek funds for their projects. They are evaluated on results, either in terms of publications and prestige or in terms of funding gained and financial proceeds. The university officials in charge of research serve as traffic police seeking to avoid collisions between different units of the same university seeking funding from the same source.

Loyalty of Alumni. Gifts to American colleges and universities come largely from graduates and their families. Alumni also sit on boards of trustees, and sometimes help to lobby legislatures on behalf of "alma mater". Where one attended college (as even going to university is commonly called) is likely to be a lifelong source of identity and networks. This may be attenuated somewhat by the growing importance of higher education (typically pursued at a different institution) and by an increasing tendency to transfer among institutions during undergraduate degree programs. Nonetheless, alumni identification and loyalty remains extraordinary by European standards (with Oxford and Cambridge approximating it in the English system, and the grandes écoles in France, but no overall European system producing or relying on it in the same general fashion). Three factors are probably crucial to this.

First, secondary schools do not play comparable roles in elite formation or relational networks and identities generally. There is nothing like the lycée or gymnasium systems, nor like the old pre-comprehensive English system. American high schools have been overwhelmingly public for a long time, and attendance based mainly on residential location not selectivity. Neither is there a national examination system to judge secondary school achievement (and secondary school is perhaps the weakest link in the overall U.S. educational system). With a comparatively high percentage of 18-22 year olds attending college or university, this became the focal point for identity-formation, especially among elites.

Second, the traditional American college education involves a residential experience. Although fewer American students share this experience as the scale of the system grows and more schools cater to commuters, it remains both large in absolute numbers and normative. It is basic to the American version of adolescence—again, especially for elites—and is celebrated in literature, TV, and film. This period of residence at college or university contributes to the development of strong identification, loyalty, and personal networks. It is also one of the key things that many middle and upper class parents are buying when they invest in a liberal arts education for their children. They are choosing a particular form of socialization.

Third, perhaps comically to European ears but not trivially, American colleges and universities build loyalty through sports competition. Among those that are largely residential and especially those that are largely liberal arts in orientation, it is common to field teams in several sports. Some research universities field forty or more different teams in inter-school competition. College sports can be big business, with football and basketball programs especially able to bring in millions of dollars in annual revenue. In addition to ticket sales, they help colleges and universities to establish a "brand" which they market through the sale of commodities and as part of their recruitment of students. Perhaps above all, successful sports programs keep alumni involved, and make potential donors of them. The word "successful" is important, though; pity the college or university president whose teams do not win. Coaches are often paid more than university presidents and in some cases presidents have found themselves unable to fire winning coaches, even when those were clearly guilty of recruiting or other infractions and had been publicly censured by national regulatory organizations. Athletes attend school on scholarships (especially in profit-making sports), and are commonly granted special consideration in admissions. Nearly all professional football and basketball players in the U.S., for example, played at the college level (though not all graduated) and commentary on television frequently makes reference to where they were undergraduates.

Mobility of Faculty. European university professors have long moved from one center of learning to another, and indeed pioneered international exchanges of intellectuals long before the Erasmus scheme commemorated them. It is becoming increasingly common for faculty members to work outside their country of origin. Nonetheless, the European pattern has been for faculty appointments often to stay bounded not only by national but by regional and institutional origins. A large-scale market in university faculty is only now emerging in Europe. It is, by contrast, very much the norm in America.

Indeed, one might say that the loyalty of alumni is complemented by disloyalty of faculty.¹¹ These are rewarded primarily for publications and other achievements recognized within their academic disciplines or interdisciplinary fields. Accordingly, they turn their attention largely towards their standing in those fields, especially those that seek to compete in the upper reaches of the research university hierarchy. Outside offers are commonly the main condition for large pay raises. The result is not only that many professors are constantly looking for other jobs (whether they actually move or not) but that they are led to emphasis research activities that result in external recognition more than teaching and service work visible more on the local scene (see Lewis 1996). Mobility is highest among research-oriented faculty and especially those in research universities; more teaching-oriented faculty are less mobile (resulting in a reward problem for some institutions).

The pattern of mobility begins with "doctoral program exogamy". That is, it is extremely uncommon for American departments to hire their own recent PhDs as new faculty. Americans praise this system for discouraging tendencies for departments to become ingrown, and encouraging not only intellectual dissemination and crossfertilization, but also productivity and high standards. It is not enough for graduates to be well-liked in their own departments; they must have achievements that make them marketable to others. Indeed, success in placing new PhDs is one of the most important status-markers for U.S. graduate departments. After initial placement, the tenure decision reached usually after five to seven years is the next major transition point. Delayed permanent employment, like doctoral program exogamy, is valued for promoting productivity and discouraging simply loyalty to those already within a departmental system. Standards for tenured positions have a tendency to vary with overall competition in the job market, however. Tenure was relatively easy to achieve in the 1960s; from the late 1970s to early 1990s, standards (or at least failure rates) were much higher. Few assistant professors could take promotion to associate professor with tenure for granted; many had to move at this stage; more than a few left academia. ¹² Predictably, rates of rejection were highest at the most prestigious research universities. There has been some relaxation (varying by field) as the excess supply of strong faculty has declined. Nonetheless, tenure decisions remain points of major evaluation. Routine good performance is (at least in principle) insufficient for success. An unsuccessful review for tenure usually brings dismissal. It is rare for those dismissed to find new jobs at comparably prestigious institutions.

By contrast, the appointment to full professorships is much more routine in the U.S. than in Europe. There is no similar tension over a long-term holding pattern where (as in Germany recently) an entire generation might wait years in indeterminate statuses

¹¹ The same pattern holds also among senior academic administrators in the US, who if anything are more mobile than faculty.

¹² The American Association of University Professors sponsors a norm that "up or out" decisions should be reached within six years (allowing for one year of continued employment should decisions be unsuccessful). Tenure reviews are normally initiated in assistant professors' fifth year or early in the sixth. A few universities, notably Harvard and Yale, tenure only full professors. Accordingly, they promote assistant professors to associate professorships with less rigorous scrutiny than other elite research universities (since tenure is not involved) but reviews for tenure are especially rigorous.

while waiting for their elders to vacate a more or less fixed number of chairs. Likewise, the American system removes faculty members from direct dependency on their seniors at a relatively early stage of career. Mobility remains common, though, as faculty members seek better appointments. This may mean bringing together groups of like-minded researchers. In other cases, faculty members move in search of autonomy. To some extent, the mobility of college professors mirrors the generally high rates of geographic and job mobility in the US.

Above all, however, what replaces the European competition for chairs in the American system is a competition for money. This is often complemented by titles, but named professorships have proliferated to an extent that devalues them, and in any case few people will trade much real income for the prestige of a specially endowed professorship. What has resulted is a star system in which a small number of highly regarded and hence potentially highly mobile professors become the object of bidding wars. This began with the most famous senior faculty, but has extended even to new PhDs. Where there was in the past little salary competition for new assistant professors, universities are now prepared to vary salaries by several thousand dollars to win the stars of a particular cohort. Needless to say, being a star at such an early stage is the result of an especially unreliable (though self-reinforcing) process of social construction. The bidding wars become more common with approximately tenure stage faculty. Where fifteen to twenty years ago it may have been a narrow stratum gaining tenure, a larger proportion get tenure but a narrow stratum get to be the object of inter-institutional competition. The rewards can be huge-when one institutions sets out to poach an assistant professor from another, that individual can end up with early tenure, a salary nearly doubled, and extra research funds. At the full professor ranks, major salary increases come only from the threat of departure (whether immediate or more vaguely threatened). Some faculty members, however, operate under non-professional constraints, like two career marriages that limit their mobility. There are also obvious inequities based on the relative marketability of different specialties at different times. The star system results in huge salary differences within the same rank: some full professors are apt to make twice as much as others in the same institution at approximately the same stage of career. Naturally, hard feelings are not in short supply.

These bidding wars are not simply a result of a shortage of faculty; the star system results, rather, from a "winner take all" approach to rewards. Indeed, at the same time that the star system has become more prevalent and more expensive, there has been a substantial growth in the number of faculty members who work without long-term contracts, often in one-year temporary positions. Some are new PhDs who may soon get tenure-track positions—or else leave academia. A growing number of teachers remain without long-term contracts indefinitely, however, as universities use "adjunct" and other temporary appointments as a way of maintaining flexibility and cutting costs (see Martin 1999).

Breadth of ties to local communities. While European universities certainly make a variety of contributions to the communities in which they are situated, this is distinctively a mandate for American institutions of higher education. This is another reflection of the general tendency for U.S. universities to reflect the heritage of guild autonomy less than European ones. Where they had a religious heritage, the mission it imparted was to train preachers; they did not evolve out of monasteries. More generally, they are called upon (often in their very charters) to be of service to their local communities. The pattern of their establishment—by local leaders and by state governments locating campuses in response to local political pressures—reinforced this.

Community service can mean several different things (including educating the community's youth). Probably its most visible form has been the provision of adult education programs. Partly because education has always been tied to a vision of social mobility in the U.S., demand for provision of practically oriented programs has long been large. It led to the development of continuing education programs and night schools. Universities helped to provide opportunities for immigrants. Their rapid growth was fueled by an openness to—even a drive to enroll—first generation college students. Some of these could study only part timer while working. It has generally been easier than in Europe for adults who did not start or left higher education programs earlier to re-enter

the system. Many such adults simply enter regular course programs.¹³ In addition, colleges and universities have created a wide range of special programs for adults. Many of these were designed, at least initially, to offer "enrichment" rather than practical skills or credit toward degrees. A number of schools with core daytime programs for traditional college age students have gone into the potentially lucrative business of providing short-term, evening, and weekend courses for adults. Many of these focus on specific career skills; others offer "seminars" aimed at cultural enrichment, self-help, spiritual fulfillment, avocational interests, etc. In a few cases, these market-driven "extension" programs have become larger operations than the institutions' original conventional degree programs.

The very prominence of adult education and programs oriented to the practical concerns of local communities may have helped in recent years to facilitate the development of more for-profit higher education programs. While much of the attention to the recent rise of for-profit higher education has focused on new kinds of degree-granting institutions, many programs are developments out of what were once service programs. Colleges and universities still structured as non-profit organizations—and often still oriented largely to their traditional campus constituencies--found that they could make money responding to markets for seminars, extensive courses, professional certificates, and distance learning.

Beyond this, universities from early on took on other community-service tasks. The Morrill Act which created the "land-grant" universities provided many with a focus on agriculture and technology and a mandate to contribute to economic development. One of the most visible practical results was the university operation of agricultural extension services. Indeed, the fact that U.S. colleges and universities are much less likely to be in major cities may increase the prominence of this kind of contribution. Similarly, universities operate small business development centers, programs to educate and advise

¹³ The GI Bill after World War II was unusual in making older students central to a wide range of conventional academic programs. Most of the time, in most institutions, undergraduates are still primarily in their late teens or early twenties. The growth of graduate programs brings more mature students to colleges and universities. So do special programs designed to enhance specific job-related skills, with or without degree credit.

newly elected legislators, town councilors, and school board members. Colleges and universities also lend their space to a variety of autonomous community organizations.

What all this means is that colleges and universities are often strongly integrated into the life of local communities. At the research universities this may be relatively formal, as in the operation of teaching hospitals. At smaller institutions it may be more informal. It creates in all cases a significant additional constituency for administrators to attend to.

Emerging and Changing Issues in American Higher Education

The American system of higher education has been shaped by recurrent structural transformations. Small colleges gave way to large universities; single campus universities grew into complex state systems; enrollments multiplied; students became more diverse. Another important restructuring is currently underway, and likely will prove a crucial phase in this longer-term history. In the remainder of this paper, I wish simply to call attention to some of the issues shaping change in the system. I will speculate on possible resolutions to these issues and directions of likely change, but it should be clear that these are only guesses.

Tenure and employment security. One of the biggest issues in American higher education is the division between relatively privileged and secure academics and those in more marginal jobs. Academia has, somewhat surprisingly, emerged as a prime example of a dual labor market. The situation of those with tenured appointments in well-funded institutions is markedly different from those lacking secure labor contracts, and also from those with some employment security but high teaching loads in relatively poorly funded institutions. The privileged elite unsurprisingly views its privileges as warranted protections of academic freedom allocated on a meritocratic basis. It is not clear, however, that all the privileges are sustainable (or desirable).

First, while tenure has long been defended on grounds of academic freedom it is not clear that as presently structured it defends freedom very well, and it is clear that it empowers one class of academics at the expense of others. Calls for an end (or limits) to tenure proliferated in the later 1980s and 1990s, but have faded with the current relatively strong job market. They are not likely to go away entirely, though, and may well gain wider force. Proposals to end or radically transform tenure have flourished recently partly because conservatives thought tenure was protecting left wing opinions, foolish political correctness, or the replacement of classics by cultural studies. This has encouraged many professors to dismiss them as merely ideological. It is worth recalling, however, that there are other reasons to reconsider the tenure system.

Second, the abolition of mandatory retirement ages meant that tenured faculty could hang on to their positions indefinitely. While many may do their work well, this reduces entry-level positions for talented younger scholars. Tenure has become manifestly a system defending certain age cohorts at the expense of others.

Third, this older professoriate was disproportionately white and male, which meant not only that it was harder for minorities and women to get in, but that when affirmative action measures were used they were more likely to provoke resentment because competition was limited to a reduced range of openings.¹⁴

Fourth, the provision of tenure to one class of professors directly contributes to the marginalization of others. Not only do adjunct and other temporary faculty have none of the protection afforded tenured faculty, their numbers grow partly because the tenure system makes regular full-time appointments costlier, less flexible, and riskier.

Fifth, it is widely acknowledged that there is little effective system of performance assessment in place for tenured faculty. While many institutions allocate merit raises on the basis of performance assessments, very few allocate work on such a basis, and still fewer have sufficient confidence in their systems to use them as bases for determining actual employment. In other words, in the absence of a retirement age, universities and colleges lack effective and fair criteria for determining when faculty members should be asked to step down.

¹⁴ One of the continuing obstacles to appointing more minority faculty—at least in the research universities—is that their records are compared primarily to their age-mates. The inflation of publication standards in an era of few jobs makes this a tough comparison. But hardly anyone is willing to admit the extent to which many minorities denied jobs because their research records were not "up to par" in fact have stronger records than already tenured faculty.

Sixth, calls to rethink tenure have also flourished because of the extraordinary freedom and opportunities for self-regulation afforded academics—at least those with tenure in relatively elite schools. It was (and remains) easy to find examples of scholars who do little teaching, no research, and much gardening—even while studies show that overall, academics work quite long hours. Colleges and universities added to the problem both by offering the public extremely poor explanations of what professors do, and by failing to implement effective systems of post-tenure review and continual performance monitoring.

Seventh, the rise of university-industry partnerships and other market-driven components to the higher education system will put more pressure on assessment of actual faculty performance. It is also much harder to explain why researchers engaged in proprietary, for-profit research should be protected by tenure.

Eighth, compared to the earlier institutions in which the academic freedom argument was classically developed, today's American colleges and universities pioneered a less hierarchical structure of ranks (though not salaries) in which the range of protected "professors" was expanded to include a majority of teachers.

Ninth, the growth and differentiation in American higher education discussed above meant that most faculty protected by tenure worked outside the elite institutions committed to the production and transmission of original knowledge and perspectives.

Some of these issues are brought to the fore especially in periods of economic crisis or demographic pressure. At least between the late 1970s and mid-1990s, for example, tenure may actually have worked to inhibit free speech and intellectual diversity. It did this both by reducing the number of positions available for younger scholars, and by keeping young scholars on tenure track appointments under constant pressure to please their elders. The relative ease of gaining tenure during the rapid expansion of the 1960s and early 1970s exacerbated the problem by leaving in place an unusually large number of tenured scholars, many of whom had been chosen with relatively low selectivity. These scholars constituted a kind of demographic bulge blocking job opportunities and mobility for the large cohorts of talented graduate students attracted to many fields during the 1960s and 1970s. A downturn in employment

opportunities exacerbated this, turning many of the newer PhDs into a kind of enduring academic underclass. Members of this generation who considered themselves underplaced have constituted competition for new PhDs for twenty years. During the same period, simple financial pressures encouraged challenges to tenure at many institutions (famously Bennington in 1994).¹⁵

Noting the problems with the existing tenure system does not mean that no protections of academic freedom and intellectual inquiry are needed. ¹⁶ On the contrary, growing pressures for accountability to extra-academic constituencies, and for marketdriven performance indicators both suggest that protections are needed. The question is whether it is best to defend the existing tenure system or develop some better, more equitable and flexible way of accomplishing similar goals. Keeping protections against dismissal for unpopular political views seems important. So, though with more qualifications, does protecting against dismissals that reflect short-term fluctuations in the popularity of different scholarly fields. Both of these can be addressed through good labor law, due process, and other institutional mechanisms as well as tenure.

The growing prominence of adjunct and short-term faculty is already reducing the scope of coverage of the tenure system. Higher education has resisted neo-liberal erosions of job security more than many other industries, but it is certainly not immune. An economic downturn will put new pressure on the system. Even without a downturn, though, colleges and universities will continue their drives towards increasing productivity and efficiency.¹⁷ Willingly or under external pressure, more and more will adopt post-tenure reviews, and more of these will come to have real teeth. Which forms of faculty productivity they favor will be a matter of struggle and will vary among institutions.

¹⁵ Larger institutions were not immune. Under financial pressure in 1991, the University of California introduced not only economic incentives for retirement, but procedures that could lead to termination of tenure for low productivity faculty who did not volunteer. See Brubacher and Rudy (1997: 402-4).

¹⁶ O'Brien (1997: ch. 3) offers a useful discussion of some of the background and arguments, and concludes that tenure is not a necessary condition of academic freedom.

¹⁷ Institutions will continue to experience fiscal pressures, even in good economic times. Many of the factors that have already driven up costs will continue to do so. These include not only labor costs, but expenditures on libraries; physical plant; and laboratory facilities (for teaching as well as research). At the same time, competition for students will center partly on cost (in the form of scholarships at elite institutions, and directly in the form of tuition and fees at less elite ones).

Enrollment trends and career-orientations. Overall enrollments will remain strong based on demographic momentum, but subject to economic cycles. There is no reason, however, to expect a return to the growth in resources and enrollments characteristic of the postwar period. Moreover, it is likely that for the foreseeable future, enrollment growth will be greatest in career-oriented subjects, not the liberal arts. This will place pressure on institutions to continue to adjust their curricular offerings.

This will probably further distinctions among institutions. Less selective schools will be much more dramatically tied to economic factors. This means fluctuating enrollments (an incentive for administrators to continue to rely on temporary faculty). The shift toward courses sold on the basis of their job-market advantages will be widespread, but strongest in the least selective schools. If anything, job-related courses will become more clearly the staple offerings of most non-selective or minimally selective schools. An increase in adult students will bring some seeking liberal arts courses as "life enrichment," but more seeking retraining to compete in the job market.

Enrolments in predominantly liberal arts schools and curricula will be likely to remain approximately constant. The good news for advocates of the kinds of education they offer is that these schools are more shielded from economic pressures (directly on them and indirectly on students' choice of fields). The bad news (for those same advocates) is that outside those schools liberal arts teaching will probably shrink and applied teaching grow. This is not the result of an intellectual crisis in the liberal arts, as some commentators have contended. The issue is better understood simply as a proportionate shift away from liberal arts towards career-oriented education, linked especially to expansion in the number of students going to college. It is indeed true that there have been declines in humanities enrollments, though this is not the evidence some conservative commentators claim for a rejection of new lines of scholarship. Indeed, the natural sciences and to a lesser extent the social sciences have also given way to other choices of majors (Turner and Bowen 1990; Oakley 1992).

That the shift away from humanities and other liberal arts majors came in and after the late 1960s has led commentators to exaggerate political and content dimensions and fail to grasp a key underlying dynamic. There was a dramatic growth in arts and sciences majors during the immediately preceding years of university expansion. Curricula at new schools largely mirrored those at older ones. Expanding campuses attempted to upgrade their status by upgrading the place of arts and sciences in their curricula. The increase was short-lived, however. Turner and Bowen (1990) cite Ball State University as an example. There arts and sciences degrees grew from 2.5% of the total in 1954 to 29.9% in 1970—before falling back to 13.3% in 1986.

Third, commentators have missed a crucial difference between male and female enrollment patterns. Male enrollment in the humanities, for example, had already declined dramatically *before* the 1960s. This did not translate into significant effects on aggregate course enrollments because women were entering colleges and universities in growing numbers and disproportionately choosing humanities courses. Women's choices of majors began to shift away from the humanities later than men's; in the 1970s and 80s, women moved out of the humanities in a trend similar to that of men a generation earlier. This occurred largely because many professional careers became increasingly open to women, and women began to place more emphasis on preparation for employment. It resulted, however, in a specious conclusion about the "crisis of the humanities."

It is worthwhile, however, for social scientists to ponder this information with self-reflexivity. The movement of women into higher education but out of humanities majors has contributed to the "feminization" of social science—in all fields but economics undergraduate majors are now predominantly female, and graduate programs increasingly female. Will women move proportionately out of social sciences (other than economics) in coming years, as men have already done?

Graduate Education. Growth in graduate education is likely to continue. The growing prevalence of post-baccalaureate degrees is as a dramatic a development of the postwar years as the internal differentiation of undergraduate institutions and curricula. The majority of graduates of highly selective liberal arts colleges and universities now go on to graduate or professional school; there is every reason to expect that growth to continue. Grumbling about it—and its consequences—is also likely to continue.

Nonetheless, graduate education has emerged as just as much a normal stage of personal development today as undergraduate education was in the pre-war period.

It is undergraduate education that defines the American public conception of both college and university. It the case of universities, however, graduate students are at least as basic to the character of campus life. Graduate education is, however, poorly understood. In particular, there is little appreciation of why majors in arts and science subjects are not more closely tied to employment, leaving many students to seek either professional credentials or more advanced academic study in a research and/or scholarly field. This may reflect credentialism, but not only that. There have also been genuine increases in knowledge and in the skill bases for many lines of work. Much of the confusion has to do with the more general pattern of institutional differentiation that leaves schools pursuing different educational mandates under the common names "college" and "university."

Growth in graduate education is an important strategy for institutional reputation building, though it works differently at different levels of the status hierarchy. While adding master's programs would do little to enhance the standing of the most elite and selective liberal arts colleges, it is a productive investment for many schools where applied majors dominate. The basic distinction lies between high status professional fields in which professional degrees are exclusively or primarily postgraduate, and lower status fields in which undergraduate credentials predominate (or in which college degrees are not required—yet). The elite liberal arts colleges offer relatively general educations that prepare students for specialization in high status professional schools or PhD programs (or for jobs that do not require highly specialized training or credentials, but that reward general learning, social status, and or networks). By contrast, less or nonselective schools emphasize applied programs at the bachelor's level (though of course they may also in varying proportion offer "arts and science" degrees the holders of which may seek entrance to elite professional or graduate schools). Some fields-notably business—straddle the distinction. By and large, the more elite and selective business schools avoid undergraduate instruction, and those on the way up have incentives to minimize their work with undergraduates. This leaves the field of undergraduate studies in business largely open to less selective schools. The latter, in turn, have an incentive to develop graduate programs. This not only serves faculty interests, it may make undergraduate degrees more valuable and help to recruit students. The presence of a graduate program enables the school to develop better connections to employers, and makes it more likely that those who receive bachelor's degrees will be able to claim a connection to people placed higher in the administrative hierarchies of prospective and actual employers.

In the professional fields where undergraduate credentials remain prominent, there is apt to be a growing differentiation among practitioners that correlates with a growing role for graduate degrees. Development of graduate nursing programs, for example, reflects the expansion of nursing into new domains (e.g., clinical assessments for schools or courts), the growing proportion of nurses who work in large institutional settings rather than small clinics or patient's homes, and the introduction of increased managerial and planning responsibility in the context of a changing health care system.

With this in mind, it is worth stressing that the growth in graduate programs already represents a shift in their nature and further change is likely. PhD programs proliferated with an emphasis on training future American college faculty. This is not a growth area and has not been for decades; indeed, most major PhD granting institutions have demanded that department reduce the size of their PhD programs. Expansion has come and probably will continue to come in educating students for non-academic careers. The majority of graduate students, including PhD holders, will not become college teachers. This means that faculty members need to pay attention to the multiple career tracks for which we prepare students. As with so much else, this is likely to be reflected in a differentiation of institutional roles. Educating students as researchers is likely to remain the dominant strategy for those who wish to be among the most elite PhD programs. Expansion into applied research may grow, but expansion into non-research fields (e.g. marriage and family counseling) is likely to be rare. The elite graduate departments would do well to think explicitly about how they can best prepare students for jobs in selective liberal arts colleges—where research continues to flourish alongside a strong emphasis on undergraduate teaching. Development of applied programs outside the research emphasis may take place more at other universities, and may offer them distinctive niches. In all settings, it is important to keep in mind that graduate education is—at least ideally—not simply "training," but a much broader intellectual and scholarly enterprise. Students are not simply developing technical skills; this may be more or less important depending on their career aspirations. They are continuing an education.

Internationalization. The internationalization of American higher education will continue. There may be debate about how to understand increasing global integration, but there can be little doubt that it is a basic fact of life in the contemporary world. Barring the catastrophic scenarios of science fiction novels, there is good reason to think that global integration will continue to grow in the next century as it has in the last five.

Close to half a million international students study in U.S. colleges and universities.¹⁸ This does not include foreign born residents of the U.S., who have become a rapidly growing proportion of the student population. Both groups are distributed unevenly among schools-close to 10% of all foreign students attend colleges and universities in metropolitan New York. In general, foreign students are more prominent at schools in large metropolitan areas—but attend a wide variety of kinds of schools in those areas. Courses need to change not only to better educate these students, but to better take advantage of the diversity their presence brings to classrooms. Much of the growth in international students has been in graduate students, and this of course also calls for attention. Too many programs have been slow to meet the interests of the students they attract; too many treat international students as a separate category, subject to different expectations and monitored for signs as to whether they will return to their home countries after graduation or make careers in the U.S. Many do the latter, of course, and contribute to a growing presence of international faculty in American colleges and universities. This too is a transformation with implications for teaching. These faculty have much to contribute, but both employing schools and students are ambivalent about them.

¹⁸ 457,984 in 1996-97, according the Institute for International Education. This is an increase of about 1% over the year before. The most rapid growth in numbers of foreign students took place in the 1980s. The recent crisis of Asian economies may actually reduce the numbers—but probably only temporarily.

The flow of students in the other direction is also important. Some 89,000 American students studied abroad in 1995-96. Study abroad programs, however, are prominent only among students at the more selective colleges and universities. This is partly a reflection of students' aspirations and choice of courses of study, but also largely shaped by financial resources.¹⁹ This suggests all the more need to bring international content into a wide range of sociological teaching. Study abroad is growing and increasingly being encouraged in liberal arts programs (and in a few more applied programs, mainly at selective schools). A weak link, however, is the development of opportunities for returning study abroad students to integrate their international experiences into their curricula, to reflect on what they learned and see it in intellectually deeper ways. Students evaluate study abroad experiences extremely favorably, but except for language majors these remain largely cut off from the rest of what they do in school, and "re-entry" is sometimes a let down.

The internationalization of higher education is also a matter of growing linkages in the production of knowledge itself. Faculty members communicate with and collaborate with colleagues around the world. There is a continuous flow of faculty among countries (with the U.S. disproportionately a receiver). In the humanities and social sciences, especially, increasingly internationalization of intellectual life must at least encourage if not force some changes in its content. U.S. social science, for example, has often been relatively ethnocentric. Its very scale allows it to remain somewhat insular, absorbing only those parts of the global production of knowledge most consonant with its existing patterns. This is a significant weakness, and one likely to become increasingly apparent.

Diversity. Overall student populations will continue to grow more diverse; a key question is how much students of different backgrounds will be segmented into different educational institutions and tracks. As college and university education has become less

¹⁹ The financial resources in question include not only those of the student and his or her parents, but those of the school itself. Operating study abroad programs is expensive; encouraging students to attend programs operated by others and transfer credit means losing tuition revenue. It should also be noted that the impact of class on study abroad is not limited to financial resources, but includes the effect of parents' "cultural capital," including whether they have traveled abroad, are aware of international issues, etc.

exclusively the prerogative of an elite, as women have been included in growing numbers, and as religious and racial exclusions have been eliminated, student bodies have become more heterogeneous. This has been true on almost every campus, but diversity has also been unevenly distributed among campuses. Children of immigrants, for example, are much more heavily represented in community colleges. The changes reflect not only higher education policies but changes in the demography and stratification of American society.

Increasing enrolments of students outside dominant groups has brought recurrent resentments—whether the newly admitted or expanding groups were Jews, Blacks, Asians, or women. The affirmative action policies adopted in and after the 1960s have produced especially widespread resentment and criticism—including from some of their intended (and actual) beneficiaries. In the late 1990s, attacks on such programs began to enjoy more success in courts and referenda. It seems likely that the extent of affirmative action in college and university admissions will be reduced. Certainly in some states such as California, dramatic changes in policy have been adopted. It is not likely that there will be an even rollback to such programs, however, but rather that the level of effort made to attract various minorities will vary from school to school and state to state.

Cutbacks in affirmative action will most adversely affect Blacks and Hispanics. They will benefit Whites and Asians—and in states with large Asian populations will benefit Asians most.²⁰ The main impact will not be on the overall numbers of each group attending college, however, but on which colleges they attend. Where affirmative action is relaxed, the most selective schools will become more White and Asian, the less selective more Black and Hispanic.²¹ The impact will probably be greater on public schools than on private. The impact is likely to be more extreme in some states, like California. In general, it will work to increase the implications of the differentiation of institutions we have already noted.

²⁰ California is the paradigm for this. It should be noted, though, that "Asian" is not a single and internally homogenous category. Asian groups vary in their economic standing and in the extent to which their children will benefit from admissions policies emphasizing grades and test scores alone.

²¹ For an indication that affirmative action at the country's most selective schools has made a difference, see Bowen and Bok (1998).

Whatever happens with affirmative action, however, diversity is likely to grow and to grow even at highly selective schools. This does not mean that it will involve all groups equally; on the contrary, Hispanics and Blacks are likely to suffer from growing disparities in educational attainment. High levels of immigration during the last decade are the key reason why there will be growing diversity of student populations. Large absolute numbers are reinforced by the relatively young age of most immigrants and the relatively high fertility of immigrants (and non-immigrant minorities). Teachers will need to be attentive to the different backgrounds and interests of a much wider range of groups than were present in American higher education even a couple of decades ago. Already teachers in major metropolitan areas are dealing with such changes in student bodies. Recent immigrants figure especially prominently in community colleges and some public 4-year schools. These are attractive not only because of low cost and open admissions, but because of programs that meet these students' needs and convenience for living at home (which many such students and/or their families prefer). Wherever minority students are, there will also be demand for teaching that bears directly on the distinctiveness of their lives and communities.²²

The goal of having faculty populations broadly reflect the composition of student bodies is becoming even harder to attain. This is likely to be a source of continuing controversy. The problem is not that there are few talented members of minority groups, but that there are many such minority groups. Asian students may think it a good thing to have Black and Hispanic as well as white faculty, for example, but it hardly overcomes a lack of Asian faculty. South Asian students may feel poorly represented by Chinese faculty members though both are "Asian." Pakistani and Indian students may not feel equally well represented by faculty members of either national background (and as the example suggests, religion is likely to play a role—uncomfortable for many American sociologists—alongside race, language, and national origin). Many of these are also categories of potential faculty that current department members—even those favorable to affirmative action for Blacks--have a hard time conceptualizing as important for increasing diversity and representativeness. To this, add the question of whether women

²² Such teaching may, in fact, be one of the most important exceptions to the tendency for "applied" courses

of ethnic and racial minorities are hired as often as men. In any case, more different minority group members will compete (with each other as well as with whites) for open positions. Foreign students figure in some groups, such as Asians, alongside immigrant or long-time Americans. Many such groups are coming to be prominent in graduate student populations, while still poorly represented in faculty positions.

Disciplines and interdisciplinarity. Within colleges and universities, there will be opportunities to achieve stronger intellectual communities across disciplinary divisions, but there will also be resistance. One of the great changes in higher education institutions has been a reduction in the embeddedness and membership of each individual faculty member in his or her home institution. This has come partly as a result of growth in scale. It has come largely as a result of inter-institutional mobility. As faculty members move from school to school, they have reduced cross-unit ties within each school. A crucial dimension of all of this is the development of highly distinct academic disciplines. This is not just—or perhaps even crucially—a matter of intellectual distinctions (Calhoun 1992). It is a matter of power and turf control. It is also largely a matter of the creation of sociometric universes within which reputations and careers are formed.

Different disciplines are supported by separate professional associations, scholarly journals, and periodic conventions. There are also interdisciplinary associations, journals, and conventions. These typically play smaller roles in job markets but they are not altogether different. As we discussed above, the rising importance of research facilitated the creation of supralocal job markets and career opportunities. These are of greatest importance, not surprisingly, for those scholars and institutions that most emphasize research. The more invested academics are in research, the greater their opportunities for mobility and the more differentiated their career patterns are likely to be. At the same time, the proliferation of temporary faculty also works against the construction of strong intellectual community.

Among the impacts of this pattern is a strong compartmentalization of intellectual life. Not only are disciplines demarcated intellectual in-groups suspicious of outsiders, so

to dominate in less elite schools.

are many subdisciplines. The jokes about scholars knowing more and more about less and less have bite. Specialization is a path to certain forms of success. It is, however, a path antithetical to strong local intellectual community. It also encourages a differentiation— and sometimes even an alienation--of teaching scholars—especially those focused mainly on undergraduates—from those playing the most powerful roles in the elite research institutions.

Continuing reductions in research funding, especially government support for scholar-initiated "basic science", will narrow the range of schools and the range of scholars that can depend heavily on this kind of research. Most other schools and scholars will have greater reasons to strengthen their local ties. Proprietary research has grown rapidly, though only minimally in sociology. Where this is rooted in local universityindustry connections rather than the discrete funding of individual scholars' research, this enhances local ties. Growth in applied research also furthers local ties, and is frequently less closely controlled by disciplinary concerns than is "basic science". Last but not least, as government funding is cut and tied to special programs, foundations play a larger role. These, however, are seldom set up on disciplinary bases and commonly set up their programs on the basis of cross-cutting thematic concerns. Ease of long-distance communication—e.g. by email and Internet—also facilitates formation of crossdisciplinary subgroups. As more graduate students seek employment outside universities, the hold of disciplines on them (and thus on those who pay for their education and employ their teachers) may be reduced. Two-career couples have become more prominent and geographic mobility is harder for them.

Among the implications of low levels of local interdisciplinary ties is a tendency for teachers in any one field to know relatively little about what their students are studying in other departments. A valid—though not altogether novel—criticism of contemporary college educations is that there is little coherence to the overall package of courses a student takes, and there are few opportunities for students to reflect on how the whole fits together. Instructors who have weak knowledge of and ties to colleagues in other fields are poorly placed to help students make the relevant connections. Colleges and universities have recently responded to this line of criticism with a renewed emphasis on interdisciplinary general education at the "foundations" level and on "capstone" courses, usually within majors, at the immediate pregraduation stage. The latter have commonly been disciplinary, and often oriented especially towards students continuing toward disciplinary graduate programs. Some, however, have addressed the needs of students headed towards post-baccalaureate professional schools or making the transition from college to employment. There remains, however, a tension between the strong interdisciplinary interests of many students and the extent to which disciplines continue to control the turf of academic employment.

Intense competition over research "stars" on the part of elite graduate institutions is likely to continue. This will lead to more inter-institutional mobility and reductions in local integration across disciplines in those institutions. The more open the job market, the greater will be the reward attaching to disciplinary prestige compared to local crossunit ties. On the other hand, many "stars" are hired on the basis of interdisciplinary reputations and engagements. In many universities, moreover, disciplinary departments are the primary defenders of the *status quo*. Conservative against most forms of change (except growth in their own resources), they resist curricular reform, the introduction of new fields, investment in interdisciplinary scholarship and teaching—even when these are intellectually exciting and/or attractive to students.

New Technology. The combination of new technology (especially the Internet) and increasingly market-driven higher education will challenge some traditional institutions and encourage the creation of new kinds of institutions. It is too early to tell what the overall results of these changes will be, but the magnitude is much greater than most American college professors realize.

It is unlikely that new technologies or orientations to the market will undo the dominance of elite research universities in American higher education. Of course, these institutions will enter some parts of the new markets and will use the new technologies in ways that change how they work. The biggest challenge to the research universities, though, comes not in their core activities but in the question of whether they will lose or transform some lucrative sideline activities. Internet provision and new kinds of marketing are transforming continuing education, for example. This has been a relatively easy to organize "cash cow" for many universities. This is now becoming less of a cottage industry and more of a nationally organized market, complete with for-profit firms managed more efficiently than universities generally are and backed by venture capital. Some research universities will likely use their "brand names" to occupy premium positions in the new market—indeed, several have already organized market-driven and sometimes explicitly for-profit subsidiaries to do so. Others will likely suffer a loss of income as their implicitly for-profit subsidiaries succumb to more efficiently organized or better-marketed competition.

Outside the research universities, the new technology and market-driven institutions may challenge more of the traditional core activities of colleges and universities. To the extent that these did not provide residential experiences, rich arrays of extracurricular activities, personal attention, and direct contact with intellectual active faculty, they have less to distinguish themselves in competition. This competition may come from completely new entrants into the educational market, or from existing educational institutions that choose radically to expand their market share. At present, the new entrants are largely confined to the development of specialized niches (such as parts of business and technology education) and to recruitment of part-time students who would not necessarily enter higher education otherwise. They compete mainly with continuing education programs if they compete with existing schools. This is likely to change, however, and to change fairly fast. There is no intrinsic reason why higher education (particularly outside its most elite bastions) cannot be subjected to the rigors of market competition—including rationalization, standardization, and economies of scale—just as much as other service industries.

The competition may be felt most acutely by branch campuses of state universities and small colleges no longer focused on the liberal arts. Some of these will adapt, probably often by forming alliances with larger-scale organizations that develop and market curricula. They will provide face-to-face contact as a complement to distance learning. Two year schools will also face a challenge, particularly because hey have expanded in recent years often by making inroads into exactly the sectors now most eagerly pursued by for-profit and Internet-based providers. Even liberal arts colleges, perhaps the most distinctively American of all higher education institutions, will feel the pinch. Indeed, as we noted, their numbers have already declined faced with competition from other kinds of institutions. It is likely that they will survive mainly where they can market attractive socialization experiences to their students. Their numbers may be reduced, but many American parents—and students--will continue to want the kind of personal attention and community environment they can offer.

Conclusion

I have suggested that perhaps the single most salient feature of American higher education is the enormous differentiation among institutions. Different in form, function, size, mandate, prestige, selectivity, and resources, colleges and universities nonetheless project a surprisingly common and confused public image. This has contributed to a lack of clarity among funders, students, and critics of various perspectives. But despite the confusions, American higher education is also enormously vital and impressively successful in meeting the needs of a very wide range of students and of other constituencies such as purchasers of research. The diversity of institutions is a crucial basis for this vitality.

I have also argued that poorly recognized transformations in institutional patterns and student enrolments have dramatically altered teaching and academic employment in the postwar era. Changes in who is enrolled in higher education, and in the kinds of institutions that enroll them, account for many differences in the overall field of higher education that are poorly perceived as declines. But these changes also demand that those who would improve teaching and learning take seriously the differences among the environments in which these occur, and the student populations with which different teachers work. A populist tendency to mask the structural and cultural differences behind the words "college," "university," and "professor" makes this hard to accomplish.

Changes continue. Some are welcome, others not. Those who would learn from the American experience need to do more than simply grasp traditional or current patterns well. They need also to watch how American institutions meet the new challenges they face, and how different kinds of institutions fare in a changing environment. Those who would emulate specific features of American higher education need to pay attention to their integration into a larger system and the potential for 'disfunctions' or disappointments when they are taken out of context.

References

- Bloom, Allan 1987 The Closing of the American Mind: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students. New York: Harper Touchstone.
- Bowen, William and Derek Bok 1998 *The Shape of the River: Long-term Consequences* of Considering Race in College and University Admissions. Princeton: Princeton University Press.
- Breneman, David W. 1990 "Are We Losing Our Liberal Arts Colleges?" The College Board Review, No. 150 (Summer), pp. 16-29.
- Brint, Steven and Jerome Karabel (1988) *The Dream Deferred*. Berkeley: University of California Press.
- Brubacher, John S. and Willis Rudy 1997 Higher Education in Transition: A History of American Colleges and Universities. New Brunswick, NJ: Transaction Publishers.
- Calhoun, Craig 1992 "Sociology, Other Disciplines, and the Project of a General Understanding of Social Life," pp. 137-195 in T. Halliday and M. Janowitz, eds. Sociology and its Publics. Chicago: University of Chicago Press.
- Calhoun, Craig 1999a "The Changing Character of College: Institutional Transformation in American Higher Education," pp. 9-31 in Bernice A. Pescasolido and Ronald Aminzade, eds., *The Social Worlds of Higher Education*. Thousand Oaks, CA: Pine Forge Books.
- Calhoun, Craig 1999b "Continuing Trends or Future Transformations," pp. 548-562 in Bernice A. Pescasolido and Ronald Aminzade, eds., *The Social Worlds of Higher Education*. Thousand Oaks, CA: Pine Forge Books.

- Carnegie Commission on Higher Education 1972 *A Statistical Portrait of Higher Education.* Berkeley, CA: Carnegie Foundation for the Advancement of Teaching.
- Carnegie Commission on Higher Education 1987 A Classification of Institutions of Higher Education. Princeton: Carnegie Foundation for the Advancement of Teaching.
- Cohen, A. M. 1998 *The Shaping of American Higher Education*. San Francisco: Jossey-Bass.
- D'Souza, Dinesh 1991 Illiberal Education: The Politics of Race and Sex on Campus. New York: Vintage
- Ehrenberg, Ronald G., ed. 1997 *The American University: National Treasure or Endangered Species.* Ithaca: Cornell University Press.
- Geiger, R.L. 1986 *To Advance Knowledge: The Growth of the American Research University, 1900-1940.* New York: Oxford University Press.
- Geiger, R.L. 1993 Research and Relevant Knowledge: The Research Universities since World War II. New York: Oxford University Press.
- Kimball, Roger1990Tenured Radicals: How Politics Has Corrupted HigherEducation. New York: Harper Collins
- Lewis, Lionel S. 1996 Marginal Worth: Teaching and the Academic Labor Market. New Brunswick, NJ: Transaction Publishers.
- Lucas, Christopher J. 1996 Crisis in the Academy: Rethinking Higher Education in America. New York: St. Martins Press.
- Marsden, George 1994 The Soul of the American University: From Protestant Establishment to Established Nonbelief. New York: Oxford University Press.
- Martin, Randy 1999 *Chalk Lines: The Politics of Work in the Managed University.* Durham, NC: Duke University Press.
- McClelland, Charles M. 1980 State, Society, and University in Germany: 1700-1914. Cambridge: Cambridge University Press.
- National Center for Educational Statistics 1996 Digest of Educational Statistics.Washington: U.S. Department of Education.

- National Center for Educational Statistics 1997 *The Condition of Education*. Washington: U.S. Department of Education.
- Oakley, Francis1992Community of Learning: The American College and theLiberal Arts Tradition. New York: Oxford University Press.
- O'Brien, George Dennis 1997 All the Essential Half-Truths about Higher Education. Chicago: University of Chicago Press.
- Ottinger, Cecily A., ed. 1989 *Higher Education Today: Facts in Brief.* Washington, D.C.: U.S. Department of Education.
- Pescasolido, Bernice and Ronald Aminzade, eds. 1999 The Social Worlds of Higher Education. Thousand Oaks, CA: Pine Forge Books.
- Rashdall, Hastings 1936 *The Universities of Europe in the Middle Ages*, 3 vols. Oxford: Oxford University Press.
- Rothblatt, Sheldon and Bjorn Wittrock, eds. 1993 *The European and American University since 1800: Historical and Sociological Essays*. Cambridge: Cambridge University Press.
- Slaughter, Sheila and Larry L. Leslie 1997 *Academic Capitalism: Politics, Policies, and the Entrepreneurial University.* Baltimore: Johns Hopkins University Press.
- Schmidt, Benno, et al. 1999 A System in Crisis: Report on the CUNY System.
- Smith, Page 1990 *Killing the Spirit: Higher Education in America*. New York: Viking.
- Sykes, Charles T. 1990 *ProfScam: Professors and the Demise of Higher Education.* New York: St. Martins.
- Turner, Sarah E. and William G. Bowen 1990 "The Flight from the Arts and Sciences: Trends in Degrees Conferred," *Science*, 250 (26 Oct.), pp. 517-21.
- U.S. Bureau of the Census 1976 *Historical Statistics of the United States*, 2 vols. Washington: U.S. Government Printing Office.
- Veysey, Lawrence, R. 1965 *The Emergence of the American University.* Chicago: University of Chicago Press.