

Diversity, Nonstandard Work, and Academic Employment in the 21st Century

By Henry Lee Allen

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Since Emile Durkheim, sociologists have been concerned with changes in the division of labor in society.¹ One reason for their scrutiny is the assumption that abrupt changes in the division of labor often reflect or signify transformations in occupational structures, labor markets, or social institutions, and systems.² The degree of workforce specialization and professionalization affects the relative status of a nation's social groups.³ Market-driven organizational changes affect the division of labor within industries; in turn, the new division of labor influences opportunities for individuals or groups.⁴ Organizations, labor markets, and workers are therefore linked. As for higher education, changes in the division of labor affect the *academic* division of labor—and vice versa.⁵

Today's rapid pace of change affects even the best colleges and universities.⁶ Global contingencies intrude upon all societies; like the mythological entities released from Pandora's box, the social forces unleashed by demographic changes, market pressures, technological innovations, politics, media, and globalization are ubiquitous.⁷ Today, sociologists—like meteorologists who monitor weather conditions and atmospheric events—attempt to dissect social trends and estimate the impact of social forces.⁸ These social scientists probe the strategic impact of international economic transformations and market forces upon complex organizations.⁹

Social scientists, for example, dissected the social and political implications of the concentration of corporate power and wealth across the globe.¹⁰ One implication of this dominance: the trend toward contingency labor—a move from full-time jobs to part-time, temporary, or nonstandard work in many industries or job markets. Other scholars scrutinized the erosion of the informal social contracts affecting labor everywhere; even productive workers are not guaranteed job tenure.¹¹ One researcher cites four changes affecting the occupational structure between 1985 and 1995—erosion of job security, routine pay increases, narrowly defined jobs, and the distance between shareholder and managerial interests.¹² Still other scholars showed how globalization, privatization, relational contracting, and less secure internal labor

markets weakened the power of organized labor.¹³ Within higher education, social scientists asked how managerial practices in the fast-food industry influence academic policy.¹⁴ The study of higher education organizations remains central to social scientific concerns, given the pivotal place of academic systems in society.¹⁵

Scholars are still trying to disentangle the economic from the sociological antecedents of these massive structural changes, but their findings suggest that organizational adaptations, such as learning, empowerment, and leadership, are key to survival in an uncertain age of global competition.¹⁶ Some scholars ask how organizational culture affects recruitment, retention, and departure from organizations.¹⁷ Others explore how managerial fads and cognitive biases affect organizational success.¹⁸

During the 1990s, many organizational changes took faculty by surprise. Professors generally did not recognize how systemic changes in the regular division of labor affected their employment. But technological changes, recession, fads, fiscal policies, and performance measurement affected academic work. Debates about the effectiveness of tenure proliferated; critics hoped to abolish the practice or restructure its benefits. But polemics and rhetoric about tenure, workloads, and productivity distracted many observers from noting the cumulative effects of disturbances within the academic division of labor.

What is the current condition of academic work? This article examines structural questions pertaining to academic employment.¹⁹ What do empirical findings from recent studies say about the contours of academic work? Next, what is the employment status of faculty, especially within community colleges? The 1999 National Study of Postsecondary Faculty (NSOPF) helps to answer this question, by providing sector-level baseline survey data.²⁰

THE CHANGING ACADEMIC DIVISION OF LABOR

The academic organizations that make up American higher education, notes one observer, represent "a mammoth industry." "There are more than thirty-six hundred colleges and universities in this country with one million faculty members and fifteen million students,"

this observer adds. "The property owned by colleges and universities has been estimated to be worth over \$200 billion, total expenditures to be \$175 billion, and annual university research and development expenditures to be about \$20 billion."²¹

Scholars, stakeholders, and policy advocates have debated the nature and future of academic work for over a decade. Several key issues emerged in this debate: the quality and affordability of undergraduate education—many families were priced out of the market for postsecondary education, absent massive loans and indebtedness—the influence of radical faculty upon the curriculum, and the prospects for distance education as the solution to cost containment. Contextual matters were obscured despite a revolution in the computational study of organizations and their agents.²² Policy debates, for example, rarely distinguished between public and private universities.

Calls for faculty accountability and productivity heightened during the early 1990s. Many states adopted performance indicators to monitor faculty work. Tenure became the scapegoat for the stresses and growing pains of a complex academic system; alternatives to tenure were promulgated as panaceas for the most pernicious or intractable organizational problems. Few observers noticed the relative stability of tenure rates, even fewer acknowledged that only modest changes in faculty workloads were evident in a select number of institutions.

Anecdotes and polemics, not rigorous evidence, dominated the debate over tenure. Rhetoric obscured empirical facts; few participants undertook statistical and computational studies. Unsophisticated discourse neglected organizational traits, conditions, networks, contingencies, and demography. Publications downplayed the effects of market segmentation among colleges and universities, especially patterns of organizational recruitment. Scant attention was paid to collegiality, faculty composition, and social networks. In short, political or ideological concerns, affected by polemical disputes over costs, care, and crises, drove research.

Findings from several cross-sectional national surveys depicted a profession dominated by teaching and instructional concerns

for nearly all faculty members outside research or doctoral universities. The workload of faculty at doctoral institutions shifted only modestly toward research; the evidence did not suggest that tenured faculty had abandoned instructional tasks.²³ Faculty productivity was invariably tied to institutional mission, organization, and resources. Some research noted the limitations of performance measures or extrinsic incentives. Other studies noted the priority given to acquiring and maintaining instructional technologies and to increasing the size of administrative staffs, instead of faculty salaries. Last, survey data consistently indicated that all faculty members worked much more than 40 hours per week.

Was the debate over tenure, faculty workload, and productivity more about perception than substance? Higher education policy has never existed in a social or political vacuum. Faculty members practice their craft within a contested organizational terrain, populated by hazards and opportunities. Organizational agents abound within and across departments, disciplines, and institutions. Costs are a function of resources and market demands; tenure is therefore an organizational outcome. One policy, the evidence suggests, does not and could not fit all institutions, due to these structural and competitive factors—each college and university occupies a specific niche.²⁴ But we know little about how the agents, units, and components of academic systems affect policy and processes—the strategic role of faculty unions, for example. The tenure debate also obscured the effects of employing part-time and temporary faculty. We were distracted from proactive strategies vital to the restructuring of academic work, especially with respect to community colleges, where scholarship is scant.

As for the future, Frank T. Rhodes, the former president of Cornell University, envisions an era of deregulation for postsecondary education. He urges reforms within the academic system: enhancing inquiry, curbing costs, nurturing community, and improving leadership and governance. The survival of any academic organization, Rhodes concludes, especially universities, depends upon the viability of its network ties and its community relations.²⁵

THE CHANGING DIVISION OF LABOR IN SOCIETY

During the last decade, several scholars alerted us to changes in the societal division of labor—how structural factors affect opportunities,²⁶ and how organizations and markets affect postindustrial societies.²⁷ Other scholars wrote about the proliferation of winner-take-all-market situations and the movement of talented, educated persons from the public sector to more lucrative opportunities in the private sector.²⁸ Yet another scholar wondered about the “end of work” as the occupational structure institutionalizes recession, technological displacement, and routine.²⁹

President Rhodes did not link changes in the academic division of labor to these societal changes.³⁰ But what goes around comes around, even for colleges and universities! Information, personnel, and strategies diffuse inexorably across organizational boundaries and sectors in a society transfixed by social mobility.³¹ One example: Governing board members and academic administrators may act upon prior experience in philanthropic, governmental, or corporate organizations. Some scholars explored the effects of these linkages on academe. How has technology transfer between universities and companies restructured the academic workplace?³² How did academic administrators augment their power, influence, and managerial discretion over faculty work?³³ How would a breach of trust affect public scrutiny of the faculty role?³⁴ It is difficult to propose solutions, these studies suggest, until we understand the problem.

FACULTY EMPLOYMENT AND NONSTANDARD WORK

Results from the American Faculty Poll, sponsored by TIAA-CREF, provide clues to the status of the academic professions.³⁵ The study achieved near parity across regions, in the number of institutions and respondents sampled.³⁶ Eighty-one percent of respondents had tenure or tenure track appointments.³⁷ Fifty-four percent of the faculty engaged exclusively in undergraduate education. Community colleges employed nearly one-fourth of respondents. Women faculty

members were more likely to be found in community colleges than men.

The survey focused on teaching as the dominant professional task and the status of tenure in the academic system.³⁸ Of the respondents, 79 percent indicated that teaching was their main professional task. Sampled faculty also expressed high levels of job satisfaction.³⁹ Teaching and learning excited most respondents. But data for several key contingencies were at variance with this rosy picture. Over 40 percent of respondents considered switching to another career at least once. Second, nearly 40 percent of the faculty worked at unionized campuses; over 60 percent of these respondents also belonged to a union. Unionized faculty members were disproportionately located at community colleges. Third, faculty frequently expressed dissatisfaction over remuneration, the worst aspects of their jobs, and limited opportunity for mobility.

Four of the top five factors that stifled academic work were organizational: workload (47 percent), lack of institutional support (41 percent), and internal and external departmental matters (combined = 66 percent). Over a third of the respondents cited concerns about an increase in workload, the treatment of faculty, and an institutional preference for hiring part-time faculty.⁴⁰ Some faculty members connected the indirect erosion of tenure with hiring part-timers and with post-tenure review.⁴¹ Half of sampled faculty expressed concern about the quality of student preparation.⁴² Faculty members also listed several other concerns—controlling tuition costs, recruiting faculty, evaporating public trust, implementing instructional technologies, and commodifying higher education.⁴³

Other research echoes these results. Part-time faculty members constitute almost 40 percent of all faculty members, notes one study.⁴⁴ “Higher education in the United States is heavily contingent,” the study notes.

According to the last NSOPF data (2001), part-time faculty comprised 39% of all faculty—379,000 employees. If full-time but temporary faculty are added to the count, more than 45% of faculty in higher education are not tenure eligible. Remember, the national average for workers in nonstandard employment is 28.7%. Higher education is considerably above the national

average in this area. The highest percentage of part-time faculty is in public community colleges—59.2%. There are some institutions—primarily the two-year ones—with up to 80% of the courses being taught by contingent faculty. The lowest percentage of part-time faculty is at the public research institutions—17.8%. This figure obscures the growing reliance of these institutions on graduate assistants who are not part of the NSOPF survey.⁴⁵

The use of contingent faculty may vary by academic discipline, location, and institutional sector. One study differentiated between types of contingent labor, cautioning that some faculty opt for contingent status because of convenience, flexibility, and employment outside higher education.⁴⁶ Other contingent faculty must travel incessantly and weave together part-time jobs to survive economically and pursue their vocation. Still others may be retirees or recruits from secondary education. Economic incentives stimulated the move to contingent faculty—they permit administrators to hedge their bets against costs, enrollment fluctuations, and faculty power. To remedy encroachment, the study concluded, faculty unions must organize contingent faculty.⁴⁷

Journalistic stories of faculty members who commute between campuses reinforce scholarship on the precarious status of contingent faculty. Many “freeway flyers” receive poor salaries, and suffer with poor working conditions, despite years of service.⁴⁸ Community college part-timers average \$3,566 per course, full-timers receive \$6,603. Adjunct faculty member salaries range between \$11,000 and \$12,000 per year.⁴⁹ Contingent faculty also struggle with concerns about security, healthcare, and retirement, especially in periods of cost containment, restructuring, and downsizing.

These findings suggest a *long-term* trend toward contingency labor in faculty employment. In many community colleges, contingent faculty members have long exceeded the numerical ranks of regular full-time faculty without much attention or protest. Why then is work performed by contingent faculty a relatively recent issue among policymakers? Preoccupation with tenure let inconspicuous, ecological changes in hiring patterns go unnoticed.⁵⁰ How else can one explain the sudden

“discovery” of contingent faculty members, after years of neglect?

Another implication of the failure to analyze the academic division of labor in the context of the social division of labor: Researchers have been more adept at recognizing transformations occurring within other occupations than within the academic professions. Scholars must see these changes as dynamical systems and link them to observations about faculty careers within the national surveys. Contextual data encompasses individuals, groups, networks, organizations, markets, and social systems—including their structures, processes, and outcomes. Our policies, reforms, and practices are only as good as our conceptualization of the dynamics of academic organizations and the system they comprise.

University and college faculty members are more diverse than ever, according to recent surveys. Yet, in most institutions, racial homogeneity prevails across institutions and disciplines because individual predilections are no match for the inertia of systemic ecological, organizational, and contextual factors. Female faculty members increased in absolute numbers and in their proportion among full professors from 1992 to 1998, while the number of minority faculty showed only minor changes during the same period.⁵¹ But, in 1999, 45 percent of all women faculty worked part-time, along with 45 percent of Native American, 37 percent of African American, and 42 percent of Hispanic American faculty, respectively. Only 27 percent of Asian American faculty had part-time status.⁵²

About 36 percent of all full-time faculty members are women. Women, now as in the past, are less likely to be tenured, and are more likely to work at teaching institutions. Women hold lower rank, have lower salaries, and are engaged principally in instructional tasks.⁵³ Minority faculty—except Asian Americans—are also more likely to be located at teaching institutions, hold lower rank, and lack tenured status, especially in predominantly white academic organizations. The culprit, suggest some scholars, is institutional culture.⁵⁴ But culture interacts with social structure. Traditional social surveys aggregate the traits or responses of individual faculty, make inferences about group patterns, and direct policy implications at the individual level. Few scholars probe market pressures,

organizational matters, and social networks that shape the context in which faculty pursue their careers.⁵⁵ Some academic organizations and departments, despite their supposed prestige, may be poor—even toxic—social environments for colleagues unwilling to settle for inept social conformity.

Contingent faculty members have been institutionalized in many sectors for decades. There is no turning back from this adaptation, because of economic considerations, personal inclinations, or organizational policies.

FINDINGS: NSOPF 1999

The 1999 National Study of Postsecondary Faculty provides data on other issues related to the academic division of labor. Table 1 gives the age distributions of faculty members in public and private institutions of higher education:

Table 1

Age Distribution by Institutional Sector

| Age | Public (%) | Private (%) |
|----------|------------|-------------|
| Under 35 | 69.1 | 30.9 |
| 35-44 | 69.3 | 30.7 |
| 45-54 | 72.2 | 27.8 |
| 55-64 | 72.3 | 27.7 |
| 65-69 | 68.9 | 31.1 |
| 70+ | 56.8 | 43.2 |
| TOTAL | 70.7 | 29.4 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty: 1999.

Public institutions employed 70 percent of surveyed faculty members. For every age cohort except those over 70, the trend favoring public sector employment holds. The fate of the academic professions, these findings suggest, is disproportionately tied to policies and practices within the public sector with its ideological fluctuations in volatile political and cultural markets.

What is the employment status of faculty? Nearly 43 percent of all full-time faculty members possessed faculty status and listed teaching and research as their principal activities (Table 2). Another 14 percent worked full-time at tasks other than teaching and research. An identical 43 percent of faculty members were part-timers. Faculty members under 35, and 70 or older were more likely to be in this category. Senior faculty members, between 55 and 64, were least likely to have part-time status. For every age cohort, over 85 percent of faculty are classified as white (not shown).

More revealing than age distributions are the professional qualifications of faculty

members by employment status (Table 3). The data suggests an inverse relationship between educational attainment and contingency work: Professors with higher educational attainments are less likely to have temporary appointments. The breakdown: 70 percent of full-time faculty members, but only 14 percent of part-time or temporary appointees have doctorates or their equivalent. Seven percent of full-time temporary professors and nine percent of regular part-timers have these degrees. This data suggests a labor market split by professional qualifications, since less than 15 percent of professors with doctorates have temporary appointments.

Table 2

Age and Principal Activity, Employment, and Faculty Status

| Age | Full-time, teaching/research with faculty status | Full-time, teaching/research without faculty status | Full-time, not teaching/research as principal activity | Part-time |
|----------|--|---|--|-----------|
| Total | 42.9 | 0.7 | 13.9 | 42.6 |
| Under 35 | 32.6 | 1.6 | 11.0 | 54.7 |
| 35-44 | 43.2 | 1.1 | 12.5 | 43.1 |
| 45-54 | 43.7 | 0.3 | 14.6 | 41.3 |
| 55-64 | 48.6 | 0.4 | 16.5 | 34.5 |
| 65-69 | 37.7 | 0.1 | 13.0 | 49.1 |
| 70+ | 23.9 | 0.2 | 7.8 | 68.2 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty:1999.

Table 3

Highest Degree Earned, Appointment, and Employment Status

| Doctoral status | Full-time, regular (%) | Full-time, temporary (%) | Part-time, regular (%) | Part-time, temporary (%) |
|--|------------------------|--------------------------|------------------------|--------------------------|
| Total | 51.5 | 5.9 | 16.6 | 26.0 |
| No doctorate | 33.8 | 4.5 | 23.9 | 37.8 |
| Doctorate or first professional degree | 69.6 | 7.4 | 9.2 | 13.8 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty:1999.

For all faculty members, employment opportunities were greatest in community colleges (28 percent), public universities (28 percent), and public comprehensive institutions (13 percent) (Tables 4, 5, and 6). Sixty-four percent of faculty members at two-year institutions were part-timers, while 66 percent of professors at four-year colleges and universities were full-timers. By sector, full-time employment was highest in public research institutions (37 percent), followed by community colleges (18 percent), public comprehen-

sive institutions (14.2 percent), and private research and doctoral universities and medical schools (11 percent).

NSOPF data on employment status by institutional sector displays the dominance of the public sector—70 percent of full-time and part-time faculty members are located in public colleges and universities.

Part-time faculty members are concentrated in community colleges (64 percent); in contrast, 66 percent of full-time faculty members are located at four-year schools.

Table 4**Employment Status and Institutional Type**

| Employment status | Public research and doctoral (%) | Private research and doctoral (%) | Public comprehensive (%) | Private comprehensive (%) | Private liberal arts (%) | Public 2-year (%) | Other (%) | Total (%) |
|-------------------|----------------------------------|-----------------------------------|--------------------------|---------------------------|--------------------------|-------------------|-----------|-----------|
| Total | 27.6 | 10.0 | 12.8 | 7.2 | 7.8 | 28.1 | 6.6 | 100.0 |
| Part-time | 15.5 | 8.4 | 11.0 | 8.1 | 7.4 | 42.1 | 7.6 | 100.0 |
| Full-time | 36.5 | 11.2 | 14.2 | 6.5 | 8.1 | 17.7 | 5.9 | 100.0 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty:1999.

Table 5**Employment Status and Institutional Sector**

| Employment Status | Public (%) | Private (%) | Total (%) |
|-------------------|------------|-------------|-----------|
| Total | 70.7 | 29.4 | 100.0 |
| Part-time | 70.7 | 29.3 | 100.0 |
| Full-time | 70.7 | 29.4 | 100.0 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty:1999.

Table 6**Employment Status and Community Colleges**

| Employment status | 2-year (%) | 4-year (%) | Total (%) |
|-------------------|------------|------------|-----------|
| Part-time | 63.7 | 33.9 | 42.6 |
| Full-time | 36.3 | 66.1 | 57.4 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty:1999.

Table 7 shows how contingency labor affects academic disciplines. Part-time faculty members are least likely to be concentrated in agriculture/home economics, engineering, health sciences, and natural sciences. Disciplines reporting the lowest incidence of full-time employment include fine arts, education, and business. In short, the patterns of recruitment, retirement, and other matters, such as the prevalence of alternative job opportunities, might affect the distribution of employment in each discipline.

Tenure remains an elite status for most professors throughout postsecondary education. Forty-five percent of the faculty members sampled in NSOPF 1999 were not on the tenure track at institutions that offered tenure, while 13 percent of professors were employed at schools without tenure systems. Thirty-one percent of all faculty members had tenure. Tenure rates were highest in public doctoral (44 percent) and non-doctoral institutions (40 percent); they were lowest in public (24 percent) and private (19 percent) two-year colleges. Table 8 presents these statistics.

Table 7**Employment Status and Discipline**

| Employment status | Discipline | | | | | | | | | | Total (%) |
|-------------------|--------------------------------|--------------|---------------|-----------------|---------------|---------------------|----------------|----------------------|---------------------|--------------------|-----------|
| | Agriculture/home economics (%) | Business (%) | Education (%) | Engineering (%) | Fine arts (%) | Health sciences (%) | Humanities (%) | Natural sciences (%) | Social sciences (%) | Other programs (%) | |
| Part-time | 15.9 | 45.2 | 46.9 | 28.4 | 54.8 | 36.4 | 48.3 | 37.8 | 40.9 | 47.3 | 42.6 |
| Full-time | 84.2 | 54.8 | 53.1 | 71.7 | 45.2 | 63.6 | 51.7 | 62.2 | 59.1 | 52.8 | 57.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty:1999.

Table 8**Institutional Type and Tenure Status**

| Institutional classification | Tenured | Tenure track | Not on tenure track | No tenure |
|------------------------------|---------|--------------|---------------------|-----------|
| Total | 31.3 | 10.8 | 45.0 | 12.9 |
| Public doctoral | 43.7 | 13.4 | 41.1 | 1.8 |
| Private doctoral | 31.8 | 12.5 | 46.5 | 9.2 |
| Public non-doctoral | 40.4 | 13.6 | 43.2 | 2.9 |
| Private non-doctoral | 24.1 | 11.1 | 46.6 | 18.2 |
| Public 2-year | 19.4 | 6.4 | 48.6 | 25.5 |
| Private 2-year | 9.9 | 3.0 | 29.8 | 56.4 |

Source: National Center for Education Statistics, National Study of Postsecondary Faculty:1999.

CONCLUSION

How do we interpret the transformations occurring within academe, absent data on organizational culture and conditions, markets, and ecology? What are the implications of these findings for academic employment in the 21st century?

To summarize—public colleges and universities are the prime locus of academic employment for all faculty members. We should focus on academic employment policy in the public sector—particularly at community colleges.⁵⁶ The findings also suggest a primary, internal labor market of tenured faculty, alongside a secondary, external labor market of non-tenured and nonstandard workers. The emergence of a split-labor market has serious implications for faculty workload, productivity, and unionization. Policymakers and critics of tenure must formally address—not conveniently ignore—the divergence in academic career paths.

Here are three conclusions that apply to all faculty, administrators, unions, benefactors, and trustees. First, *research matters*. Ideas have consequences, especially when they influence collective decisions and organizational policies. When it came to the state of the academic profession and the trend toward contingent labor across the last decade, leadership was amiss, impotent, or distracted. In 1986, Bowen and Schuster warned that the U.S. professoriate was imperiled absent proactive measures, but mainstream preoccupation with the tenure debate precluded serious attention to the substantive questions they raised. Future research must relate the complex economic, political, and social forces engulfing colleges and universities to the social actors and their decisions within these organizational domains.⁵⁷

Second, *social change matters* by affecting people, organizations, resources, and directions. Colleges and universities can never exist in a social or political vacuum, so academic organizations must adapt in light of changes in the regular division of labor, technology, culture, ideology, population cohorts, and resource flows. Administrators and faculty leaders must be conversant with research on social trends to anticipate change and avoid unintended consequences. To best serve all types of professors—non-tenured, tenured,

regular, contingent, full-time, and part-time faculty members—we must develop an organizational mindset that complements our humanistic, scientific, and professional expertise.

Last, *leadership in higher education matters*, on the institutional, policy, and professional levels. The academic professions have always required leadership that balanced forces pressing for decentralization or centralization. But given today's complexities, we can no longer afford decisions made on the basis of anecdotes, or in a disjointed or haphazard fashion.⁵⁸ One observer called for vision among university presidents and governing bodies in setting a realistic agenda, and urged leaders to collaborate effectively with the disparate campus communities and interests.⁵⁹

Good advice! For faculty members, leadership requires strategic, coordinated collaboration between departments, disciplines, professional associations, and faculty unions. For policymakers, leadership requires collaboration with all parties or stakeholders. Such leadership is needed to enhance academic work in the century ahead.

NOTES

¹ Durkheim, 1966.

² Blau and Duncan, 1967. Many studies in status attainment research since the 1960s attest to this concern.

³ Jencks and Riesman, 1977.

⁴ Blau, 1994.

⁵ Bourdieu, 1988; Rhodes, 2001.

⁶ Wolfram, 2002; Axelrod and Cohen, 1999, Rhodes, 2001.

⁷ Schwalbe, 2001; Luhman, 1995.

⁸ Coleman, 1990.

⁹ DiMaggio, 2001; Lomi and Larsen, 2001; Carroll and Hannan, 2000.

¹⁰ Derber, 2000.

¹¹ Sennett, 1998.

¹² Powell, 2001.

¹³ DiMaggio, 2001.

¹⁴ Hayes and Wynyard, 2002.

¹⁵ Ben-David and Zloczower, 1962.

¹⁶ Lomi and Larsen, 2001.

¹⁷ Harrison and Carroll, 2001.

¹⁸ Macy and Strang, 2001.

- ¹⁹ My substantive inferences in this article are drawn from aggregated individual responses from a sample survey (methodological individualism).
- ²⁰ More sophisticated multivariate research will be reported elsewhere.
- ²¹ Gamson, 2001, 367.
- ²² Carley, 1995.
- ²³ These surveys relied on static measures or a cross-sectional design.
- ²⁴ Sociologist Joseph Ben-David proved this conjecture a generation ago.
- ²⁵ Rhodes, 2001, 45-57.
- ²⁶ Blau, 1994.
- ²⁷ Simon, 1995.
- ²⁸ Frank and Cook, 1995; Bok, 1993.
- ²⁹ Rifkin, 1995.
- ³⁰ This does not infer that the structure, dynamics, or outcomes of each realm are identical in substance or form, or even susceptible to the same social forces in the same degree or with the same incidence.
- ³¹ Lomi and Larsen, 2001.
- ³² Slaughter and Leslie, 1997.
- ³³ Rhoades, 1998.
- ³⁴ Fairweather, 1996.
- ³⁵ These survey data are similar to patterns in IPEDS data.
- ³⁶ TIAA-CREF and the National Opinion Research Center, 2002, 2.
- ³⁷ Few faculty respondents opposed the continued existence of tenure in higher education (Ibid., 35).
- ³⁸ The American Faculty Poll (AFP) sampled 1,511 full-time faculty members at 285 colleges and universities in spring 1999. The institutional breakdown: 97 two-year institutions, 93 private colleges, and 95 public four year institutions (with 507, 503, and 501 respondents respectively). The National Opinion Research Center, based at the University of Chicago, conducted the survey.
- ³⁹ Forty-five percent of these professors taught in institutions with enrollments between 2,000 and 8,000 students. Another 30 percent held jobs at colleges or universities with enrollments above 8,000 students. Over 86 percent of respondents were white, with twice as many men in the sample than women. Two-thirds of faculty were between 40 and 59 years old. About 32 percent of sampled faculty held appointments in the sciences or engineering, 24 percent in the humanities, and 14 percent in the social sciences.
- ⁴⁰ TIAA-CREF and the National Opinion Research Center, 2002, 32.
- ⁴¹ Ibid., 36-37.
- ⁴² Ibid., 30.

- ⁴³ Ibid., 39-41.
- ⁴⁴ Hendrickson, 2002, 1.
- ⁴⁵ Ibid., 6.
- ⁴⁶ Ibid.
- ⁴⁷ Collective bargaining, suggest Klaff and Ehrenberg, contributes to higher salaries for staff as well as faculty (2002, 1-13).
- ⁴⁸ Lane, 2002,
- ⁴⁹ Ibid., 6.
- ⁵⁰ For example, Lane identified a ten percent increase in the percentage of part-time faculty since 1987 (2002, 6).
- ⁵¹ United States Department of Education, 103.
- ⁵² National Education Association, 2001b, table 1, p. 1.
- ⁵³ Trower and Chait, 2002.
- ⁵⁴ Ibid.
- ⁵⁵ Nearly 52 percent of faculty members under age 35 worked part-time; so did 45 percent of faculty between 65 and 69. See National Education Association, 2001b, 1.
- ⁵⁶ Faculty diversity is increasing as turnover from retirements creates opportunity and as colleges use new recruitment strategies to fill these openings.
- ⁵⁷ Wolfram, 2002; Axelrod and Cohen, 1999.
- ⁵⁸ Oakley and Krug, 1994.
- ⁵⁹ Rhodes, 2001.

REFERENCES

- Altbach, P. G. and T. M. Davis. (2001). Global challenge and national response: notes for an international dialogue on higher education. In J. H. Ballantine and J. Z. Spade (eds.), *Schools and society*. Belmont, Calif.: Wadsworth/Belmont, 439-444.
- Axelrod, R. and M. Cohen. (1999). *Harnessing complexity*. New York: Free Press.
- Ben-David, J. and A. Zloczower. (1962). "Universities and academic systems in modern societies." *European journal of sociology* 3, 45-84.
- Blau, P. (1994). *The structural context of opportunities*. Chicago: University of Chicago Press.
- Blau, P. and O. D. Duncan. (1967). *The American occupational structure*. New York: Wiley.
- Bok, D. (1993). *The cost of talent*. New York: Free Press.
- Bourdieu, P. (1988). *Homo academicus*. Stanford: Stanford University Press.
- Bowen, H. and J. Schuster. (1986). *American professors: A national resource imperiled*. New York: Oxford.

- Bradley, W. J. and K. C. Schaeffer. (1988). *The uses and misuses of data and models*. Thousand Oaks, Calif.: Sage.
- Carley, K. M. (October 1995). Computational and mathematical organization theory: Perspective and directions. *Computational & mathematical organization theory*, 1 (1), 39-56.
- Carley, K. and M. Prietula. (1994). *Computational organization theory*. Hillsdale, N.J.: Erlbaum.
- Carroll, G. and M. Hannan. (2000). *The Demography of corporations and industries*. Princeton, N.J.: Princeton University Press.
- Clark, P. F. (2000). *Building more effective unions*. Ithaca, N.Y.: Cornell University Press.
- Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, Mass.: Harvard University Press.
- Derber, C. (2000). *Corporation nation*. New York: St. Martin's Griffin.
- DiMaggio, P. (ed.). (2001). *The twenty-first century firm*. Princeton University Press.
- Dougherty, K. J. (2001). The community college: The impact, origin, and future of a contradictory institution. In J. H. Ballantine and J. Z. Spade (eds.) *Schools and society*. Belmont, Calif.: Wadsworth/Belmont, 373-381.
- Durkheim, E. (1966). *The division of labor in society* (3rd ed.). New York: Free Press.
- Epstein, J. M. and R. Axtell. (1996). *Growing artificial societies*. Cambridge, Mass: MIT Press.
- Fairweather, J.S. (1996). *Faculty work and public trust*. Boston, Mass.: Allyn and Bacon.
- Frank, R. and P. Cook. (1995). *The Winner-take-all society*. New York: Free Press.
- Gabriel, Y., S. Fineman, and D. Sims. (2000). *Organizing and organizations*. London: Sage.
- Gamson, Z. (2001). The stratification of the academy. In J. H. Ballantine and J. Z. Spade (eds.), *Schools and society*. Belmont, Calif.: Wadsworth/Belmont, 367-372.
- Gilbert, N. and K. G. Triotzsch. (1999). *Simulation for the social scientist*. Philadelphia: Open University Press.
- Harrison, R. and G. Carroll. (2001). Modeling culture in organizations: Formulation and extension to ecological issues. In Lomi, A. and E. R. Larsen (eds.). *Dynamics of organizations*. AAAI Press, 37-62.
- Hayes, D. and R. Wynyard. (2002). Resisting McUniversity, in Ritzer, G. (ed.) *McDonaldization: The reader*. Thousand Oaks, Calif.: Pine Forge Press, 116-125.
- Hendrickson, R. (2002). Nonstandard work in higher education. Unpublished paper presented at the Education International, Higher Education Conference, Montreal.
- Jencks, C. and D. Riesman. (1977). *The academic revolution*. 2nd ed. Chicago: University of Chicago Press.
- Klaff, D.B. and R.G. Ehrenberg. (April 2002). Collective Bargaining and Staff Salaries in American Colleges and Universities. Working Paper 8861. Cambridge, Mass: National Bureau of Economic Research.
- Lane, K. (April 15, 2002). On part-time faculty. "Only partway there." *Community college week*, 7 (2), 6-9.
- Levine, A. (2001). The soul of a new university. In J. H. Ballantine and J. Z. Spade (eds.). *Schools and society*. Belmont, Calif.: Wadsworth/Belmont, 487-489.
- Lomi, A. and E. R. Larsen (eds.). (2001). *Dynamics of organizations*. Menlo Park, Calif.: AAAI Press.
- Luhmann, N. (1995). *Social systems*. Stanford, Calif.: Stanford University Press.
- Macy, M. and D. Strang. (2001). Dedicated followers of success: A computational model of fashionable innovation. In Lomi, A. and E. R. Larsen (eds.). *Dynamics of organizations*. AAAI Press, 93-118.
- National Educational Association, Higher Education Research Center. (June 2001a). *Update: Tenure*. 7 (2). Washington, D.C.: NEA Publications.
- National Educational Association, Higher Education Research Center. (September 2001b). *Update: Part-time faculty*. 7 (4). Washington, D.C.: NEA Publications.
- Oakley, E. and D. Krug. (1994). *Enlightened leadership*. New York: Simon and Schuster.
- Piel, G. (2001). *The age of science*. New York: Basic Books.
- Powell, W. (2001). The capitalist firm in the twenty-first century: Emerging patterns in western enterprise. In P. DiMaggio (ed.), *The twenty-first century firm*. Princeton, N.J.: Princeton University Press, 33-68.
- Rhoades, G. *Managed professionals*. (1998). Albany, N.Y.: State University of New York Press.
- Rhodes, F. T. (2001). *The creation of the future*. Ithaca, N.Y.: Cornell University Press.
- Rifkin, J. (1995). *The end of work*. New York: Tarcher/Putnam.
- Ritzer, G. (2000). *The McDonaldization of society*. Thousand Oaks, Calif.: Pine Forge Press.
- . (2002). *McDonaldization: The reader*. Thousand Oaks, Calif.: Pine Forge Press.
- Schwalbe, M. (2001). *The sociologically examined life*. Mountain View, Calif.: Mayfield.
- Sennett, R. (1998). *The corrosion of character*. New York: W. W. Norton.

- Simon, H.A. (July 1995). Organizations and markets. *Journal of public administration research and theory* 5 (3), 273-294.
- Slaughter, S. and L. L. Leslie. (1997). *Academic capitalism*. Baltimore: Johns Hopkins University Press.
- Stinchcombe, A. L. (2001). *When formality works*. Chicago: University of Chicago Press.
- TIAA-CREF and the National Opinion Research Center. *The American Faculty Poll*. New York and Chicago, 2000.
- Trower, C. and R. P. Chait. (March-April 2002). Faculty diversity: Too little for too long. *Harvard magazine*. 33-37, 98.
- United States Department of Education. National Center for Education Statistics. (2002). *The condition of education 2002*. Washington, D.C.: author.
- United States Department of Education. (1999). *National Study of Postsecondary Faculty*. Washington, D.C.: author.
- Von Neumann, J. and O. Morgenstern. (1967). *Theory of games and economic behavior*. New York: Wiley.
- Williamson, O. E. (1975). *Markets and hierarchies*. New York: Free Press.
- Wolfram, S. (2002). *A new kind of science*. Champaign, Ill.: Wolfram Media.