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ABSTRACT

This annual compilation offers six articles on the history of higher education. In the first article, "The Historical Matrix of American Higher Education," Roger L. Geiger provides an overview of the history of American higher education. Following it, E. D. Duryea, Jurgen Herbst, and W. Bruce Leslie comment on his hypothesis which identifies eight "generations" in higher education from 1637 to World War II. The next paper is by Geraldine Joncich Clifford and is titled "No Shade in the Golden State: School and University in Nineteenth-Century California." It analyzes the complex relationship between the University of California and its environment, including demographic, economic, and political forces. In "Conflict and Community in Soviet Institutes of Higher Education, 1921-1928," Peter Konecny examines the relationship between the communist party, state educational apparatus, and local leaders of higher education in Leningrad during the years of the New Economic Policy. Next, Jurgen Herbst in "Translatio Studii: The Transfer of Learning from the Old World to the New" looks at the history of higher education in North America, prior to the American Revolution. Carol Everly Floyd, in "Centralization and Decentralization of State Decision Making for Public Universities, Illinois 1960-1990," considers the forces that dictated the complex "balance of power" and "system of systems" approaches to the governance of public higher education in Illinois. The last article, "The Not-So-Old-Time College" by Roger L. Williams, is a review essay discussing two books--"Wesleyan University, 1831-1910" by David Potts and "Gentlemen and Scholars" by W. Bruce Leslie. (Individual papers contain references.) (DB)

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On the cover: Fred Lewis Pattee, the nation's first Professor of American Literature, and students in the library of Old Main, The Pennsylvania State University, c. 1900. *Courtesy of* The Pennsylvania State University Archives.

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The *History of Higher Education Annual* welcomes manuscript contributions for consideration in future volumes. Manuscripts should be submitted in triplicate, typed double-spaced (including quotations, footnotes, and references) on 8 1/2 x 11 paper, with ample margins. Authors should follow the Chicago Manual of Style 13th edition. The author's name, affiliation, and telephone number should appear on a separate cover page to insure anonymity in the reviewing process. Manuscripts should be submitted to: Dr. Roger Geiger, Editor, *History of Higher Education Annual*, The Pennsylvania State University, 403 South Allen Street, Suite 115, University Park, PA 16801-5202.

Introduction to Volume Twelve

HAROLD S. WECHSLER
University of Rochester

THIS VOLUME MARKS A MAJOR TURNING POINT in the history of this journal. Beginning with the next issue, Roger Geiger and Roger Williams, both of The Pennsylvania State University, become the *Annual*'s editors. Alan Karp and I relinquish our duties grateful to our editorial board for unwavering support, to our colleagues who submitted their work for publication consideration and who responded thoughtfully to our requests for evaluation of submitted articles, and to a loyal readership that followed the peripatetic *Annual* on its sojourns around western New York and the Midwest. The *Annual*, has justified the faith of its board, authors, and readership by adhering scrupulously to criteria of excellence in publishing significant articles. Roger Geiger and Roger Williams will further strengthen the journal by providing a more permanent home and by bringing their wisdom and erudition to the editorship.

The current issue uses the occasion of this transition to present a forum on the state of our field. Incoming editor Roger Geiger has contributed an overview of the history of American higher education, and three members of the editorial board comment on his generational hypothesis. This issue also includes another synthetic statement—Jurgen Herbst's essay on the history of higher education in North America, prior to the American Revolution.

Two articles in this year's *Annual* discuss the relationship of the states to the development of American higher education. Geraldine Clifford analyzes the complex relationship between the University of California and its environment, including demographic, economic, and political forces. Carol Floyd looks at the forces that dictated the complex "balance of power" and "system of systems" approaches to the governance of public higher education in Illinois.

Center and periphery is also the theme of Peter Konecny's essay. Based on documents in recently opened communist party archives in Leningrad, the article carefully examines the relationships between the communist party, state educational apparatus, and local leaders of higher education in Leningrad during the years of the New Economic Policy.

Last, the *Annual* features an essay review of two important new books, *Wesleyan University: A History*, by David Potts and *Gentlemen and Scholars*, by W. Bruce Leslie. The reviewer, Roger Williams, demonstrates the insight and perceptiveness that he brings to the *Annual* editorship.

Two final notes: The *Annual* was fortunate to have a talented group of editorial assistants, including Jeannie Sullivan, Kathy Button, Ann McBurney, Pat Terando, Mary Bucholtz, and Danielle Crawford. Each assistant became an expert on journal

publication, including editorial work, production, and subscriptions, and brought patience and good humor to a position that demanded both qualities in abundance.

The editorial board decided to mark the transition to a new editorial team by designating Edwin Duryea, Alan Karp, and Joan Burstyn "Founding Editors." The board is grateful for the high standards the founders established for the *Annual*, and for their continued interest and support.

The Historical Matrix of American Higher Education

ROGER L. GEIGER
The Pennsylvania State University

THIS ESSAY IDENTIFIES AND CHARACTERIZES relationships, broadly speaking, among knowledge, institutions, and constituents that evolved during the history of American higher education. The central hypothesis is that American higher education changed fundamentally approximately every generation, or 30 years. This hypothesis arose empirically—from reflection upon the growing scholarly corpus—rather than from a metahistorical theory. Change in higher education, or institutional systems in general, tends to be gradual and to reflect evolving internal forces. But wars—Marx's locomotive of history—or other external events often become turning points—the occasion for major readjustment. Symbolic events can also mark transitions by altering prevailing mentalities concerning higher education. In either case, the higher education system had a different feel or character shortly afterward than it had shortly before.

This essay outlines the curriculum, effects on students, and the array of institutions for eight generations of American higher education, from the founding of Harvard to World War II. Institutions and their faculty members screen the extant state of knowledge for certified acceptance into the curriculum, which, in turn, has an implied relationship toward later utilization. The phrase "origins and destinations" frames the place of higher education in the lives of students.[1] The expansiveness of American higher education implied broad and diverse student *origins*. *Destinations* are, perhaps, more important. Expectations about destinations motivated college attendance, and inspired crucial interventions by third parties, including governments, churches, foundations, and individuals. The college experience lies between these origins and destinations. Last comes the institutional order—the organization and distribution of higher education institutions.[2]

This heuristic conceptual scheme is not meant to exclude any factor that impinged on higher education, but instead highlights features for monitoring change. The depictions of the eight generations determine the scheme's worth. They must ring true with events and conditions in their respective historical eras and prove useful for marking the milestones of historical change. Only then can the ultimate goal of this exercise be contemplated—providing a preliminary matrix for the history of American higher education that monographic studies can refine, amplify, or correct.

GENERATION ONE: REFORMATION BEGINNINGS, 1637-1740

The first three colleges in the British colonies of America, for all their uniqueness, were "schools of the Reformation."[3] Established as adjuncts of their respective churches,

Harvard, William and Mary, and Yale were also integrally related to their respective civil governments. Harvard's long head start gave it a special, settled character. Originally a true product of the Wars of Religion, Harvard evolved away from strict Calvinism in the eighteenth century. The spreading heterodoxy of Puritan society and the support of secular and mercantile elements in Massachusetts Bay turned the college into a more cosmopolitan, tolerant institution.[4] William and Mary too, after a long gestation as a Latin school, embodied the latitudinarianism of official Anglicanism rather than sectarian zeal. The Virginia gentry, planter-capitalists who governed the colony and the college, found this stance especially congenial. Only Yale preserved and cultivated the sectarian orthodoxy of the Reformation into the middle of the eighteenth century.

Some features of their origins persisted long after the Reformation era passed. Lay governance, a natural outgrowth of viewing the colleges as an emanation of the polity, endured, though the respective spheres of clerical and provincial authority were for long ambiguous. Harvard and William and Mary had a corporation and a board of overseers. A single board, originally consisting of ten Connecticut Congregational ministers, founded Yale.[5] The colleges thus reflected the religious outlook of their respective constituents. A relatively powerful college president—the embodiment of authority within, and the foremost religious and intellectual leader—emerged to complement lay authority. A "faculty" of tutors, usually recent graduates preparing for the ministry, played a circumscribed role in governance. Public subsidies, a less-enduring feature of the Reformation era, continued intermittently throughout the eighteenth century.

The college curriculum resembled the offerings of the medieval university. Its aim was to provide students with a liberal education, including facility with classical languages, grounding in Aristotle's ethics, metaphysics, and natural philosophy or science, and a smattering of general knowledge. Admission to college required some knowledge of Latin, a bit of Greek, and arithmetic. Students mastered the classical languages, particularly Latin, during the first two years, and learned philosophy, general subjects, and finally divinity in the final two years. The colleges, though lagging Europe in the sciences, offered a practical education for the seventeenth and early eighteenth centuries when learned texts were still written in Latin. The process of education was undoubtedly more valuable than the content. The collegiate way of living and the constant presence of tutors completely immersed students in a learning environment. Composing declamations and engaging in disputations inculcated an indispensable facility with language that prepared them for the oral public culture of the Colonies.

The founding documents of all three colleges stated the intention to train ministers, even though ministerial training followed upon a liberal education. Nearly two-thirds of the graduates of seventeenth century Harvard for whom occupations are known entered the ministry.[6] It is difficult to imagine a much higher figure for a commanding profession that required being "called" to a congregation. But other students were both welcome and expected. William and Mary sought to make youths "piously educated in good Letters and Manners," and Yale's founders intended to provide education "for Publick employment both in Church & Civil State."[7]

The nexus between colleges and the ministry slowly eroded during the eighteenth century. Under John Leverett (1708-1724), Harvard already possessed a clientele of young gentlemen who took scant interest in studies or piety. At William and Mary, a ministerial career required a journey to England for ordination. The college probably always catered to some extent to sons of the Virginia gentry who sought only a patina of liberal education.

Harvard took a further step away from the narrowness of the Reformation college by the third decade of the eighteenth century when Thomas Hollis created professorships in Divinity (1721) and Mathematics and Natural History (1727). The college overcame an important curricular limitation by being able to hire individuals who could specialize in a single field of knowledge. By the next generation, the colonial colleges would prefer learned professors to young tutors.

GENERATION TWO: THE COLONIAL COLLEGES, 1745-1775

The founding of the College of New Jersey (1746) broke the mold of Reformation colleges.[8] A compromise between Presbyterians and the colony of New Jersey resulted in a board of trustees with 12 ministers, ten laymen, and the New Jersey governor as ex-officio presiding officer. Rooted in the colony, the college served a wider Presbyterian constituency. Though denominational, the college tolerated other Protestant sects. The next four colleges followed the same pattern of toleration with preferment, though for somewhat different reasons. King's College (1754), an Anglican founding, had to assuage fears of institutionalizing a state religion. The College of Philadelphia (1755), successor to the academy that Ben Franklin helped to found, continued the tradition of Quaker toleration amidst religious diversity. The College of Rhode Island (1765) incorporated the Baptist belief in toleration. New Hampshire, eager to have a provincial college, enticed Eleazer Wheelock to Dartmouth (1769). Only the chartering of Queen's College (1766), by and for the Dutch Reformed community, introduced a new note at the end of the period.

Harvard and William and Mary conformed to this provincial college model. Yale, the single exception under Thomas Clap (1740-1766), demonstrated the untenability of the Reformation ideal of denominational purity. Clap's rear guard defense of Yale against the Great Awakening, against an Anglican presence in Connecticut, and finally against the Connecticut General Court ended, ironically, when he lost control of the college to rebellious students.[9]

At the end of this period, the four oldest institutions enrolled almost three quarters of American college students; the other five were relatively immature institutions.[10] The curriculum and purpose of the colonial colleges became more secular. Fewer than half of the graduates of the College of New Jersey, among the most pious of the colleges, pursued careers in the ministry. A sizable class of gentlemen, consisting of professional men and successful merchants, now existed in the small but vital urban centers of the colonies. Perhaps 40 percent of King's College students originated from that milieu; the Harvard proportion was probably higher. Students from more humble circumstances, chiefly the

sons of prosperous farmers, were more likely destined for the ministry; gentlemen's sons typically became lawyers and public officials.[11]

Curricular offerings widened in the mid-eighteenth century. Provost William Smith, for example, advocated enlarging education at the College of Philadelphia. Teachers at the College of New Jersey, a leader in curriculum, saw complete harmony between God's majesty and greater knowledge of the natural world.[12] Purchase of the famous Rittenhouse orrery symbolized the embrace of Newtonian cosmology and the pursuit of scientific subjects. Classical languages, still at the heart of the curriculum, ceased to be the languages of instruction. The curriculum devoted greater attention to moral philosophy, which emphasized present concerns. Some colleges utilized history and philosophy after 1750 to introduce greater political content.[13] Students also received more competent instruction as college teaching became a semi-permanent occupation and attracted men of genuine learning.[14]

During this generation, the colleges balanced duties to church and province, offered a richer intellectual fare, and served a slightly broader constituency. The American Revolution led college officials to contemplate a further expansion of their social role.

GENERATION THREE: REPUBLICAN EDUCATION, 1776-1800

A high degree of political consciousness within the established colleges characterized this somewhat truncated generation. The Revolution against England ignited political feelings, but the War for Independence disrupted college life, and events then moved slowly before the Constitution united the nation in 1788. During the federalist era, however, political passions rose to a crescendo at the end of the century.

The ideal for collegiate education in this period sought to join three elements. Republican education headed the list—instilling selflessness, patriotism, and virtue in the citizens and leaders of the new republic. The choice of texts, topics for student oratory, and the widespread, though unsuccessful, introduction of the study of law conveyed this outlook. Second came the advances of science and learning that occurred during the Enlightenment. Indeed, these years mark the zenith of enlightenment influence in American colleges. Third was the traditional emphasis on a learned approach to religious faith. Samuel Stanhope Smith, John Witherspoon's successor as president of the College of New Jersey (1795-1812), epitomized the ascendancy and the fragility of this republican Christian Enlightenment.[15] This outlook led the colleges to accord a relatively high value to learning and led the polity to value higher education.

After independence the newly sovereign states took measures to provide for higher education for their citizens. States without colleges chartered new institutions—Maryland (1782 and 1784), Georgia (1785), South Carolina (1785), North Carolina (1789), and Vermont (1791). Elsewhere, this impulse sometimes led to controversial changes in existing colleges. Pennsylvania supplanted the College of Philadelphia with a public institution in 1779, but the two colleges merged in 1791. The University of the State of New York was intended to counter the influence of conservative Columbia.

State officials provided some financial support and served as ex-officio trustees of colleges in Massachusetts, Connecticut, New Hampshire, and New Jersey, where continuity was the rule.

After the Revolution, almost every state thus exhibited an impulse for the public provision of higher education. But these impulses everywhere failed due to a loss of public support. This—not the later period identified by Merle Borrowman—was the "false dawn" of public higher education. At the end of the eighteenth century, David Robson noted, America had no functioning model of a state college.[16]

Nor was this yet the age of the denominational college. The new colleges founded near the frontier tended to have stronger denominational ties, but they too had various kinds of entanglements with their respective states. Their political outlooks were varied and inconsistent, depending as they did upon a few transient individuals. The age of denominational colleges was in fact prepared by the dissolution of the republican Christian Enlightenment outlook at the turn of the century.

Events conspired to alter the way in which each of the three elements of this ideal were viewed. First, political opinion among the governing class polarized. The drift of events in France toward democratic excess and foreign adventurism horrified the Federalists, who dominated all the established colleges save William and Mary. The Federalist fear of the democratizing, pro-French proclivities of the Jeffersonian faction came to a head with the undeclared naval war against France (1798-1799) and the election of Thomas Jefferson (1800). Changes in the political climate left behind the Federalists and their ideal of a republic of virtue.

At the same time, the "Revolutionary Enlightenment" (Henry May's term) undermined confidence in the expansion of secular knowledge. Robespierre's deistic dictatorship may have been remote, but *The Age of Reason*, Thomas Paine's polemical attempt to discredit Christianity, sowed great apprehension. Riots and disorder forced a closing of William and Mary in 1798, a Republican institution that taught the most advanced enlightenment authors. Clerical leaders grasped the lesson, and became disenchanted with enlightenment thought. A more circumspect accommodation, the "Didactic Enlightenment" in Henry May's scheme, later incorporated worldly knowledge into a reasoned defense of Christianity.[17]

The learned clergy of the colleges reacted with vigor to these challenges to religion. But as they excoriated the skepticism lurking in enlightenment thought, they also jettisoned the toleration and openness to new knowledge that had been there as well. They and their institutions adopted a fearful, defensive posture. As with federalism in politics, they were left to defend the religious predilections of an increasingly isolated upper class. Ironically, the democratic trend at this juncture began to turn decisively in support of religion, but in this case it was the religion of the heart, not the head. In this, as in other respects, the implications of the dissolution of republican education were realized in the following decade.

GENERATION FOUR: THE RETROGRESSION, 1800-1830

Richard Hofstadter described the evolution of American colleges after 1800 as a "Great Retrogression." His indictment detailed the declining presence of Enlightenment thought, a dissipation of resources caused by the proliferation of non-viable denominational colleges, and debilitating denominational rivalries.[18] Subsequent scholarship bolstered some of Hofstadter's points but demolished others, particularly his reliance on Donald Tewksbury's count of non-viable colleges.[19] Did the colleges actually regress or did they merely "mature" more slowly than Hofstadter would have wished? A shriveling of interest in new ideas, withdrawal of support from the polity, and widespread institutional debility prevailed chiefly during the first two decades of the century, but most certainly did *not* extend for 60 years until the Civil War.

Steven Novak sees the student riots that occurred from the end of the century to the next decade as the decisive cause of this stagnation. College leaders shifted the curricular emphasis back toward the "safe" ancient languages that promoted behavioral, as well as mental, discipline. But, Novak concludes, "having embraced [this] curriculum for the wrong reasons—as a bulwark against dangerous ideas—academics were never able to bring it to life."[20]

A denatured approach to the classics that emphasized form over content denoted the old-time college curriculum. Interspersed general education courses covered everything from chemistry to political economy. The capstone of this liberal education was moral philosophy, based on a watered-down version of Scottish common sense philosophy, which provided reasoned underpinnings to Christian doctrines. This framework permitted considerable flexibility: more or less Latin and Greek, for example; possibly Hebrew; various general education topics and texts; elective courses, most often in modern languages. Associated medical or law departments might offer optional lectures in some colleges. After 1820, colleges began to expand science offerings, and to offer civil engineering.[21] But the ends remained the acquisition of mental discipline through drill in the ancient languages, broad, rather than deep or advanced knowledge, and proper—according to the denomination—understanding of Christianity.

The institutional base of higher education palpably weakened during the first two decades of the nineteenth century. The fortunes of individual colleges varied considerably over time, but infirmities were conspicuous during these years. Princeton reached low ebb following the riot of 1807; Rutgers, Dickenson, and Cumberland colleges closed; while Columbia, Williams, and William and Mary were in dire straits. Bernard Bailyn described the Harvard regime as dysfunctional.[22] By withdrawing most support from their earlier initiatives, the states left the colleges in a debilitated condition. Enrollment ratios for white, college-age males increased by less than one in 1,000 for these years, and just 16 viable institutions opened in the first 20 years of the century, according to Jurgen Herbst's count. The average age of entering students reached a nadir early in the century—15 years old at Harvard; less at Columbia and Pennsylvania.[23]

Trends that buffeted the sponsoring denominations adversely affected the colleges. The founding of theological seminaries, for example, diminished a distinctive colle-

giate function, even if the seminaries opened another channel for intellectual development.[24] Recurrent revivals during the Second Great Awakening brought welcome bouts of piety to many campuses, but caused turmoil within the organized churches. The Presbyterians began this period by cooperating with Congregationalists in Christianizing the newly opened Northwest Territories, but soon became more insular, factionalized, and contentious. The Middle South—where Hofstadter drew his examples of denominational rivalry—witnessed particularly bitter strife.[25]

The proliferation of colleges, which Hofstadter also deplored, nevertheless occurred largely after 1820. During that decade, the colleges, in fact, exhibited renewed dynamism. A surge of college foundings in recently settled regions, especially the Midwest, began in the 1820s. These foundings peaked first in the 1830s and again in the 1850s, and were thus more typical of the succeeding generation.[26] The dynamism of the 1820s is perhaps better reflected by the first serious challenges to the hegemony of the old-time college. The University of Virginia was Thomas Jefferson's ambitious attempt to found the nation's first true university. The ferment of reform went beyond this sui generis case. Critics, noting the collegiate obsession with dead languages, the neglect of practical subjects and science, and the continued unruliness of apparently disgruntled students, implemented specific reforms in the middle of the decade. George Ticknor, after a student insurrection at Harvard, reformed instruction in modern languages, offering advanced courses outside the rigid boundaries of the separate classes. Eliphalet Nott created a parallel course for a bachelor of science degree at Union College (1828). Amherst's Jacob Abbott implemented a similar parallel course upon recommendation of a faculty report. James Marsh tried to divide the University of Vermont into departments and allow students to take partial courses as they wished. But outside of the Hudson Valley, few reforms endured. Ticknor's and Nott's achievements remained isolated successes; the University of Virginia proved an incongruous setting for the sons of the planter aristocracy; and both Abbott and Marsh were completely frustrated.[27] Instead, the reforms provoked a magisterial defense of the old-time college—the Yale Report of 1828.

The Yale Report was addressed to the Connecticut Assembly, which had responded to student riots by raising questions about the classical curriculum.[28] In defense, the Report defined first the ends of a college education and then the means. The purpose was to provide a liberal education as preparation to later professional training. Its intent was above all to provide the discipline of the mind, and only secondarily the "furniture." As for the means, it maintained, perhaps less cogently, that the classical languages were the ideal vehicle for instilling mental discipline, culture, and taste. From this perspective the Report was able to argue that all other forms of education—for practical ends, advanced learning, or partial courses—should take place in other types of schools. The singular contribution of the Yale Report was thus to define a narrow and focused mission for the old-time college—laying the foundation for later learning, not providing that learning itself. This position was readily defended against contemporary criticism, but the price was the insularity of the old-time college as a social institution.

The Yale Report of 1828 was used to legitimize the old-time college throughout the antebellum period. But the persistence of the old-time college drew upon deeper strengths than the arguments of Jeremiah Day and James Kingsley. Furthermore, the genre had different histories on the eastern and western sides of the Appalachians. In the East, the old-time college generally preserved its narrow focus on preprofessional, liberal education, despite mounting clamor for reform. In the West, the old-time college was a loose model that covered numerous permutations of the classical ideal. There the dominant mode was dynamic growth in the number of institutions.

Colleges proliferated in territories that had only short years before been considered frontier. In 1820, colleges were virtually nonexistent in the Southwest and Midwest, but these sections contained 59 percent of the colleges and 43 percent of students in 1860. According to Colin Burke, these institutions need to be viewed as "multi-level, multi-purpose institutions," which served the basic need for educational upgrading for their localities. The foundings were largely the work of local civic boosters, anxious to enhance their town's cultural and economic standing. The denominations, given their proselytizing impulse, generally cooperated. These characteristics were also shared by many of the newer foundings on the eastern side of the Appalachians.[29]

Western colleges undertook notable experiments—manual labor colleges, admission of women—aimed at increased student access. Pedagogically, though, they faithfully replicated the old-time college and the classical curriculum. Denominational sponsorship and clerical leadership—often from Yale or Princeton graduates—made this replication a natural course. Then too, Western colleges could not have afforded alternatives, if any had existed. Western colleges in 1860 averaged about 56 students (compared with 174 in New England). Their students, moreover, were far from wealthy.[30] Limited resources made feasible only the familiar, predigested, socially sanctioned classical curriculum.

The University of Michigan, under Henry Tappan (1853-1863), demonstrated academic possibilities, absent penury and clericalism. Relatively generous funding from the state permitted Tappan to make the second attempt to realize an American university.[31] Tappan instituted a bachelor of science curriculum, added a large law school in addition to an already flourishing medical department, built an observatory and hired a German Ph.D. as astronomer, and created an earned master's degree. The university was a successful institutional gambit—the largest institution in the country in 1860, counting professional students. But Tappan's fate showed the latent force of the *vox populi* in the egalitarian Midwest. Hectored by a savage press, disdained by the denominations, Tappan was ousted by a vindictive rump of the Regents in what amounted to a coup. Reform was stilled for a decade, but not reversed. Michigan remained one of the country's most progressive institutions.

The prestige of the most venerable colleges and the patronage of the small but crucially important professional class made the hegemony of old-time colleges more difficult to dislodge in the East.[32] The reform impulse remained strong even after the

ferment of the late 1820s. The University of the City of New York (founded in 1832) offered a parallel scientific course and provided for awarding master's degrees. But a clear status differential was evident between the classical and scientific degrees, and curricular innovations enticed few additional students. In 1838, penury forced the dismissal of eight professors, including Henry Tappan, and the university became little different from other colleges.[33]

Francis Wayland, president of Brown (1827-1856) and the era's most egregiously unsuccessful reformer, might well have noted this failure. Wayland accurately diagnosed that the old-time college catered only to the professional class and furnished students with only a preprofessional education—just the narrow focus advocated in the Yale Report. Practitioners of industry and commerce, then transforming the American economy, went entirely neglected. However apt the diagnosis, Wayland offered a faulty prescription. He replaced the old curriculum with modular courses of one-to-two years in traditional and modern subjects. The appeal to the new class, however, largely attracted poorly prepared students, thus alienating the faculty; failed to pay for itself, thus violating Wayland's own economic strictures; and discouraged Brown's traditional clientele, thus threatening the institution's future. Wayland's clearly disastrous approach—incremental reforms might have achieved more—revealed the hidden resilience of the old-time college.[34]

The most successful eastern alternative avoided direct conflict with the old-time college. Yale's Sheffield Scientific School evolved over a decade from a few extracurricular courses into a department devoted to both scientific and advanced subjects. Yale then specified a "select course," which resembled the parallel scientific course rejected by the 1828 Report. No matter the Sheffield School and the select course existed quite apart from Yale College, where mental discipline and the classics reigned unchallenged. Most large Eastern colleges adopted separate courses to incorporate science and engineering subjects, but none achieved even the modest success of Sheffield before 1860.[35]

The old-time college still dominated American higher education at the outbreak of the Civil War, but the rate of innovation presaged new departures. At issue was whether they would find homes inside or outside of the colleges.

GENERATION SIX: NEW DEPARTURES, 1860-1890

The years from the Civil War to 1890 were the fulcrum of the evolution of American higher education. Never before and never since have such an abundance of new departures been not merely proposed but brought into corporeal existence. Laurence Veysey identified this period as the scene of an ephemeral struggle between three overriding conceptions of higher education—utility, research, and liberal culture.[36] In addition, however, new constituencies entered college—the "industrial classes," African-Americans, and women—at first predominantly through their own separate institutions.

Adumbrations of these developments can be found before 1860. Advanced agricultural education was given by the Farmers' High School in central Pennsylvania, the

People's College in Havana, New York, and institutions in Michigan, Maryland, and Iowa. Many institutions taught civil engineers. Ashmun Institute (founded 1854: later Lincoln University) and Wilberforce University (founded 1856) provided college education for free African Americans. Female seminaries compensated somewhat for the exclusion of women from almost all colleges.

Three questions lay beneath the many calls for utilitarian instruction: what was the actual demand among the industrial classes for practical higher education; what kind of curriculum would be offered; what would be the relation of the new institutions to the classical college? Passage of the Morrill or "Land-Grant" Act (1862) broke the cake of custom and determined the shape of the new utilitarianism, less by its terms than by its existence.[37]

The industrial classes had only sparse enthusiasm for agricultural or mechanical education. True, well-publicized Cornell attracted the largest entering class in the nation, but only 10 percent of these students, with their mixed aspirations and aptitudes, eventually graduated. More typically, Purdue expected 200 students when it opened in 1874, and built a state-of-the-art dormitory for 120. But only 39 students, mostly locals, appeared for the entrance examination, and the faculty deemed just 13 prepared for college study.[38] Preparatory departments overshadowed collegiate ones in land-grant colleges outside New England. After a slow start, enrollment in the mechanic arts (engineering) grew in the 1880s and then accelerated after 1890, but matriculants in agriculture remained few and far between. Reformers fundamentally misjudged the nexus between farming and advanced education.

Engineering exhibited the ambiguity surrounding a practical curriculum as adherents debated the opposing models of "shop culture" and "school culture." Adherents of the first approach, like the Worcester Free Institute of Industrial Science and the Georgia School of Technology, fitted students for machine shops through on-site training. MIT and later Cornell, on the other hand, emphasized mathematics, basic science, and experimental laboratories to train engineers to design and supervise machinery. The rise of electrical engineering may have assured the ascendancy of the school culture, but only at the end of this generation. Student-run college farms occupied the same equivocal position as the student machine shop in a similar conflict in agricultural education. The Hatch Act (1887), which created Agricultural Experiment Stations, tipped the balance towards the scientific study of agriculture.[39]

The land-grant colleges neither met an exigent popular demand, nor appreciably democratized higher education.[40] Had they depended on the market, many colleges undoubtedly would have failed. But the circumstances of their beginnings, which gave them an assured, if meager, income and an implicit relationship with their respective states, sustained the colleges through sickly infancy—long enough, in fact, for social and economic conditions to catch up to premature expectations. The Second Morrill Act (1890) gave the land-grant colleges annual federal subsidies, a crucial advantage just as universities entered their most dynamic era of growth.

The first Morrill Act nevertheless stipulated the most important precondition for utilitarian education—establishment of "at least one *college*" that would teach these subjects "without excluding other scientific and classical studies."[41] Continental Europe, and Yale for that matter, separated modern languages and useful subjects from classical and theoretical studies in different institutions or levels. But in the U.S., the progeny of the industrial and professional classes would eventually study in the same institution. Since every state complied with the Morrill Act, the land-grant college became a powerful precedent that soon melded with the university.

Despite the salience of the Morrill Act, these years were characterized far more by private initiatives and, particularly, singular acts of philanthropy. This generation increased the number of higher education institutions from roughly 200 colleges in 1860 to almost 1,000 by 1890.[42] Morrill Act progeny were a small, though vital, segment of this institutional flood, followed by 16 additional historically black colleges after the Second Morrill Act. Most new colleges were "targeted" liberal arts institutions, aimed at students in underserved denominations or geographical areas. Gifts of hitherto unprecedented size, in contrast, helped to establish a set of institutions that sought to fill lacuna in American higher education. The gifts of Matthew Vassar, Henry Wells, Sophia Smith, and Henry Durant created colleges for women between 1861 and 1875. Those of Ezra Cornell and John Purdue made land-grant colleges far more effective. Trustees of estates established Stevens Institute of Technology and Johns Hopkins University. The most spectacular foundings, after Johns Hopkins—Clark and Stanford Universities and the University of Chicago—marked the end of this era.[43]

The American university is the most enduring legacy of these multifarious developments, even though its ascendancy over American higher education became the dominant feature during the next generation. Charles Eliot said in 1869 that no university yet existed in the United States. Daniel Coit Gilman, G. Stanley Hall, David Starr Jordan, and William Rainey Harper each independently attempted to invent a university, but prior to 1890 uncertainty persisted about the form of this new institution.

The chief conundrum was the relationship between advanced learning, or graduate education, and the American college. Gilman would have entirely dispensed with collegiate education. He bowed to his trustees, but undergraduates nevertheless were a distinct minority at the new Hopkins. These undergraduates, ironically, became the chief source of graduate students, and over time their paucity limited the university's development. G. Stanley Hall outmaneuvered his university's benefactor in making Clark a pure graduate university.[44] But his deviousness was self-defeating: American society had scant use for the institution he envisioned.

The paradigmatic American university instead evolved at the country's paramount institution. Charles W. Eliot assumed the Harvard presidency in 1869 with a clear sense of the changes needed in the college and professional schools. He instituted the elective system to replace recitations and the classical curriculum with "true learning." It took Eliot a decade and a half to displace the old regime; by then the classical curriculum was in retreat at most other Eastern colleges. Eliot, simultaneously attacking the

decadence of the law and medical schools, replaced practitioner-teachers with learned, full-time faculty; implemented a mandatory curriculum; and eventually defined professional education as requiring a bachelor's degree.

Eliot's instincts were less sure when it came to graduate education. But the elective system allowed him to appoint a distinguished faculty, capable of scholarship, research, and advanced instruction. In 1890 the scientific school and the college faculty merged into the faculty of arts and sciences. The Graduate School of Arts and Sciences was its other face. Eliot felt that Harvard was "now well on the way to the complete organization of a university in a true sense."[45] Indeed, it was. The instruction of large numbers of undergraduates would support a numerous, specialized faculty who would also teach graduate students. Not even William Rainey Harper could devise anything better. The more vigorous state universities, about to embark upon explosive development, also adopted this model. The next generation witnessed the efflorescence of this powerful engine of mixed purposes.[46]

GENERATION SEVEN: GROWTH AND STANDARDIZATION, 1890-WORLD WAR I

The character of growth in American higher education changed pronouncedly around 1890. During the previous generation, enrollment growth was absorbed by an increasing number of institutions, but after 1890 the net number of institutions remained stable while larger numbers of students swelled enrollments. Between 1870 and 1890, the average institution grew from ten to 16 faculty members, and from 98 to 157 students. Twenty years later, though, average faculty size was 38, and enrollments more than doubled to 374. Moreover, the largest institutions led this growth. The ten largest universities averaged near 2,000 students in 1895; 4,000 in 1910, and 5,000 in 1915.[47] The institutional order was anything but stable. College founding continued unabated into the 1890s and then tapered off somewhat. Colleges that failed to grow were threatened with extinction, and many institutions closed during these years, though we know little of this phenomenon. These demographic realities help to explain the imperatives of standardization during this era. Academic standards were provided by the ascendant universities. A second, more subtle standard—the collegiate ideal—spread like a contagion. New extramural entities, including foundations and institutional associations, then furthered imposition of these standards.

The standardization of the universities after 1890 is the central theme of Laurence Veysey's classic study. Veysey's deliberate emphasis on the cerebral aspects of this subject, however, may slight some mundane features, largely caused by similar adaptations to a common environment. The rapid growth of universities resulted from the growth of their several parts. In different combinations, they added units in engineering, business, education, and smaller professional specialties (mining, forestry, dentistry, pharmacy, veterinary medicine, art, architecture, or music) in addition to schools for graduate study, medicine, and law. Universities became compartmentalized institutions whose parts shared little common intellectual territory. Administra-

tive structures served these autonomous units, especially to secure ever more resources to fulfill their needs.[48]

By 1908 it was possible to delineate the "standard American university."[49] This university admitted only bona fide high school graduates; provided students with two years of general education and then two years of advanced or specialized courses. It offered doctoral training in at least five departments, appropriately led by Ph.D.'s, and possessed at least one professional school that admitted students after two years of college work. Edwin Slosson, the first to comment on this phenomenon, added a list of non-compulsory standard items: summer sessions, extension work, correspondence courses, a university press, and the publication of learned journals.[50] Idiosyncrasies faded away in this environment: Eliot's unconstrained elective system and his proposed three-year bachelor's degree; John Burgess's special graduate course at Columbia; and probably the majority of Harper's multitude of innovations. Outliers moved closer to the norm as Johns Hopkins increased its undergraduate enrollment and lengthened its course to four years, or as MIT established units for research and graduate education.

The universities, in turn, generated standards for the rest of higher education, primarily by defining academic knowledge and the academic profession. Between about 1890 and 1905 the major disciplinary associations and the departmental structure of colleges and universities assumed their modern forms.[51] Scientific recognition was henceforth embodied in autonomous organizations, while universities increasingly reserved teaching positions for faculty members who contributed to their disciplines. Soon after the universities thus imposed a definition of the academic profession, faculty members organized the American Association of University Professors (1915) to champion their professional rights.[52]

The collegiate ideal, far more difficult to measure but probably more apparent to contemporaries, spread contagiously during this period. Hard-pressed after the Civil War to modernize their faculties and buildings, established colleges could only turn to their denominations—their principal source of students and capital. Denominational interest in the colleges still largely centered on the control of student behavior through discipline and piety. Denominations discouraged the growing student extracurriculum, including fraternities and athletics, and doctrinal distinctions still loomed large. David Potts has shown, for example, that Methodism at Wesleyan peaked in the 1870s and 1880s.[53] But church ties sustained few late nineteenth-century colleges. Neither the churches, nor faithful old grads who became ministers or teachers, could offer much succor.

During these decades, younger alumni with business careers in urban centers offered an alternate vision. These alumni appreciated the social qualities instilled by an active extracurriculum, including athletics. Their financial contributions influenced college trustees and often supported the appointment of a modernizing president. Such presidents displaced denominationalism with broad, middle-of-the-road Protestantism, galvanized student enthusiasm and alumni loyalties through intercollegiate athletics, and admitted students consciously destined for business careers who eagerly threw themselves into campus activities.[54]

The collegiate ideal developed first out of the unique traditions of the "Ivy League" schools, especially Harvard and Yale, and quickly captured the principal eastern colleges—a story chronicled by Bruce Leslie and David Potts. It soon gained importance within heterogeneous state universities as well. Older university leaders, like Charles Eliot and James B. Angell, had scant regard for collegiate practices, but the next generation of presidents—Abbott Lawrence Lowell, Arthur Hadley, and above all Woodrow Wilson—sought to amalgamate the collegiate ideal with their own solicitude for undergraduate learning. After 1890, the collegiate ideal projected clear, and increasingly effective, normative standards that governed the college experience. These standards resulted in a backlash against coeducation that produced coordinate colleges like Pembroke and Radcliff and led Wesleyan to expel its women students.[55]

New champions of standardization emerged after 1900. The Carnegie Foundation for the Advancement of Teaching was chartered in 1905 to provide pensions for college teachers, but under Henry Pritchett, it also sought to alleviate the "chaos" of the American education system. The same year, the General Education Board began to promote "a comprehensive system of higher education in the United States," by attacking "waste and confusion." Both agencies pushed for standardization. Institutions scrambled to conform to the Carnegie Foundation's stringent set of eligibility criteria for its pensions. The more subtle GEB provided matching endowment grants that forced colleges to turn to their alumni.[56] Neither required an institution to have a football team, but they validated the types of schools that did: residential colleges with strong alumni support. Departures from the collegiate norms were viewed as signs of weakness. The Carnegie Foundation dropped George Washington University in 1908 for, among other things, having too many special students—government employees taking night classes.[57]

New institutional associations strongly endorsed standardization. The National Association of State Universities defined the "standard American university." The Association of American Universities, formed to set standards for graduate education, worked closely with Pritchett and the Carnegie Foundation, and soon became, in effect, an accrediting agency for the colleges.[58]

A generation of standardizing activities helped to define the American system of higher education, even if the system remained diverse and decentralized. By World War I, American colleges and universities largely conformed to a single pattern of admissions criteria, credit-hours, course offerings, and major subjects. The large differences among institutions stemmed chiefly from the level of resources each commanded. Differences in resources would henceforth produce an increasingly steep hierarchy.

GENERATION EIGHT: HIERARCHICAL DIFFERENTIATION BETWEEN THE WARS

Higher education enrollments doubled during the 1920s, an expansion that triggered qualitative changes that Martin Trow identified as characteristic of the transition from elite to mass higher education.[59] Full-time, residential students, cultural ideals of liberal

learning and character formation, and careers in high-status professions characterized elite patterns. Mass higher education, in contrast, catered to irregular, commuting students, conveyed particular and immediately applicable knowledge, and prepared students for technical or semi-professional positions. Between the two world wars, American higher education became more explicitly hierarchical measured by resource levels and recruitment patterns. Newer types of institutions fulfilled "mass" roles, while educational leaders discussed the need to offer qualitatively different kinds of instruction to different levels of students. The rush of events usually preceded conscious attempts at rationalization and institutionalization.

Burgeoning junior colleges, teachers colleges, and urban, service-oriented universities reflected the growth of a "mass" sector.[60] The first self-conscious junior college opened in Joliet, Illinois in 1903. Junior colleges, which proliferated in the 1920s, provided local access to higher education in sparsely populated western states as well as in cities—the forerunner of Wayne State University, for example. By 1940, these humble institutions, mostly still attached to local high schools, enrolled 11 percent of all college students, and profoundly affected thinking about the structure and function of American higher education.

The conversion of normal schools into teachers colleges also dates officially from 1903, when Ypsilanti Normal School was elevated to college status. Most conversions occurred in the 1920s, and most teachers colleges remained confined to education degrees. But as heirs to the normal schools, they provided access to higher education for a broad segment of the population, especially women.

New colleges joined existing institutions to serve a neglected urban populace. Akron's free municipal university (founded 1913) aimed to produce employable graduates for the region by offering engineering, home economics, commerce, and teaching programs. The College of the City of New York, perhaps the most renown example of a municipal college, grew to more than 24,000 students during the 1920s. Private municipal universities grew largely by creating special programs for part-time students. Part-time and summer students exceeded full-time enrollments at Boston University, NYU, Northwestern, USC, and Western Reserve in 1930. Municipal universities with large, irregular enrollments replaced research universities as America's largest higher education institutions.

The waves of mass higher education lapped the shores of traditional institutions, producing largely defensive reactions. President Ernest Hopkins of Dartmouth caused a stir when he declared that "too many young men are going to college." Abraham Flexner, probably the most vehement critic, charged that universities had become "service stations for the general public."[61] The apparent success of junior colleges inspired some educators to conclude that democratic access should extend only through the sophomore year of college. University of Michigan president Clarence Cook Little unsuccessfully sought to impose a radical winnowing between the sophomore and junior years. Robert Maynard Hutchins wanted to open liberal education to the multitude and then end it after the sophomore year, reserving advanced

study to the few. The University of Minnesota, partly to preserve its monopoly in the state, created a General College, which constituted hierarchical differentiation within a single institution. The Carnegie Foundation's 1932 report, *State Higher Education in California*, rationalized hierarchy by defining separate roles for the university in Berkeley, the regional state colleges, and the largely vocational junior colleges. This document helped to redefine the most open sector of higher education—the junior colleges—as terminal institutions.[62] Determined efforts by the leaders of higher education thus hardened the outlines of a "mass" sector that had emerged almost spontaneously.

Defining the upper reaches of American higher education also required purposeful action. This definition at once involved social origins and destinations, manner or style of attendance, and relationship with higher learning. Three criteria for elite status emerged during this period. The *collegiate ideal*—determined by student peer groups, extracurricular activities, and business world aspirations—probably attained maximum influence in the 1920s. The quality of *undergraduate learning* was a persistent concern to most colleges and to students not intoxicated by the collegiate ideal. Colleges attempted to raise their standards, while many educators extended the elusive quest for true liberal education. In universities, *advancing knowledge*, the touchstone of research and graduate education, interacted with undergraduate education in complex ways.

Financial constraints limited the ability of leading private institutions to admit students after World War I, just as the number of applicants rose. Institutions near large immigrant populations were sensitive to the impact of student social composition on their collegiate image. Columbia pioneered a form of selective admissions that used social criteria to limit the proportion of Jewish students, and Princeton, Yale, and Harvard soon adopted discriminatory procedures.[63] While selective admissions was linked with this moral blot, it was also key to fashioning elite collegiate status. Colleges shaped the peer society of students and the environment, sometimes by excluding supposedly nonconforming social groups, but also by extending student recruitment to the entire country. Colleges simultaneously became "national" rather than regional institutions, refused the weakest academic performers from among their traditional clientele, and raised somewhat the level of study. Improving economic conditions permitted the elite colleges to increase their per-student educational spending. Substantial resources henceforth backed each matriculant. Yale launched the largest endowment drive in the history of higher education (1927), promising "to make a finer, not a bigger Yale."[64]

Elite universities also invested additional wealth in more and better faculty members—scientists and scholars actively engaged in advancing knowledge. Philanthropic foundations, particularly the Rockefeller trusts, strongly assisted this development. Research conferred prestige and elite status, as well as distinction. But recognition of scholarship resided in international communities of scholars, not in individual universities. Universities could scarcely ignore this different set of imperatives. It was no paradox, then, that a Jew could be a physics professor at Princeton but not an undergraduate: universalism prevailed in the sphere of research, but not among students.[65]

The progeny of socially prominent state residents helped to develop powerful collegiate traditions at state universities. These universities featured more heterogeneous student bodies and could not match the salaries paid faculty members at the wealthiest private universities. But they developed competitive strength in research, and in graduate and professional education. The strongest state universities secured lofty positions in the implicit hierarchy of American higher education.

Numerous colleges aspired to excel in undergraduate education alone—probably the most difficult route to elite status. Swarthmore under Frank Aydelotte was one example of success. Inspired by his experience at Oxford as a Rhodes scholar, Aydelotte provided a rigorous course of study for able and motivated students through a voluntary honors program. He also progressively deemphasized facets of the collegiate ideal—sororities, fraternities, and big-time football. The costly honors program—supported by Abraham Flexner and the General Education Board—attracted academically ambitious students and made Swarthmore one of the nation's most selective colleges.[66]

Hierarchical differentiation reflected the simultaneous movement of American higher education in different directions. Elite and mass sectors received explicit definition, while seemingly contradictory developments affected access and curriculum. Virtually all high school graduates—a category that grew from nine percent to 51 percent of the age cohort between 1910 and 1940—could enroll in some form of undergraduate education. Professional and graduate education also became widely available Yet, social exclusiveness at many elite institutions increased along with nativist prejudice. This weakly meritocratic system largely mirrored prevalent social and workplace biases. Vocationally oriented programs, including the attempt to define terminal tracks, dominated the curriculum of the expanding mass sector. Yet, other reformers simultaneously attempted to fashion a true liberal education. At the same time, the implacable advancement of the academic disciplines weighed ever more heavily on the structure of college courses.

Which trend would dominate? The answer, dimly evident by the eve of World War II, became apparent during the next generation. Democratic access triumphed over social exclusiveness; the triumph of academic norms raised the stature of "mass" institutions and elite colleges became strongly meritocratic. An "academic revolution" confirmed the ascendancy of the formal curriculum.

LOOKING FORWARD

The 30 years after World War II brought revolutionary changes in the scale and incidence of American higher education. Government action, above all, transformed the institutional order. State and local authorities vastly expanded the network of public universities, colleges, and community colleges, but the federal government effected the most far-reaching changes. The G.I. Bill, the single greatest discontinuity in access to higher education, affected the entire postwar generation. Federal, need-based, student aid financed the final stage of the access revolution. Federal support for science

vastly accelerated the development of research universities and nurtured the academic revolution that conquered many other sectors. Private institutions survived the burgeoning of the public sphere by specializing their roles and by tapping available federal aid. The elite colleges of the previous generation became highly meritocratic, high-cost, high-quality institutions. The strongest colleges identified with evolving conceptions of liberal education; others offered culturally-based alternatives; and still another set of institutions found niches by providing professional credentials. American higher education, for all its day-to-day problems, attained unprecedented size, resources, breadth, and depth of learning.

Around 1975, however, substantially different changes signaled a transition to a new generation. American higher education, for the first time, exhibited no meaningful growth. The current era of the steady state is characterized by a relatively fixed institutional order, stable participation patterns, resource constraints, and curricular anomie. Historians may someday define this generation as a period of consolidation within a mature system. But Generation Ten is far from complete. The historical matrix of American higher education suggests that any number of trends could yet crystallize into distinctive dimensions of change.

Arranging historical materials into a matrix raises more questions than it answers. Which developments really mattered? When did quantitative changes produce qualitative differences? When did the incremental change vectors begin to point in different directions? Above all, how did specific events relate to larger underlying movements? Arranging the "what" and the "when" of the history of higher education into a relational context is but a prelude to the "how" and "why" questions: how did historical change occur; how did educational change relate to other social developments, and why did generations assume the identified characteristics?

NOTES

[1] A.H. Halsey, A.F. Heath, and J.M. Ridge, *Origins and Destinations: Family, Class, and Education in Modern Britain* (Oxford: Oxford University Press, 1980).

[2] "Institutional order" is somewhat simpler than "institutional fabric," used by the author in "The Institutional Fabric of the Higher Education System," *The Encyclopedia of Higher Education*, Burton R. Clark and Guy Neave, General Editors (Oxford: Pergamon Press, 1992), 1031-1047; or "institutional complex," used by Richard M. Freeland, *Academia's Golden Age: Universities in Massachusetts, 1945-1970*, (New York, N.Y.: Oxford University Press, 1992), 11 and passim.

[3] Jurgen Herbst, *From Crisis to Crisis: American College Government, 1636-1819* (Cambridge, Mass.: Harvard University Press, 1982), 1-61.

[4] Samuel Eliot Morison, *Three Centuries of Harvard, 1636-1936* (Cambridge, Mass.: Harvard University Press, 1936), 53-82.

[5] Herbst, *From Crisis*, 38-47; George W. Pierson, *The Founding of Yale: The Legend of the Forty Folios* (New Haven, Conn.: Yale University Press, 1988).

[6] Margery S. Foster, *'Out of Smalle Beginnings...': An Economic History of Harvard in the Puritan Period (1636-1712)* (Cambridge, Mass.: Harvard University Press, 1962).

[7] Herbst, *From Crisis*, 1.

[8] *Ibid.*, 82-88; Howard Miller, *The Revolutionary College: American Presbyterian Higher Education, 1707-1837* (New York, N.Y.: New York University Press, 1976), 65-75.

[9] Herbst, *From Crisis*, 66-81; Louis L. Tucker, *Puritan Protagonist: President Thomas Clap of Yale College* (Chapel Hill, N.C.: University of North Carolina Press, 1962), 232-262.

[10] Beverly McAnear, "College Founding in the American Colonies 1745-1775," *Mississippi Valley Historical Review* 42 (1952): 24-44.

[11] David C. Humphrey, *From King's College to Columbia, 1746-1800* (New York, N.Y.: Columbia University Press, 1976), 199; Morison, *Three Centuries*, 102-103; James McLachlan, "The American College in the Nineteenth Century: Toward a Reappraisal," *Teachers College Record* 80 (1978): 287-306, esp. 294.

[12] Miller, *Revolutionary College*, 82-94.

[13] But not at Yale, King's, William and Mary, or Philadelphia.

[14] Miller, *Revolutionary College*, 92-94; David W. Robson, *Educating Republicans the Colleges in the Era of the American Revolution, 1750-1800* (Westport, Conn.: Greenwood Press, 1985), 57-93; William D. Carrell, "American College Professors, 1750-1800," *History of Education Quarterly* 8 (1968): 289-305.

[15] Mark A. Noll, *Princeton and the Republic, 1768-1822* (Princeton, N.J.: Princeton University Press, 1989), 185-213, 297-299; Robson, *Educating Republicans*, 143-177.

[16] *Ibid.*, 227-253, esp. 247; Merle Borrowman, "The False Dawn of the State University," *History of Education Quarterly* 1, 2 (June, 1961): 6-22, which discusses events between 1820 and 1850.

[17] Henry F. May, *The Enlightenment in America* (New York, N.Y.: Oxford University Press, 1976); Steven J. Novak, *The Rights of Youth: American Colleges and Student Revolt, 1798-1815* (Cambridge, Mass.: Harvard University Press, 1977); Douglas Sloan, *The Scottish Enlightenment and the American College Ideal* (New York, N.Y.: Teachers College Press, 1971).

[18] Richard Hofstadter, *Academic Freedom in the Age of the College* (New York, N.Y.: Columbia University Press, 1956, 1961), 209-253.

[19] Natalie Naylor, "The Ante-Bellum College Movement: A Reappraisal of Tewksbury," *History of Education Quarterly* 14 (1974): 185-208; McLachlan, "American College"; also germane, Walter P. Metzger, "The Academic Profession in the United States," in *The Academic Profession: National, Disciplinary, and Institutional Settings*, Burton R. Clark, ed. (Berkeley, Calif.: University of California Press, 1987), 123-208, esp. 126-140.

[20] Novak, *Rights of Youth*, 166.

[21] Stanley M. Guralnik, *Science and the Ante-Bellum American College* (Philadelphia, Pa.: American Philosophical Society, 1975); Terry S. Reynolds, "The Education of Engineers in America before the Morrill Act of 1862," *History of Education Quarterly* 32 (1992): 459-482. Guralnik emphasizes the backwardness of American science in the decades before 1820, and Reynolds shows that most instruction in civil engineering took place outside of classical colleges.

[22]Noll, *Princeton*, 237-241; Novak, *Rights of Youth*, 166; Bernard Bailyn, "Why Kirkland Failed." in Bailyn et al., *Glimpses of the Harvard Past* (Cambridge, Mass.: Harvard University Press, 1986), 19-44. In contrast, Middlebury College (founded 1800) prospered during these decades and foundered in the next generation: David Stameshkin, *The Town's College: Middlebury College, 1800-1915* (Middlebury, Vt.: Middlebury College Press, 1985).

[23]Colin B. Burke, *American Collegiate Populations: A Test of the Traditional View* (New York, N.Y.: New York University Press, 1982), 116; Herbst, *From Crisis*, 249-253; Morison, *Three Centuries*, 184. Considerations of land values and land grants were at least as prominent in these foundings as educational considerations.

[24]Natalie A. Naylor, "The Theological Seminary in the Configuration of American Higher Education: The Ante-Bellum Years," *History of Education Quarterly* 17 (1977): 17-30.

[25]Miller, *Revolutionary College*, 287-293; Hofstadter, *Academic Freedom*, 238-252. The most virulent strife was often *intra*denominational rather than between denominations, as Hofstadter implies. Presbyterians increased control over their colleges after the schism of 1837 Saul Sack, *History of Higher Education in Pennsylvania* 2 vols. (Harrisburg, Pa.: Pennsylvania Historical and Museum Commission, 1963) I, 68-106, and a schism among Vermont Congregationalists seems to have touched off the decline of Middlebury (Stameshkin, *Town's College*, 126-131).

[26]Burke, *American Collegiate Populations*, 53-89.

[27]Frederick Rudolph, *The American College and University: A History* (Athens, Ga.: University of Georgia Press, 1990 [1962]), 118-130; Jennings L. Wagoner, Jr., "Honor and Dishonor at Mr Jefferson's University: The Antebellum Years," *History of Education Quarterly* 26 (1986): 155-179.

[28][Jeremiah Day and James Kingsley,] *Reports on the Course of Instruction in Yale College; by a Committee of the Corporation and the Academical Faculty* (New Haven: 1828). See also, the discussion in Guralnik, *Science and the Ante-Bellum College*, 28-33.

[29]Burke, *American Collegiate Populations*, 38; David B. Potts, "'College Enthusiasm' As Public Response: 1800-1860," *Harvard Education Review* 47 (1977): 28-42.

[30]Burke, *American Collegiate Populations*, 19, 57; Walter Metzger used the notion of "generations" of colleges to make a similar point: "Academic Profession," 180-181.

[31]James B. Turner and Paul Bernard, "The Prussian Road to University? German Models and the University of Michigan, 1837-c.1895," *Rackham Reports* (1988-1989): 6-52; Richard J. Storr, *The Beginnings of Graduate Education in America* (Chicago, Il.: University of Chicago Press, 1953), 60-65; 112-117.

[32]Ronald Story, *The Forging of an Aristocracy: Harvard and the Boston Upper Class, 1800-1870* (Middletown, Conn.: Wesleyan University Press, 1980), 34-39; Peter Dobkin Hall, *The Organization of American Culture, 1700-1900: Private Institutions, Elites, and the Origins of American Nationality* (New York, N.Y.: New York University Press, 1984). Both authors emphasize the melding of the professional and merchant classes.

[33]Storr, *Graduate Education*, 33-43.

[34]Francis Wayland, *Report to the Corporation of Brown University on Changes in the System of Collegiate Education* (Providence: 1850). Despite his ineptness, Wayland stands as a martyr for those critical of the old-time college (Rudolph, *American College*, 237-240); more critical of Wayland are David Potts, *Baptist Colleges in the Development of American Society, 1812-1861* (New York, N.Y.: Garland, 1988), 316-332, and Donald Fleming *Science and Technology in Providence, 1760-1914* (Providence, R.I.: Brown University, 1952), 31-32, 37-43.

[35] Storr, *Graduate Education*, 46-58; Robert V. Bruce, *The Launching of American Science*, 1846-1876 (Ithaca, N.Y.: Cornell University Press, 1987), 162-165.

[36] Laurence Veysey, *The Emergence of the American University* (Chicago, Il.: University of Chicago Press, 1965).

[37] The conventional land-grant history is Edward D. Eddy, Jr., *Colleges for Our Land and Time: The Land-Grant Idea in American Education* (New York, N.Y.: Harper, 1957). Important additions: Alan I. Marcus, *Agricultural Science and the Quest for Legitimacy: Farmers, Agricultural Colleges and Experiment Stations, 1870-1890* (Ames, Ia.: Iowa State University Press, 1985); and Roger L. Williams, *The Origins of Federal Support for Higher Education: George W. Atherton and the Land-Grant College Movement* (University Park, Pa.: The Pennsylvania State University Press, 1991).

[38] Burke, *American Collegiate Populations*, 71; Robert W. Topping, *A Century and Beyond: The History of Purdue University* (West Lafayette, Ind.: Purdue University Press, 1988), 78.

[39] Monte A. Calvert, *The Mechanical Engineer in America, 1830-1910* (Baltimore, Md.: Johns Hopkins University Press, 1967); Marcus, *Agricultural Science*, passim.; Williams, *Origins of Federal Support*, 97-122.

[40] Private colleges proliferated during these years (see below) and usually contained preparatory departments. Most private colleges were underenrolled and open to virtually all comers.

[41] "The Morrill Act, 1862," in *Higher Education: A Documentary History*, eds. Richard Hofstadter and Wilson Smith, 2 vols. (Chicago, Il.: University of Chicago Press), II, 568-569.

[42] *Digest of Education Statistics, 1989*, 166.

[43] The standard work merely scratches the surface of this phenomenon: Merle Curti and Roderick Nash, *Philanthropy and the Shaping of American Higher Education* (New Brunswick, N.J.: Rutgers University Press, 1965).

[44] Hugh Hawkins, *Pioneer: A History of the Johns Hopkins University, 1874-1889* (Ithaca, N.Y.: Cornell University Press, 1960); William A. Koelsch, *Clark University, 1887-1987: A Narrative History* (Worcester, Mass.: Clark University Press, 1987).

[45] Hugh Hawkins, *Between Harvard and America: The Educational Leadership of Charles W. Eliot* (New York, N.Y.: Oxford University Press, 1972); Morison, *Three Centuries*, 323-399, quote 361.

[46] Veysey, *Emergence*, passim.

[47] *Digest of Education Statistics, 1989*, 166; for universities, see enrollment figures in Roger L. Geiger, *To Advance Knowledge: The Growth of American Research Universities, 1900-1940* (New York, N.Y.: Oxford University Press, 1986), 270-271.

[48] Veysey, *Emergence*, passim; Geiger, *To Advance Knowledge*, 14-19; enrollments by professional school or department are given in Edwin E. Slosson, *Great American Universities* (New York, N.Y.: Macmillan, 1910).

[49] *Report of the U.S. Commissioner of Education, 1909*, 89.

[50] Slosson, *Great American Universities*, 99.

[51] Geiger, *To Advance Knowledge*, 30-35.

[52] *Ibid.*, 35-39; Walter P. Metzger, "Origins of the Association," *AAUP Bulletin* 51 (1965): 229-237.

[53] W. Bruce Leslie, *Gentlemen and Scholars: College and Community in the "Age of the University," 1865-1917* (University Park, Pa.: The Pennsylvania State University Press, 1992); David B. Potts, *Wesleyan University, 1831-1910: Collegiate Enterprise in New England* (New Haven, Conn.: Yale University Press, 1992), 83-117 (see review in this issue).

[54] Leslie, *Gentlemen and Scholars*; Ronald A. Smith, *Sports and Freedom: The Rise of Big-Time College Athletics* (New York, N.Y.: Oxford, 1988).

[55] Slosson, *Great American Universities*; Leslie, *Gentlemen and Scholars*; Potts, *Wesleyan*, 212-220. Geiger discusses the "collegiate syndrome" during the 1920s in *To Advance Knowledge*, 115-123. Lynn D. Gordon perceives a shift in emphasis toward extracurricular activities among collegiate women: *Gender and Higher Education in the Progressive Era* (New Haven, Conn.: Yale University Press, 1990), 34.

[56] Geiger, *To Advance Knowledge*, 45-47; Ellen Condliffe Lagemann, *Private Power for the Public Good: A History of the Carnegie Foundation for the Advancement of Teaching* (Middletown, Conn.: Wesleyan University Press, 1983), 3-53.

[57] Elmer Louis Kayser, *Bricks without Straw: The Evolution of George Washington University* (New York, N.Y.: Appleton-Century-Crofts, 1970), 204-205.

[58] Hugh Hawkins, *Banding Together: The Rise of the National Associations in American Higher Education, 1887-1950* (Baltimore, Md.: Johns Hopkins University Press, 1992), 107-110.

[59] Martin Trow, *The Transition from Elite to Mass Higher Education* (Paris, France: OECD, 1974).

[60] Much of what follows draws on David O. Levine, *The American College and the Culture of Aspiration, 1915-1940* (Ithaca, N.Y.: Cornell University Press, 1986).

[61] Geiger, *To Advance Knowledge*, 129-130; Abraham Flexner, *Universities: American, English, German* (New York, N.Y.: Oxford University Press, 1930), 45.

[62] Roland L. Guyotte, "Liberal Education and the American Dream: Public Attitudes and the Emergence of Mass Higher Education, 1920-1952," (Ph.D. dissertation: Northwestern University, 1980), 111-147; Levine, *American College*, 169-183.

[63] Harold S. Wechsler, *The Qualified Student: A History of Selective Admissions in America* (New York, N.Y.: Wiley-Interscience, 1977); Marcia G. Synnott, *The Half-Opened Door: Discrimination in Admissions to Harvard, Yale, and Princeton, 1900-1970* (Westport, Conn.: Greenwood, 1977); Geiger, *To Advance Knowledge*, 129-139.

[64] *Ibid.*, quote 206; see appendices for institutional finances.

[65] *Ibid.*, 135, 237.

[66] Frances Blanchard, *Frank Aydelotte of Swarthmore* (Middletown, Conn.: Wesleyan University Press, 1970), 150-294; Burton R. Clark, *The Distinctive College* (New Brunswick, N.J.: Transaction, 1992 [1970]), 184-232.

Responses: the Historical Matrix of American Higher Education

I. E. D. DURYEA
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ROGER GEIGER OFFERS AN INSIGHTFUL, STIMULATING format for historical analysis. I find myself comfortable with it and certainly agree with the validity of the historical periods he uses. But, as a structure for research, I have some concerns, the major one stems from what I perceive as a danger of over-segmentation. The flow of history suggests to me the importance of a blending of fundamental, long-range developments related to the evolution of western culture. This orientation directs my comments, not as a criticism but *as a matter of emphasis.*

Also, my historical endeavors go back to the Hofstadter-Veysey generation: that the early colleges persevered in *essential* form and function until the mid-1800s and that major change came during the last four decades of that century. The modern American system of higher education has come into being as a consequence of a long development closely related to the thrust of western culture. The form and substance of our present system evidences a combining of antecedents, both from Europe and this country, over time. One will benefit from attention to both universities and cultures and how they interact.

As a structure for research and scholarship, three limitations, which I perceive as inherent in Roger's proposal, give me pause for concern: scope, time frame, and context.

The limitation in scope is apparent at the outset by his three determinants, "knowledge, institutions, and constituents," which as used appear to translate into curriculum, colleges, and students. Teaching and learning are and have been central to education, but in a broader sense than the paper seems to consider. Colleges and universities, currently and historically, interact with their social environment. Each has an internal organization that emanates from its own history and from societal authorization. In other words, they are social institutions with both particular and generalized functions.

The limitation in time frame inherent in the short-term sections implies an artificial segmentation. Universities have contributed to the growth of knowledge, despite lapses during the Renaissance. The roots of contemporary social and natural science, for example, lie with Abelard's advocacy of reason as a basis for knowing faith. The nineteenth century evidences the gradual but increasing acceptance of empirical investigation and the expansion of secular knowledge, both in society and the universities. History flows from and through one generation to another, each point in time drawing from the past and influencing the future.

The limitation in context is twofold: historical and contemporary. For example, practice under Calvin at Geneva deserves attention as a critical factor in the formation of the colonial colleges and the relationships of church, state, and education, as the Puritans

explicitly recognized. Parallel examples accompany the influences of the Enlightenment and the formation of research universities. Inattention to a contemporary context tends to neglect the cultural or societal environment. Did not the early colleges respond to, more than influence, the provincial culture? Similarly, the emergence of the American state colleges and the research universities related to westward expansion, the increasing industrial character of the nation, Darwin and the growth of science, and the influence of the German universities. Veysey views "standardization" as an inevitable accommodation to specialization and the growth of knowledge and an expanding curriculum, as well as a concomitant of a more complex twentieth century industrial-based society.

Perhaps these comments can be summarized by the thought that research might fare better with a *longitudinal* rather than a *latitudinal* structure.

2. JURGEN HERBST

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I ADMIRE ROGER GEIGER'S COURAGE AND STAMINA! What an ambitious enterprise! Readers will receive the essay with admiration and gratitude. As Henry Adams wrote, "To bring order out of chaos—to make comprehensible the chaotic and apparently arbitrary." My questions deal mainly with the early period and the nineteenth century. I have no caveats concerning twentieth century developments.

I agree with generation one. How could I not, since I am associated with the concept of the schools of the Reformation. Generation two responded to diversity through the "provincial" college, a public institution that reflected and protected heterogeneity. This response to the breakdown of the reformation settlement is central to this generation.

The description of generation three is problematical. An extended period (1776 to 1819) should include the rise and the decline of republican education. This period of great turmoil and of opposing parties is better denoted by the testing, not the establishment, of "republican education." The 1819 termination signifies the Dartmouth College case—the magna carta of the old-time college—a key date and event in the history of higher education. The essay's stated dates for the third generation do delineate the real significance of these years because the fourth period is off key. That, in turn, is due to the resuscitation of Richard Hofstadter's unfortunate concept of retrogression.

I have little sympathy for calling the fourth generation "The Retrogression, 1800-1830." Were student riots a *cause* of the "retrogression?" More likely, the riots resulted from dissatisfaction with the rejection of the public college ideal as normative for higher education—the development that led to the Dartmouth case. Further, the concept of retrogression is ahistorical and anachronistic, since it takes eighteenth and twentieth century circumstances as yardsticks to judge early nineteenth century developments. Hofstadter made a faux pas; why should we repeat it?

I'd take my cue from Willard Hurst's "release of energy" to characterize the period from 1819 through the 1850s, the flush time of the "old-time college." Higher education then took on its characteristic "American" form. Responsive to the double pull of democracy—equal opportunity and meritocratic selectivity, though not necessarily at the same place—proliferating academies and colleges made the philosophy of the Yale Report the criterion for academic excellence. Collegiate education, redefined as "post-elementary" and stimulated by the Dartmouth case, was off on its own.

The fifth generation, "Antebellum, 1830-1860," features institutional proliferation in the territories, preparatory departments, booster colleges, manual labor colleges, women's colleges, Michigan, Wayland, and scientific schools. These innovations demonstrate the incredible vigor and strength that sought expression in ventures bevond the "release of energy" associated with the old-time colleges. In fact, these enterprises fit the name for the sixth generation, "New Departures." I'd prefer to define a "New Education" period, running from the 1840s to the 1880s, that includes much of generation five plus the land-grant schools, the black colleges, the new state universities, work in agriculture and engineering, outreach and extension, the Wisconsin Idea, and the German influence.

The research imperative and the counterpoint general education movement, stimulated by the several waves of new students, govern the years between 1880 and 1920. These "waves" include women in coeducational institutions, normal schools, and teachers colleges, and the veterans after World War I. Once we get to the twenties, I happily defer. Honing in on hierarchical differentiation is dead right.

A general observation: Significant and extended conflicts or tensions characterize the periods I entitle "Rise and Decline of Republican Education, 1776-1819," "Release of Energy, 1819-1840s/1850s" and "The Research Imperative and General Education, 1880s-1920s." Respective battles over republican education, democracy vs. excellence, and research vs. teaching suggest that themes of conflict, rather than developments that point in one direction, better define periods or generations. I hope the essay provokes an exciting debate, and admire Roger Geiger's willingness to attempt this synthesis. The essay advances our mutual concern for our subject.

3. W. BRUCE LESLIE

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IN THE 1890s, PHILANTHROPISTS SUCH AS ROCKEFELLER and Stanford transformed American higher education by underwriting the university as the capstone. Such institutional developments fit a recognized periodization. But the same events also fit a different periodization involving the development of railroads, oil, corporations, professionalization, and urbanization. Which periodization is more important?

Roger Geiger's essay holds a mirror to our subdiscipline, arranging the supply-side of American higher education—what was offered, to whom, and when—into ten generations. Having just published a book whose periodization corresponds to the sixth and seventh generations, I will not question the time frame for the what's, whom's, and when's. Instead, I'll proceed to the "how" and "why," and approach higher education from the demand-side; perhaps inspired by the return of Keynes to respectability. Thus I will attempt to integrate Roger Geiger's institutional periodization with one based on economic, political, and cultural change.

The history of higher education may be conceptualized as the history of the encounter between the elite and the upper middle classes and the colleges and universities. American higher education became a vehicle for the identity of privileged groups. This conceptualization does not imply a simple economic determinism; economic motives often did not dominate, so we must see class formation in a cultural as well as an economic sense.

This conceptualization suggests a four-part periodization. A plausible first stage, equating to generations one through three, was shaped by agrarian and mercantile life and the colonial nature of society. Derived from Cambridge, via Oxford and Paris, early colleges helped to maintain the cultural identity and hegemony of elites faced with social turmoil and loss of legitimacy on frontiers. As immigration further diversified the colonies, college graduate Puritan divines could no longer maintain hegemony. Colleges then became outposts of the leaders of religious groups seeking protection from the outside or to evangelize. Financial survival required greater heterogeneity in student bodies than among faculty members and trustees. And the economic interaction among Protestant groups made isolation self-defeating.

Higher education remained decidedly marginal—barely one in 100 were involved—but developed unique, indigenous characteristics that law and practice confirmed after the Revolution. Government—especially the federal government—played a minor role compared to Europe. Nor did American higher education follow Europe in granting a monopoly to the dominant cultural-religious group. Instead, virtually every cultural group created colleges to promote its identity.

The intersection of local and state boosterism and the ethno-religious promotion of colleges within a maturing agrarian and mercantile society characterizes the second stage, which covers most of the nineteenth century and parallels generations four through six. Leaders of large and small communities viewed colleges as part of community-building and added local resources to state or denominational support to launch the institutions. These colleges, which provided as much or more secondary as higher education, joined opera houses and churches at the center of local genteel culture. Despite ethno-religious affiliations, most colleges fulfilled multiple roles and gained public familiarity to an extent unknown in Europe. College-founding followed settlement westward, if not on a moving frontier, certainly on a moving line of

respectability. Most intellectual and religious leaders weren't college-educated, but college gave a cachet to those who were. This stage, closely tied to small town economic and social structures, followed the line of settlement into the west as a new stage brewed in the east.

The class formation accompanying industrialization, urbanization, and bureaucratization created a third stage—the 1890s to World War II—equating to the essay's seventh and eighth generations. Ethno-religious differences blurred within eastern Protestantism while the economy created corporate and professional "white collar jobs" that required greater knowledge. Access to professions had broadened during the more ethno-religiously homogeneous Jacksonian period, and proprietary schools admitted a diverse student body. But affluent fin de siècle parents sought to counter the proprietary school threat to "standards" and to their off-spring's dominance of white collar jobs through higher educational institutions that raised qualifications and specified the right "character" for successful applicants. Colleges perpetuated the established elite by granting degrees in surroundings that recalled a more bucolic and Protestant America. The universities then restricted professional accreditation to college degree recipients. Educators, capitalizing on the traditional ability of colleges to convey identity, made higher education relevant to the professional and corporate cultures. In turn, graduates underwrote the expansion of undergraduate facilities, research divisions, and professional schools.

Most groups excluded from the predominantly Protestant, white, male colleges, still adopted the model. Catholics, eastern and southern women, and African-Americans essentially created parallel institutions. Jews, Asians, midwestern and western women, and Hispanics sought admission to existing schools. The elites and upper middle class of every group, through parallel or mainstream institutions, relied on higher education to promote group identity and perpetuate individual privilege.

A fourth stage is based on the intersection of "post-industrialism" with higher education. Americans, beginning with Horace Mann, believed that education could relieve social pressures with minimal conflict. A wary establishment, facing the prospect of 12 million trained killers returning from World War II to potential unemployment, turned to higher education and produced the G.I. Bill. Groundwork laid by American high schools facilitated the bill's acceptance by so many veterans. The "comprehensive" high school, which combined academic and social life after World War I, promoted a youth culture that encouraged massive college attendance. Federal, state, and private expenditures furthered this proclivity after World War II. "Dropping out" of high school became pathological, and the most affluent third of society came to *expect* college attendance.

Sensitivity to discrimination after the Nazi experience slowly led to the removal of many access barriers. Creation of the State University of New York, under Governor Thomas Dewey, was only the most prominent opening of places to Jews and African-

Americans. Mushrooming state colleges and new community colleges created "mass higher education." Catholic colleges, which flourished along with the children and grandchildren of Catholic immigrants, gave up their distinctiveness as Catholic youth increasingly opted for non-Catholic colleges. Separation of the sexes largely ended in the east and the south in the 1970s. Integration cost the "historically Black" colleges much of their African-American elite patronage.

All western societies have developed along the agrarian-mercantile, industrial, post-industrial social pattern. But if "American exceptionalism" is true anywhere, it is in higher education. Wedding pre-industrial American traditions and institutions to industrial and post-industrial economic forces gave the U.S. the first of mass higher education.

Higher education institutions have cultures and ambitions that intersect with the desires of their clienteles. Historians of education, having made great progress on "the what and the when" of institutional developments, now must emphasize this intersection between the desires of educators and their external opportunities. We can then integrate our knowledge of institutions and of external forces to create an explanatory framework.

No Shade in the Golden State: School and University in Nineteenth-Century California

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> There is, in public institutions, no shade for "elegant learning and science."
>
> *Horace Bushnell*

SINCE THE PUBLICATION OF RICHARD HOFSTADTER and Walter Metzger's *The Development of Academic Freedom in the United States* (1955), historians of higher education have documented the triumph of modernism in higher education's organization and institutional culture through case studies, reduced the contrast between the college and the university models, and studied more diverse institutions, including a few women's colleges and traditionally black institutions. Finally, revisionism has looked at institutions from other than the perspective of the president's office files, paying some attention to student and faculty life and to the effects of race, ethnicity, gender, and social class upon students' access, persistence, and experiences.

KNOWING HIGHER EDUCATION BETTER: THE UNFINISHED AGENDA

Two serious deficiencies remain in both the standard and the revised accounts of the history of higher education, however.[1] First, women are still omitted or marginalized.[2] Most of the still too few histories of women's education are recent and read primarily by women—if judged by their impact on the scholarship of male historians of higher education. Second, higher education is still separated from its many-sided and revealing historical connections with schools and normal schools, and from their shared social and cultural environments. These two dimensions of scholarly myopia are closely related because from the beginning a large and growing part of the college female student body was preparing itself, intentionally or not, for public school teaching.[3] The fast-spreading public high schools took many early graduates. After 1900, professionalization of urban elementary schools, and some independent and parochial schools, led to mass employment of college-educated women, more of whom joined male college graduates in the labor force. Only in the 1970s, when sharply declining birthrates ended the need for new teachers, and when new fields opened to women, did women graduates find other fields to till.

A major reason for the Berlin Wall between the stories of schools and colleges is that, in most instances "lower" and higher education have attracted different historians, with

diverging backgrounds, prejudices, presumptions, and preoccupations. College and university histories, when they mention schools at all, typically confined themselves to inadequacies in the preparation of the freshman class. Historians of the schools returned the insult by reference to the arrogant effort of higher education to reduce high schools to "feeder" schools.[4]

School-College Linkages

Some connections of schools and colleges are structural, others personal, yet others contextual. Structural connections include arrangements by which colleges and universities examined and participated in the accreditation of high schools; the presence of state superintendents of public instruction on boards of trustees of public and sometimes private colleges and universities; the provision of college scholarships by state legislatures to prospective common school teachers; the operating of secondary and sometimes elementary school classes by colleges and universities; and the privileges accorded college and university graduates by governments in the granting of teachers' licenses. In addition, creation of normal schools stimulated higher education to introduce or formalize teacher preparation, which in turn led to coeducation, increased competition between high schools, normal school, and colleges in preparing teachers, and the upgrading of normal schools into baccalaureate institutions. As for personal connections, many college faculty and administrators taught, administered, or authored textbooks in the expanding and modernizing schools, participated in state teachers' institutes and associations, and led national organizations, committees, and commissions of public and private school educators.[5] The third category, the contextual connections, are the subject of this essay.[6]

None of these connections receives more than scant mention in most institutional histories, but the relationships between colleges and universities and larger structural and intellectual developments are almost always absent. Social developments, as reported in the typical case study, may mean only town-gown squabbles or the assumption of elements of a dawning national youth culture by a student subculture. Rarely do authors trace the oftentimes subtle effects of societal influences upon educational institutions.[7] References to demographic, political, or economic developments or to the growing influence of science are often brief, unanalyzed, or pro-forma. Recent histories of public elementary and secondary schooling, in contrast, offer richer ecological fare. Historians of higher education, therefore, might start by noting whether and how the intellectual and social pressures on schools affected higher education alone, as well as the relationships between school and college. This approach should correct and enrich our understanding of both sets of institutions, and build towards a more integrated historiography of education in the United States.

A Common Environment

This essay examines some shared elements in the social and intellectual contexts of colleges, universities, and schools.[8] Using California as a test case, it identifies major environmental features that have arguably acted upon both schools and colleges, and to which they responded—although not always equally or in the same fashion.[9] The essay

therefore examines significant dimensions along which any state's educational institutions came to share experiences, understanding, and programs. Environmental realities can provoke both accommodations and resistances, thereby generating differences as well as agreements in outlook between the school and the university, and producing tensions that take on a life of their own. These themes emerged from a study of the schools of the young state of California and of the University of California in its first half century or so, but they are probably generalizable—despite obvious variations stemming from sponsorship, sectarianism, localism and regionalism, and idiosyncrasy.

American distrust of centralization and standardization resulted in minimal legal connections between schools and colleges, even within the public sector. Hence, to explain linkages, and the pronounced similarities that marked schools across the land and that characterized colleges and universities under different sponsorships, one must look to extra-legal and nonformal influences: to a shared environment, standardizing forces like textbooks and teacher professionalization, and the powerful effects of imitation and interaction. Environmental factors affecting California schools and colleges include the legacies of its unique early history, its participation in national and international developments in nineteenth century religious history, political realities, and utilitarian, scientific, and pedagogical thought. This essay focuses upon the state's demographic realities and a utilitarian mindset, while an extended conclusion raises other elements in the common context. In considering societal influences, however, it is well to recall Lawrence Stone's caution: "As every historian knows, all the institutions of society are partly functional and partly antiquated, vestigial, or even frankly 'dysfunctional.' This is because they all have a history and a life of their own, and their response to outside pressure is consequently imperfect, stumbling, tardy, and even reactive."[10]

Demography and Educating The Children of the Argonauts

In his inaugural address as President of the University of California in 1872, Connecticut-native Daniel Coit Gilman articulated a comforting appreciation of the state's unique needs:

> This is the University of California; it is not the University of Berlin or of New Haven which we are to copy; it is the University of this state; it must be adapted to this people, to their public and private schools, to their geographical position, to the requirements of their society and their undeveloped resources.[11]

The history of San Francisco's first public school was shaped by the preoccupations of *its* society. First the pupils, then the trustees, and, finally, the teacher, Thomas Douglas abandoned the schoolhouse for the Motherlode. The *alcalde* (mayor) of Monterey reported that his carpenters, at work on a schoolhouse, saw a sailor's gold, "threw down

their saws and planes, shouldered their picks and are off to the Yuba," along with deserting seamen and the fort's soldiers.[12] But even before gold fever subsided, a scattering of schools appeared. Local views on the value of schooling reflected the national outlook to stem the danger of "vagrancy and crime," to attract and raise solid citizens, and to increase local property values. Civic-minded Californians stressed, particularly, the need to retain worthy settlers and eliminate the habit among the prosperous of sending their children east for schooling. Eastern-bred ministers wished to secure adequate endowment for private schools and colleges, but the broader public looked towards funding common (public) schools and, perhaps, founding the state university. The 1849 California Constitution of 1849, by which the territory entered the Union, provided for the university through a Seminary Fund.[13]

They Came from Elsewhere

Like Gilman, most Californians began as outsiders, drawn by the promise of gold panned in the streams, in wheat and orange harvests, in the abundant sunshine, and, later, in the glitter of Hollywood.[14] A '49er wrote home, "Neither the Crusades nor Alexander's expedition to India (all things considered) can equal this emigration to California."[15] A thinly-settled territory of Mexico attracting only about 400 American settlers in 1848, California became home to 90,000 miners, merchants, scouts, and adventurers during 1849.[16] By late 1850, hundreds of abandoned ships were berthed in San Francisco Bay, some later reclaimed by disappointed settlers who exchanged hopes of quick riches for passage home. In 1853, 31,000 residents departed, but this count was reduced to 14,500 in 1860. Some departees came back, along with many more who caught a "California Fever" that has never been eradicated. The census counted 380,000 Californians in 1860, 560,000 in 1870, and over one million by 1900. Most residents lived around San Francisco Bay and in the Sierra gold towns. Eight mountain counties were among the ten most populous in 1855. In 1880, San Francisco still had a quarter of the state's total, with the balance clustered in other small northern and central cities and towns. Los Angeles was small and insignificant—the intense north-south rivalry that characterized California's politics and preferences developed only in the twentieth century. The state's small rural population was scattered on atypically-large holdings. Only 20 percent of California's citizens in 1870 were farmers, compared to the 47 percent nationwide or 61 percent of Iowans, for example. This demographic fact helps to explain the consistently tiny enrollments in the agriculture courses at the University of California before 1900.[17]

The private College of California preceded the University of California. President Henry Durant offered this healing vision at the college's 1865 commencement "The education of its peoples is that which shall make them one, and one forever...*E Pluribus Unum.*"[18] Durant knew that California's population and early politics, though far from the battlefields, reflected the divisions leading to the Civil War. Admission of California to the Union as "free soil" aroused Southern bitterness, breaking the

precarious balance between free and slave states. California's first two Senators were William Gwin from Mississippi and John C. Frémont. The numerous pro-slavery partisans were well-placed in government and party—California and Oregon representatives were the only free state delegates to the 1860 Democratic National Convention voting with the ultra-pro-slavery wing. Andrew Jackson Moulder, a native Virginian, was the pro-slavery (Lecompton) Democratic faction's candidate for State Superintendent of Public Instruction (1857). In September 1859, a week after Moulder's reelection to a second term, along with the whole Lecomptonite ticket, United States Senator David C. Broderick, leader of the state's pro-Union Democrats, was killed in a duel. His followers went over to the Republicans, giving Lincoln the state in 1860 and ending Democratic control—but not "Secesh" sympathies.[19]

Despite initial Southern political dominance in California, the majority of the Americans settling California came from New York, New England, and adjacent states—many with strong pro-Union sentiments.[20] Delegates from New England, New York, and Ohio, strongholds of common schools, wrote the education provisions in the state's constitution. All members of the San Francisco Board of Education in 1853-1854, the mayor, the leaders of the city's churches, and most lawyers and businessmen pushing for schools, were all New Englanders. Many early teachers were Yankees, including Mrs. Olive Mann Isbell—Horace Mann's niece—who opened the first American school in California, at Santa Clara in December 1846. As State Superintendent, Moulder chaired the State Teachers' Institute in 1862, but he was absent from the chair when the institute adopted six strong pro-Union resolutions, and he wisely chose not to run again for the superintendency.[21]

...*With Their Prejudices*

Superintendent Moulder represented a pro-public school body of Southern opinion that was silenced throughout the 1850s by the sharpening of sectional antagonism and suspicion. But Molder's views on race mixing in the schools reflected his origins, though negrophobia and pro-segregation sentiments were not confined to Southerners. In his 1858 *Annual Report*, Moulder wrote that "the odious tastes of the Negrophilist school of mock philanthropist" had succeeded in introducing Negro children "into our Public Schools on an equality with the Whites." He informed school officials "that our Public Schools are clearly intended for whites alone" since school funding was based on annual local counts of white school-age children:

> Had it been intended by the framers of the law that the children of the inferior races should be educated side by side with the whites, it is manifest the [school] census would have included children of all colors.
>
> If this attempt to force Africans, Chinese, and Diggers [Indians], into our white Schools is to persist, it must result in the

> ruin of our schools. The great mass of our citizens will not associate on terms of equality with these inferior races, nor will they consent that their children should do so...[;] they would rather forego the benefits of our Schools than permit their daughters...to affiliate with the sons of Negroes.[22]

Moulder acknowledged that such antipathy, however unreasonable, was "deeply rooted and wide-spread." To educate Negroes to unrealistic expectations was cruel, but neither should they be brought up "in ignorance and heathenism." A school district was free to create a separate black school district and even use a portion of its state funds or local taxes to operate it, "provided that the citizens do not object." Moulder disclaimed any personal prejudice "against a respectable Negro in his place." The proper place, he added, was not one of equality with whites. Moulder obtained a law giving him the power to withhold state appropriations to school districts that failed to exclude non-white children from white schools. During the superintendency of New Englander John Swett, identification with the Union cause led to new legislation (1864 and 1866) that required districts to establish schools for "Negroes, Mongolians and Indians," if ten parents or guardians of colored children applied in writing, and to admit them to regular public schools unless a majority of white residents petitioned otherwise.

The University's Regency included a few southerners, mostly in *ex officio* roles.[23] Moulder, the first secretary, served from 1868 to 1873. The Board's *Minutes* do not reveal southern influence on Regental policies; the committees, arenas for much formative discussion, kept no minutes in the early years. But the first faculty included members with pro-segregationist attitudes. The brothers John and Joseph LeConte, sons of a slaving-owning Georgia planter, worked as scientists for the Confederacy, and taught at South Carolina College, later the University of South Carolina, when called to Berkeley. They were well-respected faculty anchors for decades; John LeConte also served twice as acting president and once as president (1876-1881). Joseph LeConte, who taught geology from 1869 to 1896, neither sought out, nor evaded, opportunities to lecture to his students at Berkeley and in the Medical School, California teachers, and public audiences nationwide on his deep interest in evolution. Concluding that "cross breeding" of the "primary races" weakened the stock, certainly in the short run, Joseph taught that the white and black races differed widely in their intellectual and moral capacities, and hence their ability to profit from schooling; and that "race repulsion," an adaptive instinct, protected the purity of the higher races. He also explained southern attitudes to non-southerners: slavery had retarded the southern economy and southerners did not wish its return, but the South was not repentant and gloried in its history. Close contacts between blacks and a superior race, under the paternalism of slavery, advanced the black cause.[24] LeConte's autobiography (1902)

described his 1891 Brooklyn lecture, "The Race Problem in the South," later a book, as a scientific view of a delicate question:

> The views I maintained that evening were then unpopular, but are now acknowledged almost universally by thinking men. Lincoln's definition of an ideal government, one of the people, for the people, and by the people, must be modified; how becomes obvious if we introduce the little word all. A rational government must be of all the people and for all the people but not by all the people. It never has been and never can be.[25]

We have no evidence as to whether the majority of LeConte's colleagues shared his views or taught them regularly in their classes. But these professorial views were neither controversial nor censured by the Regents or their presidential appointees. In contrast, liberal and reform-minded social scientists were fired elsewhere during the 1890s; so was Stanford University sociologist Edward A. Ross in 1900, for espousing municipal ownership of public services and other policies abhorred by the financial interests well-represented on college and university boards of trustees—including that of California's only public university.[26]

The politics of race in nineteenth-century California, however, centered not on Negroes but on the Chinese. Some 25,000 Chinese settlers arrived by 1852 in search of gold. By 1860 the Chinese were ten percent of the state's population. The remnants of the first migration, and newcomers, worked on the western portion of the transcontinental railroad, and on other northern California construction projects upon the railroad's completion. The 1868 Burlingame Treaty, a friendship pact between China and the United States, encouraged further immigration. The strange customs and ceaseless work performed by Chinese migrants—laying rails, building dikes, planting and harvesting crops, cooking and cleaning in San Francisco boarding houses and on distant ranches—agitated many Californians. Intense anti-Chinese feelings provoked former Regent John Dwinelle, an Alameda County Assemblyman and author of the University's Organic Act, to testify in Congress in 1876 on behalf of Chinese exclusion. Without displaying the race prejudice of many contemporaries, Dwinelle argued that the Asian influx would overwhelm American institutions, and that employer exploitation would widen the gap between rich and poor.[27] Congressman Horace Davis, a future president (1888-1890) of the University of California introduced the Chinese Exclusion Act in 1878; Congress passed the bill in 1882.

...And Their Institutions

Labor unrest, anger at the railroad monopolists, economic hard times, and "scientific racism" all scapegoated California's racial minorities. These conflicts and controversies often centered around educational institutions. Boycotts, demonstrations, legisla-

tion, law suits, and international diplomacy kept school segregation and desegregation an issue for decades, with victories and defeats on both sides. College and university students and professors, though less directly involved, were not sheltered from the debate. An article in *Pacific*, a church organ that regularly publicized the College of California, seemed to include white racial pride among the reasons for going to college:

> But we do protest against your giving up the chief place of influence and trust, in the land of your birth, to strangers and foreigners without competition. We shall not impute it to any lack of wisdom or ambition on your part, if you should import John Chinaman to do some part of your *hardiwork*; but we shall impute it to a lack of every manly attribute if you shall allow John Chinaman, or any other imported superior, to do for you your *head-work*, too. Let the fame of California forever be the supremacy of her sons, not merely for her adopted sons, as now....Shall the State of California repose her trust in the genius and education of her own sons, and be disappointed? See to it boys, that you do not fail her in your duty.[28]

There were contrary tides, however. In 1872 University of California Regent Edward Tompkins donated the "Tompkins Farm," on Broadway Terrace in Oakland, to endow the Agassiz Professorship in Oriental Languages. Tompkins wanted Asian students to find a home at the university, and to prepare American students to develop economic and political ties to Asia. Chinese and Japanese names sprinkled class lists even before the Regents finally used Tompkin's gift, the delay arose, perhaps, out of concern about popular anti-Oriental passions.[29]

The California gold rush also brought numerous Europeans. Germans and Irish, each about ten percent of the population in 1860 were, like Jews and other white foreigners, well-accepted. But unprecedented immigration from southern and eastern Europe after 1880 agitated Californians and many other Americans. Californians talked of southern Italians and Sicilians as inferior races that taxed the schools' powers of "racial uplift" to the fullest. The reports of the Immigration Commission (1911) identified only 42 percent of the pupils in San Francisco schools as native born children of native-born fathers. The city's public school teachers—only 38.6 percent were native born of native born—nearly matched the nativity status of their pupils. But 60 percent of high school seniors and 69 percent of university students were natives.[30] Thus, the university did not educate many teachers from immigrant backgrounds. Far more insulated than public or non-public schools from language and cultural diversity, university faculties held different attitudes towards immigration.

The 12,000 Yankee settlers who preceded the Argonauts displayed ethnocentrism and racism. One American described Mexican citizens, the *Californios*, as "Miserable people who sleep and smoke and hum some tune of Castilian laziness, while surrounding Nature is inviting them to the noblest and richest rewards of honorable toil."[31] Other Americans, however, saw problems not in the indolence of the *Californios* but in the aggressive ambition, intolerance, materialism, and lawlessness of their fellow Americans. These characteristics slowed the creation of core communal institutions lawful government, a responsible press, churches, and schools. "This country...in all probability will, become a great central point in the commerce of the two worlds; but in my judgment she lacks the essential elements of national prosperity and will be one of the poorest states of the Union," wrote a thoughtful New Yorker; in California the "sociable man" was overwhelmed by "the money-seeking, gold-hunting, selfish, acquisitive miser and conniving millionaire."[32]

Eastern arrogance, of course, explains some criticism of California's weak civic spirit. A western university chancellor observed in 1872 that

> They tell us in the Eastern cities that it is better for us to educate our children there. They say, complacently, the spirit of society there is more favorable to study and to the growth of literary institutions; that in the West the material engrosses us too much for the successful pursuit of learning. By so much the more should we correct the evil.[33]

The chancellor actually spoke of Missouri, but similar pride motivated some new Californians to hurry to establish schools and colleges.

Demographic Dilemmas and School Support

Observers often explained that social irresponsibility arose because the Argonauts did not intend to become community builders. Hence women were underrepresented in California's population eight percent in 1850, 30 percent a decade later. The even greater scarcity of children often excused delays in founding and maintaining adequate schools. Horace Bushnell, the Hartford preacher, explained the "slow and struggling progress" of the College of California by pointing to the "*actual lack of pupils* in the State," not enough to form a single class much less a proper college. But Bushnell also pointed to the "*almost entire engrossment* of the whole people in the *immediate objects for which they came to the state*...pecuniary or political advancement." Many Californians thought of their state as a place "to acquire riches to enjoy elsewhere." Still Bushnell was not discouraged, since "the claims of education, *academic as well as common*, are daily taking a firm hold of the public conscience and the public heart."[34]

The 1785 and 1787 Land Ordinances had begun the tradition of donating federal land to encourage schooling, part of government's larger aim of promoting settlement beyond the 13 original states. Congress doubled the land grants available to territories and states to start a Common School Fund with the creation of the Oregon territory in 1848. California received 500,000 acres to support common schools and, in 1853, 46,000 acres for a "Seminary" (higher institution) Fund. The federal grants were to be sold, the principal invested, and the interest used to operate and maintain whatever institutions each state chose to support.

The California legislature passed laws enabling local school districts to tax themselves to augment their share of the Common School Fund if they met certain standards; the requirements were raised as public tolerance permitted. The state's elected Superintendent of Public Instruction and elected county and appointed district superintendents of schools were the chief goads to public opinion in the early years. El Dorado, the state's most populous county, amended the state superintendent's 1851 report, which listed her as school-less, by noting the operation of a "select" (private) school "under the superintendence of a lady in every way competent to discharge the duties in which she was engaged." But this school died after a month, reportedly "for want of support, the parents taking no interest in its success...."[35] State teachers' organizations, and the president and faculty of the infant University of California joined the chorus urging consistent operation of public schools. Reformers may have lamented public indifference and stingy support, but the extent of state involvement in schooling was remarkable, especially given a tradition of reliance on private initiative and nineteenth-century public skepticism about most governmental ventures.[36]

Superintendent Moulder, continually reminding the legislature of the unused Seminary grant, proposed that the state create a university along the lines of a military institution. He also argued, more successfully, for new common school legislation to extend the school year, secure better teachers, ensure proper budgetary management by school district trustees, and raise more school revenues. Moulder calculated that the public spent $1,885 for each of the state's 400 criminals, but only $9.00 for each of its 30,000 children in 1859. Only 162 of the state's 432 public schools were open six or more months. Recalling his southern origins, he compared California's rural schools to the "old field schools" located on worn-out lands in the antebellum South, and he scored the poll tax that some districts used to supplement their small State School Fund appropriations.[37] Moulder's efforts on behalf of education were rewarded by a mid-1868 appointment to the first Board of Regents of the University of California. He soon resigned to become Secretary of the Regents, and later added the duties of selling its own land grants as University Land Agent.

Moulder's exhortations inspired district and county school superintendents to display their own animating belief in public education. In the spirit of Thomas

Jefferson and Horace Mann, Superintendent George F. Price of the Hawkinsville District (Siskiyou County) enthused, in 1858:

> I like this word common, it carries with it the idea of a common interest, a common purpose, and a common destiny. It proclaims that wealth is not the only passport to intelligence. It implies the progress and equal privileges of a free people, and it breathes the spirit of social independence....Free institutions cannot be sustained until the masses are prepared to appreciate them, hence free education and a free press are the surest means of accomplishing this object. [38]

Some were prepared to say that the state University could—and should—be included in this vision of democracy's arsenal.

UTILITARIANISM

Historian Henry Steele Commager wrote of the nineteenth-century American that "Education was his religion, and to it he paid the tribute both of his money and his affection."

> Yet, as he expected his religion to be practical and pay dividends, he expected education to prepare for life—by which he meant, increasingly, jobs and professions. His attitude toward higher education was something of a paradox....No people was more avid of college degrees, yet nowhere else were intellectuals held in such contempt or relegated to so inferior a position; and in America alone the professor—invariably long haired and absent minded—was an object of humor.[39]

In 1854 the Italian Jesuits had barely opened Santa Clara College when they added a course in commerce to the classical curriculum. This action seemed to support the judgment of Superintendent Moulder, an anti-classics man, that "Ours is eminently a practical age....We want no pale and sickly scholars."[40] In 1899, Alexis Lange, then of the University of California's English Department, did not distinguish between the goals of different institutions: "The common schools are to prepare for life in its individual and social aspects; secondary schools and the universities *are to have the same aim exactly*," each to be organized and articulated with one another through "reference to the common ideal."[41]

California populists, however, perennially charged that, unlike the public schools, the state university was biased against the common people and effectively deprived the state's children of a practical education that would prepare them for a livelihood. A farmer's child could only acquire learning that guaranteed a city life. Anticipating the uproar of 1874-1879, Ezra Carr, the university's first professor of agriculture, articulated the concerns of farmers and mechanics in an 1870 speech to California teachers. Carr denounced the neglect of an "industrial education" that would raise workingmen's pursuits "to the rank they deserve in the hierarchy of industries," and that would stem the replacement of farm children as "the permanent tillers of the soil" with "the lower classes of foreigners." Which was responsible for this situation, Carr asked, rhetorically: "Is it the monotony of country life, or a want of the right kind of education?"[42] Educators, he believed, had failed to "find a remedy for the growing aversion of American youth for pursuits most vital to the public welfare."

The Morrill Land Grant Act (1862) eventually provoked all states to extend the aims and curriculum of higher education to include agricultural and engineering subjects. The Act inspired the tiny, classically-oriented College of California to announce, in 1863, a new Department of Science and the Arts in its new Mining and Agricultural College, to operate as a San Francisco annex. Authorities hoped to get California's Morrill grant, just as Yale, a private institution, had captured the Connecticut appropriation. This plan failed and the branch never opened.[43] Instead the struggling college next offered to combine its resources and commitment to an "academical" education with the state's announced intention to open an Agricultural, Mining, and Mechanical Arts College as its land-grant institution. The result would be a comprehensive institution, combining the traditional and the new, the liberal and the practical.

College of California authorities looked to Union College, one of the largest, most successful antebellum colleges, for a model. Several Union graduates actively supported both the college and the university. Union's broader curriculum and opportunities for student choice represented a successful combination of the liberal and the practical in a single institution. Advocates of combination cited reasons of economy, mutual broadening, or the need to throw the mantle of prestige of the older studies over the newer. This latter rationale received special emphasis in justifying the continuation of the old College of California curriculum within the new University of California. The college provided the nucleus of a College of Letters; state and federal monies provided colleges of applied arts and sciences. Political sensitivities, however, dictated that the charter bill, to get approval, would read "College of Mines, College of Civil Engineering, College of Mechanics, College of Agriculture, and an Academical College, all of the same grade."[44] The Morrill Act offered no blueprint, and states adapted their land grant institutions to the local political culture. Some stressed the "leading object" of the Act—promoting agricultural and the mechanic arts—and others minimized it, often by stressing the sciences generally.[45]

Daniel C. Gilman's appointment as university president rekindled utilitarian suspicions of ties between conservative Yale and the University of California. Gilman came

from Yale's separate and struggling Sheffield Scientific School, created, along with Harvard's Lawrence Scientific School in the 1840s, but some eyes saw the academic snobbery of "Old Yale" hung about him. Sheffield's claim to offer agricultural education, with Connecticut's Morrill Act funds, but without a farm might have attracted the Regents to Gilman, but it did not impress the Golden State Grange.

Californians not only looked to Union College, and later to the University of Michigan, but approvingly invoked the words of Ezra Cornell: "I would found an institution where any person can find instruction in any study." Few Californians thought that Yale, "the Mother of Colleges," could be the "Mother of Public Universities." Sherman Day, son of Yale President Jeremiah Day (1817-1846), provided first-hand evidence. The younger Day, manager of the New Almaden (mercury) Mines in California, was an active friend of the College of California. Yale having admitted French, in 1825, and German, in 1841, the elder Day stated, "It might soon be necessary to appoint an instructor in whittling." But Sherman Day, speaking before the Associated Alumni of the Pacific Coast, an informal organization of college-educated California men in 1864, asked about the young man who had finished his rhetoric, Latin, and higher mathematics: "Where, sir, is your mining college, your laboratory, your geological cabinet, with those professors and appliances, and appurtenances which we need for the education of not only that young man, but a thousand of similarly situated young men who are toiling in the dark holes of the mines of this State?"[46] The University of California eventually provided these subjects and facilities, but older attitudes lingered. For decades the university limited the A.B. degree to classical course graduates, and assigned the Bachelors of Philosophy and of Science to graduates of the literary, political science, and other science courses.[47]

From the outset the University of California had parallel courses of study, administered by distinct colleges. Utilitarianism at the University of California eventually meant courses in mining, engineering, agriculture, business, the social sciences, architecture, pedagogy, social work, pharmacy, nursing, journalism, law, and medicine. It also entailed the admission of "At Large" students who did not confine themselves to a unified course of study, "Special Students" who did not intend to take a degree, and "Limited Students" who did not meet all entry requirements. Utilitarianism also led to altered or alternative admission standards and a degree of "election" or freedom from a prescribed curriculum.[48] Curricular modernization sometimes produced neither disciplinary cohesion nor practical skills, but the reformers were sure that they were on the right track. In any case, the proliferation of courses, as well as the social and occupational environments in which young people lived, quickly created changes *within the University itself*: in how the faculty spent its time and in who was hired to join the faculty. For example, only 17 of 130 new students admitted in 1888 took the classical course; the colleges of Letters and Political Science and Civil Engineering each had more.

The parallel courses of study had differing entrance requirements that directed the prospective freshman toward one of the "colleges of general culture" (classics, letters,

later political and social science) or one of the "science colleges" (mines, agriculture, chemistry, engineering). But in 1884, the university embarked on the path toward its present structure of negotiated uniform entrance requirements for all students. That year, the university followed the precedent set by the University of Michigan (not Yale) by gradually moving from admitting students by examination to guaranteeing admission to graduates of high schools with a university-inspected and accredited program, if the school principal recommended the student.[49] This system facilitated communication between high school and university, and in 1889, the university, for example, permitted accredited schools to replace the history and geography requirement with "Government of the United States."

School principals, department heads, and teachers' associations, reflecting the increasingly non-classical character of the evolving high schools, pressed particularly hard to change the language requirements. The revised California Constitution of 1879 advanced this movement by depriving high schools of any share in the Common School Fund. Communities that supported high schools through higher local school taxes often asked hard questions about "dead languages" and about a public university that required them. The High School Teachers Association proposed to make more time for "modern" and utilitarian subjects for all high school students by reducing the foreign language entrance requirement to below five years, and by making Greek and Latin optional. Latin persisted for its snob appeal, but Greek virtually disappeared, first in the high schools, then becoming a college subject for the few. Eventually Latin, too, fell by the wayside except for the atypical student. The university implemented the previously "unthinkable" in 1918 by reducing the foreign language requirement to two years and by no longer requiring Latin.

The university had given into the inevitable as secondary schools had become more inclusive and less college-driven. From 1890 to 1900, a period during which high school enrollments doubled nationally, the percentage of all secondary school students who prepared for college dropped from a small 18.7 percent to a smaller 14.5 percent.[50] Proliferating high schools guaranteed colleges larger numbers of potential freshmen, but the area of overlapping interests between high school and university educators simultaneously grew smaller, and the university gradually moved disputed subjects from the list of entrance requirements to the list of requirements for junior-year status—a practical concession to the high schools. Thereafter, the university permitted "deficiencies" (Latin, for example) to be "made up" during the first two years of college work.

Elementary and high schools *were* even more impelled to "educate for life," since almost all late nineteenth century youth ceased their schooling about age 14. "In many of our Public Schools a Pupil can obtain a thorough business education; an education competent to make him a teacher, a merchant, a mechanic, or anything else perhaps, but a lawyer, a physician, or a clergymen," argued Superintendent Grove K. Godfrey of Shasta County in 1858. He lamented, perhaps sincerely, that his districts lacked the resources, including classics teachers, required by the curricular demands of the traditional professions.[51] Many members of the public lamented that just before the century's close some rural counties still lacked rudimentary programs in agricultural

education. All schools emphasized the "common English branches" for their utility, not for "mental discipline" or "culture," and many added bookkeeping, drawing, and sewing if they could. As early as 1894, the California Teachers Association (CTA) urged the legislature to admit manual training into the schools.[52] The Smith-Hughes Act (1917) provided federal grants to states for vocational education, bringing agricultural education and home economics to counties like Godfrey's, and wood and print shops, auto repair, and business subjects to high schools throughout the state. These subjects found a receptive audience even if the results were sometimes less or other than expected.

The upper school grades—grammar schools, high schools, and, after 1910, the new junior high schools—had the most need and opportunity to experiment. The primary schools instilled the fundamentals and socialized to school routines, but secondary schools "graduated" most of their students directly into the workaday world. So had the private academy, the high school's predecessor. Called "the first fruit of the new Americanism which no longer weighted a man 'with the bones of his ancestors thrown in,'" academies appealed strongly to the mid-nineteenth century middle classes.[53] Its permutations included military academies, female seminaries, and self-styled "colleges" like Washington College of Science and Industry in early California's Alameda County.[54] The academy waited only to be eclipsed by publicly-funded high schools, able to reach more children and, hence, subject to still more experimentation in the interests of a practical education. Most city high schools, even Boston's, the nation's first in 1821, adopted the modernist academic core of the private academy, adding the classics for students bound for college. In the last third of the nineteenth-century, however, many of the newer high schools and most union high schools in California's thinly settled areas could not afford and did not attempt the classics.

Not only the provincial and the uneducated advocated practical education. Lawyer John R. Glascock, College of California graduate (A.B., 1865), lawyer, and member of a prominent local family, noted the salutary effects of practical education on the "laboring classes." The alumni orator at the 1893 inauguration of Martin Kellogg as university president, Glascock used language reminiscent of Tory England's opposition to public schools to warn that an "intellectual education breeds artificial wants" and instilled a sense of "conscious superiority of the mind" that "chafes against restraints." Hence, Glascock added, intellectual education is inappropriate for the yeoman, and deprived the state of its essential manual workers. Worse yet, it made the worker "discontented with his lot, by creating capacities for the enjoyment of pleasures that are denied him, making of him a labor agitator, a socialist, or nihilist." It was, therefore, necessary, to remodel the common schools—which "deal too much in theory"—and introduce "industrial education" before the bulk of youth drop out of school. Industrial education, Glascock concluded, should include instruction in government and political economy so that workers may know "the reasons that underlie the institution of property."[55] But support for practical education was not unanimous. Labor unions opposed manual training courses and even pre-vocational curricula in

many cities, certain that they were intended to track their children into blue-collar jobs. Educators opposed separate vocational or trade high schools, favoring comprehensive high schools so students could elect classes across the academic-vocational divide.[56]

The university's own concessions to a more practical or, at least, broader curriculum and its more active, social service role were thus part of a general response to the market demands of students and the increasingly diverse and specialized disciplinary interests of college faculties. But the intense, Grange-led controversy of 1874 almost certainly hastened the university's responses. In December 1873 a joint remonstrance of the State Grange, Mechanics State Council, and the Mechanics Deliberative Assembly condemned the university for violating the letter and spirit of its charter and the Morrill Act by neglecting "industrial education." Ezra Slocum Carr, the university's lone professor of agriculture, was believed to have furnished the petitioners with evidence of this neglect, but was noncommittal at a legislative committee hearing, probably part of a deal to preserve his job.[57] William Swinton, Professor of English Literature and History and a prolific author of school textbooks, supported the charges; he had already resigned when the Regents refused his request for a leave.

Specific charges of Regental neglect of their responsibility and financial mismanagement were not sustained, but the university was given augmented funds to reduce the disparity between its College of Letters and its applied science departments in faculty, courses, and space. The Regents fired Carr, who had refused a request to resign; for which the Regents were hit with a near-universal storm of public and press abuse. The Regents quickly abandoned a widely ridiculed plan to replace Carr with eight traveling agriculturalists and botanists, and instead hired Ernest R. Hilgard as professor of agriculture. Carr's long, detailed, and apparently effective published account supporting the original charges against the Regents led the voters to elect him State Superintendent of Public Instruction in a landslide, but he seldom attended meetings of the Regents. Two Regents resigned following the affair: Dr. Samuel Merritt, stung by charges that his lumber business profited from the construction of a university building, and Assemblyman John Dwinelle, who reportedly promised key legislators that Carr would not be fired but was unable to convince the majority of Regents to honor that promise. Upset by the event and expecting future political controversy, President Gilman resigned to head the new Johns Hopkins University.[58]

"The New Education. Objections to the System as Taught in the University of California," an anonymous response to these events, signed by "Columella," quoted Thomas Huxley:

> The modern world is full of artillery; and we turn out our children to do battle in it equipped with the shield and sword of an ancient gladiator. Posterity will cry shame on us if we do not remedy this deplorable state of things. Nay, if we live twenty years longer, our own consciences will cry shame on us. Modern civilization rests upon science.[59]

As farmers and mechanics watched to see what would happen next at the university, developments affecting their local schools tapped a mix of class antagonisms, government suspicion, and cultural anxiety about the currents of modernism. These developments eventually forced the university into action on behalf of public high schools. In 1870, reformers persuaded the legislature to institute a uniform system of textbooks for all schoolchildren. The State Board of Education replaced the McGuffey Readers, with their heavy dose of God-centered morality, with a new series. In the midst of a battle that raged until the mid-1880s over economic profit and loss, conflicting values, and fear of centralization, a constitutional convention amended provisions for school districts and the university. By discouraging the founding of public high schools, the new Constitution of 1879 threatened the university's enrollments and its capacity to achieve what a restive but ambitious public was said to want.[60] University of California faculty and administrators travelled the state, stirring up public opinion in favor of new school taxes for public high schools.

CONCLUSION: OTHER "OUTDOOR PERILS"

The demography and disposition of California's population in its first half-century of statehood is but one part of the shared environment in which the state's schools and colleges first struggled and eventually thrived. That environment also included the state's political culture, its religious competitions, and the intellectual currents that swept over educational thought and practice. The following comments suggest where a fuller ecological analysis must look.

Politics and the "Republic of Learning"

Not surprising for one educated in the tradition of "eastern establishment" thought on higher education, Horace Bushnell, D.D. urged Californians to forgo a state university. These universities offer, he wrote, no shade for "elegant learning and science" because they "are dragging always in the mires of uneasiness and public intrigue, sweltering always in the heat of some outdoor peril of disturbance."[61] He was early to be proven right.

Politically-turbulent young California sorely tested the promise of education to protect liberty and further opportunity through public schools and a public university. The uncertainty of Mexican land titles and the rapacity and stifling power of the Central Pacific and Southern Pacific railroad companies compounded the problems of farmers facing new conditions, armed with inherited techniques and a disposition to mine their farms as the Argonauts had plundered the hillsides. High rail rates, railroad ownership of huge swatches of California land, and the Southern Pacific's control of newspapers, judges, and legislators all enabled the national Patrons of Husbandry, the Grange, to gain adherents among angry farmers. To land and transportation monopolies, add water monopolies: private water companies, with their canals and diversion of their neighbors' streams, in this semi-arid country.[62] In alliance with the Grange, workingmen's organizations protested unregulated monopoly capitalism, unequal

taxes, and the privileges granted business and banking by corrupt politicians. The nationwide Panic of 1873 increased the numbers of the disaffected, and a Workingman's Party drew enough voters from the Republican and Democratic parties to win control of the next legislature. The legislature's investigation of the university came a few months later.

Nineteenth-century Democrats generally favored limited and decentralized government, so Whigs and their Republican successors typically expanded common school systems and pushed for greater power to the state superintendent and state board of education. The university's appointed Board of Regents—which included the Governor, Lieutenant Governor, State Superintendent of Public Instruction, Speaker of the California Assembly, and the presidents of the State Agricultural Society and the Mechanics Institute of San Francisco, *ex officio*—contained both perspectives. Other Regents before 1900 had also held political office, so like trustees of local boards of education, the Regents were enmeshed in local, regional, and sometimes national politics. Their values, the social ramifications of many issues, and their connections to business, professional, and religious circles made their's an inevitably political role.[63]

The Regents rapidly acquired reputations as the servants of privilege and as the clumsy, if not faithless, custodians of the public's trust. Their nettlesome professor of agriculture fed that perception in 1874, calling the Regents an ungoverned guild, a "solidarity of resistance to the popular demands, which, however crude, always tends toward reason and justice."[64] The tradition of "democratic localism" in American school governance, Michael B. Katz's term, had cultural appeal and special urgency where state government appeared as corrupt as in early California.[65] But neither was local government necessarily pure, disinterested, or efficient. Without independent central control, educational institutions seemed too responsive to unworthy local influences—as when a teacher was hired because of her family connections or another was denied a post because he could not purchase property offered by a school trustee. Still, it seemed easier to prevent, detect, and root out the rascals in local politics, although a wish to distribute the boodle locally certainly figured in the popularity of the ideology of local control.[66]

The American tradition of lay government by non-experts widened the channels of influence, thereby weakening the political power of professional lobbies. This principle, perhaps rooted in a latent but pervasive anti-intellectualism, dominated the governance of the schools and higher education alike.[67] University professors and common school teachers thus lacked ultimate, and sometimes even advisory determination of their administrators, colleagues, curriculum, disciplinary policy, and working conditions. President Kellogg was laughably naïve when he doubted, in 1893, that high school principals "in this young state were forced to write undeserved recommendations for the University for the children of influential men."[68]

In theory the powers in the new office of district superintendent of schools compensated for what the school principal lacked in political independence. But former state and San Francisco superintendent, John Swett, echoed the complaint of numerous other putative

school chiefs: "He was allowed a seat in the board, but no power to decide anything, not even to send out a substitute teacher for a single day. He could not suspend or reinstate a pupil."[69] University professors attending the 1894 meeting of the California Teachers Association in Santa Cruz should have identified with that city's superintendent when he complained that most school boards selected teachers with minimal consultation with the superintendent.[70] Schools and the university both had large lay boards that operated through committees that assumed administrative duties at will.[71] The short tenure of San Francisco's nineteenth-century superintendents—a maximum of four years for any of 20 men—resembled the duration of university presidents until 1899, when Benjamin Ide Wheeler began his 20-year tenure.[72]

The "Dolly Vardens"—the People's Independent Party that captured the legislature in 1873—proposed popular election of the Regents to assure financial and educational accountability. This effort failed in the 1874 legislature, and the 1879 Constitution confirmed the relative autonomy of the Regents by incorporating the 1868 Organic Act. Neither public satisfaction with the Regents nor convincing evidence of their competence explains the protection of Regential autonomy. The explanation perhaps lies with the ties between some Regents and members of the Constitutional Convention, or with the greater incompetence and more certain corruption of other elected officials. Local elected school trustees could not bear too-close scrutiny for their diligence, good sense, or clean hands; a new arrangement might prove worse. The Irish of San Francisco had a ready proverb: "The Divil ye know is better 'n the Divil ye don't know."

Church, State, and School

Christian missionaries were among the first to respond to news of the California gold strike. Harvard's President Edward Everett urged Yankees to march west "with the Bible in one hand and your New England civilization in the other and make your mark on the people and the country."[73] By "mark" he meant planting churches, Sunday Schools, Bible societies, and schools and colleges. The difficulty of establishing strong sectarian loyalties and settled congregations in a new land and in secularizing times, made schools important to the strategy to make the West Protestant. The response to this call was palpable: clergymen opened at least 40 academies and colleges in California before the Civil War, including all of the state's earliest permanent colleges, serving the minister's goals of personal piety and social uplift and the educator's faith in human perfectibility and self control.[74]

Congregationalists, Unitarians, and "New School" Presbyterians, in the forefront of the common school movement in the Northeast, were similarly active in California, promoting public schools as well as founding nonsectarian (interdenominational) Protestant private schools and colleges. Rev. Henry Durant, for example, came to California in 1853, he said, with "college on the brain," founded the Contra Costa Academy and its successor, the College of California, taught in the college and in the university, and became university president. Voters also elected him mayor of Oakland in recognition of his contributions to community life.

Sectarian competition was as alive in California as elsewhere, though the early presence of many Irish and the holdover influence of Spanish California meant that anti-Catholicism lacked its Eastern intensity. Initially local Protestants patronized the Jesuits' Santa Clara College rather than send their sons to Hawaii or Boston for schooling.[75] Still, Santa Clara College, founded to protect "Catholic California," was described as "the calm, shrewd, steady systematic movement of the Jesuit order" by a Protestant pamphleteer in 1856, "to subvert the principles of the Reformation, and to crush the spirit of liberty." The only recourse in the competitive theological and social climate of American sectarianism was to "build college against college."[76] Henry Durant dismissed old-school Presbyterian attacks on the College of California as "The old familiar hue and cry of jealous priest-craft against the independency of Churches and Colleges...."[77] Nor were public institutions spared. Charles Maclay, a legislator who also served as a trustee of the Methodist college opposed the plan for the University of California. Maclay, like many other friends of denominational colleges, hoped to divide the state's Seminary Fund and Morrill Land Grants among the private colleges and a small public agricultural and engineering college.[78] Ironically, the new state university actually made the Catholic colleges "numerically and ideologically more Catholic" because Protestant and secularist students departed, while pious Catholics remained behind in institutions now freer to reaffirm their faith.

In their struggles over student souls, the denominations alternatively competed and collaborated, responding to constitutional and statutory limits on government support of church activities. Early policies against religious tests in admitting academy and college students demonstrated American reliance on tuition income, as much as it affirmed toleration. The removal of religious tests on faculty and trustees and the end of compulsory chapel reflected social secularism, evident everywhere except in the South. Similarly, the public schools gradually dropped Bible reading, school prayer, and textbooks that promoted religion and denigrated Catholics and Jews—concessions to religious pluralism more than to constitutional principles. Public schools also promoted religious "neutrality" to attract children from private schools. Liberal Protestants supported secularization of the common schools to compete with Catholic schools, especially in the larger cities. As the civic aim of education came to dominate the teaching goals of common schools, denominational schools reconsidered their own approaches to religion in education.[79]

California's original constitution prohibited giving state School Fund monies either to sectarian schools or to doctrinal teachings in common schools. But, in 1853, on recommendation of State Superintendent John G. Marvin, the legislature enacted a law permitting Catholic schools in San Francisco to share in school funds raised by local taxation. Loud protests from public school and Protestant voices forced the repeal of the Act in 1855.[80] The 1868 Organic Act creating the University of California, and the Act's incorporation into the revised Constitution of 1879, similarly affirmed the university's non-sectarian identity. Noting that the Regents' Secretary was an Episcopal clergyman and that the proposed Lecturer in Botany was also an Episcopal minister,

"Inquirer" asked the San Francisco *Examiner* if the non-sectarian character of the university was being destroyed (1883).[81] At the same time, Rev. Samuel Willey complained that "Roman Catholics, Jews, and indifferents or Skeptics—but no minister (but one Unitarian)" were being appointed to the University's first Board of Regents.[82] And President Gilman was criticized for not including traditional religious rituals in the university's first commencement at its new Berkeley campus.

The charter of the University of California forbade "sectarian, political or partisan tests" in any aspect of its governance or operations. Churchmen renewed their complaints of rampant immorality and irreligion at the university during the 1874 controversy with the Grange and Mechanics Institute. Edward R. Sill resigned his chair in English in 1880 rather than respond to attacks on his religious radicalism.[83] Mr. Bolce, author of a critical article in the San Francisco *Examiner*, appeared at Professor Howison's class in 1894 to gather on-site information about the philosopher's heterodox views; Bolce defended his right to be there as a citizen.[84] The absence of religion from university classrooms prompted Archbishop Riordan to arrange for a Newman Center for Catholic students. In turn, Catholic college spokesmen charged that Riordan thereby betrayed Catholic institutions and educational principles.[85] How tangled the issues!

Religious bodies had centuries-long associations with formal education; churchmen had long run academic institutions and had chosen teachers and curriculum with little outside interference. The growing state responsibility for education, however slow and uneven, was therefore revolutionary. Adherents of revealed religion responded through protest, propaganda, and politics. In 1903, the university instituted requirements in "evolutionary philosophy" and biology in its affiliated law and medical schools. The Jesuits called this action hostile to Catholic students. Ironically, sectarian divisiveness only hastened the day of public school and public university dominance in a society transformed by precisely the religious skepticism and scientific rationalism that entered the classrooms and laboratories of high schools and colleges.

Intellectual Currents

Powerful ideas, as well as demographic, political, and cultural elements helped to shape schools and universities alike. Many observers echoed "Columella's" idealization of science, which appeared especially productive in Germany's education, civil service, and industry. All parties in the university's 1874 crisis agreed that spirit of science, open-minded, forward-looking, unfettered, should shape the "new education"—whether "industrial" or "liberal." The scientific method was declared applicable to inquiry in many old and new disciplines and would, sooner or later, inform all the practical arts that sought space and time in school and university curricula. In 1893, Joseph LeConte called science a "sort of noble contagion" infecting "every department of modern thought with her own spirit and her own methods."[86]

Science included using research findings to treat patients, speed products through the manufacturing and transportation systems, increase crop yields, make better law, and

improve city government and school and university management. University publicists invariably had an easier time selling applied than basic science to public opinion. Many late nineteenth century American academics believed that German universities best signified pure research and disinterested intellectualism. To others, especially in the reading public, German scholarship promised a utilitarian university, with schools of agriculture, commerce, and public administration. The American educational world admired German educational institutions and German-born pedagogical principles and practices, regardless of what one wished to see and however much was "lost in translation."

This envious eye-on-Germany was another strand that linked the universities and the schools. From its earliest days, the Board of Regents saw Germany as the beacon into the educational future. The Regents' *Minutes* contain frequent authorizations for book and equipment purchases in Europe, especially scientific apparatus in Germany. The Regents occasionally commissioned a professor to travel to Europe, usually Germany, to determine and fill the university's needs. The Regents granted instructors leaves to study in Germany and, in the 1890s, subsidized extended study in Germany for a promising young philosophy instructor, George M. Stratton. Stratton later introduced modern experimental psychology into the University of California, a field soon to have a decisive impact on the training of teachers and the organization of school instruction in the state. The humanities at Berkeley also acquired German-educated scholars—in English, history, and philosophy, but Carr and his supporters thought the Regents should have looked abroad even more. They countered the Regents' statements about inevitable failures in agricultural education, for example, with accounts of German and other European triumphs in scientific agriculture.

Other German influences on American schools and colleges included the introduction of physical culture by German immigrants, especially their more vigorous model of gymnastics, into the schools in competition with the Swedish system. German-method physical educators traveled to Sacramento at least twice in the 1890s to lobby for compulsory physical culture in the public schools. Soon after its opening, Berkeley's physical culture department became so popular that women students first asked for time in the gymnasium, and then equal time. The university hired Mary Bennett Ritter, a woman's physician to ensure the fitness of its students. When she taught a hygiene course in 1898, Ritter laid claim to being the university's first woman faculty member.[87] In 1897, the Academic Council began planning for a training program within the university for prospective high school physical education teachers.

German immigrants promoted the use and study of the German language in elementary and secondary schools in communities where German native-speakers were numerous and politically active. One of San Francisco's two public "cosmopolitan schools" used German as the language of instruction; the other was a French language school. Both succumbed to the nativist, anti-immigrant pressures that also led to progressively more federal limitations on immigration after 1882. Increasing numbers of high school students studied German; many students wished to learn the

subject as the universal language of science. The national percentage of high school graduates taking German went from 11 percent in 1889, and 15 percent a decade later, to over 24 percent in 1915.[88] The University of California offered German language and literature from the beginning.

The American college, like the common schools and high schools, still taught primarily by the recitation or textbook method, called the "American method." Class meetings were, in fact, commonly referred to as recitations, with frequent quizzes. The lecture, a German method that relied on the teacher's independent command of the subject and ability to synthesize knowledge from many sources, was touted as a pedagogical breakthrough. President Gilman introduced Friday afternoon lectures at Berkeley in 1874—welcome departure in an institution that some thought was dominated by text-book crammers. Gustavus Schulte, local German-born academy teacher and caustic critic, urged other university faculty members to emulate Ezra Carr and the LeContes. Each of these professors was "the live teacher, the lecturing teacher," spreading the "fruit of his own thoughts, his own research, his own labor—ever fragrant, fresh and new before his class." If all other faculty members followed suit, Schulte argued, the university's buildings "would soon be thronged with hungry crowds of students" rather than the disappointingly few matriculants.[89]

Bernard Moses introduced the seminar, then called "seminary," into the University of California in 1888 or 1889. Moses brought together juniors and seniors to present their original investigations, under his direction, into contemporary European politics. "In some measure they become their own instructors," President Davis explained to the Regents. Such work signalled the first dawn of the graduate era at Berkeley, and the promise of a further maturing of German influence.[90]

California evinced many other German pedagogical influences. In 1859, State Superintendent Moulder challenged California to make her schools as good as those of Massachusetts or Prussia, and California reformers emulated the New England example of importing the centralizing force of a strong state board or state superintendent of education, in the spirit of the Prussian minister of education. But countervailing tendencies toward decentralization were too-strong in California, as in New England. California acquired its first state normal school, an American adaptation of the teachers' seminaries of Prussia, before the university was chartered. California state superintendents, conceiving of teachers as well-paid professionals, civil servants in the best sense, pressed for more normal schools, compulsory teacher institutes, and teacher certification by examining boards composed of teachers. But in an 1894 State Teachers Association meeting, attended by university faculty members, Professor Edward T. Pierce of the Los Angeles State Normal School questioned California's efforts in teacher education, noting that Germany and France spent over four times as much per normal school student, while 95 percent of Germany's and only 10 percent of California's teachers had special training.[91]

The kindergarten, another German importation, was an acceptable outlet for an increasingly large pool of women with too much education and time for the domestic sphere. These women created private kindergartens, charity kindergartens, training schools for their teachers (called "kindergartners"), national and international organi-

zations, and publications—a full professional movement. As "child savers," free kindergartens fit into a broad movement of humanitarian and religious reform, while soothing concerns about America's capacity to "Americanize" the children of immigrants. Soon after 1900, northern and western public school systems largely absorbed the initially-separate kindergartens, clearly indebted to Friedrich Froebel, and redirected them along "progressive" lines.

The University of California had, and squandered, the opportunity to earn a prominent place in the history of kindergarten education in the west. German-born and Froebel-trained, Emma Marwedel once ran a successful kindergarten in Los Angeles in 1876, enlisting Kate Douglas Wiggin and others in the movement. In the spirit of German romanticism, but also congenial to the American messianic tradition, Marwedel had earlier written, "I believe in the power of the kindergarten to reform the world."[92] Apparently wishing to connect her work with the university, Marwedel moved to Oakland in 1878 to open a school and training class. But a Regents committee denied, without comment, her request to rent university space for a kindergarten training school.[93]

Another admired German educational theorist was Johann Friedrich Herbart. The first American research-oriented pedagogical society was the Herbart Society for the Scientific Study of Teaching, organized in 1895 by Charles McMurry of the Illinois State Normal University and President Charles DeGarmo of Swarthmore College.[94] The subject-matter conferences that led to the 1893 Report of the Committee of Ten on Secondary School Studies, accepted without question the Herbartian principle of coordination of subjects to improve learning. Herbartianism advocated field trips, hands-on learning, and opportunities to practice—increasingly called the laboratory or inductive method—for teaching virtually every subject. Appreciative audiences saw Herbartian approaches demonstrated at the period meetings of the California State Teachers' Institute as early as 1870.[95] In the official organ of the State Department of Public Instruction, Joseph LeConte wrote on "Sense-Training and Hand-Training in the Public Schools." The prevailing "Scholastic methods"—what Andrew D. White called the "Strasburg method" of teaching, akin to fattening geese—took a repeated drubbing from university professors in their talks at California Teachers Association Meetings.[96]

But the University of California could not be the University of Berlin. In "The True Idea of a University," Joseph LeConte criticized German and English universities as rooted in aristocratic ideas of learning, and intellect. "We are free to make experiments," LeConte argued. "We can look at the subject with unclouded eyes, and surely no where in America have we a fairer opportunity than here in California."[97] This opportunity was not lost, though it did not always appear that way. Australians call *their's* "The Lucky Country," but California might advance the same claim. More than its schools, its university profited from good fortune. From unpromising beginnings and a deficiency of educational vision and statesmanship, a great university haltingly emerged at Berkeley one both more theoretical and more practical than the respective partisans had any right to expect.

In 1910 Edwin Emery Slosson published *Great American Universities*. A chemist better known as a science journalist and editor of the *Independent*, Slosson was well-

connected in academic circles and well-informed. His "great universities" list read, alphabetically California, Chicago, Columbia, Cornell, Harvard, Johns Hopkins, Illinois, Michigan, Minnesota, Pennsylvania, Princeton, Stanford, Wisconsin, and Yale. Student numbers—which lead to faculty numbers and instructional budgets—helped him to create his pantheon. Comparing California and Stanford, Slosson wrote,

> The University of California has a long list of humanistic, scientific, and technical publications. It extends its influence throughout the State by means of lecture courses. It is closely connected with the public school systems. Its summer school is large and prosperous. It sends abroad archaeological and scientific expeditions. It has been an important factor in the remarkable agricultural development of California. And in addition to all this, it takes care of twice as many students as Stanford, although its income is less than the gross income of the Stanford property.[98]

At least five of these achievements required a strong nexus between school and university. A public institution, the university had rhetorical and some real responsibility for heading a unified system of schools. And, despite the presence of both comity and friction in their relations, four decades of institutional interaction in a shared social context paid off handsomely for both. Not long into the twentieth century, the state's public schools and its flagship state university were together considered among the nation's very best.

NOTES

[1] Several ideas set forth below were first explored in Geraldine Jonçich Clifford, "'Shaking Dangerous Questions from the Crease:' Gender and American Higher Education," in *Feminist Issues* 3 (Fall 1983): 3-62.

[2] A widely used survey, so popular that it went into a revised and enlarged third edition in 1976, is John Brubacher and Willis Rudy, *Higher Education in Transition: A History of American Colleges and Universities, 1636-1976* (New York, N.Y.: Harper and Row, 1976 [1958]). It covers the rise of women's education, women's colleges, and coeducation on six of its 514 pages. Richard Hofstadter and Wilson Smith's *American Higher Education, A Documentary History* (Chicago, Il.: The University of Chicago Press, 1961) is supposed to capture the essence of the period 1850-1950 in its second volume; none of the 65 selections treats women students and the issues creating or issuing from their appearance, and no entry for "coeducation," "females," or "women" appears in their index. Until Verne A. Stadtman's *The University of California, 1868-1968* (New York, N.Y.: McGraw-Hill, 1970) was published, the standard work on that institution was William Ferrier's *Origin and Development of the University of California* (Berkeley, Calif.: The Sather Gate Bookshop, 1930); its index is similarly silent about women's presence in this large coeducational institution, and references to women in the text are few and superficial.

[3] This is the theme of Geraldine Jonçich Clifford, "School/Teacher/University: Towards a New Framework for the History of Higher Education in the United States," Willystine Goodsell Award Address, American Educational Research Association Annual Meeting, Atlanta, Georgia, April, 1993.

[4] An exception is Merle Curti and Vernon Carstensen, *The University of Wisconsin, A History, 1848-1925*, 2 vols. (Madison, Wisc.: The University of Wisconsin Press, 1949).

[5] These institutional and personal relationships are highlighted in Geraldine Jonçich Clifford, "Equally in View: The University of California and the Schools," a chapter in Sheldon Rothblatt and Carol Brentano, eds., *The University of California: Anniversary Essays for a Second Century* (forthcoming).

[6] Harold Wechsler helped me greatly in focusing this paper. I am also indebted to anonymous reviewers for the *History of Higher Education Annual*.

[7] An obvious exception is David Allmendinger, *Paupers and Scholars: The Transformation of Student Life in Nineteenth-Century New England* (New York, N.Y.: St. Martin's Press, 1975).

[8] Hereafter, for simplicity's sake, the term college and university will ordinarily be used interchangeably. The term "lower education" is being deliberately avoided. Unless otherwise indicated, "schools" refers generically to what was already evident in various parts of the United States in the later nineteenth century: a *ladder* of institutions from kindergarten or first grade through grade twelve.

[9] The published general histories of California's schools, colleges, and universities are limited in scope and subtlety, and neither standard nor revisionist histories of education do much justice to the west. The few biographies of California educators are mostly celebratory. And because mine is meant to be a "corrective" approach to a strongly perceived inadequacy in the historical portrait, it may prove overdrawn. It also concentrates upon the state's first half-century, with only a few steps into the present. Nonetheless, one begins by beginning.

[10] Lawrence Stone, "The Ninniversity," in *The New York Review of Books* (January 28, 1971), 24.

[11] "The Building of the University: An Inaugural Address Delivered at Oakland, November 7th, 1872" (San Francisco, Calif., 1872). In University Archives, Bancroft Library, University of California at Berkeley (hereafter UnAr).

[12] Thomas Douglas was drawn from the Sandwich Islands by an advertisement for a teacher. In William Ferrier, *Ninety Years of Education in California 1846-1936* (Berkeley, Calif.: The Sather Gate Bookshop, 1937), 24-26. The Monterey incident is reported in J. S. Holliday, *The World Rushed In: The California Gold Rush Experience* (New York, N.Y.: Simon and Schuster, 1981), 35.

[13] Of the 26 state universities founded before 1870, all but four received federal land endowments, the earliest in 1804; these stimulated state action. See Joseph Lindsey Henderson, *Admission to College by Certificate* (New York, N.Y.: Teachers College, Columbia University, 1912), 41; for a good brief survey, see 10-21.

[14] In 1897 eastern students at Stanford were asked why they went west for schooling. The California climate lured 30 percent, the university's prestige 16 percent, the elective system 14 percent, the desire to see California 12 percent, and the low cost 10 percent. The remaining 12 percent mentioned the faculty's reputation and the institution's ideals. Newspaper clipping

cited in Laurence R. Veysey, *The Emergence of the American University* (Chicago, Il.: The University of Chicago Press, 1965), 271n.

[15] Dr. C.N. Ormsby, July 24, 1849, in Holliday, *The World Rushed In*, 59. Unless otherwise indicated the data on California in its first decade as a state are drawn from Holliday.

[16] The American period continued the decimation of California's indigenous population, begun by disease, conscription as laborers on the mission lands, and neglect after these lands were released from Church control. An original population estimated at 250,000 in 1769 was reduced to some 20,000 in 1880. In Sherburne F. Cook, "The Destruction ... ne California Indian," in *California Monthly* 79 (December, 1961): 15-19.

[17] Cited in Ann Foley Scheuring, *A Learned Profession: A History of Agriculture at the University of California*, Working Papers of the Agricultural History Center, University of California at Davis, No. 61 (Davis, Calif.: University of California at Davis, 1990), 33. Populist critics of the university's admittedly half-hearted early efforts in agricultural education ignored this reality, however.

[18] Henry Durant, *Oration and Poem* (San Francisco, Calif.: Towne & Bacon, 1865), 9. Quoted in Patrick Joseph Foley, "The Antecedents and Early Development of the University of California, 1849-1875" (unpublished dissertation, University of California at Berkeley, 1970), 48.

[19] James Edward Myers, "The Educational Work of Andrew Jackson Moulder in the Development of Public Education in California, 1850-1895" (unpublished dissertation, University of California at Berkeley, 1961), 44, 50, 80.

[20] For the connections between California's statehood and the great debate over the extension of slavery to the former Mexican territories, as perceived by some gold seekers and their families at home, see Holliday, *The World Rushed In*. On New England influence in early California education, see Charles J. Falk, *The Development and Organization of Education in California* (New York, N.Y.: Harcourt, 1968), 17; Ferrier, *Ninety Years*, 65; Roy W. Cloud, *Education in California: Leaders, Organizations, and Accomplishments of the First Hundred Years* (Stanford, Calif.: Stanford University Press, 1952), passim. For a similar influence on educational formation in the midwest, see Curti and Carstensen, *Wisconsin*, 49.

[21] Myers, *Moulder*, 81.

[22] *Annual Report of the State Superintendent of Public Instruction* (January 3, 1859), in Moulder Papers, Bancroft Library, University of California at Berkeley (hereafter Bancroft). For the broader context and subsequent developments in school racial segregation, see Charles M. Wollenberg, *All Deliberate Speed: Segregation and Exclusion in California, 1855-1975* (Berkeley, Calif.: University of California Press, 1976).

[23] Only two long-serving regular Regents were Southerners: Jonathan Swift (1872-1888) and W.T. Wallace (1875-1902), both from Kentucky. From chronological list and biographies in UnAr.

[24] Joseph LeConte, "Effect of Mixture of Races on Human Progress," in *Berkeley Quarterly* 1 (1880); "The Genesis of Sex," in *Popular Science Monthly* (December, 1879); "The South Revisited," *Overland Monthly*, II, 14 22 (1889): 2-11.

[25] Joseph LeConte, *The Autobiography of Joseph LeConte*, ed., William Dallam Armes (New York, N.Y.: D. Appleton and Co., 1903).

[26]Mrs. Leland Stanford, sole trustee of Stanford University, was the widow of a railroad magnate, and her extensive financial interests in rail and streetcar lines would have been affected by such "socialistic" ideas as Ross expressed. See Veysey, *Emergence*, 400-407 et passim.

[27]United States Senate Report No. 689 (1876), 1067, quoted in Foley, *Antecedents*, 97-99. Dwinelle resigned from the board late in 1874.

[28]Nd. Quoted in Samuel H. Willey, *A History of the College of California* (San Francisco, Calif.: S. Carson and Co., 1887), 141.

[29]September 18, 1872, *Regents Minutes*, vol I, 277-279 (in Office of the President of the University of California, Oakland). It was not until 1895 that the Regents sold the property and created the professorship. Under terms of the gift, any funds realized from the sale over the $50,000 gift, as happened, were returned to Tompkins' estate. This fact and keeping valuable property off the tax rolls for two decades was one of the Regents' financial decisions that aroused public suspicion and criticism.

[30]The University of California enrolled lower proportions of immigrants and children of immigrants than did Columbia University, the College of the City of New York, or the University of Minnesota, among others. In Reports of the Immigration Commission, *The Children of Immigrants in Schools* (Washington, D.C., 1911), vol. 5, esp. 296, 336, 721, 735, 739. The better educated and more prosperous Italian north provided the bulk of Italians in Northern California before 1900.

[31]Thomas Jefferson Farnham (1839?), in James D. Hart, *American Images of Spanish California* (Berkeley, Calif.: University of California, 1960), 13.

[32]William Swain, April 1850, in Holliday, *The World Rushed In*, 370.

[33]William G. Eliot, *Inaugural Addresses Delivered Before the Government and Alumni of Washington University, February 29, 1872* (St. Louis, Mo.: Levison and Blythe, 1872), 13.

[34]Horace Bushnell, *Movement for a University in California: A Statement to the Public By the Trustees of the College of California, and An Appeal* (San Francisco, Calif.: Pacific Publishing Co., 1857), 4, 5 (emphasis added.) Copy in UnAr. Bushnell was visiting California for his health. He declined the presidency of the College of California but visited sites around San Francisco Bay searching for the College's permanent home. He wrote this pamphlet to gain support locally and among potential eastern benefactors.

[35]In Ferrier, *Ninety Years*, 69.

[36]David Tyack and Thomas James, "State Government and American Public Education: Exploring the 'Primeval Forest,'" in *History of Education Quarterly* 26, no. 1 (Spring 1986): 39-69. Rush Welter coined the phrase "anarchy with a schoolmaster" to describe the American penchant to support schooling in lieu of other government programs, under the assumption that educated persons would be able both to take care of themselves and their families and to obviate the need for "big government." In *Popular Education and Democratic Thought in America* (New York, N.Y.: Columbia University Press, 1962).

[37]Andrew J. Moulder, "Annual Report of the State Superintendent of Public Instruction," (January 3, 1859), 4, 6, 7. Moulder Papers, Bancroft.

[38]"Appendix to Annual Report, Siskiyou County, Hawkinsville," November 8, 1858. Newspaper clipping in Scrapbook, in Moulder Papers, Bancroft.

[39] Henry Steele Commager, *The American Mind: An Interpretation of American Thought and Character Since the 1880's* (New Haven, Conn.: Yale University Press, 1950), 10.

[40] In Gerald McKevitt, S.J., *The University of Santa Clara: A History, 1851-1977* (Stanford, Calif.: Stanford University Press, 1979), 57. Moulder amended his views somewhat after becoming Secretary of the Regents. A university should be, he wrote, "an institution of learning in which everything is taught in science and learning which the student desires to learn," a broader view than what the critics derided as the "narrowly practical." In Moulder, "Report of the Board of Regents, 1872," (San Francisco, Calif., 1872), 7, in Myers, *Moulder*, 138.

[41] Alexis Lange, in Arthur H. Chamberlain, ed., *The Lange Book* (San Francisco, Calif.: Trade Publishing Co., 1927), 129. Emphasis added.

[42] Ezra S. Carr, "Industrial Education Abstract of a Lecture Before the State Teachers Institute," in *Proceedings of the California State Teachers' Institute, September 13-16, 1870* (Sacramento, 1871), 52-53. Copy in Bancroft. For an introduction to the origins and implementation of the Morrill Act, see Rudolph, *American College*, 241-263 and his bibliography.

[43] College of California, *Announcement of the Mining and Agricultural College* (San Francisco, 1864); *Catalogue of the College of California and College School* (San Francisco, 1867), 16. Both in College of California and University of California *Documents, 1861-1875*, vol 1. UnAr.

[44] Willey, *College of California*, 211-212.

[45] Eldon L. Johnson, "Misconceptions About the Early Land-Grant Colleges," *Journal of Higher Education* 52, no. 4 (July/August 1981): 333-351.

[46] Jeremiah Day in Brooks M. Kelly, *Yale. A History* (New Haven, Conn.: Yale University Press, 1974), 165; Sherman Day in Willey, *College of California*, 278-279.

[47] In this spirit, in 1872 the Academic Senate passed to the Regents, without recommendation, the protest of certain Juniors against granting the A.B. to Arthur Rodgers, a graduate of the College of Agriculture. The *Regents' Minutes* (I, 264) report that, after debate, he was awarded the Bachelor of Science. He is listed, however, as A.B.'72, Ph.B.,'73, in California Alumni Association Central Council, *Directory of Graduates of the University of California, 1864-1916* (Berkeley, Calif.: University of California, 1916), 1, 2.

[48] Berkeley honors graduate, Harry Overstreet ('99), later professor of philosophy at the City College of New York, recalled that "All these studies were simply separate tasks that bore no definite intrinsic relation to each other....The right studies were there; what was lacking was the conscious organization of them for the students." Harry A. Overstreet, in H. C. Goddard et al, "The American College Course," in *Educational Review* 26 (1903): 169-170. Martin Trow calls this curricular variety an "intellectual supermarket" in "The State of Higher Education in the United States," in William K. Cummings et al., eds., *Educational Policies in Crisis: Japanese and American Perspectives* (New York, N.Y.: Praeger, 1986), 187; its high school counterpart is frequently referred to as a "cafeteria of courses," or more recently a "shopping mall." See Arthur G. Powell, Eleanor Farrar, and David K. Cohen, *The Shopping Mall High School: Winners and Losers in the Educational Marketplace* (Boston, Mass.: Hougton Mifflin, 1985).

[49] This plan, adopted in 1901, created the "a to f" sequence. In 1990 these were a) one year of U.S. history, b) four years of college preparatory English, c) three years of mathematics (four years recommended), d) one year of laboratory science (three years recommended), e) two years of foreign language (three years recommended), and f) four years of college preparatory electives.

[50]"Report of the United States Commissioner of Education for the Year 1899-1900," in Brown, *Middle Schools*, 472. Among *graduates prepared for college* that year, 49.9 percent studied Latin compared to 41 percent in English literature, suggesting how late the classics dominated the college preparatory curriculum. Greek enrollments, however, had fallen to 3.9 percent of the students.

[51]Grove K. Godfrey, "Shasta City Report [for 1858?]," in "Abstract of County Superintendents' Reports," Scrapbook in Moulder Papers, Bancroft.

[52]*Proceedings of the California Teachers Association, Twenty-Eighth Annual Meeting*, 90. Copy bound with Joseph LeConte, *Miscellaneous Writings*, vol. 4, Bancroft.

[53]Lange, "High School Development" (1908), in *Lange Book*, 53. An invention of the eighteenth century, the academy introduced navigation, surveying, botany, drawing, modern foreign languages, English, and modern history and geography—as alternatives to the Latin Grammar School's curriculum which prepared narrowly for college or conferred the patina of classical learning upon the rest of its limited clientele.

[54]*Official Historical Atlas Map of Alameda County, California* (Oakland, 1878), 27. Its principal, Rev. S.S. Harmon, was another of the graduates of Union College working in the area. Theodore Sizer notes the "bookish" teaching and "absurd six-week packages" through which the inflated academy curriculum was often taught, in his *Secondary Schools at the Turn of the Century* (New Haven, Conn.: Yale University Press, 1964), 4.

[55]Hon. John R. Glascock, "Address on Behalf of the Alumni," in "Addresses at the Inauguration of Martin Kellogg, LL.D. as President of the University of California, Berkeley, March 23, 1893," 13-16. Bound with Joseph LeConte, *Miscellaneous Writings*, vol. 5, Bancroft. Glascock did not mention "strong minded women" (feminists) as a product of a misapplied education but many others of his generation did.

[56]See Harvey Kantor and David Tyack, eds., *Work, Youth, and Schooling: Historical Perspectives on Vocationalism in American Education* (Stanford, Calif.: Stanford University Press, 1982).

[57]Carr, a popular speaker before groups of teachers and farmers groups, was an active supporter of the university's women students. These women students believed that Jeanne Carr, his wife, provoked the Regents' 1870 decision to admit women to the university. In "Flossie Banks, A Co-Ed of '70," in *Student Opinion* 2, no. 7 (1916), 3. Citation courtesy of Maresi Nerad. The first woman graduate was a student of agriculture.

[58]Californians tend to see this episode as a morality play the enlightened Gilman (later to prove himself a far-sighted educational statesman at Hopkins), with his supportive and unfairly maligned Regents and a lonely pair of discerning newspaper editors, besieged by narrow-minded, demagogic populists and an eccentric if not malevolent Carr, vindicated by a sensible legislature, though at the cost of losing Gilman and delaying the university's rise to greatness. The real story is, of course, more complex, interesting, and important—one I hope to re-analyze elsewhere.

[59]"Columella," [Hon. G. M. Pinn[illegible], Oakland], "The New Education...," reprinted in *The University of California and Its Relations to Industrial Education, As Shown by Professor Carr's Reply to the Grangers and Mechanics...and other Documents* (San Francisco, Calif.: Benjamin Dore & Co., 1874), 75. UnAr.

[60] Ferrier, *Ninety Years*, 113-114; David Tyack, Thomas James, and Aaron Benavot, *Law and the Shaping of Public Education, 1785-1954* (Madison, Wisc.: University of Wisconsin Press, 1987), 99-105.

[61] Bushnell, "Appeal," in Willey, *College of California*, 29.

[62] For a good brief account see "The Southern Pacific's California," in George E. Mowry, *The California Progressives* (Berkeley, Calif.: University of California Press, 1951), 1-22. For sources on the railroading's effects on California agriculture, see Scheuring, *Learned*, 37. The railroads ran crusading newspapers out of business, bought others, and gave "subsidies" to most of the rest according to San Francisco *Bulletin* editor, Fremont Older, in *Growing Up* (San Francisco, Calif.: San Francisco Call Bulletin, 1931).

[63] The Board's first underestimation of the *educational* nature of the institution they governed was offering the university's presidency to discredited US Army General (and 1864 Democratic presidential candidate) George B. McClellan. A howl went up and ex-Governor Low resigned in protest, but McClellan saved the situation by declining. In one of their first actions to secure faculty, the Regents offered a professorship of law to United States Supreme Court Justice Stephen J. Fields, formerly a justice of the California Supreme Court. Stephens accepted, to the extent of offering lectures on constitutional, international, and municipal law from July to October 1871. Whether their desire was to capture a "big name" for the young university or was dictated by personal connections with Fields, the more worldly Regents cannot have been unaware of Field's record and reputation bought and sold by the Southern Pacific. *Minutes of the Board of Regents of the University of California*, vol. 1, 145, 177. In Regents, Oakland; Mowry, *California Progressives*, 13.

[64] The problem lay, he thought, with its unrepresentativeness "I believe this Board has done as well as any other Board so chosen and constituted." Ezra S. Carr, "Professor Carr's Reply to Inquiries of Joint Committee...," in *The University of California...and Industrial Education*, 68, UnAr. The university's first woman doctorate and editor of the influential western literary magazine, *Overland Monthly*, Millicent Shinn ('80, '98) concluded that, at the least, the Regents "have not been good judges of men for university purposes." Successive governors continued to choose Regents primarily for their presumed ability to guard the university's funds rather than "for knowledge of and sympathy with university ideas." Millicent Washburn Shinn, *The University of California* (San Francisco, Calif.: nd), 359-360. Reprinted from *The Overland Monthly* 20 (October, November, December, 1892), 359, copy in Bancroft, 359.

[65] Michael B. Katz, *The Irony of Early School Reform: Educational Innovation in Mid-Nineteenth-Century Massachusetts* (Cambridge, Mass.: Harvard University Press, 1968) and *Class, Bureaucracy, and Schools: The Illusion of Educational Change in America* (New York, N.Y.: Praeger, 1971). Mowry maintains, however, that small communities also had their "purchasable" editors, jurists, and city councilmen. In *California Progressives*, 12.

[66] There was strong resistance later to giving the State Board of Education governmental powers over the state normals schools, each with its own board of trustees and jealously guarded powers. The eventual centralization of their governance under a new Board of Trustees of the California State Colleges and Universities (the successor institutions of the normal schools/ state teachers colleges) was thought necessary primarily to compete for resources with the Regents of the University of California. A somewhat sanitized account of the story is Donald R. Gerth and James O. Haehn, *An Invisible Giant: The California State Colleges* (San Francisco, Calif.: Jossey-Bass, 1971).

[67] The governance reformers who argued for centralization commonly urged greater professionalism—as did Alexis F. Lange, the first dean of the University's School of Education. See, for example, his "Should the University be the Central Authority in a Unified School System?" (1899), in *Lange Book*.

[68] Martin Kellogg, "Accrediting Schools in California," in *Educational Review* 6 (April 1893), 684-688.

[69] John Swett, *Public Education in California* (New York, N.Y.: Arno Press, 1969 [1911]), 247.

[70] J.W. Linscott, "First Paper," in *Proceedings of the California Teachers Association*, 79.

[71] It was said of Regent Stebbins' power in the Board's committees that "at his frown every Professor in the University trembled in his boots." In Stadtman, *University of California*, 59, 103-104 et passim. Lawrence Veysey maintains that the Academic Senate of the University of California has never been able to exert true independence; whenever the Regents' own opinions or external pressures were strong enough, faculty self-government became hardly more real than student self-government. In *Emergence of the American University* (Chicago, Il.: The University of Chicago Press, 1965), 393n. In his analysis of the vulnerability of schoolteachers to local and political control, Martin Trow neglects to mention how this—and others of his points—also characterized higher education. In "The State of Higher Education," esp. 177.

[72] San Francisco's change from an appointed to an elected superintendent in 1855 was a contributing factor, but the national average tenure of the city superintendency at around five years suggests a more general problem of board-superintendent relations. See Theodore L. Reller, *The Development of the City Superintendency of Schools in the United States* (Philadelphia, Pa.: the author, 1935), 126-127.

[73] In John W. Caughey, *California* (New York, N.Y.: Prentice Hall, 1953), 246. The long standard work of Donald B. Tewksbury, *The Founding of American Colleges and Universities Before the Civil War* (New York, N.Y.: Teachers College, Columbia University, 1932), 31, 211, reported that nearly 90 percent of the 182 permanent chartered colleges were church-sponsored; even more were founded and failed.

[74] All the permanent colleges founded in the state's first two decades were church-sponsored: California Wesleyan College (later University of the Pacific), Santa Clara College (University of Santa Clara), St. Ignatius College (University of San Francisco), and The College of Notre Dame. The Baptists' Petaluma College School and the Disciples of Christ's Herperian College were examples of ones that failed to survive. Tewksbury, *Founding*; Clifford M. Drury, "Church-Sponsored Schools in Early California," in *The Pacific Historian* 20 (Summer 1976), 158-166.

[75] Santa Clara's earliest graduate, Thomas Bergin (Class of 1857) was one of the first directors of Hastings School of Law, which became an affiliated college of the University of California. In McKevitt, *Santa Clara*, 41, 48.

[76] In McKevitt, *Santa Clara*, 2, 41.

[77] Henry Durant, *"Divided" or, The Pacific Expositor on Unions* (San Francisco, Calif.: 1861), 1. In Foley, *Antecedents*, 45.

[78] Jones, *Illustrated History*, 12-13; Ferrier, *Ninety Years*, 188; Stadtman, *University of California*, 33.

[79] On the various ways in which Catholic schools adjusted to the public school presence, see Paula S. Fass, *Outside In: Minorities and the Transformation of American Education* (New York, N.Y.: Oxford University Press, 1989).

[80] An Independent, Marvin had won in a fluke. On the issue see Ferrier, *Ninety Years*, 6-7; Cloud, *Education in California*; Lee S. Dolson, Jr., "The Administration of the San Francisco Public Schools, 1847-1957" (unpublished dissertation, University of California at Berkeley, 1964), esp. 55.

[81] Undated clipping in Regents' Files, Box 7, Folder 18. UnAr.

[82] In Stadtman, *University of California*, 36. Stadtman describes the lone minister, Stebbins, as "unworldly" (42), a questionable judgment given Stebbins activism on the Board, his stubborn grasp on power, and his connections with San Francisco's business, social and political elites. He was apparently not loath to put himself in the midst of the Board's most bitter conflicts, as a partisan not a mediator.

[83] Veysey, *Emergence*, 424-425. Sill's own commitment to poetry writing was undoubtedly a contributing and perhaps the major factor behind his resignation.

[84] The Harold Bolce affair, which included eye-witnesses' testimony about whether he had been ordered out is found in the Academic Senate Papers, Box 7, Folder 10, UnAr.

[85] McKevitt, *Santa Clara*, 313.

[86] Joseph LeConte, "Address on Behalf of the Faculties," 19, in *Miscellaneous Writings*, vol. 5. LeConte spoke to the National Education Association's Annual Meeting in 1895 on "The Effect of the Theory of Evolution on Education," a popular topic in teachers' gatherings at least through the 1920s. See "The Effect of the Theory of Evolution...," *Educational Review* (September, 1895), 121-136, in *Miscellaneous Writings*, vol. 3, Bancroft.

[87] Ritter was the wife of William E. Ritter, professor of zoology. Her salary was reportedly paid by Regent Pheobe Apperson Hearst, the first woman regent; this arrangement is not indicated in the Regents *Minutes*.

[88] During the anti-German uprisings of the World War I period, MIT refused to eliminate its German admissions requirement, calling it essential to science education. Nonetheless, in 1922 under one percent of high school graduates nationwide were studying German, in enrollment statistics drawn from the annual reports of the United States Commissioner of Education. The wider climate of opinion and the responses of legislators, school board members, and educators are covered in Wallace Henry Moore, "The Conflict Concerning the German Language and German Propaganda in the Public Secondary Schools of the United States, 1917-1919" (unpublished doctoral dissertation, Stanford University, 1937), and Clifford Wilcox, "World War I and the Attack on Professors of German at the University of Michigan," *History of Education Quarterly* 33 (March, 1993), 59-84.

[89] Gustavus Schulte, *A Glance from a German Standpoint at the State University of California, Particularly and the Educational Systems of America and Germany, Comparatively*. (San Francisco, Calif.: 1871), 6-7, UnAr.

[90] On the lecture and seminar methods see Andrew Dickson White, *Autobiography* (New York, N.Y.: The Century Co., 1905), vol. 1, chapter 2; John W. Burgess, *The American University: When Shall it Be? Where Shall it Be? What Shall it Be?* (Boston, Mass.: Ginn, Heath, and Co., 1884). On their appearance at Berkeley, see *The Berkeley* (March 1874), 9; "Bi-Monthly Report of Horace Davis... (March and November, 1889)," Regents Files, Box 10, Folder 18, UnAr.

[91]Edward T. Pierce, "The Teaching Force—Normal Schools as a Source of Supply," in *Proceedings of the California Teachers Association, Twenty-Eighth Annual Meeting*, bound in LeConte, *Miscellaneous Writings*, vol. 4, 44, 46, Bancroft.

[92]Quoted in Rousas J. Rushdoony, *The Messianic Character of American Education* (Nutley, N.J.: Craig Press, 1963), 282. On Marwedel, see Fletcher Harper Swift, *Emma Marwedel, 1818-1893, Pioneer of the Kindergarten in California*, in *University of California Publications in Education*, 6, no. 3 (1931). On the professionalization of the kindergarten by American women, see Barbara Beatty, "'A Vocation from on High' Kindergartening as an Occupation for American Women," in *Changing Education: Women as Radicals and Conservators*, Joyce Antler and Sari Knopp Biklen, ed., (Albany, N.Y.: State University of New York Press, 1990), 35-50.

[93]Advisory Committee File, June 23, 1879, in Regents Files, Box 1, Folder 4, UnAr. Marwedel relocated her Oakland kindergarten elsewhere in Berkeley in 1879—next to a private preparatory school that also expressed a debt to Germany, the Berkeley Gymnasium—before moving it to San Francisco. It prospered there as the Pacific Kindergarten Normal School, with a model kindergarten and a primary department. Her school was patronized by leading San Francisco families and sponsored by influential benefactors like Jane Stanford and Phoebe Apperson Hearst, later the first woman member of the Board of Regents. Hearst was Marwedel's most devoted backer, providing her a monthly living allowance until her death. Professors Putzker and Hilgard were among Marwedel's friends in Berkeley, but her portrait hangs in the School of Education at Stanford, evidence of a missed opportunity to enlarge the university's supporters among important social figures and in a broader educational movement.

[94]Charles DeGarmo, *Herbart and the Herbartians* (New York, N.Y.: Charles Scribner's Sons, 1912). This became the National Society for the Study of Education, which continues to publish important yearbooks chronicling developments in curriculum, teaching methods, learning theory, testing, and other pedagogical and educational issues.

[95]In *Proceedings of the California State Teachers' Institute, September 13-16, 1870* (Sacramento, Calif.: 1871), 8, Bancroft.

[96]LeConte in *Pacific Educational Journal* 3, no. 2 (March 1888): 41-52. Bound in LeConte, *Miscellaneous Writings*, vol 3. Bancroft. White is quoted in Edward Danforth Eddy, Jr., *Colleges for Our Land and Time: The Land-Grant Idea in American Education* (New York, N.Y.: Harper, 1956), 4. For a sampling of faculty opinions, see Frederick Slate in "Physics in Secondary School, "Address Delivered Before the California Teachers' Association at Riverside, December 28-31, 1891, by Professors in the University of California," *University Bulletin* No. 37 (1892), 57, UnAr.; and Lange, in "Our Adolescent Schools" (1907), in *Lange Book*, 12.

[97]Address to the Associated Alumni of the Pacific Coast, June 9, 1876, in *The Berkeleyan* (August 1876), bound in LeConte, *Miscellaneous Writings*, vol. 5, Bancroft.

[98]E.E. Slosson, *Great American Universities* (New York, N.Y.: Macmillan, 1910), 117.

Conflict and Community in Soviet Institutes of Higher Education, 1921-1928

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THE MARCH, 1917 FALL OF THE RUSSIAN TSARIST regime brought about an unstable duality of power between the Provisional Government and the Petrograd Soviet of Workers' and Soldiers' Deputies. The failure of the Provisional Government to reconcile the social and political tensions that engulfed the nation or to bridge the widening gap between the state and the demands of society allowed V.I. Lenin and the Bolsheviks to seize power on November 7, 1917. The ensuing prolonged, bloody civil war devastated the country's infrastructure, ravaged its populace, and further polarized the warring factions into "Red" (Bolshevik) and "White" (anti-Bolshevik) camps.[1] At war's end, the victorious, if factionalized, Bolsheviks had to rebuild a state with a devastated economy, while facing hostile European neighbors.

In the spring of 1921, Lenin relaxed state control on the means of production and eliminated hated grain requisition brigades that plundered the countryside. These measures, coupled with greater tolerance for entrepreneurs (the so-called Nepmen) and professionals from the former "bourgeois" ruling classes, denoted the period known as the New Economic Policy (NEP), 1921-1928.[2] Admitting the need for a calculated "retreat" from the more radical and militaristic stance taken during the Civil War, Lenin and the Bolsheviks hoped to spur economic recovery and to prepare Soviet Russia for the transition to socialism.[3]

Economic recovery and the transition to socialism also required the transformation of existing *institutions* into agencies for industrial modernization and social change. Much thought, therefore, went into the reorganization of the higher education system. The Bolsheviks wished to convert Soviet higher schools (*vuzy*) into state-controlled institutions that trained qualified, loyal specialists, who would eventually assume political and professional leadership positions.[4] During the Civil War, the weak infrastructure and opposition from anti-Bolshevik professors and students hindered this reorganization. So did debates within the Communist Party and Narkompros (the Commissariat of Enlightenment) over educational policies aimed at non-communist specialists.[5] During NEP, a period of tremendous social, political, and cultural diversity, a burgeoning state apparatus fostered new bureaucratic hierarchies that antagonized local implementers of policies and directives. This tension became an inherent part of state-building during the 1920s.[6]

This article examines state intervention into higher education—and institutional responses—during NEP by contrasting the policies pursued by the Communist Party, and Narkompros and its subsidiaries, with the distinct, often contradictory, interests and responses of local "communities" in higher schools.[7] Community responses to

state intervention, despite internal political and professional divisions, ranged from mild apprehension to outright hostility. The 1924 student purge, election campaigns for faculty members in 1926-1927, and state policies designed to achieve greater organizational and administrative unity over higher schools illustrate how institutional and political rivalries compounded the complex, often contradictory strategies devised by Narkompros and Communist Party authorities. Focussing on higher schools in Leningrad, especially Leningrad State University (LGU), the nation's second largest university, this study uses documents from the previously inaccessible Communist Party archives, and from the St. Petersburg State Archives to detail the conflicts in higher education during the 1920s, and to expose a fundamental contradiction of a fluid and chaotic NEP society.[8]

Ceaseless tensions between the autocracy, professors, and students characterized the pre-Revolutionary higher education system. After the 1884 introduction of restrictive university statutes, professors battled a succession of Ministers of Education over institutional autonomy and academic freedom.[9] A weakened autocracy granted autonomy to higher schools in the wake of the 1905 Revolution, but the relative academic and political freedom granted to students and professors gradually eroded during the the ensuing period of reaction.[10] Despite a slight relaxation of tensions under Minister of Education P.N. Ignatiev during the war, basic issues of autonomy and student rights remained unresolved.[11] After the fall of the autocracy in March, 1917, discussions by university rectors and state officials resulted in a scheme, drafted by the new Minister of Education A.A. Manuilov, that assured academic and institutional autonomy. But the unwillingness of professors and students to cede rights and privileges led to the persistence of intramural problems, such as student representation on school councils and rights for junior faculty members.[12]

Following the Bolshevik Revolution, the Communist Party launched an attack against what it called the old regime's "bourgeois" and class discriminatory system of higher education. A.V. Lunacharskii, Commissar of Narkompros, and N.K. Krupskaia, an influential Soviet pedagogical theorist, envisioned a system based on free access to higher education and on the application of Marxist pedagogical theories to new curricula in the social and physical sciences. E.A. Preobrazhenskii, chairman of Glavprofobr, the committee for professional education under Narkompros, and L.D. Trotskii advocated policies more representative of the Party's "left" wing, including an emphasis on polytechnical schools that offered instruction in specialist disciplines in the industrial sector, and admissions policies that strongly favored workers and peasants.[13] Decrees granting universal access to higher education and limited "autonomy" emerged from these debates in 1917-1919.

But, in 1920-1922, after prolonged, heated debates with professors and other officials, Narkompros passed new statutes that again eliminated autonomy and substituted higher school administrations staffed by representatives from Narkompros, the Communist Party, trade unions, and local executive committees (*ispolkom*).[14] Many professors and students saw the new statutes as another attempt to neutralize

gains in academic freedom and institutional democratization accomplished during the Provisional Government period.[15] Hostile professors, themselves the targets of a campaign to weed out "old" (*starye*) academics through compulsory elections in each faculty, were caught between their ideological hatred of the new regime and their desire to continue teaching. Many instructors reluctantly opted to work with their new masters when Lenin, realizing that "bourgeois" professors were, for the present, often indispensable, attacked Preobrazhenskii and other party "leftists" for their persistent harassment of non-communist professors.[16] But continued suspicion evinced by Communist Party officials culminated in the arrests and deportations of dozens of professors in the summer of 1922.[17] The need to separate irrevocably hostile professors from others willing to work under Soviet power, argued the Central Committee of the Communist Party, made these arrests essential. G.E. Zinoviev, secretary for the Petrograd regional Party committee, stated, "We need honest people who are prepared to serve their country."[18]

The majority of students (who by and large supported the Kadets and Mensheviks) denounced the new statutes as a revocation of their right to participate in school administrative affairs. In 1921, following the disbanding of the largely anti-Bolshevik Petrograd Students' Council, student protests and demonstrations resulted in arrests and deportations that enabled communist students to control student councils in most higher schools.[19] For the communist student minority, these measures symbolized the extension of a "class war" against non-communists; for the vast majority who were ambivalent to Soviet power or wavered in their political views, the arrests and deportations represented a return to Tsarist policies of political repression and meddling in university affairs. The Bolsheviks could claim military victory by 1921, but continuing political hostility with students and professors during NEP led the state to attempt to remold higher schools as institutions that could promote far-reaching social reforms.

The nationalization of higher education and the institution of discriminatory admissions policies during the first six years of Soviet power produced mixed results. Student representation from the working class and peasantry increased in higher schools.[20] But Narkompros officials and state employers expressed growing concern that the selection process for students (*komandirovanie*) produced poor quality recruits who were pushed up the educational ladder too rapidly.[21] Communist Party officials worried about the continued presence of "hostile elements"—alleged agitators against Soviet power—on many campuses.[22] Rectors and senior professors were more concerned with the decay of higher education after the Revolution, exemplified by perennial funding shortages, the poor quality of new recruits, and overflowing classrooms.[23]

These conflicting concerns laid the seeds for more serious clashes when Glavprofobr, in conjunction with the Communist Party, launched a student purge (*proverka*) in May, 1924.[24] The stated goal of the purge was to relieve an economic and academic crisis in higher education while satisfying demands by the Communist Party for a proletarianization of the student body. The historical literature analyzed the purge either as an attempt to weed out non-proletarians and Trotskyites, an attack on poorly-prepared

students, or an expression of "hard-line" elements within the Communist Party.[25] The purge actually combined disparate agendas—the educational goals of Narkompros and the political and ideological agendas of the Communist Party—into one campaign by purging politically "unreliable" and academically "inadequate" students from the classroom.

This attempt to fulfill multiple agendas severely weakened the effectiveness of the purge; indeed, the process was out of control from the start. Party officials viewed the purge as a means of expelling "unreliable" communists who supported the opposition platform that Trotskii issued in Fall, 1923 and of stepping up the "class war" in higher schools.[26] The Party organization at Leningrad State University used regular quarterly reports on campus political opposition to demonstrate that scientific and academic excellence required the expulsion of "hostile elements."[27]

But N.S. Derzhavin, the communist rector of the University, and other supporters of the regime, viewed the purge as a destructive and futile measure that would destroy what little financial and academic stability Leningrad State University had managed to attain.[28] Derzhavin's fear that irrevocable damage would result from the innuendo and political warfare that inevitably accompanied a general purge outweighed his support for proletarianizing the student body. Many non-communist professors supported Derzhavin's argument. V.A. Dogel, dean of the Physico-Mathematics faculty and a constant target of the local Party organization for his alleged "reactionary" views, viewed the purge as another attempt to undermine his authority and that of the non-communist teaching staff. Expressing his displeasure, he added that his only concern was completing the academic year.[29]

Half-hearted communist support, or even open opposition, meant that expulsion rates depended upon the leniency of rectors and purge committee officials.[30] Regional Party committees, already angered at the ad hoc decision-making process at each higher school, expressed outrage upon learning that school administrations were reinstating students without permission.[31] In late August, Narkompros ended the debacle by announcing mass reinstatements of expelled students. Most higher school officials welcomed the decision, but then faced the nightmare of placing readmitted students in courses that new recruits had already filled up.[32] The student reinstatements undermined Narkompros's authority with Regional Party officials. These officials felt that the purge had failed to weed out what they called "hostile elements" from the classroom and that Narkompros issued inflexible plans and programs from Moscow. The purge itself contributed to increased student cynicism, apathy, and depression.[33] Communist faculty members and students, feeling betrayed and distrustful, complained openly against "agitation by Muscovites" in formulating Party policy. These feelings translated into substantial support for the Leningrad Opposition, led by G.E. Zinoviev (a movement defeated at the Fourteenth Party Congress in December, 1925).[34] The emergence of a solid opposition at almost every campus by the end of NEP reflects the depth of resentment.[35]

The purge episode showed how local interests could defy, or at least shape, directives from central and regional agencies. The state, often rightly so, singled out professors for guilt. From Moscow, professors appeared to be running their own little fiefdoms

impervious to Soviet power. Only by creating a new generation of "Red specialists," Narkompros and Party officials concluded, could the state claim control over the professoriate. Through the arrest and deportation of dozens of professors in the summer of 1922, the establishment of the Petrograd Left Professors in April, 1921, and the founding of the Scientific Society of Marxists in 1923, the Bolsheviks hoped to encourage a new generation of communist teachers to take over scientific and academic leadership in higher schools. These organizations grew rapidly and garnered significant support among the professoriate.[36] But, the debate between liberals, "positivists," and Marxists continued well into 1925. E.A. Engel, the Marxist dean of the faculty of Social Sciences at LGU, attacked non-Marxist historians, such as N.I. Kareev and A.A. Vvedenskii, for their un-Marxist conceptions of historical development.[37]

State officials experienced modest success in encouraging professors to work loyally for the Bolsheviks. But debacles, such as the student purge, not only sharpened existing tensions and made professors more hostile to further reform plans, but also provoked their resistance through bureaucratic means. Professors delayed or even neutralized state policies by using their influence with faculty deans to reinstate expelled students, raising examination marks of favored students, and refusing to use new teaching methods decreed by Narkompros.[38]

The frequent inability of Narkompros to execute policies effectively, coupled with the Communist Party's objections to opponents of the new academic programs, deepened the consensus in favor of a stronger campaign to replace non-communist professors, deans, and rectors with academics more loyal to Soviet power. Pleas for patience and cooperation with "bourgeois" professors did not sit well with the many radical students in the Communist Youth (Komsomol) who had lost their administrative power in school councils in 1925.[39] The Party press reflected increased rank and file pressure within the Communist Party to act firmly against hostile professors.[40]

A policy requiring professors to submit themselves to re-election every five to ten years became the vehicle for action. Party officials attempted to coordinate the campaign of professorial elections. The policy was not enforced during NEP, because of the difficulty in finding qualified replacements.[41] But in February, 1925, the Central Committee directed all regional Party committees to select candidates carefully for top administrative posts, and ordered more supervisory power for the district committee (*raikom*) during faculty elections.[42] Regional Party committees thereupon demanded a list of approved candidates from Glavprofobr to ensure agreement among all agencies. This complicated procedure permitted non-communist faculty members to stall, and nominee lists at several higher schools (including Leningrad State University) were not approved for over a month.[43] By the fall of 1925, the Central Committee and Narkompros realized that professors at best ignored their memoranda or at worst attempted outright sabotage of the election campaigns.[44] This realization intensified the in-fighting that arose from the election campaigns.

At Leningrad State University, a virtual civil war of backroom intrigue caused prolonged crises over the appointment of a new rector and faculty elections in 1926-

1927. Early in 1926, Rector Derzhavin announced his readiness to relinquish his post and return to academic work. The defeat of the Leningrad Opposition at the Fourteenth Party Congress in December, 1925, and Moscow's attempt to tighten control over the regional Party apparatus created an atmosphere of uncertainty among communist faculty members at the University and made the choice of a new rector more difficult. These faculty members reconsidered their priorities as Party members and as professionals concerned for the well-being of their school. The University's Party organization resisted pressure from the new Leningrad regional Party committee under S.M. Kirov, and emphasized political compromise by nominating E.V. Tarle, a non-communist and renowned historian, for rector.[45]

This move created more problems than it solved. V.V. Pokrovskii, executive head of Narkompros, charged the University could not come up with an "acceptable" (communist) nominee, and declared his own candidacy. Meanwhile, some non-communist professors nominated K.M. Deriugin for the rectorship. The nomination of Deriugin, a professor of zoology known for his opposition to the Bolsheviks, resulted in two de facto parallel rectorship elections.

The University's Party bureau immediately rejected Pokrovskii—he received only one of 20 votes—as a representative of a meddlesome Muscovite authority. Glavprofobr Chairman I.I. Khodorovskii then proposed B.V. Tomashevskii, a non-communist professor of philology, as a compromise candidate who was acceptable to the University administration and Party bureau.[46] I. Teslenko, head of the Party section on student affairs, recounted that Deriugin and his colleagues thereupon engaged in "grand intrigue" by filibustering at nomination meetings to prevent communist candidates from speaking, plotting to bring back exiled professors, and proposing to revive "autonomy" if Deriugin was elected rector. The University's Presidium, stacked with communist representatives, voted down Deriugin in June, 1926 and confirmed Tomashevskii as rector.[47]

Tomashevskii died the following year, and the Party bureau acted furtively to ensure the election of communist law professor M.V. Serebriakov. Communist professors and the bureau met secretly on May 17, 1927 to discuss tactics: the bureau sent three members to "have chats" with professors either wavering or opposing Serebriakov's candidacy, two others to bribe a faculty member who sought more laboratory equipment, and another to persuade I.A. Pergament, another non-communist nominee for rector, to "withdraw" his candidacy. These tactics assured Serebriakov's easy election.[48] A similar debacle occurred during the elections of the Physico-Mathematics faculty in 1926, when communist and non-communist delegates deadlocked over two nominees for dean. The dispute ended when the non-communist faction stormed out of a nomination meeting after their opponents introduced a despised communist junior faculty member as their nominee for dean.[49]

Stalling tactics and clandestine opposition from non-communist professors continued after 1926-1927. Local Party organizations complaints of professorial "agitation" and "intrigue" led many communists to view professorial privilege as an unnecessary

betrayal of the Revolution, and to call for a more ruthless campaign to remove "bourgeois" leftovers of the Tsarist regime.[50] Critics of Narkompros's policies cited the professorial belief in total scientific and intellectual freedom, as evidence of misunderstanding the Revolution's goals.[51] But the state's continued inability to supply adequate replacements for non-communist professors, coupled with a consensus among administrators of all political persuasions favoring political and academic peace over stacking faculties with communists, perpetuated this stalemate during the last years of NEP. Critics of Narkompros had more ammunition, but realities dictated a need for continued compromise.

One legacy left by the Civil War was the absence of adequate funding and teaching materials for higher education. The introduction of cost-accounting (*khozrashchet*) measures and the reorganization of production methods for the industrial sector in 1922 was part of a general campaign to spur economic growth. Although there were indications of an economic recovery, concern for the stabilization of industrial and agricultural prices during the "scissors" crisis prompted the government to introduce a currency reform and new taxes in 1924 in an attempt to balance the budget.[52] The Supreme Council of the National Economy (VSNKh) expected each sector to contribute to a balanced budget by employing the principles of *khozrashchet* and the "rationalization" of their administrative apparatus, so that they could operate more efficiently.

These basic principles were applied to higher education. "Rationalizing" higher schools, as defined by Narkompros in 1924, meant paring down redundant faculties and administrative positions, and greater financial and political accountability by higher schools to central agencies in Moscow. The poor communication between local Party organizations, school administrations, and Glavprofobr officials, Narkompros argued, necessitated enhanced authority for school councils to execute policies. But the councils must assume greater responsibility to central agencies to ensure the implementation of policies and efficient use of resources.[53]

Officials quickly noted that this campaign "had turned out to be far more difficult than first imagined." Complaints included poor communication between state and higher school administrative bodies, uncooperative professors, irresponsible financial planning by local committees, and apathy on the part of members of academic councils. These problems, Narkompros and Communist Party officials ritually recounted in their monthly reports, resulted in wasteful spending and a generally lamentable state of affairs.[54] In fact, getting higher schools to submit their monthly reports—a policy instituted in 1924—became a task in itself.[55] By 1925, many in Moscow concluded that gaining control of *vuzy* required stronger Party authority.

The Central Committee therefore ordered more drastic measures in 1925 to increase financial and academic accountability. Narkompros was to transfer student administrative duties to the school council, appoint only communists for top-level Narkompros positions, and institute a more strictly regimented scheme of cost-accounting. One Party official bluntly summarized this strategy: "The more concise the work of the

apparatus, the less there is to worry about superfluous, redundant workers; and the less the number of positions, the less unneeded expenses will be made."[56] Narkompros responded by establishing regional executives (*upolnomoch*) in December, 1925, with sweeping powers to ensure that rectors implemented decrees enforcing academic and financial accountability.[57] Narkompros also increased the personal responsibility of top-level officials for reducing intra-institutional feuding, granted deans greater supervisory powers and a veto over all academic and administrative decisions concerning the faculty made by departments and their committees, and held deans directly responsible to the rector and Glavprofobr for all financial and academic matters.[58]

Moscow accompanied this increased level of intervention into the everyday affairs of its higher schools with a move to secure greater control over regional apparatuses following the defeat of the Leningrad Opposition in December, 1925. State officials continually admonished professors and administrators against irresponsible spending and ignoring basic rules of administrative procedure.[59] But, by the end of 1927, most Narkompros officials denounced the campaign to control regional executive bodies as a failure and a contributor to greater bureaucratization. Instead, Narkompros officials supported decentralized educational bodies, more local autonomy in planning, and elimination of "petty tutelage" which, they said, tyrannized local agencies.[60] The abrupt end to NEP in 1928 prevented the implementation of these potentially viable proposals, though a decentralized network of state and school agencies could not have dealt with a more fundamental economic crisis effectively.[61]

Individual higher schools reacted defensively to the campaigns for rationalization and cost-accounting, generally fearing excessive state interference in their activities. In 1924, the University's Party bureau noted that "full chaos" reigned in the Physico-Mathematics faculty while the dean, K.R. Matsiulevich, was basically doing all the administrative work himself. While 600 rubles had been doled out for research trips to Moscow, the report continued, "not one kopek had been spent on repairs." The bureau accused other deans, as well as Rector Derzhavin, of ignoring all but academic matters and neglecting their administrative duties.[62] Derzhavin and his faculty executives responded that Glavprofobr had continually denied their university the funds necessary to ensure the fulfillment of academic plans and financial requirements for students, and that University administrators were preoccupied with submitting mundane petitions to Glavprofobr and other state agencies for funds for building repairs, materials purchases, or bill payments.[63] Despite modest increases in higher schools budgets in 1926-1927, the financial health of Leningrad State University and most other *vuzy* remained in jeopardy.[64]

Financial difficulties not only turned members of the University community against the state, but also against each other. Faculties continually complained to the rector about inattention to their needs. Feeling neglected by the rector, Physico-Mathematics Dean Kamenshchikov frequently travelled to Moscow with a delegation of professors to "personally acquaint" one Narkompros executive with the problems facing his faculty.[65] Such lobbying often heightened tensions between the dean's office and the rector, but it also augmented suspicion in Narkompros that administrative responsibility in higher

schools remained a myth. Party officials and Narkompros inspectors issued scathing reports attacking University officials for not implementing cost-accounting measures, neglecting production training sessions for their students, and letting nepotism govern employee selection.[66]

Arguments over financial and administrative accountability reinforced the tendency of officials in higher schools to view central authority in Moscow suspiciously, and to see the solutions to problems confronting them on campus from a more insular perspective. This perspective was not an unexpected result of a bureaucratic system undergoing constant expansion and redefinition during NEP. Ia.A. Beretys, dean of the faculty of Economics at the Leningrad Mining Institute, complained to the Leningrad regional Party committee in 1928 that the rationalization of higher schools had been "conducted in a purely bureaucratic manner by the upper ranks [in Narkompros]." Since Moscow bureaucrats now "dictated" higher educational policy, Beretys admitted that he and his colleagues put "defence of our own interests," including cessation of further departmental closures in his faculty, above all else.[67] During meetings with Narkompros officials, Leningrad rectors and local Party officials opposed innumerable, usually incomprehensible, policy changes or structural reorganizations.[68] They also disputed Glavprofobr's authority and ability to allot a correct number of students to the specified subject disciplines at each higher school, and accused Glavprofobr of ignoring advice that contradicted its official policies.[69]

Local interest groups thus often successfully blocked or stalled directives from central agencies, but conflicts within communities also impeded reforms. Structural disorganization and frequent policy changes tended to make school officials protective of their territory and suspicious of their colleagues. Narkompros inspectors reported that Mining Institute faculty members, academic sections (in charge of working out academic plans), and administrators consciously worked against each other, and failed to share information. More openness, these constituencies feared, would result in interference with their activities by other groups.[70]

The proposed merger of Leningrad State University with the Leningrad Chemical-Pharmacological Institute in 1925 illustrates another damaging internal rivalry. The merger, like others, was intended to alleviate funding and space shortfalls. Not a few university professors favored this merger, but many suspected that the local Party organization would use it to institute new faculty elections and undermine the strength of non-communist professors. Professors at the Chemical-Pharmacological Institute surmised that the merger meant the elimination of many of their specialist disciplines, while the student council vehemently opposed the move because it would disrupt the academic year. Glavprofobr established a committee in February, 1925 to implement the merger, but by April, the difficulties involved became clear. Rector Derzhavin sent weekly complaints to the institute's chancellery that the necessary documents and inventories were being deliberately withheld from him. Completely frustrated he urgently asked Glavprofobr to force the institute to cooperate. The secretary of the University's Party organization simultaneously attacked several professors for bickering and attempting to sabotage the linkage.[71]

The University's Party bureau believed that a merger would result in additional administrative burdens and a disruption of Party work.[72] The failure of subsequent proposals to incorporate the institute forced Glavprofobr in 1926 to shelve the scheme. An anonymous University party member charged, "[O]ther than wrecking the Chemical-Pharmacological Institute as an academic entity and wasting student time, this merger did absolutely nothing!"[73] This fiasco confirmed the fears of many university professors, students, and officials about the potentially damaging effects of state intervention; but it also illustrated how political, ideological, and institutional differences within higher school communities remained unreconciled. These complex rivalries left a legacy of tensions that more authoritarian management would later try to rectify.

In the past, historians of Soviet Russia in the 1920s have debated the "viability" of NEP as a society and a political system. Many historians have seen NEP as a natural precursor to an authoritarian Stalinist system; others have argued that NEP represented a functional, even viable alternative to the system that later consumed Soviet society.[74] The disorganized, fractionalized, even chaotic NEP system in higher education allowed room for negotiation of agendas and strategies. But, some fundamental contradictions could not be worked out during the 1920s. Non-communist professors in the universities and other higher schools tried to conduct pedagogical and academic work with limited state interference. When necessary, these "scholar-bureaucrats" utilized administrative and bureaucratic power to minimize state intervention in their lives. For officials in Narkompros and its subsidiaries, the state agencies responsible for higher education, priority went to establishing and maintaining a stable and efficient means of training and graduating students. But Communist Party members often pressured Narkompros officials to fill the classrooms with proletarian students and staff the faculties with professors loyal to Soviet power. A social revolution in higher schools, communists argued, would be a pillar for industrial modernization and the transition to socialism.

The complexities of NEP society made clear cut distinctions in policies and objectives difficult to reconcile. A crisis of institutional and political identity, for example, complicated the status of local communities in higher schools. Academic communities, despite their diverse political views and occupations, reacted negatively toward state intervention. Suspiciousness toward central state authority resulted from the attempt of educational institutions to seek their own identity and purpose during a period of rapid change. But political, ideological, and territorial divisions within the academic community at times became pronounced. The state often took advantage of these divisions to make inroads into the academic community, though it never totally succeeded in breaking down local bonds and interests.

The clash between local interests and identities and central authority was a fundamental problem of NEP society. Many communists and non-communists had to reconcile their political and ideological loyalties with their community roles. Clashes between levels of authority and within individuals frequently resulted in a zig zag of policies and objectives. Supporters of a relatively centralized state apparatus, expect-

ing to gain control over the levers of power in higher education, and the hundreds of thousands of communists, believing that the continued existence of "bourgeois" professors in the classroom betrayed the Revolution, found these conflicts intolerable.

By 1928, cries for more radical measures became more pronounced in the media and among the rank and file. That summer, following the trial of alleged "saboteurs" in the mining town of Shakhty,[75] the Communist Party introduced measures to ensure the collection of grain from recalcitrant peasants and to step up economic growth through a radical industrialization scheme. The defeat of N.I. Bukharin and the "Right Opposition" in 1928 illustrates the movement towards authoritarianism and intolerance for dissent.[76] This radicalism implied more authoritarian management for a higher education system embattled by political and institutional conflict. For the next three years, a class war on campus and an abnegation of the NEP system threw higher education into the maelstrom of the Cultural Revolution.

NOTES

I would like to thank the Association of Universities and Colleges of Canada for a grant enabling me to conduct research in St. Petersburg in 1991-1992.

[1] For a recent analysis of military conflict during the Civil War, see Evan Mawdsley, *The Russian Civil War* (Boston Allen & Unwin, 1987). Recent explorations into the nature of state and society during the Civil War can be found in Diane P. Koenker, William G. Rosenberg, and Ronald Grigor Suny, eds., *Party, State, and Society in the Russian Civil War* (Bloomington, Ind.: Indiana University Press, 1989).

[2] For a discussion of the transition to NEP, see E.H. Carr, *The Bolshevik Revolution*, vol.1 (London: Macmillan Press Ltd., 1950). For an analysis of trading and capitalism during NEP, see Alan M. Ball, *Russia's Last Capitalists: The Nepmen, 1921-1929* (Berkeley, Calif.: University of California Press, 1987).

[3] On the militarization of state and society during the Civil War, see Sheila Fitzpatrick, "The Civil War as a Formative Experience" in Abbott Gleason, Peter Kenez, and Richard Stites, eds., *Bolshevik Culture* (Bloomington, Ind.: Indiana University Press, 1985), 57-76.

[4] The term *vuzy* refers to all universities and specialist higher schools.

[5] The best study of education during the Civil War is by Sheila Fitzpatrick, *The Commissariat of Enlightenment: Soviet Organization of Education and the Arts Under Lunacharsky, October 1917-1921* (London: Cambridge University Press, 1970).

[6] The pioneering study on the issue of center-periphery relations was by Merle Fainsod, *Smolensk Under Soviet Rule* (New York, N.Y.: Vintage Books, 1958). More recent literature has explored political and social conflict in NEP society as the product of a continued gulf between the state and the demands of its social constituents. This work often questioned past definitions of political authority and social identities during NEP. See Sheila Fitzpatrick, Alexander Rabinowitch, and Richard Stites, eds., *Russia in the Era of NEP. Explorations in Soviet Society and Culture* (Bloomington, Ind.: Indiana University Press, 1991), and Roger Pethybridge, *One Step Backwards, Two Steps Forward: Soviet Society and Politics in the New Economic Policy* (Oxford: Clarendon Press, 1990).

[7] I define "community" as the students, professors, administrators, and members of the local Communist Party organization at each higher school. This theme is developed in my dissertation, "Party, State, and Community at Leningrad State University, 1917-1941."

[8] Originally St. Petersburg University, the school changed its name to Petrograd University from 1914 to 1924, and then to Leningrad State University after the death of Lenin in January, 1924.

[9] See James C. McClelland, *Autocrats and Academics Education, Culture, and Society in Tsarist Russia* (Chicago, Il.: University of Chicago Press, 1979).

[10] The student political environment on campus was highly complex. After the 1905 Revolution, students tended to become more introspective and career-oriented, though they still remained politically fractious. See L. Kleinbort, "Sovremennaia molodezh'-prezhde i teper'" *Sovremennyi mir* 9 (1914): 118-141. On the relations between professors and the autocracy, see Samuel D. Kassow, *Students, Professors, and State in Tsarist Russia* (Berkeley, Calif.: University of California Press, 1989).

[11] See Paul N. Ignatiev et. al., *Russian Schools and Universities in the World War* (New Haven, Conn.: Yale University Press, 1929).

[12] *Zhurnal' Ministerstva Narodnogo Proveshcheniia* 69 (June, 1917): 117; 70 (July-August, 1917): 59-60; 71 (September, 1917): 21; 71 (October, 1917): 77; *Vestnik vremennogo pravitel'stva*, September 1, 1917. For a general discussion of cultural policies under the Provisional Government, see Daniel T. Orlovsky, "The Provisional Government and Its Cultural Work" in *Bolshevik Culture*, 39-56.

[13] For a more detailed discussion of these initial debates, see James C. McClelland, "Bolsheviks, Professors, and the Reform of Higher Education in Soviet Russia, 1917-1921" (unpublished doctoral dissertation, Princeton University, 1970). Glavprofobr was established in January, 1920 by the Council of Peoples' Commissars. Technically a subsidiary of Narkompros, Glavprofobr received an independent budget. This practice created tensions and rivalries between the two entities.

[14] *Sobranie uzakonenii rasporiazhenii rabochego i krest'ianskogo pravitel'stva* RSFSR (hereafter *SU*), no.2, st.17 (October, 1917); no.12, st.183 (December, 1919); *Polozhenie o vysshikh uchebnykh zavedeniiakh (utv. SNk 3 iiulia 1922 g.)* (Moscow, 1922).

[15] Pitrim Sorokin, a professor of sociology at Petrograd University, recalled that the majority of professors wanted nothing to do with "political" demands made by the Bolsheviks. Sorokin himself was involved in the underground publication of a right-wing newspaper after the October Revolution, and was eventually arrested and deported in 1922 for alleged "anti-Soviet" activities. See Pitrim Sorokin, *A Long Journey* (New Haven, Conn.: Yale University Press, 1963).

[16] See V.I. Lenin, *Sochineniia*, 3[rd] ed. (Moscow, 1951): 332; and Lenin's remarks following the Tenth Party Congress in *Pravda*, April 19, 1921.

[17] For the experiences of one professor at Petrograd University, see S.E. Frish, *Skvoz' prizmy vremeni* (Moscow, 1992), 90-103.

[18] *Izvestiia TsK* 4 (1923): 25. Zinoviev's remarks are in *Pravda*, August 31, 1922.

[19] In 1922, the Petrograd branch of the State Police (GPU) issued memoranda for the arrest of all "politically hostile" students. See Central State Archives For the History of Political Documents, St. Petersburg, formerly Leningrad Party Archives. (Hereafter cited as TsGA IPD),

f.40, op.1, d.14, l.17, l.28. For reports of student protests following the disbanding of student councils and arrests of their representatives, see *Poslednie novosti*, September 6, 1921 and February 2-3, 1922. The personal experiences of an exiled former student leader at Petrograd University can be found in Sergei Zhaba, *Petrogradskoe studenchestvo v bor'be za svobodnuiu vysshuiu shkolu* (Paris, 1923), 50-53.

[20] Working-class and peasant representation in higher schools rose from approximately 30 percent in 1921 to 53 percent in 1928. However, historians have tended to dispute the accuracy of these figures. James McClelland argues enrollment figures for workers were inflated by up to 25 percent, while David Lane believes that, despite instances of falsification of class origin, there was a substantial increase in working-class and peasant representation in higher schools. David Lane, "The Impact of Revolution: The Case of Selection of Students For Higher Education: Soviet Russia, 1917-1928" *Sociology* 2 (1973): 241-252; and James C. McClelland, "Proletarianizing the Student Body The Soviet Experience During the New Economic Policy," *Past and Present* 80 (1978): 122-146.

[21] A.V. Lunacharskii, "Zadacha uchebnogo goda," *Narodnoe prosveshchenie* 9 (1923): 12.

[22] TsGA IPD, f.16, op.9, d.9140, l.12; f.4, op.1, d.91, ll.40-41, l.73; f.k 601, op.1, d.249, l.52. For the recollections of a former member of the student opposition, see E. Olitskaia, *Moi vospominaniia*, 1 (Frankfurt: Posev, 1971).

[23] See the meeting of rectors and regional Narkompros officials on November 1923, in the Central State Archives of St. Petersburg formerly Central State Archives of the October Revolution in Leningrad. (Hereafter cited as TsGA SPb), f.2556, op.1, d.3, ll.1-2; "K reforme vysshei shkoly" *Narodnoe prosveshchenie* 9 (1923): 94-95.

[24] The literal translation for *proverka* is "verification," but the term "purge" will be used here for greater contextual accuracy.

[25] L.S. Leonova, *Iz istorii podgotovki partiinikh kadrov sovetsko-partiinikh shkolakh i kommunisticheskikh universitetakh (1921-1925gg)* (Moscow, 1972), 109; N.L. Safraz'ian, *Bor'ba KPSS za stroitel'stvo sovetskoi vysshei shkoly (1921-1927 gg.)* (Moscow, 1977): 71-73; Sheila Fitzpatrick, "The 'Soft' Line on Culture and Its Enemies: Soviet Cultural Policy, 1922-1927," *Slavic Review*, 2 (1974): 270-272.

[26] Most Soviet historians argue support for Trotskii was significant in 1923, but that almost all students supported the Party line after 1924. (Leonova, *Iz istorii podgotovki partiinikh kadrov*, 109 and 140). Fitzpatrick argues that approximately 70 percent of studen . Party cells supported Trotskii in 1923, but most were expelled after the 1924 purge. This is corroborated by one Soviet source (V. Sorin, "Diskussiia 1923-1924 gg. [Bor'ba partii o trotskistkoi oppozitsii]," *Proletarskaia revoliutsiia* 7 (1936), 53). But these figures may be deceiving. Secret reports by the Petrograd University Party committee show that 15 to 20 percent of the communist students supported Trotskii, but indications are that many were voting against the current Party line as much as they were "supporting" Trotskii (TsGA IPD, f.984, op.1, d.36, ll.51-52).

[27] For example, in 1923 the Petrograd University Party organization issued a secret report characterizing its students in the following manner: 30 percent were communist, but many of them did not support the current Party line; 20 to 25 percent were "White-Guardists" (a pseudonym for alleged counter-revolutionaries), though many were only passive supporters; 15 to 20 percent reportedly were "wavering between the [Party] collective and the Kadet-bourgeois group," and 35 to 40 percent remained basically apathetic (TsGA IPD, f.984, op.1, d.36, ll.51-52).

[28]TsGA IPD, f.984, op.1, d.54, ll.5-7.

[29]TsGA SPb, f.7240, op.14, d.144, ll.53-55.

[30]TsGA IPD, f.984, op.1, d.54, l.77. Expulsion rates varied from 19 to 33 percent across the country. See *Izvestiia*, October 23, 1924; V.V. Mavrodin, ed. *Na shturm nauki vospominaniia byvshikh studentov fakul'teta obshchestvennykh nauk Leningradskogo universiteta* (Leningrad, 1971), 34; *Kazanskii universitet, 1804-1979. Ocherki istorii* (Kazan', 1979), 110.

[31]TsGA IPD, f.k-601, op.1, d.554, l.249.

[32]TsGA IPD, f.436, op.1, d.6, l.36. At LGU, approximately 15 percent of the expelled students were reinstated; this was a much lower figure than in some other higher schools, where over half of the expelled students were reinstated. (TsGA IPD, f.4., op.1, d.91, l.216). Before the mass reinstatements in the summer, approximately 13.5 percent of students in Leningrad higher schools had been expelled. (TsGA IPD, f.984, op.1, d.54, ll.24-25).

[33]Suicides had become so common that one student, seeing a queue in the halls of one higher school jokingly remarked "Is this the line-up for suicides?" *Sotsialisticheskii vestnik* 12/13 (1924), 16-17; 14 (1924), 15; 15 (1924), 15. Several professors at LGU raised their students' marks in order to persuade Glavprobfobr to reinstate them. (TsGA IPD, f.984, op.1, d.54, ll.77-78).

[34]TsGA SPb, f.2552, op.1, d.80, l.52; TsGA IPD, f.984, op.1,d.120, l.58.

[35]By the 1927-1928 academic year, seven teachers and 21 students had declared themselves to be part of the United Opposition (Trotskii-Zinoviev) at the University; at the Leningrad Mining Institute, the local Party organization singled out 13 communists (all having supported Zinoviev at the Fourteenth Party Congress) as opposition supporters (TsGA IPD, f.984, op.1, d.295, ll.37-39; f.80, op.1, d.112, l.2).

[36]L.A. Shilov, "Gruppa Petrogradskoi levoi professury (1921-1923gg.)" *Vestnik Leningradskogo Universiteta. Seriia ist., iaz i lit.* 20 (1967), 34-38; *Istoriia Leningradskogo universiteta* (Leningrad, 1968), 215-220; V.I. Klushin, "Deiatel'nost Nauchnogo Obshchestva Marksistov (1920-1924gg.)" *Ocherki istorii Leningradskogo universiteta*, 2 (Leningrad, 1970), 125-137.

[37]For a good discussion of intellectual debates at the University during the first years of Soviet power, see V.I. Klushin, *Bor'ba zaistoricheskoi materializm v Leningradskom gosudarstvennom universitete (1918-1925 gody)* (Leningrad, 1970). The broader intellectual background is discussed in Kendall Bailes, *Science and Russian Culture In An Age of Revolutions: V.I. Vernadsky and His Scientific School, 1863-1945* (Bloomington, Ind.: Indiana University Press, 1990).

[38]S.E. Frish recalled that many professors at the University forced by Narkompros to teach new curricular programs reacted by giving only half-hearted lectures or by openly criticizing these new methods in class (Frish, *Skvoz prizmu vremeni*, 101-103.)

[39]Typical was a speech by Glavprofobr official P.P. Lazarev to a conference of rectors early in 1925. Lazarev urged impatient student organizations to allow non-communist professors a little leeway in their work. (*Nauchnyi rabotnik* 2 (1925), 111.

[40]See *Leningradskaia pravda*, June 21 and September 12, 1925; *Izvestiia TsK* 6 (1925), 3-5.

[41]For the law on professorial elections, see *SU* no.7, st.44 (January, 1924).

[42]TsGA IPD, f.16, op.9, d.9920, ll.7-8.

[43] TsGA IPD, f.436, op.1, d.6, ll.143-145.

[44] *Ezhenedel'nik Narkomprosa RSFSR* 25 (1925), 14; 31 (1925), 13-14.

[45] TsGA IPD, f.984, op.1, d.175, l.16.

[46] TsGA IPD, f.984, op.1, d.219, ll.1-6.

[47] TsGA IPD, f.984, op.1, d.219, ll.32-34.

[48] TsGA IPD, f.984, op.1, d.246, l.14.

[49] TsGA SPb, f.2556, op.1, d.596, ll.66-68; TsGA IPD, f.984, op.1,d.175, ll.122-123.

[50] TsGA IPD, f.984, op.1, d.219, ll.4-6.

[51] See *Izvestiia*, April 17, 1927; *Komsomol'skaia pravda*, April 25, 1928; *Studencheskaia pravda*, November 7, 1927.

[52] On the introduction of *khozrashchet*, see E.H. Carr, *Socialism in One Country, 1924-1926*, vol. 1 (London: Macmillan Press Ltd., 1978), 330-332. For a discussion of economic control mechanisms during NEP, see Peter Gatrell and R.W. Davies, "The Industrial Economy," in R.W. Davies, ed., *From Tsarism to the New Economic Policy. Continuity and Change in the Economy of the USSR* (Ithaca, N.Y.: Cornell University Press, 1992), 151-154.

[53] *Ezhenedel'nik Narkomprosa RSFSR* 1 (1924): 17-22; 1 (1925): 16-21; 3 (1925): 1-3.

[54] *Ezhenedel'nik Narkomprosa RSFSR* 4 (1926), 1-4; 30 (1927), 23-29.

[55] See *Informatsionnyi biulleten' LONO* 1 (1924), 16.

[56] V. Makovskii, "Rezhim ekonomii v dele narodnogo obrazovaniia" *Narodnoe prosveshchenie* 8 (1926), 15. For decrees on reforms of student organizations and hiring practices, see *Informatsionnyi biulleten' LONO* 23-24 (1925), 31; *Izvestiia* TsK RKP(b) 6 (1925),83. The Central Committee directive is in TsGA IPD, f.16, op.1,d.9920, l.1.

[57] *Ezhenedel'nik Narkomprosa RSFSR* 52 (1925), 17-18.

[58] *Ezhenedel'nik Narkomprosa RSFSR* 5 (1926), 16.

[59] For example, see the report of Narkompros official A.P.Pinkevich at a conference of rectors in Moscow in June 1926, in *Ezhenedel'nik Narkomprosa RSFSR* 27 (1926), 10-14; and grumbling about overloaded courses and poor economic management at Moscow University in *Pervyi universitet*, May 30, 1927.

[60] See B. Makovskii, "Reorganizatsiia tsentral'nogo apparata Narkomprosa," *Narodnoe prosveshchenie* 7 (1927), 100-107; A. Vigdorov, "Ob organizatsii sistemy upravleniia i rukovodstva delom narodnogo obrazovaniia v RSFSR," *Ibid.* 4 (1928), 38-42; L. Leonov, "O reorganizatsii sistemy upravleniia i rukovodstva delom narodnogo obrazovaniia v RSFSR." *Ibid.* 4 (1928), 42-47.

[61] For a discussion of how these schemes affected primary and secondary education at the end of NEP, see Larry Holmes, *The Kremlin and the Schoolhouse: Reforming Education in Soviet Russia, 1917-1931* (Bloomington, Ind.: Indiana University Press, 1991), 93-108.

[62] TsGA IPD, f.984, op.1, d.68, l.1.

[63] In one incident, power to the University was cut for two days after Derzhavin asked for another extension to pay for arrears owed to the Leningrad power authority (TsGA SPb, f.7240, op.14, d.154, l.22).

[64] For budgetary allotments to *vuzy* for 1926-1927, see *Narodnoe prosveshchenie* 3 (1927), 97.

[65] TsGA SPb, f.7240, op.14, d.144, l.75.

[66] TsGA IPD, f.984, op.1, d.175, l.106; TsGA SPb, f.2556, op.2, d.169, ll.2-5; f.7240, op.14, d.178, ll.266-267.

[67] TsGA IPD, f.436, op.1, d.11, ll.17-20.

[68] See TsGA SPb, f.2556, op.1, d.2, ll.53-54; d.3, ll.1-2, for meetings of rectors and Petrograd/ Leningrad officials in 1923 and 1924.

[69] One example of this was A.A. Baikov, rector of the Polytechnical Institute, who publicly complained in 1926 that Glavprofobr had no business dictating which graduate students should be placed in his school. (*Tovarishch*, April 4, 1926).

[70] TsGA SPb, f.2556, op.1, d.14, ll.30-34.

[71] TsGA SPb, f.2556, op.1, d.113, ll.81-119; TsGA IPD, f.984, op.1, d.219, l.2.

[72] See comments in a report on the merger in TsGA IPD, f.984, op.1, d.119, l.34.

[73] TsGA IPD, f.984, op.1, d.175, l.35.

[74] For the traditional interpretation of NEP as a precursor to Stalinism, see Leonard Schapiro, *The Communist Party of the Soviet Union* (New York, N.Y.: Random House, 1959). A groundbreaking critique of this approach was contributed by Stephen F. Cohen, "Bukharin, NEP, and the Idea of an Alternative to Stalinism" in *Rethinking the Soviet Experience* (New York, N.Y.: Norton, 1985), 71-92.

[75] A number of foreign and Soviet engineers were put on trial in the mining town of Shakhty for alleged espionage activities. This case created an international incident, and provided fuel for Stalin's and Molotov's attack against "bourgeois specialists." See Kendall Bailes, *Technology and Society Under Lenin and Stalin* (Princeton, N.J.: Princeton University Press, 1978), 69-94.

[76] For a discussion of the defeat of Bukharin, see Stephen F. Cohen, *Bukharin and the Bolshevik Revolution: A Political Biography, 1888-1938* (Oxford: Oxford University Press. 1971).

TRANSLATIO STUDII: THE TRANSFER OF LEARNING FROM THE OLD WORLD TO THE NEW

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INGRAINED IN THE CONSCIOUSNESS OF HUMAN BEINGS as they spread from their ancestral homelands in Asia and Africa into the Mediterranean world, the European continent, and the British Isles lay the awareness of having to learn, preserve, and transmit the lessons that taught them how to take care of their wants of body, mind, and spirit. Survival depended on practice in the arts and sciences of medicine, government, and religion, as well as knowledge of the elements of the natural world in which they lived, and of the traditions and accumulated wisdom of their societies. Thus, in tandem with synagogues, mosques, and churches, arose universities to gather, store, and refine the treasures of knowledge and transmit them to future generations.

The medieval European universities served as focal points, supply depots, and refineries in the process of transmission. These universities drew together the strands of knowledge from the Arabic, Jewish, and Christian traditions, and handed them down to their successor institutions in the modern world, whence they were carried across the Atlantic ocean to North American colleges and universities. Each step on the way of this *translatio studii* added new discoveries, inventions, and commentaries and enhanced the knowledge that human beings desired.

This essay examines the last stage of this process, and summarizes just what was transmitted across the North Atlantic and the form it took in the New World. It discusses the purposes and aims of this intellectual transfer, the establishment of English colleges on the American shores, and the curriculum, students, finances, and professors. The essay is equally concerned with the preservation of an inheritance as with its modification in a new environment, as much with tradition as with innovation.

PURPOSES AND AIMS

The seventeenth and eighteenth centuries are not known as flourishing times in the history of European universities. The medieval university and Renaissance humanism had passed, and the rise of the great national universities of the nineteenth century lay unsuspected in the future. Exhausted from the convulsions of the Reformation and devastated by the subsequent religious wars, Europeans turned their energies outward. New destinies beckoned at new destinations. War and exploitation at home spurred thousands to seek their fortune afar. Undreamed of treasures drew navigators and planters across the ocean. The traditional universities and the great seaport cities, each in their own way, became cultural and commercial centers of transfer and dissemination of their products to new outposts of European civilization at the "fringes" of the world.

This outward flow of energies characterized the expansion of Elizabethan England. The push into Cornwall, Wales, and the Scottish border areas, A.L. Rowse has shown, preceded the moves into Ireland, and then North America.[1] Violence and lawlessness, from London's viewpoint, accompanied the expansion of British populations into these border territories, threatening a return to barbarism.[2] The areas retained a recognizable British slant, but developed lives, cultures, and identities of their own. This double pull of tradition, harking back to European origins, and adaptation to new environments and conditions characterized the growth of their schools and colleges.

Starting from common origins in England and France and reaching back to the beginnings of European education in medieval cathedral schools and universities, grammar schools and colleges were transplanted to the West Indies and to what would later become the United States and Canada. These transplants flourished as vigorously on the American mainland as had peer institutions in an earlier frontier in Scotland.[3] The very rigor of their existence in an often hostile environment gave them strength, both in the struggle for cultural survival among the French in Canada and among the English further south. Scholars and teachers with Latin texts and scientific apparatus backed up the original settlers, traders, missionaries, and statesmen who opened the way with sword, axe, hoe, and Bible.

Settlers on the North American continent established Latin grammar schools and colleges for the same reason: to aid in the transfer, maintenance, and propagation of a way of life. It mattered little whether London or Versailles authorized a charter, whether English or French provincial or proprietary authorities opened a school, or whether an institution's affiliation was Dissenter, Anglican, or Jesuit. The grammar schools and colleges provided the necessary professionally trained governors and ministers, lawyers and administrators, physicians, and scholars.

Thus upon settling in the Massachusetts Bay, the Puritans told their English brethren that after they had taken care of houses, livelihood, churches, and government, they determined "to advance learning and perpetuate it to posterity; dreading to leave an illiterate ministry to the churches...."[4] These Puritans considered colleges and universities an indispensable step towards their goal of establishing their own, relatively independent society. Their Connecticut neighbors similarly established their own collegiate school—later to become Yale College—to prepare young men "for public employment both in church and civil state."[5]

A century and a half later the tutors of Yale College and their students in the literary societies attempted to create an American literature, thereby turning the school into the cradle of an American national consciousness.[6] Anglican clergymen, loyal to the Crown and deeply unsympathetic to American independence, simultaneously planned their departure to Canada and petitioned their church to found colleges in Nova Scotia and New Brunswick. Thus, in 1789, a grammar school opened that became King's College in Windsor after 1802. In 1828 the Crown incorporated King's College, opened in 1787 in Fredericton; later to become the University of New Brunswick. Both schools were viewed as citadels of nationalism and of front-line defense against the threatened subversion of English church and society by American republicanism.[7]

Meanwhile, the British Crown granted charters to colleges under Anglican control in Virginia and New York. Through its governors, it supported proprietary and popular efforts to found colleges in New Jersey, Pennsylvania, Rhode Island, and New Hampshire. British officials believed that support of these college foundations would strengthen rather than subvert the loyalty of colonial Englishmen. But royal governors or Church officials blocked college foundings that they considered threats to Anglican predominance in New Hampshire in 1758, in Georgia in the 1760s, and in North Carolina in 1772.[8]

The Jesuits in Quebec opened seminaries and Latin grammar schools early in the seventeenth century to admit candidates for the priesthood and to facilitate education for the secular professions.[9] The Jesuits, too, wished to perpetuate a civilization in the wilderness, primarily by emphasizing their religious heritage. After the British conquest, their schools became centers for preserving the French language and the Roman Catholic faith in an English-speaking, Protestant environment. Only with the 1852 incorporation of Laval University in Quebec, did French language higher education receive its full representation with faculties of the arts, law, medicine, and theology.[10]

Planters and authorities in the home countries paid little attention to education in the West Indies. A few private foundations furnished the scant preparatory and higher education on the British islands. Christopher Codrington intended his 1710 bequest of two Barbados plantations with its labor force of slaves to fund the training of theologians and physicians. But, like Harrison College, founded in 1735 to support 24 indigent white boys, the resultant institution functioned as little more than a grammar school. Financial mismanagement soon undermined these foundations. Parents sent most white children to England or to colleges on the American mainland.[11] The home government, distrusting the native population in the French possessions and fearing a movement for autonomy, opened no colleges, and kept the number of grammar schools to a minimum. Relatively few white children were sent to private boarding schools in France.[12]

ESTABLISHMENT OF ENGLISH COLLEGES IN AMERICA

During the seventeenth and eighteenth centuries, nine North American collegiate foundations, stretching from William and Mary in the south to Dartmouth in the north, offered a higher education similar to the British colleges and the arts faculties of continental European universities.[13] The Jesuits, in their Grand Séminaire de Québec, offered the first professional education in North America in 1667. In the English speaking areas, college presidents and divinity professors offered informal professional education to resident graduates and tutors. In 1785, John H. Livingston inaugurated the first theological school independent of a college by training candidates for the Dutch Reformed Church ministry in his New York home.[14]

Medical education began in the 1760s at King's College and at the College of Philadelphia; followed in the seventies and eighties at William and Mary, Yale, and Harvard.[15] Earlier, colonials had to cross the Atlantic for training in Europe, especially Edinburgh. In the half-century before 1800, 117 Americans received a medical degree

from the Scottish university. The medical centers at Leyden, Paris, London, and Rheims also attracted American students.[16] Formal legal education began when a proprietary law school opened at Litchfield, Connecticut, in 1784. Law professorships soon appeared at William and Mary, the University of Pennsylvania, and Columbia College.[17]

Founders of North American colleges and professional schools, particularly the seventeenth century foundations in New England and Virginia, followed familiar European forms of academic organization. The Puritan founders of Harvard placed the college corporation under the Overseers, an external board of magistrates and ministers that resembled the supervisory boards of Calvinist churches, schools, and universities from Geneva to Edinburgh. Their Connecticut neighbors founded Yale as a trust and subsequently incorporated the clerical Fellows as an external board. At the College of William and Mary, Virginia Anglicans concentrated effective administrative power in the president whose authority derived from the external Board of Visitors. The Crown followed the Oxford and Cambridge precedents by giving the college the legal status of a civil corporation and by allowing the faculty the right of representation in the Virginia legislature.[18]

What imprint did European models leave on colonial colleges? The evidence admits of no single and simple answer. New England Puritans, mid-colony dissenters, and Virginia Anglicans, equally reluctant to accept direction from London or to permit an unrestrained self-governing academic corporation in their midst, all adopted an external board form of college government. Political sagacity and sometimes dire necessity—but not denominational allegiance—prescribed that choice. College officials needed the support of close-by provincial authorities, and considered the far-off Crown and its officials in residence potentially hostile or, in the case of the College of William and Mary, too supportive of the English college faculty. Virginians suspected William and Mary professors, mostly ex-Oxford clergymen-dons. Their New England contemporaries thought the young and unseasoned Harvard and Yale tutors incapable of governing a college. Thus neither in Virginia nor in New England did an English-style college corporation gain a hold.

Colonists largely relied on their own resources in collegiate governance, but curricular questions provoked a different reaction. Surrounded by a human and a natural wilderness, and frightened by the prospect of a descent into barbarism, colonists nodded towards tradition, and borrowed directly from the Oxford and Cambridge curricula. Lectures, recitations, declamations, disputations, textbooks, and graduation exercises show a striking similarity to European practice. The number of Cambridge University matriculants in seventeenth century New England underlines its pervasive influence. Between 1620 and 1660, 103 or 44 percent of all New England men who had ever attended a university studied at Cambridge. If we leave out the 91 Harvard alumni, the percentage rises to 71. And of the Cambridge matriculants, 28 percent attended Emmanuel College and 15 percent attended Trinity College.[19]

The colonial colleges in America generally adopted presbyterial models of government and Oxford-Cambridge curricular models. As for other seventeenth century European influences, we can only agree with Samuel Eliot Morison that "the farther we get from Cambridge, the more meagre is the result."[20] The Scottish universities and

presbyterian academies and, to a minor degree, the dissenting academies of England offer the one exception. The effect of these institutions on governmental organization and curriculum began with the labors of James Blair (1655-1743) in founding the College of William and Mary at the end of the seventeenth and the beginning of the eighteen century, and continued in the efforts of William Smith (1727-1803), the first provost of the College of Philadelphia.

At William and Mary, Blair telescoped university and college characteristics that, as a form of academic organization, were particularly appropriate in areas far removed from metropolitan centers and their financial resources. Thus it was used in Scotland, Ireland, and Virginia, and ultimately in all the American colonial colleges.[21] Smith, learning during the 1750s that Aberdeen changed from having the same tutor teach all subjects to disciplinary specialization, promoted that innovation in New York and Pennsylvania.[22] Many Scottish, Scotch-Irish, and dissenting English immigrant ministers, educated in their respective universities and academies, reinforced Smith's curricular modernizations.[23]

Increasingly diverse ethnic and religious traditions combined with the Great Awakening, a colony-wide outburst of religious enthusiasm, to end strict denominational control over all aspects of college life by the middle of the eighteenth century. A college, though still controlled by a particular denomination or church, might guarantee freedom of conscience and worship to students and professors of many other Christian confessions. This toleration with preferment characterized Philadelphia, where the college was open to Protestants of all denominations, while Anglicans and Presbyterians shared in its administration. Baptists controlled the college in Rhode Island, but even Jewish students entered without encountering religious obstacles. Anglican King's College freely admitted students of other denominations, but its supporters successfully prevented incorporation of a rival public college with no formal denominational participation in its government. American circumstances made toleration necessary; complete secularization, however, awaited the years after the Revolution.[24]

The first signs of dissatisfaction with the system of toleration with preferment arose in New Jersey where members of the Dutch Reformed Church resented Presbyterian dominance at the provincial college at Princeton. Their successful petition for Queens College breached the monopoly enjoyed by provincial colleges, and marked the end of an era. College charters no longer forbade discrimination against students on religious grounds. The Queen's charter obliged the college to promote "the advancement of the protestant religion of all denominations," but also declared the college's special mission to be the preparation of young men for the ministry of the Dutch Reformed churches. To compensate for this tilt towards sectarianism, the Board of Trustees included four New Jersey public officials. Ordained ministers were prohibited from occupying more than one-third of the seats on the board.[25]

This divergence from the toleration with preferment scheme led to the phenomenal growth of collegiate institutions in the nineteenth century. State universities replaced the provincial colleges after the Revolution, while many denominations followed the

Queen's precedent by founding their own non-public institutions. Some denominations began with academies that were later incorporated as colleges; others sought college charters from the beginning. In the first two decades of the nineteenth century, local developers, businessmen, and civic leaders joined Presbyterians, Catholics, Methodists, Dutch and German Reformed, and Congregationalists.[26] No longer was college founding necessarily a public undertaking.

This "privatization" and diversification of higher education in the half-century following the Revolution reflected the transformation of American society from its colonial past into a nation that set out to conquer a continent. The proliferation of a bewildering variety of academies, institutes, colleges, theological seminaries, medical and law schools implied a "great retrogression" apparent in a disregard for traditional scientific standards and academic rigor.[27] But the new nation's tremendous economic and demographic "take-off" stimulated a "release of energy" that created novel academic institutions.[28] Academic decline and economic and social stimulus together enabled higher education to perform its traditional function in a frontier society governed by the spirit of laissez-faire capitalism.

CURRICULUM AND STUDENTS

Latin preparatory education in the liberal arts opened the door to professional training in North America as in Europe. The Collège de Québec, opened by the Jesuits in 1635, corresponded to a French collège, or Latin grammar school. By 1663 the Collège also offered courses in the humanities, rhetoric, philosophy, mathematics, and theology. It sent some graduates to the Quebec Theological Seminary to study for the priesthood. The Massachusetts Latin grammar schools prepared students for entrance into Harvard College, North America's first degree-granting collegiate institution. Elsewhere in the English colonies, local ministers or private academies provided preparatory training in Latin grammar.

Boys entered college as members of a class, and added logic, Greek, Hebrew, rhetoric, natural history, and catechetical divinity to the study of Latin grammar. Instruction usually consisted of lectures, individual study, recitation, discussion, and syllogistic disputations. After the student's first year, ethics and politics usually replaced logic, to be in turn supplanted by natural philosophy and arithmetic, geometry, and astronomy. Metaphysics and moral philosophy appeared in the student's final years. Towards the end of the eighteenth century the moral philosophy course, usually taught by the college president, became the capstone of the student's education. Thoroughly eclectic in the materials it covered, moral philosophy sought to answer the question: By what principles should men govern their behavior?[29]

By the second half of the eighteenth century, modern subjects like geography, history, belles lettres, and French appeared. Many inhabitants of commercial centers discussed a more practical orientation that stressed applied skills, such as surveying,

measuring, navigation, commerce, husbandry, law, and government. But curricular change actually brought greater specialization to academic disciplines, such as mathematics, chemistry, botany, and mineralogy.[30]

The eighteenth century, too, witnessed the gradual displacement of syllogistic disputations by forensic debates. Induction, experience, and experiment had become essential parts of inquiry, and the scholastic syllogism restrained debaters, rather than allowing the display of argumentative skills. In contrast, the popularity of contemporary political and social topics, combined with greater argumentative freedom, contributed to the rise of forensics.[31] Latin remained the language of instruction into the eighteenth century and was used in syllogistic debates, but it had earlier lost its place as medium of conversation and was useless in forensic debates. The colleges relied upon English with ever greater frequency; English textbooks began to appear in the seventeenth century.

Student literary societies that sprung up before the middle of the eighteenth century led the curricular switch from Latin to English, introduced the study of belles lettres and, in the case of the Connecticut Wits at Yale College, stimulated the growth of a native American literature.[32] These societies provided the training in debate and oratory so useful for future ministers, politicians, lawyers, and orators. They used contemporary pamphlets and essays on political and literary issues of the day, and in most of the colleges acquired larger libraries than the college itself.

The number of students receiving their first degrees at American colleges generally followed the increase of the colonial population.[33] Yale College, upon becoming Harvard's New England rival, steadily increased its share of graduates. Subsequent decades witnessed college foundings in New Jersey, New York City, Philadelphia, Rhode Island, and New Hampshire. The war and immediate post-war years (1777 to 1785) only slightly interrupted the growing rate of college graduations. In 1800, 215 students received their degrees from 14 of the 22 existing colleges, bringing the total of undergraduate degrees granted since Harvard's first commencement to 8,884.

Table 1: Undergraduate Degrees Conferred at Colonial Colleges by Five-Year Intervals, 1640-1800

1640	0	1695	59	1750	240
1645	20	1700	64	1755	280
1650	25	1705	71	1760	462
1655	31	1710	83	1765	570
1660	40	1715	83	1770	509
1665	39	1720	123	1775	625
1670	30	1725	256	1780	525
1675	27	1730	248	1785	598
1680	22	1735	255	1790	899
1685	35	1740	237	1795	1,079
1690	54	1745	237	1800	1,058

Total 8,884

After 1785, smaller frontier colleges, including Dartmouth in New Hampshire, Williams in Massachusetts, and Dickinson in Pennsylvania began to contribute graduates to the country's college-educated elite. Removed from the wealthier, coastal commercial and social urban centers, and reliant on individual and group charity, these colleges attracted students from the rural, generally poorer sections of the hinterland. The availability of a college education in rural New England, David Allmendinger observed, "resulted in a social diversity that was far more significant than any mere increase in the number of enrolled students...."[34]

College presidents usually conducted admissions examinations, testing the applicant's skill in Latin, Greek, and arithmetic. These interviews served more to introduce the young men to the college and its president than to select an entering class rigorously. Many colleges, eager for students, even offered remedial instruction in preparatory grammar classes to 11 or 12-year old boys. Most students, however, averaged from 15 to 17 years at entrance, and received their previous education in New England's Latin grammar schools, in private academies modelled on Scottish or English dissenting academies, or from private tutors or ministers.[35] Only after the Revolution in the newer, interior colleges did the entrance age of students climb significantly. By 1800, the percentage of students aged 25 or older at the New England colleges founded after the 1760s was more than twice as large than at Harvard and Yale combined.[36]

During the entire colonial period nearly half the college graduates entered the ministry. But the percentage declined throughout the period. Statistics published in 1912 listed ministry as the career of 60 percent of seventeenth century college graduates, 40 percent of eighteenth century graduates, and 29 percent of post-1750 graduates. Physicians came next in the seventeenth century, but lawyers overtook physicians and ministers by the 1770s. These figures ought to be taken cautiously. College graduates at first often served as minister, lawyer, and physician while listing themselves as ministers. The growing presence of lawyers and doctors testified more to the increasing professional differentiation of college graduates than to a relative decline of the ministry. Nonetheless, throughout the colonial period the colleges continued to provide society with its professional leadership.[37]

FINANCES AND PROFESSORS

From the beginning, the greatest obstacle to colonial college growth was the lack of surplus wealth. There existed neither native sources for collegiate endowments, nor colonial treasuries to fund professorial chairs or authorize and support universities. John Harvard's (1607-1638) gift of £799.17.2 to the college that bears his name was exceptional. Public subsidies, such as legislative appropriations and grants, tax and duty revenues, and, as in the case of Harvard, the income from a ferry across the Charles River, provided whatever funds the early colleges could command.

The colleges therefore depended greatly on student fees and material contributions. Presidents frequently recruited potential students in their province since institutional

survival often required strong enrollments. Success depended on providing dormitories and keeping costs down. Enrollment figures suggest that, before the Revolution, Yale, the College of New Jersey, and the College of Rhode Island best succeeded in providing an economical education, room, and board.[38]

In the eighteenth century, subscription lists for private pledges, bequests, and profits from lotteries became more common. Normally, such contributions came from the neighboring environs of a college, but colleges also raised funds in other colonies, in the West Indies, in Britain, and in Europe. Promoters appealed to religious sentiment and the need to support civilization and missions by educating ministers and converting the Indians. But by the time of the Revolution, these contributions dwindled to a trickle, and the post-war spread of local and non-public colleges depended on local and denominational support. Fund-raising changed accordingly.[39]

The shortage of qualified instructors, as well as the dearth of financial resources, inhibited college growth. The heads of the colonial colleges were therefore inevitably ministers who sometimes combined preaching in a local church with their college work, and who always viewed their teaching and administrative functions as part of their ministry.[40] Some presidents served their college for a few years only, whereas Thomas Clap (1703-1767) viewed his service as his ministry and stayed in Yale's presidential chair for 26 years. Harvard's Increase Mather (1639-1723) reluctantly accepted the presidency as his duty. When Mather was asked to move from his Boston residence and church to the college, he replied "Should I leave preaching to 1500 souls only to expound to forty or fifty children...?"[41]

The president administered, led prayer in the college church or chapel, usually taught moral philosophy, supervised the professional divinity training of the resident post-graduate students and tutors, and, as in Clap's case, served also as professor of divinity. He examined entering students, supervised, counselled, and disciplined the undergraduates, presided over commencements, and awarded degrees to the graduates. A fundraiser and lawgiver, the president was one of the colony's most important personalities. Princeton's John Witherspoon (1723-1794) signed the Declaration of Independence and represented his province at the Continental Congress. Many presidents, despite their obligations, wrote textbooks and scholarly treatises.[42]

The absence of a professorial class so colored the thinking of American college founders that only two colonial college charters mentioned a faculty of masters or professors. The William and Mary charter provided for two professors each in philosophy and in its divinity school. The College of Philadelphia charter defined its faculty as Provost, Vice-Provost, Academy Rector, and professors. Both colleges relied on Anglican support, and expected to attract masters or professors from the English universities—Oxford in the case of Williamsburg. In their controversies with the Virginia visitors the professors, as Anglican clergymen, naturally sought assistance from church and government officials in London. The more experienced and well-known Philadelphia professors, respected, accepted as equals, and accorded professional status by the city's leaders and the college's trustees, needed no support from either church or government in England.

The other colonial colleges made their first professorial appointments, usually in divinity and mathematics, whenever finances permitted. After the middle of the eighteenth century, colleges began to offer professional instruction in medicine, the natural sciences, law, and modern languages. Most colonial professors were educated as ministers in American colleges, but many professional men were trained abroad, especially physicians who studied in Edinburgh and modern language instructors.

Professorial scarcity led college presidents to rely on tutors—graduates of the college, who later pursued advanced studies for the ministry. These students viewed themselves as apprentices or journeymen preparing for a professional career in the church, in law, medicine, or science. Each tutor instructed the students in a single class in all subjects not covered by the president. This teaching, called regenting, was abolished after the middle of the eighteenth century, when tutors, like professors, could specialize.

Tutorial assignments were usually temporary. At Harvard the average length of service in the eighteenth century was nine years; at Yale three.[43] These young tutors might have previously stayed at the college after graduation on a fellowship, served as butler or librarian, or tried their hand at keeping school. They tended to remain in education and eventually gain professorial appointments or enter the ministry or the law.[44]

By the end of the eighteenth century, college teaching thus became an accepted aspect of a professional identity. Having usually begun their professional lives in another occupation, such as the ministry, medicine, or law, or having made their livelihood as scholars and scientists in publishing, these professors were then provided with a desirable opportunity to teach in a comfortable, prestigious environment. Once they switched to the college, fewer than half the colonial professors entered another occupation.[45]

Philadelphia and Boston professors, together with prestigious and wealthy colonial businessmen, landholders, and politicians, also helped to create the earliest learned societies and academies. Conditions, as described by Brooke Hindle, were anything but encouraging:

> Nowhere in the colonies could be found the rich libraries, the ancient universities, or the conversation of the learned that graced the centers of Old World culture. Great endowed institutions were lacking. So, for the most part, was the patronage of the king and of enlightened nobles. Stimulus and support from Europe could supply only a part of the deficiency. Communication was slow and uncertain and the encouragement offered was not balanced but biased by the particular needs of the individuals who offered it.[46]

Nonetheless, some of the best known men in the colonies became corresponding members of the Royal Society in the seventeenth century, including New England's John Winthrop (1605/06-1676), Cotton Mather (1662/63-1727/28), James Bowdoin

(1726-1790), Paul Dudley (1675-1751), Roger Williams (1603-1682/83), and Zabdiel Boylston (1679-1766); Pennsylvania's Benjamin Franklin (1706-1790), David Rittenhouse (1732-1796), and John Morgan (1735-1789); Virginia's William Byrd II (1674-1744), John Mitchell (?-1768), and John Tennent (c.1700-c.1760), and South Carolina's Alexander Garden (1730-1791).[47]

After early abortive attempts to found learned societies, the American Philosophical Society for Promoting Useful Knowledge was permanently established in Philadelphia during the 1760s, while the the American Academy of Arts and Sciences began its work in Boston in 1780.[48] New Yorkers undertook no similar initiatives. The city's commercial interests, the Anglican domination of King's College, and a bent towards practical innovations rather than philosophical discussions discouraged the founding of a learned society.[49] American scientists first gained international recognition for their work in connection with world-wide efforts in 1769 to observe and record the transit of Venus.[50]

Before the end of the first quarter of the nineteenth century, North American developments augured well for the survival and expansion of collegiate institutions. Several new Canadian colleges joined the two English-speaking colleges, though the French-speaking Quebec Seminary received a charter only after mid-century.[51] South of the border "the great retrogression" made collegiate expansion seem haphazard and ill-advised, but the foundation proved enduring. Colleges nurtured and sustained the American scientific and intellectual renaissance that began in the century's second half. Many colonial grammar schools and colleges, though small in size and student numbers and forced to deal with elementary instruction in Latin grammar, helped to assure the survival of civilization in a wilderness by providing strong, and effective incentives "to advance learning and perpetuate it to posterity...." Europe's intellectual and spiritual legacy indeed found a new home in the New World.

NOTES

The substance of this paper will appear in abbreviated form in volume two of *A History of the European Universities in Society* (Cambridge, U.K. Cambridge University Press, forthcoming, 1993).

[1] A.L. Rowse, *The Expansion of Elizabethan England* (London: Macmillan, 1955), vii.

[2] Bernard Bailyn, *The Peopling of British North America: An Introduction* (New York, N.Y.: Alfred Knopf, 1986), 112.

[3] On the similarities of Scotland and America, see John Clive and Bernard Bailyn, "England's Cultural Provinces: Scotland and America," *William and Mary Quarterly*, 3rd ser., 11 (1954): 200-213.

[4] Reprinted in Samuel Eliot Morison, *The Founding of Harvard College* (Cambridge, Mass.: Harvard University Press, 1935), 432.

[5] See charter in Franklin B. Dexter, ed., *Documentary History of Yale University* (New Haven, Conn.: Yale University Press, 1916), 21.

[6] Brooks Mather Kelly, *Yale A History* (New Haven, Conn.: Yale University Press, 1974), 81-83. For a general discussion of the history of American education during the colonial period and a reliable bibliographical essay on the literature of higher education, the reader is best served with Lawrence A. Cremin, *American Education: The Colonial Experience, 1607-1783* (New York, N.Y.: Harper and Row, 1970). A similarly comprehensive survey of American higher education with perceptive discussions of the colonial period is presented in Frederick A. Rudolph's two books, *The American College and University: A History* (New York, N.Y.: Vintage, 1962), and *Curriculum: A History of the Undergraduate Course of Study Since 1636* (San Francisco, Calif.: Jossey-Bass, 1977). Very useful, too, is the first volume of the documentary collection by Richard Hofstadter and Wilson Smith, eds.. *American Higher Education: A Documentary History* (Chicago, Il.: University of Chicago Press, 1961).

[7] Robin S. Harris, *A History of Higher Education in Canada, 1663-1960* (Toronto: University of Toronto Press, 1976), 28-29. Harris' volume is the most comprehensive survey of higher education for all of Canada.

[8] See Jurgen Herbst, *From Crisis to Crisis: American College Government, 1636-1819* (Cambridge, Mass.: Harvard University Press, 1982), passim, especially 131-133.

[9] Lucien Campeau, *La premiére mission des Jésuites en Nouvelle-France, 1611-1613, et les commencements du Collège de Québec, 1626-1670, Cahiers d'histoire des Jésuites*, Nr. 1 (Montreal: Bellarmin, 1972), 94-96, and E. Chartier, "The Classical Colleges of Quebec," *Proceedings, National Conference of Canadian Universities and Colleges*, 12 (1923), 25. For a history of institutions of secondary and higher education in Quebec before 1800, the reader should consult Louis Philippe Audet, *Le systéme scolaire de la province de Québec*, vols. 1 and 2 (Québec Editions de l'Erable, 1951), and his briefer, *Histoire de l'éducation au Québec L'organization scolaire sous le régime français, 1608-1760* (Montreal: Centre de Psychologie et de Pédagogie, 1966).

[10] Harris, *A History*, 24-25.

[11] J.H. Parry and P.M. Sherlock, *A Short History of the West Indies* (London: Macmillan, 1960), 246.

[12] Pierre Pluchon, ed., *Histoire des Antilles et de la Guyane* (Toulouse Edouard Privat, 1982), 261, 222, and Willem Frijhoff and Dominique Julia, "Les grandes pensionnats de l'ancien régime a la restauration La permanence d'une structure Éducative," *Annales historiques de la révolution française* 13 (1981): 180-184.

[13] In the order of their founding these institutions were: Harvard College, established by the Massachusetts General Court in 1636, chartered in 1650; the College of William and Mary in Virginia, chartered by the Crown in 1694; Yale College, opened as Connecticut's collegiate school in 1701 and chartered as college in 1745; the College of New Jersey, now Princeton University, chartered in 1746; King's College in New York, today's Columbia University, chartered in 1754; the College of Philadelphia, in 1755, which became the University of Pennsylvania in 1791; the College of Rhode Island, now Brown University, in 1765; Queen's College, today's New Jersey's Rutgers, The State University, chartered in 1766, and Dartmouth College, chartered in New Hampshire in 1769. Better college histories that emphasize the seventeenth and eighteenth centuries are Samuel Eliot Morison's *The Founding of Harvard College*, and *Harvard College in the Seventeenth Century*, 2 vols. (Cambridge, Mass.: Harvard University Press, 1936), Jack E. Mopurgo, *Their Majesties' Royall Colledge: William and*

Mary College in the Seventeenth and Eighteenth Centuries (Williamsburg, Va.: College of William and Mary, 1976), Richard Warch, *School of the Prophets: Yale College, 1701-1740* (New Haven, Conn.: Yale University Press, 1973), David C. Humphrey, *From King's College to Columbia, 1746-1800* (New York, N.Y.: Columbia University Press, 1976), and George P. Schmidt, *Princeton and Rutgers: The Two Colonial Colleges of New Jersey* (Princeton, N.J.: Van Nostrand, 1964). General college histories with useful sections on the colonial and revolutionary periods are Kelley, *Yale A History*; Thomas J. Wertenbaker, *Princeton, 1746-1896* (Princeton, N.J.: Princeton University Press, 1946); Edwards Potts Cheyney, *History of the University of Pennsylvania, 1740-1940* (Philadelphia, Pa.: University of Pennsylvania Press, 1940); Richard P. McCormick, *Rutgers: A Bicentennial History* (New Brunswick, N.J.: Rutgers University Press, 1966); Walter C. Bronson, *The History of Brown University, 1764-1914* (Providence, R.I.: n.p., 1914), and Leon Burr Richardson, *History of Dartmouth College*, 2 vols. (Hanover, N.H.: Dartmouth College, 1932).

[14] Hugh Hastings, ed., *Ecclesiastical Records of the State of New York* (Albany, N.Y.: J. B. Lyon, State Printer, 1905), 6: 4322-4323.

[15] Whitfield J. Bell, Jr., "Philadelphia Medical Students in Europe, 1750-1800," *Pennsylvania Magazine of History and Biography* 47 (January 1943): 1-29, and 'Some American Students of 'That Shining Oracle of Physic,' Dr. William Cullen of Edinburgh, 1755-1766," *Proceedings, American Philosophical Society* 94 (June 1950).

[16] See also Francis R. Packard, "How London and Edinburgh Influenced Medicine in Philadelphia in the 18th Century," *Annals of Medical History*, n.s., 4 (1932): 219-244; and J. Gordon Wilson, "The Influence of Edinburgh on American Medicine in the 18th Century," *Proceedings, Institute of Medicine of Chicago* 7 (1929): 129-138.

[17] Samuel H. Fisher, *The Litchfield Law School, 1775-1833* (New Haven, Conn.: Yale University Press, 1933); and see Herbst, *From Crisis to Crisis*, 159-165.

[18] Jurgen Herbst, "The First Three American Colleges: Schools of the Reformation," *Perspectives in American History*, 8 (1974): 27-29; and Morison, *The Founding*, 120-147. The subject of transatlantic influences is particularly stressed in George S. Pryde, *The Scottish Universities and the Colleges of Colonial America* (Glasgow: Jackson, 1957); and Douglas Sloan, *The Scottish Enlightenment and the American College Ideal* (New York, N.Y.: Teachers College Press, 1971).

[19] Harry S. Stout, "University Men in New England 1620-1660: A Demographic Analysis," *Journal of Interdisciplinary History* 4 (Winter 1974): 375-400.

[20] Morison, *The Founding*, 146.

[21] Herbst, *From Crisis to Crisis*, 32, 36.

[22] P.J. Anderson, "Aberdeen Influence on American Universities," *Aberdeen University Review* 5 (1917-1918): 27-31.

[23] See Sloan, *The Scottish Enlightenment*; but see also David C. Humphrey, "Colonial Colleges and English Dissenting Academies: A Study in Transatlantic Culture," *History of Education Quarterly* 12 (Summer, 1972): 184-197.

[24] Herbst, *From Crisis to Crisis*, 63-65.

[25] *Ibid.* 110-113.

[26] *Ibid.* 189-190.

[27] Richard Hofstadter, "The Great Retrogression," in *Academic Freedom in the Age of the College* (New York, N.Y.: Columbia University Press, 1961), 209-222.

[28] See W.W. Rostow, *The Stages of Economic Growth* (New York, N.Y.: Cambridge University Press, 1963), and James Willard Hurst, *Law and the Conditions of Freedom in the Nineteenth Century United States* (Madison, Wisc.: University of Wisconsin Press, 1956), 3-32.

[29] For a convenient summary on the colonial curriculum see Rudolph, *Curriculum*. An older study is Colyer Meriwether, *Our Colonial Curriculum, 1607-1776* (Washington, D.C.: Capital Publishing Co., 1907).

[30] See Joe W. Kraus, "The Development of a Curriculum in the Early American Colleges," *History of Education Quarterly* 1 (June 1961): 64-76. See also James J. Walsh, *Education of the Founding Fathers of the Republic Scholasticism in the Colonial Colleges* (New York, N.Y.: Fordham University Press, 1935).

[31] See David Potter, *Debating in the Colonial Chartered Colleges An Historical Survey, 1642 to 1900* (New York, N.Y.: Teachers College, Columbia University, 1944).

[32] Kelly, *Yale A History*, 81-83. On students and student life much good information is to be found in Steven J. Novak, *The Rights of Youth American Colleges and Student Revolts, 1789-1815* (Cambridge, Mass.: Harvard University Press, 1977).

[33] Table One does not include the graduating students of the College of William and Mary in Virginia, and thus the numbers for the seventeenth century reflect those of Harvard College alone. After these statistics were compiled, James McLachlan wrote me that he had found the records of bachelor degrees granted at the College of William and Mary in the ordination records of the Bishops of London. They amount to 24 bachelors of arts, and this number should be added to the total given in the text. Personal letter to the author from Dr. James McLachlan, November 29, 1992.

[34] David Allmendinger, *Paupers and Scholars: The Transformation of Student Life in Nineteenth Century New England* (New York, N.Y.: St. Martin's Press, 1975), 125.

[35] Beverly McAnear, "College Founding in the American Colonies, 1745-1775," *Mississippi Valley Historical Review* 42 (1955): 24-44.

[36] See Allmendinger, *Paupers and Scholars*, Table I, 10.

[37] See table 69 in Bailey B. Burritt, *Professional Distribution of College and University Graduates*, US Bureau of Education Bulletin 1912, No. 19 (Washington, D.C.: Government Printing Office, 1912): 144, and compare with data given by Peter D. Hall, *The Organization of American Culture* (New York, N.Y.: New York University Press, 1982), 310. Very helpful are the excellent alumni directories of John L. Sibley for the graduates of Harvard, of Franklin B. Dexter for the graduates of Yale, and of James McLachlan and Richard A. Harrison for the graduates of Princeton.

[38] Beverly McAnear, "The Selection of an Alma Mater by Pre-Revolutionary Students," *Pennsylvania Magazine of History and Biography* 73 (October, 1949): 429-440.

[39] See Beverly McAnear, "The Raising of Funds by the Colonial Colleges," *Mississippi Valley Historical Review* 38 (1952): 591-612.

[40] The presidency of John Leverett (1662-1724) at Harvard (1707-1724) was the only exception.

[41] Quoted in Josiah Quincy, *History of Harvard University*, vol. I (Boston, Mass.: Crosby, Nichols, Lee, and Co., 1860), 499-500.

[42] See Richard G. Durnin, "The Role of the Presidents in the American Colleges of the Colonial Period," *History of Education Quarterly* 1 (June 1961): 23-31. On colonial college professors, see William D. Carrell, "Biographical List of American College Professors to 1800," *History of Education Quarterly* 8 (Fall 1968): 358-374. Readable biographies that provide insights into university life and politics include Edmund S. Morgan, *The Gentle Puritan: A Life of Ezra Stiles, 1727-1795* (New Haven, Conn.: Yale University Press, 1962), Louis L. Tucker, *Puritan Protagonist President Thomas Clap of Yale College* (Chapel Hill, N.C.: University of North Carolina Press, 1962), Albert F. Gegenheimer, *William Smith Educator and Churchman, 1727-1803* (Philadelphia, Pa.: University of Pennsylvania Press, 1943), Varnum L. Collins, *President Witherspoon*, 2 vols. (Princeton, N.J.: Princeton University Press, 1925), and Joseph J. Ellis, *The New England Mind in Transition: Samuel Johnson of Connecticut, 1696-1772* (New Haven, Conn.: Yale University Press, 1973).

[43] One tutor, however, Harvard's Henry Flynt (1675-1760), spent 55 years on the job.

[44] Kathryn McDaniel Moore, "The War with the Tutors: Student-Faculty Conflict at Harvard and Yale, 1745-1771," *History of Education Quarterly* 18 (Summer 1978): 115-127.

[45] William D. Carrell, "American College Professors 1750-1800," *History of Education Quarterly* 8 (Fall 1968): 289-305.

[46] Brooke Hindle, *The Pursuit of Science in Revolutionary America 1735-1789* (Chapel Hill, N.C.: The University of North Carolina Press, 1956), 3.

[47] Ralph S. Bates, *Scientific Societies in the United States*, 2nd ed. (New York, N.Y.: Columbia University Press, 1958), 2-3.

[48] See John C. Greene, "Science, Learning, and Utility Patterns of Organization in the Early American Republic," in *The Pursuit of Knowledge in the Early American Republic: American Scientific and Learned Societies from Colonial Times to the Civil War*, Alexandra Oleson and Sanborn C. Brown, eds. (Baltimore, Md.: The Johns Hopkins University Press, 1976), 1-20.

[49] Cf. Brooke Hindle, "The Underside of the Learned Society in New York, 1754-1854," in *The Pursuit of Knowledge*, 84-116.

[50] Hindle, *The Pursuit of Science*, 146-165.

[51] In addition to the two original foundations, subsequently known as the University of New Brunswick and the University of King's College, St. Mary's College, a Catholic institution, was established in 1802 in Halifax. Dalhousie College and McGill College, two non-sectarian foundations modelled upon Scottish universities, were opened in 1818 and 1821 respectively. The Quebec Seminary was chartered as Université Laval in 1852.

Centralization and Decentralization of State Decision Making for Public Universities: Illinois 1960-1990

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A national commitment to serve returning World War II veterans began a 25-year period of greatly increased demand for American higher education. Expectations for educational opportunities and the needs of a national economy maintained a high level of demand. Private sector enrollments grew significantly between 1945 and 1970, but most expansion occurred in the public sector. State governmental responses to increased demand for higher education depended on the mix of existing colleges and universities and on the state authority framework.

During the first half of the twentieth century, the public sector of most non-Southern states included one or two state universities—more likely two if the most prestigious university was not the land grant institution—and multiple state teachers colleges. The postwar period featured the addition of branch campuses to universities, the transformation of teachers colleges into colleges or universities, and the establishment of junior or community colleges.

During the 1950s and 1960s, four patterns of state structure for higher education emerged. By the early 1970s, a single governing board covered all public universities in 19 states; 14 states had a statewide board with specified coordinating responsibilities, and 13 states had advisory statewide boards. Four states had no legally prescribed governing or coordinating structure encompassing the whole public senior sector.[1] Coordinating boards had at least three essential functions: planning, appropriations recommendation, and approval of new programs.[2] The statewide master planning function of coordinating boards—the most fundamental power—provided the base for their assigned functions, including program approval and budget review. During the 1960s, a decade of two-year college founding and expansion, a locally elected board usually governed these colleges. Two-year colleges received state funding on a formula basis, and generated local tax revenue through a property tax. By 1970, most states coordinated two-year colleges through a higher education coordinating board and/or a statewide two-year college board.

By the 1970s, the leaders of many public colleges and universities, and the Carnegie Council, expressed concern that statewide boards, by assuming decision making authority in many areas, stifled local initiatives, and reduced the decision making role and influence of faculty and campus administrators.[3] The 1980 and 1982 Carnegie Council reports and the 1980 Sloan Commission report, issued after significant higher education growth ended in most states, concluded that changing social needs required

institutional flexibility, unencumbered by excessive federal and state regulation.[4] Institutional and state board leaders agreed that regulations issued by other bureaucratic state agencies impeded institutional effectiveness and efficiency, especially in the areas of fiscal and management controls.[5]

Existing political histories discuss the conflict between states and institutions over centralization-related issues. Case studies completed in the early 1970s described the emerging political role of the statewide board and its impact on the political role of institutions.[6] Other histories outlined the political factors in legislative decisions on statewide board structure and powers.[7] But decision making was usually a more complex and multidimensional process than these histories suggested. Decision making patterns in any higher education organization, Kenneth Mortimer and T.R. McConnell observed, tended to be dynamic rather than static. Centralization and decentralization were end points on a continuum, not polar opposites, and some decisions much more centralized than others. Ambiguity in the limitations on coordinating board authority resulted in an ill-defined separation of powers between the coordinator and the coordinated. Mortimer and McConnell distinguished four analytical dimensions of this continuum that roughly corresponded to the institutional concerns about state decision making. The locus of decision making, who is involved in decision making, and decision making style were continual institutional concerns between 1960 and 1990. Techniques of control, the fourth aspect, resembles the concerns of the Carnegie and Sloan reports.[8]

State decision making for public universities was particularly complex in Illinois, where the statewide coordinating board—the Illinois Board of Higher Education (IBHE)—had strong statutory powers. During the 1960s, the IBHE fashioned a "system of systems" coordinating-governing board framework and established two new general purpose campuses (Sangamon State University and Governors State University) outside the University of Illinois. The Illinois example illustrates the difficulties experienced by the coordinating board in distinguishing between its master planning authority and institutional planning initiatives, especially those of the principal state university. The Illinois example also shows how a coordinating board used terms of discussion and political symbols that contained both centralizing and decentralizing elements. During the 1970s and 1980s, tensions continued between the IBHE and Illinois public universities under "steady state" circumstances. Conflicts crystalized over the centralization of the appropriations process, planning-program review, and budget calculation, as well as over the management controls of other parts of state government.

This article first provides historical background for the analysis of the Illinois centralization-decentralization continuum beginning in the 1960s.[9] The article then examines limits on IBHE planning influence, IBHE use of political language, and patterns of centralization-decentralization in the 1970s and 1980s—ending with a 1993 postscript.

In 1960, three boards governed all state four-year higher education institutions the University of Illinois (UI) Board of Trustees, the Southern Illinois University (SIU)

Board of Trustees, and the Teachers College Board. The University of Illinois was the only comprehensive public university in Illinois. SIU's teaching, research and public service functions were significantly less comprehensive and well developed. In 1943, SIU overcame its earlier limitation to teacher training with legislative approval to offer liberal arts programs. In 1949, SIU gained a separate governing board, over the opposition of UI's primary legislative friend. But UI did limit SIU involvement in education for the professions. The statute that permitted SIU to offer liberal arts degrees also prohibited medicine, dentistry, law, agriculture, education, and pharmacy programs. During the 1950s, UI successfully resisted SIU attempts to overturn these bans, but the two institutions reached a modus vivendi on budgetary matters, supporting each other's budgetary request in negotiations with the governor.

In the late 1950s, the other four-year state institutions—Northern Illinois University, Illinois State University, Western Illinois University, and Eastern Illinois University—governed by the Teachers College Board, emerged from the status of teachers colleges and from legal confinements to teacher education. These universities developed full undergraduate liberal arts curricula and aspired to additional graduate and professional programs.

In 1960, only UI and SIU operated branch campuses. UI long had a medical center campus in Chicago. Since 1946, UI had also operated a two-year campus on Chicago's Navy Pier. UI was also trying to find a site for a permanent Chicago campus that would replace Navy Pier and offer four-year and graduate programs. SIU already operated small temporary branch campuses, and was developing a permanent branch campus in the St. Louis area. UI's legislative friend initially opposed land acquisition for the SIU branch, but backed off in exchange for the votes of SIU's legislative supporters for new buildings for the Urbana-Champaign campus and for developmental costs for the new Chicago campus.[10]

The Illinois Board of Higher Education arose from legislative desires to avoid mediating disputes between competing universities and from expert opinions on the need for coordinated development of higher education. The competition, confined in the 1940s and 1950s to UI and SIU, broadened as the former teachers colleges developed into universities. The Illinois General Assembly, with the governor's concurrence, established the advisory Commission on Higher Education to provide policy advice. But the universities ignored the commission's reports and recommendations, and instead took their case directly to the legislature. In 1959, the commission was asked to recommend a plan for unified administration of all state-funded universities. But UI and SIU resisted commission planning for a coordinating board with strong statutory powers. The emerging universities expressed less opposition, believing that the board might balance power more evenly and sympathize with their aspirations.

In 1961, Otto Kerner, a new governor, seeing the need to balance opposing forces, had bills introduced to establish a coordinating board less powerful than the commission advocated but stronger than the universities preferred. The legislature passed and

the governor signed the legislation creating the Illinois Board of Higher Education in 1961. The statute assigned IBHE three primary functions: budget review, program approval, and master planning. The board made budget recommendations to the governor and the General Assembly. New branches or campuses, degree programs, and research or public service centers required IBHE approval. The Board was charged with preparing a master plan for the "development, expansion, integration, coordination and efficient utilization of the facilities, curricula and standards of higher education in the area of teaching, research and public service."[11] IBHE not only formulated the master plans, it also drafted implementing legislation. IBHE thus acquired a statewide planning function, but the statute did not address the planning prerogatives of the universities.

IBHE originally consisted of 15 members, including eight appointed by the Governor with the consent of the Illinois Senate; the chairs of the three university governing boards; one member from each university board selected by the boards; and the Superintendent of Public Instruction. The executive director, who headed IBHE's professional staff, controlled the information and analysis supplied to board members, and thereby exerted the primary influence on board policies. Though IBHE also received advice from its technical and advisory committees, in practice the executive directors, with the consent of the chair, developed board policy during the 1960s. Agreement between the executive director and chair meant routine board approval—a typical pattern for lay boards that have confidence in competent staff work.[12]

IBHE chose Richard Browne, long experienced in Illinois public higher education, as its first executive director, and appointed Lyman Glenny to the associate directorship. Glenny had taught at a California state college and had achieved national visibility as author of *The Autonomy of Public Colleges*, which focused on state coordination of higher education. IBHE members expected Glenny to assume the directorship upon Browne's scheduled retirement in 1965 and that, in fact, occurred. UI officials believed that Glenny disliked the University of California and had transferred that dislike to the University of Illinois. Glenny faced a strong advocate for UI in President David Dodds Henry (1955-71), a nationally prominent higher education leader who served as a trustee of numerous organizations and as a member of many commissions.

IBHE presented Master Plan I to the legislature and governor during the 1965 legislative session. Master Plan I, emphasizing commuter rather than residential institutions for junior, senior, and master's level work, called for enlarging the state college system by acquiring two teachers colleges operated by the Chicago Board of Education. The plan also recommended creation of the Illinois Junior College Board to plan and coordinate a partially state-supported system of junior colleges. The Junior College Board would have the same relationship to IBHE as the three existing governing boards, though it was not a governing board. IBHE also recommended, though not in Master Plan I, that only one representative from each governing board sit on the coordinating board—a recommendation aimed at decreasing the potential influence of the governing boards on statewide coordinating policy.

Master Plan I received bipartisan legislative support and the support of the governor. The Illinois Junior College Board, established in 1965, was assigned to function under IBHE oversight. Chicago State Teachers College (renamed Chicago State College and Northeastern Illinois State College) was transferred from the City of Chicago to the State of Illinois and assigned for governance to the Board of Governors of State Colleges and Universities (hereafter referred to as Board of Governors). Finally, each governing board and the Illinois Junior College Board was henceforth allotted one seat on the Illinois Board of Higher Education.

During the early 1960s, UI, mainly concerned about developing its existing campuses, expressed ambivalence about adding new campuses. But the increasing state commitment to increasing higher education student spaces led UI officials to conclude that growth would occur either within or outside of the university. UI therefore developed a statewide model similar to that of the University of California that featured new campuses in or near major urban areas. In late 1964, UI proposed to continue its long-term planning for four-year campuses in the heavily populated areas of Chicago, Peoria, Springfield, Decatur, Rockford, and Rock Island, and sought immediate approval to continue the higher education program at Navy Pier, scheduled to be abandoned on completion of the University of Illinois at Chicago Circle.

From the UI perspective, "The University of Illinois and Plans for the Future," resulted from ordinary planning efforts, and was introduced to coincide with the conclusion of IBHE master planning for junior colleges. But the IBHE staff asked why UI had not made the proposal while IBHE was formulating Master Plan I and how the plan coordinated with junior college development. The Navy Pier proposal amused many staff members because the facility was universally considered unattractive for higher education purposes. Private universities expressed concern about the effect of UI expansion on their enrollments.

The IBHE staff response stressed the impropriety of the UI proposal since IBHE had responsibility for all statewide planning. In April, 1965, IBHE declined to grant UI the permission it sought. President Henry agreed to abide by the decision but added that the university would press its case for new campuses in the planning for Master Plan II.

Master Plan II, completed in 1966, recommended the establishment of an unspecified number of upper-division commuter institutions in the Chicago metropolitan area and one in Springfield, the state capital. The plan also called for a new Board of Regents to govern Northern Illinois University and Illinois State University, then under the jurisdiction of the Board of Governors. IBHE, noting that NIU and ISU would develop a broad range of doctoral programs in the arts and sciences, called for governance separate from more narrowly focused universities. Politically, IBHE wished to even off the scale of the governing board units, and especially to avoid augmenting the political constituency of UI or SIU by adding campuses to either unive ty. The legislative committee that considered the Regents proposal also received an alternate plan from a legislative friend of SIU. This proposal, which designated the SIU Board of Trustees

as the governing board for ISU, NIU, and the proposed Springfield campus, did not generate significant support. The Board of Regents bill passed easily and was signed by Governor Kerner.

Heated controversy surrounded the legislative consideration, however, of Senate Bill 955, which provided for advanced planning for campuses in the Chicago area and in Springfield. The strong opposition of private colleges and universities to the establishment of new public university campuses, however, failed to thwart the planning, but the private sector gained concessions on other matters: increased funding for a state student financial aid program and establishment of a state study commission on the status of private higher education.[13] SB955 also endorsed the Master Plan II recommendation that IBHE choose the governing board for the new campuses. UI supported SB955 during the 1967 legislative session, under the impression that IBHE would assign it the Springfield campus.[14]

In Fall, 1967, IBHE established a subcommittee of seven members (none representing a state university governing board) to consider the location, function, and governance of the two new campuses. James Worthy, the most visible leader in IBHE discussion of governance issues between 1965 and 1971, chaired this Special Committee on New Senior Institutions. Worthy unswervingly favored free-standing status for the two new campuses, a status which he did not consider UI and SIU branch campuses to hold.

A desire to minimize conflict with private institutions and with junior colleges established pursuant to Master Plan I led to the Master Plan II recommendation that any new public university campus should be a senior (upper-division) college, for junior, senior, and graduate students only. The senior college structure minimized competition with the private sector inasmuch as juniors and seniors represented only 40 percent of undergraduate, private sector-enrollment. IBHE planning assumed that the majority of junior college graduates aspired to the baccalaureate degree.[15] Senior colleges would provide the spaces and tailor programs for junior college graduates.

All four public university governing boards presented papers to the Special Committee on the governance issues for the new campuses, but only UI regarded its proposal as more than perfunctory. At Special Committee meetings, IBHE executive director Lyman Glenny highlighted the advantages to developing the new campuses outside UI, especially protecting the functional identity of the new campuses within the Illinois "system of systems" and maintaining a "balance of power" within higher education. President Henry continued to emphasize UI's strengths and objected to the injection of irrelevant noneducational criteria into the debate. In December, 1967, the Special Committee recommended that IBHE assign the Springfield campus to the Board of Regents and the Chicago area campus to the Board of Governors. Once the Special Committee reported, UI ceased to press for the campuses but disputed language in the recommendations and report commentary. IBHE accepted, in January 1968, the committee's recommendations on governing boards for the new campuses but removed most of the contested wording from the final report.

UI could not activate any major external constituency to support its claims to the new campuses. The governor was never a significant UI political supporter, and the legislature lost interest once the number and location of the new campuses was settled. Labor and agricultural interest groups did not consider themselves significantly affected by the decision. The local booster group, the Springfield Committee on Higher Education, already attained its goal of a bachelor's degree granting institution.[16] UI did not oppose establishment and funding of the two new campuses, and in 1969 the legislature passed bills establishing Sangamon State University (Springfield) under the jurisdiction of the Board of Regents and Governors State University (far South Chicago suburbs) under the jurisdiction of the Board of Governors. As the 1970s began, IBHE continued its statewide master planning based on the "system of systems" principle and on the importance of a balance of power between the IBHE and governing boards.

The boundary line between statewide board master planning and institutional planning initiatives was never clearly delineated in Illinois because institutions hoped to capitalize upon the ambiguous statutory language. Throughout the 1960s, IBHE leadership wanted to restrict UI plans for adding new campuses to protect IBHE master planning jurisdiction and influence. In contrast, UI saw extensive planning as part of a program for winning support for new campuses under its jurisdiction. Strong state universities preferred to respond to new higher education needs rather than have the growth occur in competitor institutions. Palola, et al., noted IBHE fears in 1964 that if UI consistently presented statewide plans for its own development prior to the IBHE master planning process, attention would focus on UI plans—such as reopening Navy Pier and governing the two new universities—and away from their own. Palola, et al., concluded that IBHE might lose control of the master planning agenda.[17]

A 1966 study by the Commission on State Government—Illinois elaborated on the legal ambiguities that entangled the Illinois public higher education system. The study observed that the law creating the IBHE granted statewide planning authority to the IBHE, but did not deny that authority to the UI or any other higher education institution. Both IBHE and UI exploited the resultant gray area. UI statewide planning raised serious political questions. UI gained expertise by investing in planning studies, and thereby acquired a political advantage in getting IBHE approval. The commission report concluded that IBHE could only have ultimate statewide planning authority if the IBHE statute required that governing boards report all investigations of possible new campuses to IBHE and that each governing board receive prior IBHE approval for spending funds on planning studies.[18]

President Henry strongly challenged the proposed requirement for prior IBHE approval of its statewide planning efforts. Henry perceived the recommendation to threaten long accepted institutional prerogatives "...to deny that an institution cannot, on its own initiative, undertake planning studies—cannot indeed search out ideas, explore alternatives, make known its views—is a violation of institutional integrity."[19] UI opposition to the commission recommendations prevailed, and the 1966 study led to no changes in the act creating IBHE. The gray area that enabled UI to carry on statewide planning activities therefore remained.[20]

Lyman Glenny talked about the political implications of successful UI opposition to IBHE master plans. IBHE would cease to be a policy maker, Glenny contended, if it lacked more than one of the following political resources: the backing and confidence of the governor, a balance of power among the public colleges and universities, and the support of a significant portion of the legislature. In 1967, Glenny added, IBHE could count only on gubernatorial support. That fall, he added, he became convinced that assignment of either of the two planned campuses to UI would completely destroy the balance of power among the public colleges and universities, already strained because of UI's size. UI would provide increased services to the legislature from a Springfield campus, thereby gaining more legislative support and augmenting its substantial political resources. UI, Glenny suggested, would then dominate the whole public higher education system, "capture" IBHE, now unable to perform its functions effectively, and transform it into an appendage.[21]

IBHE's survival as a major policy-making entity depended on protecting the master planning authority. The board therefore denied all significant UI planning initiatives reopening Navy Pier, funding for planning for new campuses in downstate cities, and governance of the two new universities. But the mere existence of a UI statewide planning effort limited IBHE's statewide master planning power and influence.

Murray Edelman sees political symbols as a major legitimator of political activity and even as the key political resource on certain issues. The symbols employed by IBHE fit into Edelman's "hortatory" category, in which one group attempts to persuade others to accept the policies it supports. The denotations of the language content can be ambiguous and unstable. Such symbols as the "public interest" and the "national security" mean different things to different people and are, therefore, broadly efficacious.[22]

During the 1960s, IBHE developed new terms for discussing structural arrangements for higher education, and justified its position by invoking traditional political symbols. These structures and symbols may be located along the centralization continuum. IBHE justified centralization as necessary to protect the *public interest*. But IBHE also invoked other symbols as reasons to limit coordinating board powers and to keep the governing board unit relatively fragmented and small.

IBHE staff developed new terms for discussing higher education structure as the former teachers colleges evolved into universities and as the number of junior colleges grew. The term "system of systems" described the Illinois system of higher education coordinated by the IBHE with the governing board systems as the constituent elements. The report of the master planning committee on governance that preceded Master Plan II and the commentary that accompanied the governance recommendations in Master Plan II both used the "system of systems" terminology. Each system consisted of a board and the institutions it governed. Responding to a suggestion that each system

should have functional unity and cohesion, IBHE identified five types of public higher education institutions that differed in the breadth of the undergraduate curriculum, diversity of professional schools and graduate programs, and involvement in research and public service:

- the fully developed complex, multi-purpose university (University of Illinois);
- the rapidly developing, complex, multi-purpose university (Southern Illinois University);
- the "liberal arts" university (Northern Illinois University and Illinois State University);
- state universities and colleges—institutions with more limited scope than the "liberal arts" universities; and
- junior and community colleges.

IBHE used this typology to justify the Master Plan recommendation that a new Board of Regents govern the "liberal arts" universities.

The Special Committee recommendation that Sangamon State and Governors State have limited curricula with few graduate or professional programs—Sangamon would have somewhat greater breadth—made it difficult for UI to claim either campus within the "system of systems" perspective. UI argued that the Springfield campus required a broader mandate in graduate education and public affairs research, and that the institutional typology was irrelevant and had no real standing since IBHE never formally adopted it. The Special Committee responded that the Springfield campus, which included some post-master's education, resembled other Board of Regents institutions and that the narrower focus for the Chicago area campus resembled other units in the Board of Governors system.[23]

IBHE did not formally adopt the "system of systems" terminology because of strong UI opposition, but staff quickly employed the terminology in actual practice. One confirmation of the institutionalization of a "system of systems" was the consultation pattern established. In 1969, for example, James Holderman, IBHE's new executive director, regularly convened the executive officers of the university systems to discuss program plans, budgets, and broad problems.[24]

Lyman Glenny frequently employed a "balance of power" symbol during deliberations on the governing board assignment for the two new campuses. The number of full-time equivalent students (undergraduate, graduate and professional), faculty, and staff, the operating and capital budgets, and the amount of plant investment indicated the relative power of the four higher education systems. The Special Committee examined pie charts, later prominently included in its report, that compared the systems along these dimensions. Considerable political power, Glenny added, would accrue to the governing board assigned the Springfield campus.

The Special Committee report invoked the "balance of power" symbol:

> The people of the United States have developed certain concepts over a long period of time, for dealing with problems of power. Basic to these concepts is the idea of balance between and among various groups as a means of providing fair treatment of those with little power and preventing large interests or combinations from promoting their own goals at the expense of broader public needs. The concepts of division of powers and of checks and balances are indeed the central framework of the United States Constitution, and have since been extended to other areas of life and living, including higher education.[25]

IBHE easily demonstrated UI's massive resources and potential political power, but had difficulty explaining why exercise of the power might threaten public higher education in Illinois. James Worthy, chair of the Special Committee, attempted an explanation:

> It is simply human nature, if too great an amount of power be allowed to accumulate in any segment of higher education, there is a tendency for that segment to drain off resources which would otherwise be needed for the sustenance and maintenance of other educational programs and the meeting of other educational needs.[26]

UI's 1964-1965 proposal to continue Navy Pier operations and to plan for other campuses throughout the state lent some credibility to balance of power advocates. UI, almost all agreed, was "stuck with a bad image" after its Navy Pier proposal, but observers differed on whether the bad image was justified. Most non-UI higher education officials thought the university improperly threw its weight around in this instance.[27]

IBHE leadership used the "balance of power" symbol to gain support of the Chicago area press. The two Chicago newspapers owned by Field Enterprises relied on "balance of power" symbolism to editorialize against connecting the two new campuses with UI.[28] The *Chicago Tribune*, usually sympathetic to UI, stated that Illinois could not afford additional campuses that aimed for parity with Urbana-Champaign.[29]

An IBHE master plan committee on governing structure (1970-1971), again chaired by Worthy, elaborated upon the "balance of power" theme. The balance of power in Illinois public higher education, Worthy suggested, had vertical and horizontal dimensions. The limitations on IBHE's specified powers assured vertical balance;

IBHE could not impose its will on the universities and their governing boards. A horizontal balance, Worthy added, assured that not even the largest system could exert undesirable power over the smallest system.[30]

The 1971 report issued by this committee argued against providing a separate governing board for each campus because it would upset the balance of power established in the 1960s:[31]

> Fragmentation of power at the governing board level would lead inevitably to the concentration of power at the level of the Board of Higher Education; no individual institutional board (not even that of Urbana-Champaign) would be able to hold its own in a serious contest with the Higher Board.[32]

But, the report added, Illinois public higher education did not need more centralized power in the statewide coordinating board:

> What is needed in Illinois—and elsewhere as well—is an organic system of higher education, well articulated in all its parts, and with sufficient internal flexibility to adapt with reasonable effectiveness to changing conditions, changing needs and changing opportunities. The degree of adaptiveness required of higher education in...these times cannot be achieved through a further substantial concentration of power; a thoughtfully conceived and well balanced diffusion of power is much more likely to accomplish the ends desired.[33]

The committee thus returned to the "system of systems" metaphor, the basis of planning activities that culminated in the 1971 and 1976 Master Plans.[34]

The emergence of IBHE in the 1960s centralized policy making for Illinois public universities, though continued institutional planning initiatives that preceded formal IBHE planning limited the board's authority and influence. IBHE invoked political language that affirmed strong central leadership and a balance of power between the IBHE and the governing boards. But when the period of planning for significant growth in Illinois ended around 1971, IBHE had to focus more attention on external actors.

Changes in the economic climate and in state government after 1970, forced IBHE to engage in simultaneous budget conflict with the governor and the public universities. IBHE, starting in 1971, worked hard and successfully to balance the interests of higher education and state government. IBHE's Janus-faced position led to a more centralized appropriation process, though many budget calculations were still made on a traditional incremental basis. Program review, based in contrast on shared responsibilities, was inherently decentralized.

The Illinois Constitution of 1970 provided the governor with an item reduction veto over the state appropriations process. This provision, along with creation of a new Bureau of the Budget, allowed Governor Ogilvie (1969-1973) to reduce the rate of increase in the higher education budget to nearly zero. Holderman, failing to recognize the strength of the governor's position, did not fully cooperate with his request to allocate within higher education approximately 25 percent less than IBHE sought for FY72. The legislature appropriated a somewhat larger amount than the governor had requested, but Ogilvie item-reduced the appropriations bills to the level he had requested. His prestige at stake, the legislature upheld Ogilvie's item reductions on a party line vote. The governor showed his displeasure with IBHE's behavior by severely reducing IBHE's own FY72 appropriations bill.[35] IBHE, learning from the experience, subsequently presented its own budget recommendations and then, after the governor presented his budget, allocated the governor's total among the universities. Governors, in turn, began to tolerate low-keyed IBHE advocacy of budgetary increases. A UI-led and IBHE-supported coalition of the public university systems, for example, won an override of a part of the governor's item reduction of FY77 appropriations for personal services dollars intended for salary increases.[36]

IBHE, cognizant of the impact of constitutional change on gubernatorial influence, called upon all public universities to formulate a list of low priority programs that could, if deleted from FY73 appropriations, permit reallocation of 15 percent of institutional operating resources to higher priority areas. No institution could undertake serious program review during the limited time available, so each university provided limited information while protesting the IBHE approach. IBHE's FY73 budget recommendations included its own list of low priority programs. The institutions and university systems reluctantly accepted IBHE's recommended budget level, but not the specific program eliminations. The Governor first backed IBHE's authority to require specific program reductions, but finally decided that institutions should retain the right to prioritize programs and activities.[37] The FY73 controversy over program review and program elimination prompted institutions and governing boards to try to forestall development of IBHE level program review through strengthened campus program review that included increased system-level involvement. In fact, each public university conducted significant program review activity prior to the 1977 IBHE program review initiatives.

A shared responsibilities approach evolved, Roderick Groves observed, that assigned the institution most responsibility for the program review. Universities completed program reviews on five- to eight-year cycles. Internal needs and specialized accreditation requirements determined the year of review. The institutional program review process emphasized improvement, not elimination, but universities did drop qualitatively weak programs in low priority fields. Each administrative level, Groves added, concentrated on review foci appropriate for that level. IBHE, for example, emphasized statewide planning and the efficient utilization of total resources. IBHE staff also conducted a few statewide reviews that did not duplicate or displace campus program review activity.[38]

Once governing boards early on eliminated obviously deficient programs, IBHE only infrequently exercised its statutory authority to recommend a program termination to the appropriate governing board. Discussion and follow-up reports also significantly narrowed disagreements between IBHE and institutions. Thus, governing boards took seriously an IBHE recommendation for the elimination of a program, and either deleted the program or offered an in-depth rationale for continuance. These explanations ordinarily emphasized institutional priorities, enumerated planned resource improvements, and provided for follow-up review. Decentralization, along with a pragmatic division of labor and responsibilities, thus characterized the program review process, beginning in the late 1970s.

In 1972 the IBHE staff also began to establish a PPBS (Planning Programming Budget System) type system called RAMP (Resource Allocation and Management Program). RAMP was designed to rationalize and centralize budget calculations and to facilitate the oversight of programmatic budget implementation. But the PPBS approach, rooted in federal defense agencies, had inherent conceptual difficulties, as well as definitional and technical problems. Beginning in the mid-1970s, IBHE continued many of RAMP's informational requirements, but continued to calculate budget recommendations on a traditional incremental basis. IBHE staff applied formula factors, some negative, to the budget base and then added funding for new programs, program improvements and expansions, and special requests. If the gubernatorial budget total was significantly lower than the initial IBHE recommendation, most IBHE cutting occurred in new program and program improvement categories. IBHE expected universities to track new program and program improvement monies carefully, but permitted a more general level of oversight of institutional allocations in other budget areas.[39]

On the informational side, IBHE inquired about year-to-year changes in the RAMP data provided by universities, about differences between an institution's allocation to teaching and the statewide RAMP average, and about increases in selected statewide RAMP averages such as percentage of operating budget allocated to research. Questions about priorities based on RAMP function averages became part of the tension between the IBHE and institutions. But, the nearly across-the-board character of IBHE budget allocations to the universities moderated the tension. Year to year variations in each institution's 'share of the (public university) pie" were small.

Public university officials in Illinois, as in many other states, believed that compliance with state government fiscal and management controls greatly reduced campus operating efficiencies. Governing and coordinating boards helped institutions secure abolition of the controls by other state agencies or to help mitigate their impact. In Illinois, as elsewhere, universities sought the flexibility to carry funds over from one year to another and to spend excess income; authority to invest all funds; authority to reallocate funds among line items during the budget year; freedom from state regulations on purchases and funding travel; and the authority to hold tuition income locally.[40] Beginning in the late 1980s, Illinois university systems collaborated with IBHE to win greater freedom from state government management controls.[41]

Between 1960 and 1990, Illinois displayed a complex, multidimensional approach to the centralization in decision making for higher education. IBHE's experience with UI's plans for urban campuses illustrated the limitations on its strong statutory planning powers and its constant struggle to maintain authority. During the 1960s, IBHE also developed the "system of systems" and "balance of power" concepts that supported its role as a centralizing agent, while also reinforcing elements of a decentralized culture within Illinois public higher education.

As concerns about limiting expenditures for all state supported entities replaced the issues associated with rapid growth, IBHE rebalanced its position between higher education and state government. Increased centralization of appropriations power and authority in the governor's office lessened IBHE's influence and latitude. But, the method of budget calculation remained incremental; modest refinements met new circumstances. IBHE adopted a shared responsibilities approach to program review, rather than a centralized approach. The governing boards, assisted by the IBHE, grappled with problems of management controls on institutions maintained by other state agencies.

Centralization waxed and waned as IBHE asserted and reinterpreted its key duties in response to gubernatorial pressures. Governing board and institutional reactions to IBHE actions varied from confrontation to accommodation to inertia. Ordinarily, IBHE gravitated towards policies located in the "moderate centralization" range of the centralization continuum. State coordination processes were more centralized than in earlier periods, but formal and informal decentralized elements remained. Institutions and governing boards found the overall configuration at least minimally acceptable.

Two factors moderated the level of gubernatorial and legislative pressures on IBHE during the 1980s. First, though economic conditions were not rosy, appropriations levels permitted modest growth in some years and required no major retrenchment. Second, no political actors proposed to reorganize higher education by increasing the powers of the coordinating board or by replacing the coordinating board and governing boards with a single statewide superboard.[42]

By early 1993, however, the degree of centralization of state decision making for higher education had become unsettled. Higher education officials searched for new approaches for budget advocacy at a time of poor prospects for state higher education appropriations and of high public concern about effectiveness and costs. IBHE, governing board, and institutional relations became strained when IBHE announced a new PQP (Priorities, Quality, and Productivity) exercise to reallocate institutional resources from low to high priority areas.[43] Memories of past battles resurfaced when each institution, as part of the exercise, received a list of programs that IBHE viewed as peripheral to its primary focus, and therefore as candidates for elimination, downsizing, or significant restructuring.[44]

In early 1992, the IBHE chair suggested that the Board might seek statutory authority to delete programs. When he concluded that institutions were resisting program eliminations, his suggestion became a notice of intent.[45] But this proposal was strongly

resisted. In December, 1992, and January, 1993, both houses of the General Assembly adopted a joint resolution reminding IBHE that it was limited to recommending deletions. The resolution indirectly indicated a lack of support for statutory revision.[46] The IBHE staff, meanwhile, developed a statewide schedule for simultaneous program review by discipline and professional field—a review that included responding to field-specific state policy questions.

Early 1993 discussions about the "system of systems" concept opened the possibility of efforts to centralize further. A January, 1993, Governor's Task Force on Higher Education report sought to dismantle major elements of the "system of systems" structure by vaguely claiming possible improved efficiency and accountability. The report recommended a reduction in institutional influence on IBHE by removing the seats provided to the governing board chairs. The task force also envisioned replacement of the Board of Regents and Board of Governors by single campus governing boards for seven of the eight institutions under their jurisdiction.[47] While recommending gubernatorial appointment rather than partisan election of members of the UI Board of Trustees, the report asked for no change in the multi-campus structure of UI and SIU. Enacting these proposals would result in two large governing units plus seven small to moderate sized units—a configuration that contradicted the accepted principle that a successful balance of power between governing boards required groupings of roughly equal size.[48]

NOTES

[1] Robert O. Berdahl, *Statewide Coordination of Higher Education* (Washington, D.C.: American Council on Education, 1971).

[2] John D. Millett, *Conflict in Higher Education: State Government Coordination Versus Institutional Independence* (San Francisco, Calif.: Jossey-Bass, 1984), 23.

[3] Carnegie Foundation for the Advancement of Teaching, *The States and Higher Education: A Proud Past and a Vital Future* (San Francisco, Calif.: Jossey-Bass, 1976).

[4] Carnegie Council on Policy Studies in Higher Education, *Three Thousand Futures: The Next Twenty Years for Higher Education* (San Francisco, Calif.: Jossey-Bass, 1980); Carnegie Foundation for the Advancement of Teaching, *The Control of the Campus* (Washington, D.C.: Carnegie Foundation for the Advancement of Teaching, 1982); Sloan Commission on Government and Higher Education, *A Program for Renewed Partnership* (Cambridge, Mass.: Ballinger, 1980).

[5] James R. Mingle, ed., *Management Flexibility and State Regulation in Higher Education* (Atlanta, Ga.: Southern Regional Education Board, 1983); James A. Hyatt and Aurora A. Santiago, *Incentives and Disincentives for Effective Management* (Washington, D.C.: National Association of College and University Business Officers, 1984).

[6] State case studies in Joseph Tucker, ed., "The Politics of Public Higher Education," *AAUP Bulletin* 59 (September, 1973): 283-323.

[7] State case studies summarized in Edward R. Hines and Leif S. Hartmark, *Politics of Higher Education*. AAHE-ERIC Higher Education Report No. 7 (Washington, D.C.: American Association for Higher Education, 1980).

[8] Kenneth P. Mortimer and T. R. McConnell, *Sharing Authority Effectively: Participation, Interaction, and Discretion* (San Francisco, Calif.: Jossey-Bass, 1978), 241-275.

[9] The Illinois higher education politics of this period are also summarized in Samuel K. Gove and Carol Everly Floyd, "The Politics of Public Higher Education Illinois," *AAUP Bulletin* 59 (September, 1973): 287-293.

[10] Allan Rosenbaum, "Public Higher Education and State Politics: Political Resources, Institutional Cooperation and Public Policy in Illinois," (prepared for delivery at the 1974 Annual Meeting of the American Political Science Association at Chicago, Illinois), 38-48.

[11] *Revised Illinois Statutes*, Chapter 144, Paragraph 186.

[12] Carl Grafton, "Coordination of State Universities in Illinois and Indiana," (unpublished doctoral dissertation, Purdue University, 1970), 155-156.

[13] *Ibid.*, 128-135.

[14] *Ibid.*, 136.

[15] This assumption about interests and behavior of community college students does not continue in the 1990s.

[16] Various constituency relationships are described by Rosenbaum "Public Higher Education and State Politics," and by Grafton, "Coordination of State Universities."

[17] Ernest Palola, Timothy W. Lehnmann, and William R. Blishchke, *Higher Education by Design: The Sociology of Planning* (Berkeley, Calif.: University of California, Center for Research and Development in Higher Education, 1970): 345-347.

[18] Staff Memorandum, Commission on State Government—Illinois, "The Illinois System of Public Higher Education," by Boyd Keenan, September 1966.

[19] David D. Henry, "Notes on Agenda Paper G," September 30, 1966.

[20] Interview with Boyd Keenan, May 24, 1972.

[21] Carl Grafton interview with Glenny in early 1968 cited in Grafton, "Coordination of State Universities," 103-113.

[22] Murray Edelman, The Symbolic Uses of Politics (Urbana, Il.: University of Illinois Press, 1964).

[23] Questions of consistency about the rationale are raised in Palola, et al., *Higher Education by Design*, 320.

[24] Boyd R. Keenan, *Governance of Illinois Higher Education 1945-74* (Urbana, Il.: University of Illinois, Institute of Government and Public Affairs, 1975), 30-31.

[25] Special Committee on New Senior Institutions, *Report of the Special Committee on New Senior Institutions to the Board, December 1967*, 38-39.

[26] *Chicago Daily News*, December 21, 1967.

[27] Confidential Interviews; editorial, *Bloomington Daily Pantagraph*, January 4, 1965; editorial, *Chicago Tribune*, February 3, 1965.

[28] Editorials, *Chicago Sun-Times*, November 13 and 24, 1967; editorials, *Chicago Daily News*, November 11 and December 28, 1967.

[29] Editorial, *Chicago Tribune*, December 28, 1967.

[30] Keenan, *Governance of Illinois Higher Education*, 55.

[31] Both IBHE Executive Director James Holderman and Board Chair George Clements initially advocated the governing board per campus approach precisely because they wanted to tip the balance of power toward the IBHE. Some committee members also supported such boards for some campuses especially the UI-Chicago Circle and SIU-Edwardsville for regional reasons. These members did not find support for separate boards on those campuses. Keenan, 34-62.

[32] Master Plan Committee N, Report of Master Plan Committee N (Springfield, Il.: Illinois Board of Higher Education, June 1971), 32.

[33] Master Plan Committee N, June 1971, 34.

[34] State of Illinois, Board of Higher Education, *A Master Plan for Postsecondary Education in Illinois* (Springfield, Il.: IBHE, March, 1976). The 1976 Master Plan continued in force, 1976-1990.

[35] James D. Nowlan, *The Politics of Higher Education* (Urbana, Il.: University of Illinois Press, 1976), 68-76. The resulting IBHE budget level was 43 percent below that for the previous year.

[36] Carol Everly Floyd. "The Illinois Board of Higher Education and Conflict Over the Public Higher Education Budget, FY1972 to FY1977," in Jay H. Abrams and Robert J. Dworak, eds., *The Changing Face of State Finance* (Springfield, Il.: ASPA, 1977), 21-26.

[37] Gove and Floyd, "The Politics of Public Higher Education Illinois," 291-292. An exchange between the IBHE and University of Illinois on the program eliminations "tied" to the FY73 budget is recorded H. Edward Flenjte and Steven B. Sample, "Statewide Reallocation Through Program Priorities," *Educational Record* 44 (Summer, 1973): 175-184. Lyle H. Lanier, "Comment on 'Statewide Reallocation.'" *Educational Record* 44 (Summer, 1973): 184-89.

[38] Roderick T. Groves, "Program Review in a Multi-Level State Governance System: The Case of Illinois," *Planning for Higher Education* 8 (Fall, 1979): 1-9. See also Carol Everly Floyd, "Balancing State and Institutional Perspectives in the Implementation of Effective State Level Academic Program Review" (prepared for delivery at the 1983 Annual Meeting of the Association for the Study of Higher Education, Washington, D.C.).

[39] Floyd, "The Illinois Board of Higher Education...."

[40] See note 5.

[41] State of Illinois, Board of Regents *Discussion Paper on Statewide Operating Improvements* (Springfield, Il.: BOR, April 18, 1992).

[42] Political pressures for "strengthening" the statewide board have been significantly stronger in many other states than they have been in Illinois. See Aims C. McGuinness, Jr., *State Coordination and Governance of Higher Education—1987*. Also see Scott C. Jaschik "Governors and Legislators Press State Boards to Exert More Leadership over Public Colleges," *Chronicle of Higher Education* 34 (November 18, 1987): A25, A28 and A29.

[43] State of Illinois, Board of Higher Education, *Priorities, Quality and Productivity of Illinois Higher Education* (Springfield, Il.: IBHE, November 26, 1991, Item #6).

[44] State of Illinois, Board of Higher Education, *Staff Recommendations on Productivity Improvements at Public Universities* (Springfield, Il.: IBHE, October 6, 1992, Item #4).

[45] State of Illinois, Board of Higher Education, *Minutes*, November 24, 1992, 12-14.

[46] House Joint Resolution 168.

[47] Sangamon State University, the eighth university, would become a UI campus. This report ignored consistent IBHE support for the "system of systems," reaffirmed in the 1990 IBHE Scope, Structure, and Productivity report and in recent master plans.

[48] The task force report met mixed reactions. The Democrats in the General Assembly appeared to regard the report—especially the recommendations of gubernatorial appointment of the UI Board of Trustees and of abolition of the Board of Regents and the Board of Governors—as a partisan document of a Republican gubernatorial administration. "Maneuvering for '94 Races Under Way," *State Journal Register*, February 8, 1993. During the 1970s, while he served in the General Assembly, Governor James Edgar expressed his support for the concept of single campus governing boards which he noted dated back to the 1960s when he was student government president at Eastern Illinois University. In 1993, some legislators believe that he is also unhappy with the Board of Governors because of the 1992 resignation (which was alleged to be forced) of the president of Eastern Illinois University. Douglas Pokorsky, "Higher Ed Plan Splits Educators, Legislators," *State Journal Register*, January 28, 1993.

THE NOT-SO-OLD-TIME COLLEGE

ROGER L. WILLIAMS
The Pennsylvania State University

W. Bruce Leslie, *Gentlemen and Scholars: College and Community in the "Age of the University," 1865-1917*, University Park, Pa.: The Pennsylvania State University Press, 1992.

David B. Potts, *Wesleyan University, 1831-1910: Collegiate Enterprise in New England*, New Haven, Conn.: Yale University Press, 1992.

THE FIELD OF HIGHER EDUCATION HISTORY resounded with many vital new works in 1992, but the contributions of W. Bruce Leslie and David B. Potts, which together advance the historiographical redefinition of the American liberal arts college, may resonate longest.

Over the last 20 years, revisionists devoted much attention to the antebellum college. The relative neglect of postbellum colleges by historians of higher education is perplexing, especially since these institutions continue to define the American ideal of higher education. Leslie's *Gentlemen and Scholars College and Community in the "Age of the University," 1865-1917* and Potts's *Wesleyan University, 1831-1910: Collegiate Enterprise in New England* bring these colleges into the historiographic mainstream, and suggest new methods and standards for comparing institutions and for placing them into social, economic, geographic, and political contexts.

Leslie's incisive analysis and compelling interpretation of the postbellum college as a distinct institutional "type" summon a reappraisal of the development of the whole of American higher education between the Civil War and the Great War. His book invites comparison with Laurence R. Veysey's *Emergence of the American University*, though the modest number of institutional cases Leslie investigates (four) and the design of his study make for a somewhat specious analogy.[1] Veysey's influential study shed much light on the new universities but, perhaps inadvertently, shrouded the American college. Veysey consigned these institutions to a hazy oblivion where they hung on, bewildered by the changes swirling about them, as ossified and irrelevant to American society *after* the Civil War as he presumed them to be earlier.

Gentlemen and Scholars accomplishes a methodological advance on its way to dismantling Veysey's assumption. Leslie's multiple case-study provides an eminently useful intermediate step between the isolated "house history" and the grand (and often anecdotally-laden) sweep. Multiple cases create a rich comparative context for studying institutional development and, as Leslie shows, can produce whole new paradigms. The multiple-case method allows the historian to test for reproducible results across institutions and posit cause-effect relationships that would not have revealed themselves otherwise. Including more institutions in the sample, a desideratum, would have substan-

tially increased the workload for this meticulous study. Leslie is careful never to generalize beyond his regional sample, which in itself is sufficient to shatter numerous stereotypes about the development of the American liberal arts college.

Leslie selects three Pennsylvania colleges—Franklin and Marshall (German Reformed) in Lancaster, Bucknell University (Baptist) in Lewisburg, and Swarthmore College (Hicksite Quaker) in suburban Philadelphia—and one New Jersey college—Princeton University (Presbyterian), which he contends behaved more like a college than university during this period. These choices eliminated the frontier as a variable in their development. The Pennsylvania colleges are recognized today as distinguished institutions, but Leslie warns us never to "read history backward,"[2] that is, to assume that they were, perforce, founded as, or were predestined to become, distinguished institutions (as with Johns Hopkins and Chicago).[3]

Consider the variegation among these colleges at the outset. Before the Civil War, Princeton languished with an "undistinguished, solidly Calvinist faculty," while drawing students from the "narrowest geographic range in its history."[4] Franklin and Marshall College was formed in 1853 from the merger of two tiny Pennsylvania schools. Surprisingly, its academic reputation during this time might have equalled if not surpassed Princeton's in certain respects. Marshall College had "enjoyed a period of internationally recognized intellectual achievement" for having attracted Frederick A. Rauch as its president.[5] Rauch, a former Heidelberg professor, wrote *Psychology* (1841), a book that brought the new German psychology to the United States. Marshall's faculty also included two scholars whose international journals spawned the "Mercersburg Theology" that eventually split the German Reformed Church.

A product of the "unique American combination of denominationalism and boomtown boosterism,"[6] Bucknell was founded in 1846 in an unlikely backcountry village on the Susquehanna River. Opened in 1869, by Quakers, who were ambivalent about advanced schooling, Swarthmore was founded to provide a "guarded education" and "to defend a distinctive denominational life-style."[7] But, the college broke the mold from the start, with a curriculum that emphasized science over the classics and put an elective system in place before Charles Eliot's speech on the subject at Harvard.

Each college was the active agent of its own development, Leslie maintains, not a somnolent bystander waiting for the university movement to fall into place before reacting. Leslie analyzes the development of these four disparate colleges in the context of the local, regional, and denominational communities they professed to serve. At the outset, he reminds us, their leaders rightfully did not think of serving a national constituency or purpose. But they did not shy away from change, Leslie notes.

The colleges turned quickly to urban donors, whose fortunes came from newfound industrial wealth, as the major source of sustenance to fuel their postwar ambitions. In the process, the colleges turned away from denominational support and affiliation. Wealthy urbanites also increased their number and influence on the colleges' governing boards. This occurred mainly because the presidents (most of them clerics) engineered rather than resisted these changes. These clerical presidents functioned as

institution-building "captains of erudition" as much as White at Cornell or Butler at Columbia. The college that stayed most closely wedded to its denomination and did not pursue the new sources of urban wealth fared the worst: Franklin and Marshall.

Active curricular reform accompanied changes in trustee composition. An eager incorporation of science, though, was far from an abrupt departure. Instead, Leslie interprets this change as continuing the welcoming attitude toward science that existed long before the Civil War. After the war, Leslie writes, "...science courses proliferated. For instance, in the early 1870s Franklin and Marshall students studied zoology, botany, inorganic and organic chemistry, physics, acoustics and optics, astronomy, geology, anatomy, and physiology and attended 'Lectures on the connection between Natural Science and revealed Religion.' *Few students today, other than science majors, spend as much time on science.*"[8]

Generational change combined with rising wealth and new knowledge to transform these colleges. Younger alumni, younger faculty, and students in particular sought to define a new type of upwardly mobile middle- and upper-middle class behavioral standard and to reshape their colleges to accommodate that ideal. This attitudinal revolution gave rise to a "collegiate style" that emphasized conformity and social goals rather than a "liberation impulse," and intellectual pursuits. Seeking to produce graduates suited to the increasingly uniform Protestant culture emerging in urban America, these colleges purposively shed their respective skins as institutions serving differentiated local and denominational needs and reincarnated themselves as instruments of more generalized national interests.

Leslie provides statistics that strengthen his conclusions. Between 1869 and 1909, Princeton's undergraduate enrollments grew from 328 to 1,266; Franklin and Marshall's from 72 to 223; Bucknell's from 64 to 411; and Swarthmore's from 26 to 359—hardly a sign of colleges in stasis. A sophisticated measurement of faculty economic status led Leslie to conclude that "The census and other sources show that faculty at these four colleges were generally affluent and lived among the local elite."[9] At Franklin and Marshall, faculty salaries in 1880 averaged $1,200—three to four times the average wage in the highest paid local industry.[10] Faculty members at the four colleges had a higher number of household servants than their neighbors, and possessed considerable personal wealth, although the source of affluence is somewhat obscure. "Historians," Leslie admonishes, "have been too ready to accept contemporary complaints about faculty pay," though he adds that high faculty living standards experienced a slight relative decline after the turn of the century, interestingly enough, in the face of an emergent professionalism.[11]

Leslie's interpretative tour de force should significantly influence higher education historiography. Departing from the traditional thinking that equated religiosity and denominationalism with anti-intellectualism, Leslie notes:

> To criticize colleges for the high proportion of clerical faculty before 1890 anachronistically ignores the realities of intellectual life in the period. Rather than the clergy restricting

progress in higher education, *the opposite may be closer to the truth* (emphasis added). The proliferation of colleges after 1800 created a demand for academics that could only be filled by drawing on the main supply of intellectuals: the clergy. The use of clergy, therefore, permitted a remarkable expansion of higher education.

Much of the advanced scholarship of the time was produced under theological auspices. Seminaries had higher standards of admission than other professional schools and provided training in the most advanced intellectual areas, especially linguistics and philosophy. Predating disciplinary barriers, moral and natural philosophy ranged across what today is called the arts and sciences."[12]

Leslie interprets the post-Civil War liberal arts college as a *multifunctional* institution, in which the collegiate branch was not always predominant or even the most esteemed. Nor were preparatory branches simply "feeders" to the collegiate rank: "They served other educational roles highly valued by denominational sponsors and local citizens."[13]

Warning against historical determinism, Leslie considers the postbellum liberal arts college an institution in flux that transformed itself in response to, and in anticipation of, social change. Indeed, Leslie sees the multifunctional liberal arts college as positioned between tectonic plates—the emerging university movement in the higher strata, the emerging high school movement in the lower. Neither movement, though, co-opted or subsumed the baccalaureate function in whole or in part. "The development of the college was one part of the rationalization of a system of education in the United States," he says. "Threatened by two emerging giants...the college not only survived, but prospered. As the American educational system crystallized, the colleges carved out a major role without parallel in Europe."[14]

Well-conceived and brilliantly executed, *Gentlemen and Scholars* should stand as a scholarly peak on the landscape of higher education historical writing. Different from *The Emergence of the American University* in conception, construction, and scope, the volume nevertheless will draw attention to the American college, and perhaps will inspire kindred efforts for other groups of institutions.

David Potts's *Wesleyan University, 1831-1910*, in contrast to Leslie's broader study, involves a single college, but successfully immerses that case in the larger histories of American Methodism and the New England liberal arts college in the nineteenth century. Wesleyan developed in some different ways from Bucknell, Swarthmore, and Princeton, but the end result was not dissimilar. The three mid-Atlantic institutions began a subtle loosening of denominational affiliations after the Civil War, but Wesleyan, located in Middletown, Connecticut, moved into a closer relationship with its sponsoring Methodist church—a pattern that actually accelerated after 1890. This was so partly because

Methodism was in strong ascent after the Civil War, and soon became the nation's largest denomination. By the 1870s, a period of "intense denominational rivalry," the Methodists had founded a profusion of colleges so that their ministers might "lead with intellect as well as with piety."[15] Methodist colleges gave the denomination a measure of respectability, tempered the rough edge of its evangelistic fervor, and connected the church to the values of the emerging urban middle and upper-middle classes, not to mention their wealth.

Unlike the general trend from 1860 to 1900," Potts writes, "...Wesleyan's ministerial component waxed rather than waned. Clergymen on Wesleyan's board would reach a peak of 50 percent in 1892."[16] Indeed, the revised charter of 1870 stipulated that "at all times the majority of the Trustees, the president and a majority of the faculty shall be Methodist." Wesleyan worked well into the 1890s to strengthen its Methodist identity, successfully competing for preeminence against Boston University to the north and Syracuse University to the west.[17]

Yet, Potts reaffirms Leslie's admonition that a strong denominational orientation cannot be automatically equated with anti-intellectualism. He skillfully shows how Wesleyan faculty developed as academic professionals to an extent seen at only a few other institutions. The Wesleyan academic culture encouraged and rewarded research specialization and publication beginning in the early 1870s—and with the blessing of the Methodist Church, the school's trustees, and its alumni. This culture evinced a precocious preoccupation with prestige, reputation, and academic standing. A Wesleyan alumnus, Augustus F. Nightingale '66, "helped to initiate this era of comparison and competition by publishing in 1878 what may be the first systematic and selective guidebook to American colleges."[18] Woodrow Wilson's 1888 appointment to the Wesleyan faculty in 1888 also helped:

> Wilson's scholarship was less than Germanic in its depth and accuracy, but it started placing Wesleyan on the map of institutions known for faculty research. Others would carry the work forward in the early 1890s to the point where professors regularly reporting research results quickly rose from about 25 percent of the faculty in 1888 to 75 percent by the mid-1890s.[19]

The inclusion of eight Wesleyan faculty members in the first edition of *American Men of Science* (1906) was, as Potts concludes, "testimony to Wesleyan's academic quality in a national context."[20]

But Wesleyan was a complex, sometimes inconsistent institution, and the vectors of change did not always point in the same direction. Wesleyan took neither its strong Methodist identity nor its potential as a research university into the twentieth century. "While celebrating Wesleyan's Methodist connection, the Wesley Bicentennial of 1903 also served as an early parting tribute to an identity that would soon recede into the institution's past," Potts writes.[21]

Wesleyan shunned much of its uniqueness—including its early acceptance of coeducation—to don the cloak of conformity necessary for recognition as a leading New England liberal arts college. Students, no longer "poor" and increasingly middle- and upper-middle class, New York City-based alumni, and trustees, decreasingly Methodist and by 1910 characterized by "metropolitan success in business and law," pulled the college into the orbit of the emerging metropolitan culture.[22] In many ways, the developmental dynamic of Pott's Wesleyan parallels the homogenization of the emerging university, which discarded early experimental and idiosyncratic variations in favor of common standards required for respectability.

Stephen Henry Olin '66, a leading New York City attorney and the son of Wesleyan's second president, worked determinedly as a trustee (1880-1925) to shape the new Wesleyan and thereby win broader recognition for his alma mater. The consummate "clubman," Olin helped to introduce intercollegiate athletics and fraternities—"a place to prepare for membership in urban men's clubs"—and to abolish coeducation.[23] "Movement toward white, male, middle-class homogeneity at Wesleyan was close to completion by 1908," Potts says.[24]

The process of attaining the gentlemanly ideal was sometimes less than genteel, Potts points out. In 1905, students voted to exclude the few African-Americans at Wesleyan from participation in intercollegiate athletics. For women, admitted as coeds in 1872 as well as at three other adventuresome New England colleges, the future held even greater exclusions. Separate spheres for men and women began to appear at New England's coeducational campuses in the 1890s, Potts observes. Increased women's enrollment at Wesleyan represented, in the eyes of male students, "a threat to the reputation and survival" of the institution.[25] "For those most alarmed about an increasingly feminine Wesleyan, it was clear that coeducation must be contained, isolated, and eliminated."[26] The climate for women chilled considerably, and then degenerated into threats, harassment, and a social boycott. In 1909 the trustees voted to stop admitting women after the fall class, thereby earning the dubious distinction of being, according to faculty member William North Rice, "the only college in the civilized world that ever excluded women after having once received them."[27] Wesleyan women, along with interested citizens, obtained a charter in 1911 for the Connecticut College for Women in New London, which opened four years later.

Olin used Wesleyan's conspicuous omission from a select list of 50 institutions admitted in 1906 to membership in the faculty retirement system of the Carnegie Foundation for the Advancement of Teaching to engineer its final self-transformation into an exclusive New England liberal arts college. A charter revision removed the membership barrier—an 1870 requirement of Methodist Church membership by the president and the majority of the trustees and faculty. Olin's unrelenting personal campaign to wear down Henry S. Pritchett, the Carnegie Foundation president, resulted in Wesleyan's 1910 admission to the Carnegie pension system. Nicholas Murray Butler, Columbia University president, Carnegie Foundation trustee, and Olin's good friend, telephoned the glad tidings.

When Potts apprised his former dissertation adviser of the Wesleyan project, his mentor asked "Is there an interesting story to tell?"[28] Wesleyan's story is, prima facie, among the more interesting institutional cases in American higher education, but the author's narrative skill and ability to place the college in the larger regional, religious, socioeconomic and cultural contexts make for compelling history. Wesleyan is depicted not in typical "administrative" history style, divided by presidential tenure, but as an evolving academic community, that includes the contributions of faculty members, students, alumni, and trustees as well as presidents. Potts's eye for nuance, contradiction, and irony further enhance this exceedingly well written institutional history.

The tensions buffeting turn-of-century Wesleyan are perhaps best illustrated in the firestorm that surrounded publication of chemist Wilbur O. Atwater's proof that alcohol—much to the dismay of the Methodist Church—had some nutritional value. Atwater, a lifelong Methodist and a temperance movement supporter, measured the caloric value of foods, and reported in 1899 that alcohol had nutritional value. Claims to the contrary by the Methodist Church-supported temperance movement, he added, lacked scientific validity. "Atwater received strong support from the president, faculty, and students at Wesleyan," Potts notes, "but the controversy with his own denomination probably took a heavy toll...The controversy ended abruptly when Atwater, at age 60, suffered a stroke in late November 1904."[29]

Potts alludes to, but does not develop, the role played by Atwater and Alfred C. True '73, another Wesleyan faculty member, in the land-grant college movement during the 1880s and 1890s. Wesleyan hosted the first agricultural experiment station in the United States (founded 1875), but the station moved to Yale two years later. After Congress passed the Hatch Act in 1887, Atwater—regarded as one of the nation's leading agricultural scientists—became director of the Office of Experiment Stations (1887 to 1891), established by the U.S. Department of Agriculture to coordinate and facilitate the work of the stations, located mostly on land-grant college campuses. Director Atwater deduced a structure and function for the experiment stations that became known as the "Atwater standard"—a first-rate scientist to serve as station director; a staff of highly trained scientists substantially free from undergraduate instruction and motivated to attain the level of excellence established by European stations; and a selective research agenda based on the station's strengths. Atwater brought Alfred C. True to the Office to edit its publications. True, a classicist by training, directed the Office of Experiment Stations from 1893 to 1915. True adopted a management style of gentle but persistent persuasion, maintained the "Atwater standard," and never failed to remind the stations to use Hatch Act funds for original scientific research. Through the contributions of these two men, Wesleyan had a profound but little-noticed effect on the quality of experimentation station research in the agricultural sciences as they were aborning across the country. In fact, the Association of American Agricultural Colleges and Experiment Stations held its 1900 meeting at Wesleyan to celebrate the first-quarter century of the experiment station movement in America.

A joint reading of Bruce Leslie's *Gentlemen and Scholars* and David Potts's *Wesleyan University* produces its own irony. The Leslie book, using the multiple case study to reveal developmental patterns in a class of similar institutions, tempts one to sound the eulogy for the "house history."[30] Then comes Potts, taking the institutional history to a new level of contextualization, and thereby demonstrating that the single institutional study continues to have a fundamental place in higher education history. Indeed, the contextual depth of Potts's work suggests that a regional or categorical history of higher education (or of an era therefrom) might even be taught inductively—*around* a single case study.

These two rich, complex analyses of the postbellum liberal arts college will influence the historiography of American higher education. The histories of Bucknell, Franklin and Marshall, Swarthmore, Princeton, and Wesleyan suggest a transformative process no less dynamic than the supposedly more consequential experiences of research universities. *Gentlemen and Scholars* and *Wesleyan University* should spark new scholarship that deepens our understanding of the American liberal arts college, and assesses its comparative value to society in educating elites and in influencing other sectors of higher education.

NOTES

[1] Laurence R. Veysey, *The Emergence of the American University* (Chicago, Il.: The University of Chicago Press. 1965).

[2] W. Bruce Leslie, *Gentlemen and Scholars College and Community in the "Age of the University," 1865-1917* (University Park, Pa.: The Pennsylvania State University Press, 1992), 236.

[3] *Ibid.*

[4] *Ibid.*.14.

[5] *Ibid.*, 15.

[6] *Ibid.*, 20.

[7] *Ibid.*, 25. 26.

[8] *Ibid.*, 83, emphasis added.

[9] *Ibid.*, 55.

[10] *Ibid.*, 61.

[11] *Ibid.*, 60.

[12] *Ibid.*, 74.

[13] *Ibid.*, 214.

[14] *Ibid.*, 236.

[15] David B. Potts, *Wesleyan University, 1831-1910 Collegiate Enterprise in New England*, (New Haven, Conn.: Yale University Press, 1992), 71, 72.

[16] *Ibid.*, 65.

[17] *Ibid.*, 81.

[18] *Ibid.*, 166.

[19] *Ibid.*, 140.

[20] *Ibid.*, 167.

[21] *Ibid.*, 117.

[22] *Ibid.*, 172.

[23] *Ibid.*, 199.

[24] *Ibid.*, 211.

[25] *Ibid.*, 213.

[26] *Ibid.*, 213.

[27] *Ibid.*, 220.

[28] *Ibid.*, xi.

[29] *Ibid.*, 156.

[30] John Thelin sounded a similar note in his supplemental bibliography to the reissue of Frederick Rudoph's *The American College and University: A History*. (Athens, Ga.: The University of Georgia Press, 1990), 519-520.

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