CHRONICLE

OF THE UNIVERSITY OF CALIFORNIA

NUMBER 4 • A JOURNAL OF UNIVERSITY HISTORY • FALL 2000

THE UNIVERSITY AT THE TURN OF THE CENTURY

THEN AND NOW

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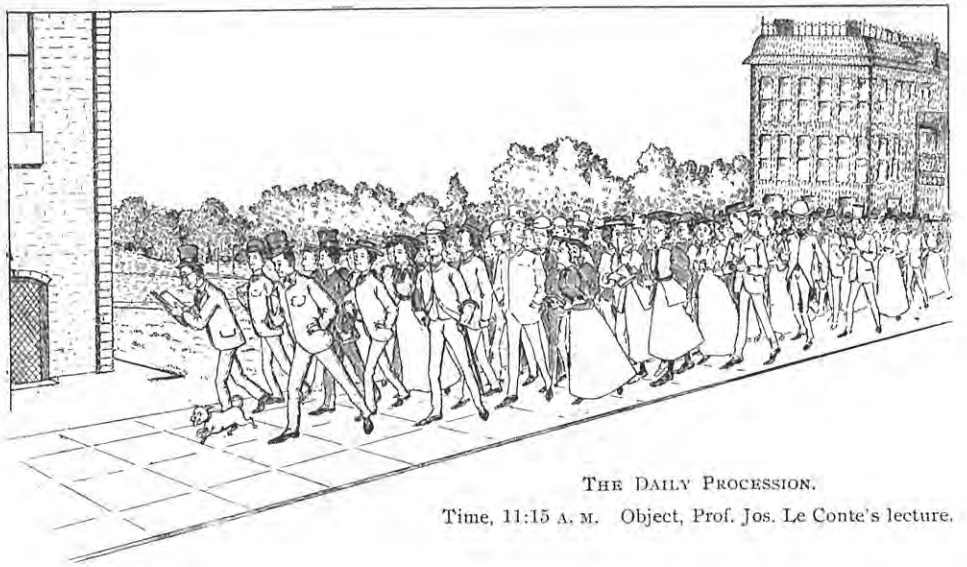

THE DAILY PROCESSION.
Time, 11:15 A. M. Object, Prof. Jos. Le Conte's lecture.

Josh, September 16, 1895.

The *Chronicle of the University of California* is published with the goal of presenting work on the history of the university to a scholarly and interested public. While the *Chronicle* welcomes unsolicited submissions, their acceptance is at the discretion of the editorial board. For further information or a copy of the *Chronicle*'s style sheet, please address:

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Subscriptions to the *Chronicle* are thirty-six dollars for two issues. Single copies and back issues if available are twenty dollars apiece (including California state sales tax). Payment should be by check made to "UC Regents" and sent to the address above.

The *Chronicle of the University of California* is published with the generous support of the Doreen B. Townsend Center for the Humanities, the Center for Studies in Higher Education, the Graduate Assembly, and The Bancroft Library, University of California, Berkeley, California.

 ISSN 1097-6604
Web site: http://sunsite.berkeley.edu/uchistory/chronicle/

Graphic Design by Catherine Dinnean.

Cover: North Hall, Bacon Hall, and South Hall. View from the west, ca. 1900.

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OF THE UNIVERSITY OF CALIFORNIA

Fall 2000

THE UNIVERSITY AT THE TURN OF THE CENTURY

THEN AND NOW

Edited by Roberta J. Park and J. R. K. Kantor

Library stacks in Bacon Library, 1893. Photograph by O. V. Lange. *University Archives (UARC PIC 700:14).*

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Pelican, April 1904.

THE
UNIVERSITY CHRONICLE

AN OFFICIAL RECORD

Vol. III. No. 3

JUNE, 1900

PUBLISHED BY THE
UNIVERSITY OF CALIFORNIA
BERKELEY

BERKELEY: STUDENTS' CO-OPERATIVE SOCIETY.

ISSUED BI-MONTHLY

Twenty Cents a Copy, One Dollar a Year

Entered at the Post Office at Berkeley as Second-class Mail Matter

A WORD TO OUR READERS

IN 1898 BERNARD MOSES, the university's first professor of history, established the *University Chronicle*, later known as the *University of California Chronicle*. He saw that "there were and would be public addresses at the University and documents relating to the affairs of the institution that ought to be preserved and made readily available," as he wrote in his unpublished autobiography. That *Chronicle*, appearing quarterly between 1898 and 1933, provided its readers with intelligent and entertaining accounts of contemporary events in the university's social, academic, and administrative life. Moreover, the *Chronicle* no doubt assisted in creating and fostering an identity, crucial not only for the campus community but also in mediating the university's dealings with the public.

Today, our institutional identity might appear to be firmly established, but institutional memory is ebbing. Every year thousands of new students (along with faculty members and staff) enter the university's campuses with little knowledge of the institution beyond its admissions requirements and perhaps its reputation for radicalism in the 1960s. And every year almost as many students leave knowing little more about their alma mater than when they entered. While institutional identity will and must evolve, it should maintain a self-consciousness of its direction by acknowledging its past. Without memory there is no identity; without identity the university is left as a mere collection of disparate buildings and people.

It is with this in mind that we, the Editorial Board, have revived the *University of California Chronicle*, in spirit if not in content. The new *Chronicle*, in contrast to the earlier publication, has an historical perspective. We are able to consider the current events of our predecessors in the context of ongoing changes within the university. Embracing this opportunity, the new *Chronicle*, at least initially, is organized around single themes that present an inherently longitudinal view of the university's development. The first issue considered institutional responses to natural disasters and calamities. The second was on women at the university. The third issue was about the university and its involvement with the environment, both on the campuses and beyond. Future issues will focus on campus conflict and controversy, the arts and culture on the campuses, and the university's relationship to institutions around the world.

In this same vein we now, with great pleasure, offer to our readers this current issue, *The University at the Turn of the Century: Then and Now.*

The Editorial Board

Please note: The Editors apologize to Christopher Adams, author of the article in the last issue (Number 3) "Rethinking the First University of California Campus and Designing the Tenth at Merced." On page 61, the sentence should read: "The Merced site was selected after a long search which went from an initial list of over eighty sites to a final three that were the subject of an environmental impact report (EIR)."

The Berkeley campus now, 1998. *Courtesy of Pacific Aerial Surveys.*

THE UNIVERSITY AT THE TURN OF THE CENTURY

THEN AND NOW

Standing on the west steps of South Hall, he drank in the beauty of the scene before him—the finest university site that the world can show. Immediately in front lay the sloping campus, bare and dry; but down below, the grand, old oaks spread their gnarled limbs, and off to the right the tall trees on the slope gave promise of refreshing shade. . . . Far down below, San Francisco Bay lay shimmering in the strong sun, and out further, seen above the tree-tops, the Golden Gate spanned its narrow width between the Fort and the brown Marin hills.

THESE SENTENCES APPEAR near the beginning of *For the Blue and Gold: A Tale of Life at the University of California*, a lively account of the experiences of undergraduate student James Rawson who arrives in the small town of Berkeley at the beginning of the twentieth century. He is met by a band of "jolly sophomores" intent upon "baiting" new students. Moving away, Rawson crosses Strawberry Creek and walks up the slope to South Hall, where he begins to ruminate about what life as an undergraduate will be like. From there he traverses the short distance to Bacon Hall (which houses the university's library of 80,000 volumes) and moves on to North Hall where the following morning he and other freshmen will begin their entrance examinations.

The remainder of Joy Lichtenstein's 1901 book revolves around a variety of student events—such things as finding a place to live; going to class; getting a job; riding with other students in horse-drawn wagons; becoming involved in extracurricular activities, which before 1905 tended to be organized around one's class (i.e., freshman, sophomore, junior, senior). The account of the annual "rush" is one such instance. Student custom had decreed that on the night before Charter Day the freshmen paint their class numbers on one of the hills east of campus and protect these against the sophomores's attempts to remove them. The "rush" evoked increasing faculty concerns about injuries and rowdyism; and in 1905, freshman and sophomore leaders agreed to construct a permanent block "C" on Charter Hill. (See Steven Finacom's article concerning the "Battle Over the 'Big C'" in the Spring 2000 issue of the *Chronicle*.) Today, the annual "battle" is waged with Stanford University during Big Game Week when Cal's arch rival attempts to turn the golden "C" a crimson red.

A new century is beginning; hence, it seemed appropriate to orient issue number 4 of the *Chronicle* around the theme "The University at the Turn of the Century: Then and Now." When Benjamin Ide Wheeler became the eighth president in 1899 enrollments had not yet reached 2,500. When Robert M. Berdahl became the eighth chancellor of the Berkeley campus in 1997 they exceeded 30,000. (Systemwide enrollments are now over 180,000.) In 1900, the university had one general campus in Berkeley, six small affiliated schools in San Francisco, and the Lick Observatory at Mount Hamilton. Today the University of California comprises nine campuses (a tenth is scheduled to open in 2004) and numerous research stations and centers throughout California and in other states and foreign lands.

The creation of the multicampus UC system, and projections regarding its future development, as well as Berkeley's physical campus, its libraries, efforts to accommodate a large and increasingly diverse student body, summer sessions, the growth of athletic programs, and the creation of important opportunities for research in anthropology and archaeology are the focus of various articles in this issue of the *Chronicle*.

In 1900, South Hall, North Hall, and Bacon Hall (each approximately 29,000 square feet) accounted for nearly a quarter of Berkeley's buildings. New buildings, so vital for carrying out the university's educational, research, and service missions, have appeared every decade. Today one hundred are situated on the central campus alone. The newly renovated Valley Life Sciences Building is 420,000 square feet; the complex formed by the Doe Library, Doe Annex, Moffitt Undergraduate Library, and David Pierpont Gardner underground stacks (opened in 1995) is half again as large.

The library's early holdings were greatly enhanced when in 1905 the regents agreed to purchase Hubert Howe Bancroft's outstanding collection of books, manuscripts, and newspapers. Berkeley's collections (presently 9,000,000 books and 80,000 serials) now are the fourth largest in the United States and Canada. However, daunting issues such as ever escalating costs for print materials and monumental changes brought about by the so-called "digital age" confront all libraries.

The creation a century ago of a Museum of Anthropology around the personal collections of benefactress Phoebe Apperson Hearst was an important early contribution to Berkeley's research and teaching excellence. Such excellence has been carried forward by events such as the creation in 1973 of a research center at Nemea, Greece. In the early 1900s, many courses offered during the summer were directed to the needs of teachers. Today the university is again reaching out to work with the state's schools. It is expected that summer sessions will add a valuable component to the University of California's systemwide obligation to accommodate dramatically increased numbers of high school graduates in the early 2000s.

Berkeley is now recognized as the foremost public research university in the world; and the campus described in Lichtenstein's *For the Blue and Gold* has changed in many ways. In some ways, however, things are remarkably similar. If James Rawson were to walk today up from the BART station, he would still cross Strawberry Creek, and he would ascend the *east* steps of the campus' oldest building, South Hall; but as he looked west over the treetops toward the narrow entrance of the Golden Gate, he would see a remarkable feat of modern engineering: the Golden Gate Bridge. And, with its stands of old oaks, majestic redwoods, and other trees, shrubs, and flowers the Berkeley campus still retains "much of the tranquil beauty of its rural past."

Without the kind help of many individuals, this issue could not have been brought to completion. We owe them a debt of gratitude even though their names are not enumerated here. Special thanks are due to Catherine Dinnean, who has given tireless and outstanding assistance throughout our first four issues of the Chronicle.

THE CAMPUS AND THE STATE: OUTREACH

Robert Brentano

AN EDITORIAL in the *Daily Californian* for March 24, 1898, spoke of the events of the previous day:

> Not much interest was shown in the Charter Day exercises yesterday, at least as far as the students were concerned. The conclusion seems emphatic that the student side of the University world does not indorse the ancient manner of celebrating the University anniversary by speech-making. . . . It seems certain that next year something will have to be done . . . to eliminate the addresses or make them fewer.[1]

And so the Charter Day report in the *Daily Californian* a year later, on March 24, 1899, comes as a surprise. The lead article begins, "Despite the drenching rain storm the Gymnasium was well filled yesterday on the occasion of the Charter Day exercises." The speaker who drew this audience or to whom it was drawn was William Rainey Harper, president of the University of Chicago. As the *Daily Californian* headline said, "President Harper Speaks on the Relation of Universities to Democracy—Tribute is Paid to the Memory of Senator Morrill." President Harper chose a motto "for the true university, the university of the future"; it would be: "Service for mankind wherever mankind is, within scholastic walls and just as well without those walls and in the world at large." He had said, "The university touches life, every phase of life, at every point," and "The university is of the people, and for the people." And more specifically he had said, "The University is an integral part of the public schools system."

William Rainey Harper, 1899.
University Archives (UARC PIC 13:368).

On the eve of Charter Day Harper had spoken to the Associated Students of the University. He had been asked he said "to say a word—I think that is the way in which the invitation ran, 'a word' . . ." (but in fact the "word" filled thirteen printed pages). He spoke of "thinking." The *Daily Californian*'s article about this performance began, "In spite of rain and mud, by 3 o'clock Harmon Gymnasium was full of students. . . ." In its editorial comment about this function, the *Daily Californian* implied that the 1899 paper had not softened completely in its attitude toward speech-making, that it had not totally betrayed its predecessor. The Harper ASUC

speech had posed a series of questions about the nature and value of thinking, of the opportunity for it, and of its (then) present depth; and the editorial said to its readers, "Perhaps you do not need an address to answer these questions for you; perhaps you can answer them yourself. But if President Harper has made you think of these things, his visit and his words have not been in vain." And in covering Harper's actual Charter Day address, although the *Californian* praised his using "parallelism to telling effect," it noted enigmatically, "He spoke entirely from manuscript."[2]

Harmon Gymnasium, in which William Rainey Harper spoke on Charter Day, March 23, 1899. *University Archives (UARC PIC 1000B:7).*

If one wants to use evidence from Harper's muddy days in Berkeley to introduce a continuing late nineteenth-century understanding of the place of the public university, the state university, in the community of the state, it seems necessary to consider audience reaction to the speeches given. The actual projected message of university speeches, like that of sermons, is conditioned by their audiences' receptivity. Because the speeches are public and out loud they are in some ways muted. Does it matter, and how, if the *Californian* is indirectly asking its readers "Was this worth a trip from Chicago or sitting wet in Harmon Gym?" How does the present reader's sense of past audience complicate his evaluation of the evidence that public speakers, deeply involved with the University of California from 1872 to 1900, at many significant university occasions, repeated and assumed the message of the beautiful, capturing oratory of Daniel Coit Gilman's inaugural address of 1872, with its image of the university of the people and for the people, of the state?[3] The assumption, in any case, is everywhere clear.

In April 1906, seven years after his own inauguration as president of the University of California, Benjamin Ide Wheeler gave an address at the inauguration of the new president of the University of Texas. The title of Wheeler's address was "The President of a State University;" it was a subject on which Wheeler had by then earned the right to speak. As he

approached his conclusion Wheeler said, "The state university represents the state, yea, *is* the state, in its attitude toward higher education."[4] The experience Wheeler thus explained and rather grandly expanded was the essential intention of the Morrill Land Grant College Act of 1862, from which in good part the western state universities grew, and which insisted that the universities it supported were to include within their curricula agriculture and the mechanical arts and were to promote "the liberal and practical education of the industrial classes in the several pursuits and professions in life."[5]

The *Daily Californian* recording the events of the muddy, rainy Charter Day of 1899 had headlined the memory of Senator Morrill. The headline referred specifically to a secondary Charter Day address delivered by Regent Timothy Guy Phelps who had sat with Justin Morrill when both were members of the House of Representatives. Of Morrill, Phelps said, "He saw, as few men have seen, that a liberal education is as important to the merchant, the mechanic, the agriculturist, and the horticulturist, as to those in other professions. He continued to guard these industries." Phelps conceded that the Colleges of Mechanic Arts and Agriculture established in the University of California "had not attracted to them as many students" as had been hoped, but he had seen "the great march of trade," and he hoped for more in the future, "daydreams of something more," artisans to build ships, merchants to conduct trade, foresters to preserve forests and "the engineers to conserve the waters of the Sierras, [who] should be educated at this University."[6]

The assumed position of the university within the state, its expansion into the state, the identity of its boundaries with those of the state, was not an isolated pattern of thought in California speech-making or California minds. In May of 1899 John Dewey, here described as "Head Professor of Philosophy in the University of Chicago," who, according to President Martin Kellogg's commencement statement for 1898-99, had then "just completed a brief and masterly series of lectures in Philosophy," spoke to the Philosophical Union, on "Psychology and Philosophic Method." In his speech Dewey argued against the conception of "psychology as an account of the consciousness of the individual, considered as something in and by itself," and proposed instead another idea, "If the individual to whom psychology treats, be, after all, a social individual, any absolute setting off and apart of a sphere of consciousness as, even for scientific purposes, self-sufficient unto itself, is condemned in advance."[7] Like the university, the individual expanded into a greater enclosing entity. In the same month Alexis F. Lange read a paper "Should the University be the Central Authority in a Unified School System?" to the Alameda High School Teachers' Club. Lange could state as a fact that, "In every state of the Union public education is now looked upon primarily as a state affair, because necessary to political well-being." Lange who went over the range and rungs of public state schools established by "our own state Constitution" said that it carried "the theory of state education well on toward its logical conclusion."[8] And in the following November President Wheeler, at the (second) annual banquet of the Merchants' Association of San Francisco, said that "The University has come to see—the modern university—that it has to do with all that concerns life and the interests of life."[9]

In all this efflorescence, the word outreach never seems to be mentioned. It would be superfluous. The university of 1898 to 1900 is outreach, or at least the university of speech-making is. Outreach is the assumed gesture of the University of California.

That does not mean that this gesture did not involve problems and controversy. The disputes that surrounded Ezra Carr and that surrounded the University Farm in the 1870s had been and were at the quintessential center of the University's Morrill Act heart. And so were controversies concerning the proportion of attention given to the mechanical arts and mining.[10] That one kind of diversity, beyond the diversity of rich and poor, that the university seemed to notice, that seemed pertinent to it, coeducation, still even in its success, raised

doubts of the sort that Edward B. Clapp proposed in his 1899 paper "The Adjustment to Coeducation," a paper which was read to the Berkeley Club. Clapp wrote, "The coeducation of the sexes is an integral part of the University's history. It is no longer an experiment, but a settled and, for the most part, successful policy." Berkeley, however, Clapp felt, was not Bryn Mawr, nor had the university adapted itself much to the presence of women, their socialization or their special abilities.[11]

The success of the Farmers' Institute's work in 1900 is recorded in the *University Chronicle* for that year, and so is the importance of the Summer Session.[12] Thomas R. Bacon wrote "The education of teachers for the primary and secondary schools is, perhaps, that most important use of the University, and it can be fulfilled in no better way than by affording opportunities of instruction during the vacation of the schools." Bacon counted 239 teachers among the 433 students enrolled for summer session of 1900 (and there were also visitors from the community). Bacon regretted that some of the courses were preparatory or remedial and that so much emphasis in education was placed on pedagogical method; he thought that, judged from his own experience, what teachers in grammar and high schools needed was knowledge in their subjects, and that in fact they were "pretty good teachers of what they know."[13] The relation of the university to teaching in the schools was addressed from a different angle in Kendric Charles Babcock's "The Condition of History in the Secondary Schools of California," a paper delivered before the California Teachers' Association at Sacramento in December 1899. Babcock spoke of schools applying for accreditation from the university, of which applications there were 120 in 1899. Babcock is wryly critical of history in the schools and argues that "History will never be well taught until the teacher has that grasp of the subject, that enthusiasm for it, which ordinarily comes only from careful training under a master in history." Babcock noted with some disapproval the greater proportion of time given in the schools to Greek and Roman than to American history, thought that the Spanish-American war might change that, and that "with deeper and more vital interest, coupled with more careful study, there will come a saner, more intelligent, less noisy patriotism." Babcock was pleased that beginning with the academic year 1901-1902 there would be an entrance requirement in American history at the University of California.[14] Not without some suspicion and hesitation from people like Lange, and from outside of the university, the university and its regents involved themselves practically in the regimen of the state's schools. With education, accreditation, and entrance requirement the university reached out to them.

All of this involvement of the university with the state was shaped by the university's being a state school, a public institution; however, although the state supported the university, it did not support it enough. Lack of income to meet the quick growth of the late century university caused serious problems and disputes and even raised the threat of tuition. It also led presidents to beg for private gifts and donations. Mrs. Hearst and Mrs. Sather were not seriously rebuffed. On Charter Day 1900 President Wheeler spoke as always grandly: "This University exists and has existed not for private uses. It exists to serve community interests. . . ." But Wheeler had also just said, "The State has established it and will maintain it, but its development into . . . greatness . . . must look to private aid, based upon the consecration of private holdings to the public welfare."[15] And Wheeler was echoing and amplifying the words of the quieter President Martin Kellogg in his 1898-1899 statement, "A great University costs large sums for its proper maintenance. The State cannot be expected to do it all."[16]

There were some intricacies in the university's position but they lay on the surface of an assumed thesis spoken most baldly in Wheeler's "The state university . . . *is* the state, in

its attitude toward higher education."[17] Wheeler was then talking in Texas, and he was presumably talking about all western states, and in much of his and his contemporaries' talk the individual state and the grander general concept of state and society glide together, but Wheeler was always also talking, and mostly talking, of the state of California. The people to whom Wheeler and his contemporaries looked out from their Berkeley base were farmers, mechanics, and city-dwellers, all to be benefited by the study of the liberal arts, with teachers and schoolchildren, male and female. The speech-makers were not arguing their point about the position of the university in the state, they were using it as an assumed base, a premise, from which to talk of other and more detailed matters. At most they were celebrating an assumption, and one not made in the isolation of university groups but also in the Alameda High School Teachers' Club and the Merchant's Association of San Francisco and the California Teachers' Association in Sacramento. The glistening freshness that President Gilman's 1872 talk of the people's university came to have in 1990, more than one hundred years later, must not have existed in 1900 when it surely seemed a commonplace, at a time when the word "outreach" did not need to be refashioned and enunciated.

On May 9, 2000, an exquisitely effective ceremony took place in the Howard Lounge of the Faculty Club in Berkeley. Under the guidance of the chair of the English department, Janet Adelman, the university unostentatiously and without reference to the word, reached out to three of its neighboring high schools. It was a personal and specific, and, in a creative sense, limited example of outreach, a kind of final imaginative step. Three high school students, from El Cerrito High and Castlemont and McClymonds in Oakland were honored, as were their teachers and families, and awarded prizes for essays they had written, which had been selected by their own teachers and then for the final awards by members of Berkeley's English department. The awards, which will be annual, were given in memory of Jenny Franchot, a brilliant and vigorous member of the English department who had died suddenly the previous year, in the middle of her work as chair of the Berkeley Academic Senate Committee on Undergraduate Admissions. The prize had been established by Jenny's mother, who had come west for the ceremony. The Jenny Franchot Berkeley Prize celebrated things Jenny Franchot had cared about personally. She had shown that care in her very central role in the creation of Berkeley's new admissions policy, which with its intense consideration of each individual applicant and its emphasis on context, is probably the most powerful "systemic" effort at outreach that the Berkeley campus has produced in the years since 1995, years in which the campus has been in a ferment of explicit outreach activity.

The Jenny Franchot Berkeley Prize Winners

"A Spiritual Moment"
by
Jerry Chanthaleth
McClymonds High School
Oakland, California

"Even Your Tallest Man"
by
AnnMarie Darrow
El Cerrito High School
El Cerrito, California

On Listening
by
Veronica Tadeo
Castlemont High School
Oakland, California

Program

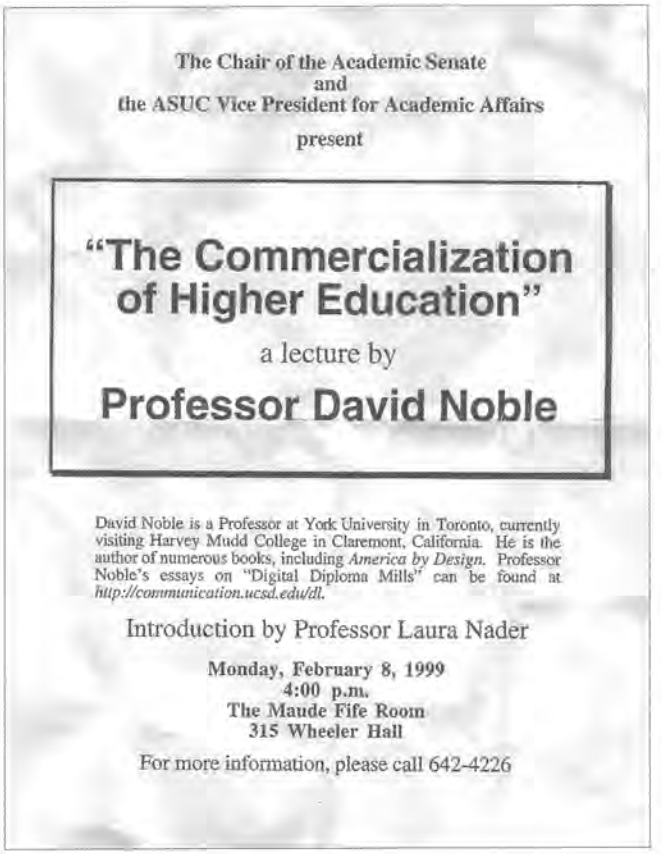
Welcome
Richard Black, Acting Assistant Vice Chancellor,
Admissions and Enrollment

Foreword
Steven Justice, Professor of English

Presentation of Awards
Janet Adelman, Professor and Chair,
Department of English

Closing
Jenny Howell

Two essentially contemporary forces and their accompanying reactions forced Berkeley to turn itself actively and vocally to consider its relations with its state and all of its citizens. The end of affirmative action in undergraduate admissions dictated by regential action in 1995 and state proposition 209 in 1996 jolted administrators and faculty into thinking through the reality of Gilman's and Wheeler's golden statements, particularly about a state in which a kind of diversity that those men had not seen was a glaring reality. Proposition 209 offered the opportunity and necessity for thought. At the same time Kellogg's and Wheeler's preoccupation with the possible and actual inadequacies of state support for the university were, in modern phrases, trumpeted about the university particularly in terms of the percentage of the university's and the campus' support that actually came, or did not come, from the state. The related search for and receipt of non-state funds provoked alarm among some members of the faculty who thought and said that the primary responsibility of the University of California was to the people of the state, and that to the extent that the university was funded from other sources, its crucial responsibility to the state was reduced. One response to worry about maintaining the public nature of the university was an increased effort by university employees to involve themselves in public service and so in outreach.



The Chair of the Academic Senate
and
the ASUC Vice President for Academic Affairs
present

"The Commercialization of Higher Education"

a lecture by

Professor David Noble

David Noble is a Professor at York University in Toronto, currently visiting Harvey Mudd College in Claremont, California. He is the author of numerous books, including *America by Design*. Professor Noble's essays on "Digital Diploma Mills" can be found at *http://communication.ucsd.edu/dl*.

Introduction by Professor Laura Nader

Monday, February 8, 1999
4:00 p.m.
The Maude Fife Room
315 Wheeler Hall

For more information, please call 642-4226

Concern with what was called commercialization of the university was specifically provoked by a number of actions and intentions that were seen as warnings, particularly the proposed use of non-19900 (state) funds for ladder-faculty salaries and the suggestion that some schools and departments might extend themselves by offering special profit-making programs and degrees. But the arrangement that particularly ignited the campus, and which suggested scandal to observers around the country, was a proposed agreement between the dean of the College of Natural Resources and the international biotechnology company, Novartis. The danger of Novartis was sharply described by Professor Robert Berring of the Berkeley law school in an article in the *California Monthly* for February 1999. In pointing to the dangers of partnerships like that with Novartis, Professor Berring worried the question: "What is the University of California at Berkeley?" And, in partial answer, he replied, "Perhaps the most amazing part of what makes Berkeley truly Berkeley is that this roiling enterprise is part of the state of California. This first-rate research university has been a public university as well."[18]

These two forces, privatization and the forbidding of affirmative action, forced university people to be more thoughtful and articulate, and even active, about the public nature

of the university and campus and their obligation of service to the people of the state. And, in a way not entirely inconsistent with the assumed goals of a hundred years ago, forced them to turn their attention to secondary education, and, particularly stimulated by proposition 209, to university access for "educationally deprived" and under-represented minority students within the state, to outreach.

Even the Berkeley division of the Academic Senate, not always in that sense a very active body, became involved. The chair of the Berkeley division of the Academic Senate in 1998-99 wrote to the chancellor that in starting his term he thought its chief preoccupation would be outreach. Three members of the divisional council of the Berkeley division, including Jenny Franchot herself, in order to involve the senate directly, initiated a senate Saturday school for tenth-graders. Most important and one hopes most lasting was the development by members of the senate, in connection with the committee for special scholarships, of a plan and program for a "Faculty Center for Leadership in Educational Access and Diversity." The "Center's unique role is to mobilize and facilitate the involvement of Berkeley faculty from a wide range of disciplines to develop practical means for removing barriers to access, for identifying and assisting students with the potential for success, and for disseminating information that can be used to improve the educational programs and opportunities in the public school system throughout the state." It "will provide linkage to the campus' extensive outreach programs."[19] The first originator of the idea for this plan was Gregory Aponte of nutritional sciences, who thought it right that the senate should have a leading role in, and that faculty members should be personally involved in, outreach activities. Through two years of heroic and persistent work, in which, with much sacrifice of himself, he encountered every form of bureaucratic and cautious faculty resistance or delay, Aponte, particularly with the continuous help of Caroline Kane and Stanley Prussin, developed and refined and gained support for this plan which would capitalize on the diverse knowledge and experience of individual faculty members and provide for them a center in which they could develop in community their ideas and shape them to the practical use of actual students and schools.

Gregory Aponte, Caroline Kane, and Stanley Prussin, October, 2000. Photograph by Catherine Dinnean.

The administration of the university at all levels switched into outreach mode. Committees were formed. Meetings were held. Officers were appointed. Practical plans were initiated. But perhaps the most significant immediate outcome of all of this activity was the general discovery and bringing to light of how much outreach work, without necessarily the benefit of the name, was already being done at Berkeley. Under the supervision of both Vice Chancellor and Provost Carol Christ and of Vice Chancellor for Undergraduate Affairs Genaro Padilla practical, effective programs and initiatives were already functioning.

When in the fall of 1998 the Chancellor's Administrative Policy Committee on Outreach looked out upon the campus, programs like the exemplary MESA (Mathematics, Engineering, Science Achievement) already tied the university to mathematics teaching in schools. Anita Madrid, a central figure in university-school activities, coordinated the Berkeley Pledge and school partnerships. Linda Gallego directed Academic Preparation and Articulation with its Upward Bound Program and its Early Academic Outreach Program, and Yvette Gullatt was already coordinator of Academic Programs in the Early Academic Outreach Program. Bob Laird, director of the Office of Admissions and Relations with Schools, already toured the state making significant connections with school counselors. Patrick Hayashi had already been vigorously active as vice chancellor responsible for admissions and enrollment. Moreover, individual faculty members, often in work connected with their own scholarship, men like Alex Saragoza, Martin Sanchez-Jankowski, and John Ogbu, worked energetically in the community. The Incentive Awards Program in San Francisco had been operating since 1992 and providing "special, outreach, mentoring and scholarship opportunities" for unusually promising students in twelve "University of California-eligible" San Francisco public high schools (by 1999, thirty-eight schools in northern California); it was a program supported by the Bernard Osher Foundation, the Gabilan Foundation, and many donors, and benefiting from the enthusiasm of Berkeley faculty like Frederick Balderston.[20] Individual faculty members were engaged heavily in pertinent activities on campus, as was (and is) prominently, Alice Agogino, and off campus as was (and is) Ling-chi Wang (currently chair of the Academic Senate's Educational Policy Committee) who helped to remake the curriculum at Galileo High School in San Francisco.

Nor was the campus inattentive to retention as the programs within the Coalition for Excellence and Diversity in Mathematics, Science and Engineering, like the prize-winning Professional Development Program, made clear and as did, for example, programs for students with disabilities.[21] Relations with community colleges were already strongly supported, and so was service to re-entry students.[22] At the time of the State and Federal Legislative Visit on April 8-9, 1999, visitors could observe much that was impressive which certainly was not brand new. The campus had not been louche in viewing its responsibilities. Nor had its sister campuses, some of them stunning in their successes.[23]

The question then naturally arises: so why the relatively sudden outcry about outreach in the late 1990s? The first answer must again be because of the threat posed to the breadth and depth of Berkeley's (and the other campuses') applicant, admissions, and attendance base by the anti-affirmative action legislation of 1995-1996, by the awareness on the campuses of that threat and its implications for the sort of university that Berkeley, now one part of the state university, a public university, would become. And this awareness was intensified by the awareness of the university's increased dependence on private funding, and, in this, its ceasing to seem a truly public university unless it could show its publicness in its actions and population. Proposition 209 and Novartis together can in fact be aptly described by one of the most tediously over-used terms of their decade, "a wake-up call."

But also the very richness of the chorus of names involved in outreach to the schools, and their teachers and students, as well as the antiphonary of outreach activities, suggested a possible lack of coordination, as well perhaps as a lack of public awareness, and of even appropriate public relations. To these lacks the Chancellor's Administrative Policy Committee on Outreach was a reply; the committee was charged with developing a coherent campus vision for outreach and overseeing the planning, coordination, and assessment of campuswide outreach efforts. There was also a demand, partly external, for a responsible assessment of results, as well perhaps as a lack of understanding (as in the case of testing in the schools) of the real difficulties of measuring, particularly quickly, important results.

Certainly in the late nineties there was on campus, and in the university system more generally, an awareness of a difficult political situation in which the university ought to demonstrate clearly both its obedience to the law and its sensitivity to the needs of the state's diverse population and to its own needs as an effective educational institution.

The result was clamorously audible support for "outreach," and there was diagrammatically visible structural reorganization. Apparent order and coordination were clearly sought. Money arrived, and external encouragement. The university was coming to seem more structurally "a part of a great, united, living, growing institution of public education"—to borrow a phrase from Elmer E. Brown in his address "The High School" which was delivered at the dedication of the new high school building in San Jose on September 30, 1898.[24]

Reforms in 2000 are, it would seem, desired to be "systemic" to use a term borrowed from physiology and afloat on the campus in 2000. Before one relaxes too contentedly into the golden glow of the new systematization, it would be wise to reflect a little on its dangers in a naturally, or at least easily, bureaucratic institution like a university. New offices and committees can have something of the insecure connection with specific reality that 1899 speech-making may have had with listening audience. "Systemic" solutions could become sufficiently denatured and embalmed in propaganda that the actual advantages that the university and the schools could offer each other and that both could offer the community would be lost in process. The university can only offer to the schools what it has, that is, the skills and learning and thinking of a lot of pretty individualistic and independent people who are interested in teaching and helping to teach other people. That is why, as the system is built, specific and particular and personal programs, like the Franchot prize, the Faculty Center for Leadership, and the Professional Development Program are in their particularity so valuable. They resist the deadening hand of bureaucracy and of public relations even as systematization at its best magnifies and generalizes the effects of their efforts.[25]

In November 1898 Frederick Slate delivered, at Berkeley, an address entitled "The Relation of the University to Secondary Schools." Slate exposed a central concern, and an obligation of a state university, a public university, its "pedagogic care for the schools around it." He emphasized the preparation and quality of school teachers and the counseling by the university which had led (through accreditation and entrance requirements as well as the understanding taken back to the schools by the university's graduates) to "a saner view concerning the results to be expected from a high-school," which had reduced the jumble of curriculum and in which even the "remotest high-schools in California" were partaking in "a more modern conception of their task."[26] One can quickly note in Slate's prose a rather smug optimism and a rather embarrassing paternalism. But in Slate as in the other voices from the end of the nineteenth century one hears similarities with as well as distance from the end of the twentieth century. Slate's contemporaries emphasized repeatedly the importance of subject matter over pedagogical theory. But Slate, explicitly echoing Matthew Arnold, attacked attachment to measuring educational success by examination. They all saw the importance of the close connection between public university and high school, and the responsibility of the university to the school.

"It is true," Sheldon Rothblatt, the historian of the modern university, has written, "the social obligations of universities were not as pressing as today."[27] Slate and his contemporaries show no appreciation of ethnic difference or its social value. They are thus untroubled. They are convinced of the necessity, the virtue, the certainty of educational progress; they look out at schools being raised from an earlier simplicity. They show no sense of danger and decay; they are in no way handicapped in their understanding by the kind of gross denigrating caricatures of contemporary schools which distort reality in 2000. Nor do they talk of violence. They do not talk of outreach because it is the air they breathe, but they are

constantly aware of public duty. Between the problems visible in the mud of Harper's Berkeley and those existing in the retrofitting of our own there are many obvious similarities, but the equally obvious differences in context and memory reshape even the closest similarities. We now return to our sense of public responsibility with very different provocations, from a very different angle, and, for better or worse, with very different machinery.

ENDNOTES

1 *Daily Californian*, March 24, 1898.

2 *Daily Californian*, March 24, 1899. William Rainey Harper, "The University and Democracy," *University Chronicle*, 2 (1899), 65-88, 69-71, 84; William Rainey Harper, "Address to the Associated Students," *University Chronicle*, 2 (1899), 89-101, 89. In 1906 the *University Chronicle* changed its title to the *University of California Chronicle*.

In using the microfilm of the *Daily Californian* at Berkeley I realize again the tragedy that the library's precipitate disposal of much of its actual newspaper collection has been for all researchers, and particularly beginning ones. Fortunately, the University Archives has kept a complete bound set of the *Daily Californian*.

3 I have used Verne A. Stadtman's abridged transcription of the address in his "The Heritage of the University of California: the Formative Years," 56-72; see too Verne A. Stadtman, *The University of California, 1868-1968* (New York: McGraw-Hill Book Co., 1970), 63-64 for Gilman's inaugural, and, of course, see Stadtman more generally for the early history of the university.

4 Stadtman, "The Heritage," 178-186, 185; the incoming president of Texas was David F. Houston.

5 Quoted in Stadtman, *The University of California*, 2; "The Heritage," 29-32.

6 Timothy Guy Phelps, "Our Debt to the Late Senator Justin S. Morrill," *University Chronicle*, 2 (1899), 102-106, 104, 105-106.

7 John Dewey, "Psychology and Philosophic Method," *University Chronicle*, 2 (1899), 159-179, 159, 160; Martin Kellogg, "Statement for 1898-99," *University Chronicle*, 2 (1899), 153-158, 155.

I do not mean to imply that the university's activities stopped at the state border. They, for example, went with Willis Jepson to Alaska as W.A. Setchell explains in his "Botanical Trip to Alaska," *University Chronicle*, 2 (1899), 321-332.

8 Alexis F. Lange, "Should the University be the Central Authority in a Unified School System?" *University Chronicle*, 2 (1899), 180-189, 181.

9 Benjamin Ide Wheeler, "The College of Commerce in its Practical Relation to Public Affairs," *University Chronicle*, 2 (1899), 385-391, 385.

10 Stadtman, *The University of California*, 68-78; Carroll Brentano, "Foreword," in Kent Watson and Peter S. Van Houten, *The University in the 1870s*. Chapters in the History of the University of California, no. 6 (Berkeley: Center for Studies in Higher Education, 1996), ix-xiv.

11 Edward B. Clapp, "The Adjustment to Coeducation," *University Chronicle*, 2 (1899), 333-345, 333, 335; see too *Chronicle of the University of California*, 1:2 (Fall 1998) "Ladies Blue and Gold."

12 "Farmers' Institutes during 1899-1900," *University Chronicle*, 3 (1900).

13 Thomas R. Bacon, "The Summer Session of 1900," *University Chronicle*, 3 (1900), 275-280, 275, 276, 278; see also Anne J. MacLachlan, "May Cheney's Contribution to the Modern University," *Chronicle of the University of California*, 1:2 (Fall 1998), 75-81; and Geraldine Jonçich Clifford, *"Equally in View": The University of California, Its Women, and the Schools*. Chapters in the History of the University of California, no. 4 (Berkeley: Center for Studies in Higher Education, 1995).

14 Kendric Charles Babcock, "The Condition of History in the Secondary Schools in California," *University Chronicle*, 3 (1900), 51-56, 53. See also "The Accrediting of Secondary Schools," *University Chronicle*, 2 (1899), 54-64.

15 "The Charter Day Exercises," *University Chronicle*, 3 (1900), 73-75, 74. And see J.R.K. Kantor, "Cora, Jane, & Phoebe: Fin-de-siècle Philanthropy," *Chronicle of the University of California*, 1:2 (Fall 1998), 1-8.

16 Martin Kellogg, "Statement for 1898-99," *University Chronicle*, 2 (1899), 153-158, 158.

17 See above, note 4. See also William E. Ritter, "The University, its Graduates, and the State," *University Chronicle*, 1 (1898), 97-103.

18 Robert Berring, *California Monthly* (February 1999) 19-20, 19.

The disturbance caused by Novartis continues in 2000, see now, Eyal Press and Jennifer Washburn, "The Kept University," *Atlantic Monthly* (March 2000) 39-54, and the pertinent resulting letter and response in *Atlantic Monthly* (July 2000) 10-11. See too a particularly strong criticism: Masao Miyoshi "Ivory Tower in Escrow," *Boundary* (2000), 7-50. The Novartis dispute led to an address, "The Commercialization of Higher Education," by David Noble on the Berkeley campus on February 8, 1999; and it provoked heroically articulate statements in opposition to the arrangement particularly by Ignacio Chapela of the College of Natural Resources.

19 I quote from the job announcement for the founding director, June 2000.

20 I quote from the 1999 "The Incentive Awards Pre-Collegiate Academy Story."

21 See the Coalition for Excellence and Diversity in Mathematics, Science, and Engineering, "Student Scholars Program Guide," of which I am using the 1998 version; see the Disabled Students' Program's "Services for Students with Disabilities at UC Berkeley."

22 See the California Community Colleges and University of California "News Release" of November 13, 1997, a vow to strengthen transfer process.

23 Work at Los Angeles, for example, is remarkable; San Diego has created a school.

24 Elmer E. Brown, "The High School," *University Chronicle*, 1 (1898), 408-418, 415; Brown was at this point actually addressing the high school's role.

25 It is always salutary to reconsider the role of Sanford Elberg as dean of the Graduate Division; he as an individual made the humanities at Berkeley blossom, the man Sanford Elberg did this, not the office of dean, although of course Elberg did it with the attributes of office.

26 Frederick Slate, "The Relation of the University to Secondary Schools," *University Chronicle*, 1 (1898), 498-514, 505, 506, 507, 510-511.

27 Sheldon Rothblatt, "An Historical Perspective on The University's Role in Social Development," in *Emerging Patterns of Social Demand and University Reform: Through A Glass Darkly*, eds., David D. Dill and Barbara Sporn (Oxford and New York: Pergamon, 1995), 20-47, 24.

Theories of education in the late nineteenth century are best seen in the context of Rothblatt's extensive scholarly production since, and including, *The Revolution of the Dons* (London: Faber and Faber, 1968). Rothblatt's continuing study of Matthew Arnold and "Germanism" gives additional resonance to the words of Frederick Slate and his contemporaries.






Josh, November 1896.

Can you identify the above individuals by name and/or academic field?
See page 198 for answers.

THE FIRST "GOLDEN BEARS"

THE TRANSCONTINENTAL TOUR OF CAL'S TRACK TEAM, 1895

J. R. K. Kantor

The idea of an Eastern tour of the U.C. Track Athletic Team was first broached in the autumn of 1893. The following spring, Track Captain North began developing the idea. The formation of the W.I.A.A.A. at that time, and the English tour of Yale, that summer, gave ground for the scheme. The ensuing autumn, Captain North was absent from the University, owing to sickness, but Acting-Captain Koch and Col. Edwards continued his plans. The matter was brought before the students and given unanimous approval.[1]

THUS BEGINS A SUMMARY OF THE '95 TRACK TOUR in the Berkeley campus yearbook for 1897. That autumn of 1893 was important in the San Francisco Bay Area, for the Mid-Winter Exposition in Golden Gate Park was being planned, with its founding of the present-day M.H. deYoung Museum of Art. Martin Kellogg was president of the University of California which at that time included the Berkeley campus, the "Affiliated Colleges" in San Francisco, i.e. medical, dental, and pharmacological departments, Hastings College of the Law, and the newly established Mark Hopkins Institute of Art atop Nob Hill, and in the foothills east of San Jose was the Lick Observatory. The student body of Berkeley totaled 815, the faculty at the Berkeley campus, 60.

It is well to remember that when the university's predecessor, the College of California, was established in Oakland in 1860, the majority of its founders were Yale graduates (the colors blue and gold derive from the blue of Yale and the gold of California's hillsides and mines). What had been a liberal arts college in Oakland became, with the signing of the "Organic Act" of 1868, a full-scale University of California, teaching agriculture and mechanical arts as well. Athletics, under the purview of the Associated Students of the University of California (ASUC), became a significant interest in the Berkeley community. As early as 1875 there was a rowing club on San Antonio Creek in Oakland, and the inception of football, i.e., rugby in 1882, provided for the young campus an important non-classroom activity. With the founding of Stanford University in 1891 and the subsequent annual football contest—the "Big Game" which surely owes its name to the already famous "The Game" played between Harvard and Yale on the *contra-costa*—enthusiasm for the intercollegiate competition became keen. Track, too, was a popular sport; in 1878, the training ground for the team was the race track at Emeryville, and the first annual track field day was held in 1879 on the Oakland cricket grounds. This was also the year in which a public-spirited Oakland citizen, A. K. P. Harmon, father-in-law of the "Colonel" George Cunningham Edwards '73, presented to the Berkeley campus its first gymnasium, the octagonal and wooden Harmon Gymnasium, standing just inside the present Sather Gate.

By the autumn of 1894 plans for the transcontinental trip were underway. The *Berkeleyan*, predecessor to the *Daily Californian*, noted in its issue for September 6: "There seems to be a general impression about nowadays that the University of California should send a track athletic team East to compete against the other big colleges." On January 21,

1895, the paper editorialized: "There is not the slightest doubt that the university at present possesses the greatest team of track athletes that ever was seen on this coast." Who were these athletes? Frederick W. Koch '96, captain; Theodore L. Barnes '98; Phil R. Bradley '96; Melville Dozier '98; Ernest I. Dyer '94; Robert Edgren '97; Louis T. Merwin '96; W.C. Patterson '96; J. W. Scoggins '97; Harry Beal Torrey '95; and Chester H. Woolsey '95.

In late January 1895, Captain Koch (who later became principal of Galileo High School in San Francisco) sent letters to several schools in the East and Midwest, suggesting that a track competition might be held. From the University of Pennsylvania in Philadelphia, H. Lausat Geyelin, chairman of the committee on track athletics, responded:

> I would say that the proposition of a dual meet between the two universities on or about June 8, I consider an excellent idea . . . Our new grounds are very complete and convenient, and think such a meeting between representative Universities of the East and West would excite much interest.[2]

On February 8, the *Berkeleyan*'s left lead was titled "Telegrams from Princeton"; it reported the message: "Could we have June 1st. . . D. R. James, Jr., Capt."

Front page news kept the issue alive. On February 14, the *Berkeleyan* staff noted:

> Every day brings evidences that our proposed trip to the East is creating much comment. Already the Philadelphia *Times* has written for full particulars and the other day the New York *Sun* gave a column to the description of men who would probably compete.

The report continues by quoting the *Sun*'s article of February 8 which called the University of California "a prominent factor in intercollegiate athletics, and the probable appearance of the Coasters this year seems to be a welcome one."

Venues for the competition were moving from the East to the Midwest. On its front page for February 26, the *Berkeleyan* noted:

> The *University of Chicago Weekly* has the following in its latest issue: "If the University of California track team should come East this summer, as it now seems likely, efforts should be made to have a meeting in Chicago with the Western representatives."

Finally, on March 28 the campus paper printed, above its name, a banner: "Eastern Trip Edition," and below, the headline: "Our Athletic Team WILL go East." The happy news follows:

> Our athletes will go. The student body has so decided. Our yell and our colors will be introduced beyond the Rockies.
>
> Genuine enthusiasm plus hard cash. This combination tells the tale. Almost a thousand dollars raised in less than twenty minutes to send the University of California against Yale, Harvard, Princeton, Pennsylvania, Chicago, and Michigan.

"The student body has so decided." It is to be remembered that, prior to 1960, the athletic program at Berkeley was overseen by the ASUC, and all financial responsibility rested with the student body. Funds had to be raised. Appeals were made. Alumni responded; first

Cal's 1895 track squad. *University Archives (UARC PIC 12:1).*

was Alexander Morrison '79—for whom the campus' present Morrison Library is named. The university's president, Martin Kellogg, himself a Yale graduate and one of the first faculty members to be appointed in 1868, gave generously, as did other faculty members. So did the students, the women students as well as the men. Arthur Rodgers, class of 1872 (who served as a university regent from 1883 to his death in 1902), commissioned a blue banner to be created; it was to bear the legend "California" and the state emblem, the grizzly bear, the latter in raised gold thread. (Two such banners were made, as shown in the accompanying team photograph.)

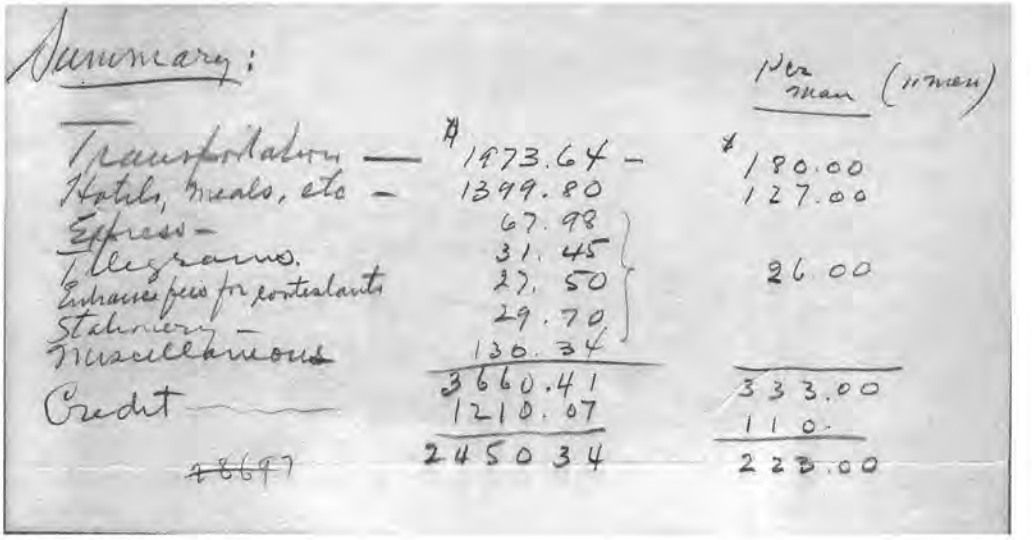
On May 2, 1895, eleven athletes left Berkeley by train, and they arrived at Princeton at three o'clock in the morning of May 9. It is reported that Edgren went off to nearby Philadelphia to receive instruction in hammer throwing from James Mitchell, the world's champion.[3] The games at Princeton began Saturday morning, May 11, at eleven o'clock. "The absence of the Blue and Gold in the grandstand was of course noticeable, but the Princeton men were very impartial in their applause. . . ."[4] The score was Cal 61 and Princeton 51; the Blue and Gold scored eight firsts and seven seconds.

A week later, on May 18, the Golden Bears met the University of Pennsylvania in Philadelphia resulting in a 7–7 tie. Back to New York for the Mott Haven Games on May 24 and 25, where Cal scored seven points. Five days later, on May 30, in Schenectady, Cal met Union College and came out twenty points ahead: 59–39. Two days following, in Chicago, the Bears achieved thirty-seven points at the Western Intercollegiate Games. In Urbana at the University of Illinois, "The Champion of the West," on June 7, and again Cal was triumphant: 55–43. And then back to Chicago for the Bears' first loss, on June 15, against the Chicago Athletic Association: 36–48.

All in all, it had been a heady six weeks of competition. The eleven athletes moved west, to Denver, where on June 22, Cal was victorious over the Denver Athletic Club and the All Colorado Colleges: 62–22. "The high altitude had no perceptive effect."[5] Leaving Denver on June 24, the team reached San Francisco. Their journey had taken them seven thousand miles. The victorious athletes were driven in a coach up Market Street to a reception at the Olympic Club, beside their blue and gold banners and their many silver trophies. (The 100-yard and 200-yard trophies won by Scoggins, along with his silk shorts, his spikes, and his scrapbook, were recently given by his daughter to the California Athletic Hall of Fame in Memorial Stadium.) The team brought to Berkeley from the University of Illinois the "Oski Wow-Wow" yell, which was modified to suit California. The iconography of the banners inspired Charles Mills Gayley, professor of English, to write his Cal song:

> Oh, have you seen our banner blue?
> The Glorious Bear is on it, too,
> A Californian, through and through,
> Our totem he, the Golden Bear!

Expenses for the journey totaled $223 per athlete, a small cost for sending eleven of the Blue and Gold on a mission which would forever place the University of California's athletic program on the intercollegiate map.



University Archives.

ENDNOTES

1 *1897 Blue and Gold*, 23 (1896), 105.

2 *Berkeleyan*, February 7, 1895, 1.

3 *Berkeleyan*, August 19, 1895, 1.

4 Ibid.

5 *1897 Blue and Gold*, 23 (1896), 107.

THE GOLDEN BEAR

Charles Mills Gayley

Oh, have you seen the heavens blue,
When just seven stars are dancing through,
Right overhead, a jovial crew?
They're joining hands to make the Bear!

And oh, that Bear's a golden sight,
A-circling 'round the pole all night,
And once you've seen him, you're all right—
You've seen our Californian Bear!

Oh, have you seen our banner blue?
The Glorious Bear is on it, too,
A Californian, through and through—
Our totem he, the Golden Bear!

He might have been a Wolverine,
A Tiger or a Badger been,
Or yet some other beast I ween—
He had his choice, and lo—a Bear!

He might have smiled on Michigan,
Or countenanced the Harvard man,
Or even gone Yalensian—
But no—he's California's Bear!

Our totem takes us in his tow,
He hugs our flag where e're we go,
He makes it cold for every foe,
He is their frigid Polar Bear!

'Twas he that froze the U. of P.,
And Princeton and Schenectady,
And all the Western Galaxy—
He hugged them tight, our Golden Bear!

He has a very patient air,
He grows a Paderewski Hair,
He's center–rush in Heaven, I swear—
Our silent, sturdy Golden Bear!

Oh, have you seen our banner blue?
The Glorious Bear is on it, too,
A Californian, through and through,
Our totem he, the Golden Bear!

(from *The Berkeleyan*, Vol. 6, No. 54, November 21, 1895)

The Berkeley campus then, 1897. *University Archives.*

BENJAMIN IDE WHEELER

PRESIDENT OF THE UNIVERSITY 1899–1919

A NEW CENTURY WAS ABOUT TO BEGIN. Seventy-year-old Martin Kellogg, seventh president of the University of California, was leaving office and the regents were searching for a man to replace him. Among those being considered was forty-five-year-old Benjamin Ide Wheeler, professor of philology and Greek at Cornell University. Wheeler already had received—and declined—offers of the presidency at several other institutions. Upon receiving the regents' notification of his election, he replied:

> Dear Sirs: You have done me great honor with your confidence. The University of California, I am well aware, represents one of the most important fields for educational work in the country. I shall give the matter my . . . most earnest attention.[1]

As Verne Stadtman has observed, Kellogg had not exercised the powers that the regents in 1897 had given to the president: "A presidency that could be circumvented by both the regents and the faculty was not easy to sell to a strong candidate."[2] However, a strong president was what the University of California needed to lead it into the twentieth century; and Wheeler wanted to make sure that he would be able to "consolidate its strengths and build toward new greatness."[3] Upon learning of his nomination, Wheeler put before the regents four conditions of his acceptance: (1) as president he would be "the sole organ of communication between Faculty and Regents"; (2) he would have "sole initiative in appointment and promotion of faculty and other teachers and in matters affecting salary"; (3) however divided they might be in their discussions, the regents would support the president "as a unit" in matters regarding the faculty; (4) subject to the Board of Regents, the president would have charge of the direction of "all officers and employees

Benjamin Ide Wheeler, 1899.
University Archives (UARC PIC 13:32).

of the University." The regents agreed and on July 18, 1899, Benjamin Ide Wheeler accepted their offer.[4]

Wheeler's first official act upon taking up his presidential duties in early October was to address the large group of students who had assembled to greet him. Leaving his office in South Hall, he traversed the short distance to meet them at the campus flagstaff in front of Bacon Hall.

> I rejoice that my first introduction to the University takes the form of an introduction to you. . . . [H]ere in the golden sunlight. . . I look into the faces of the real blue and gold that constitutes the real living University of California. . . . As long as I live I trust I may never be interested in a University of mechanisms, reports, and papers; but only a University of human beings.[5]

Benjamin Ide Wheeler addressing students at the university flagstaff, October 3, 1899. South Hall at left. *University Archives (UARC PIC 4: 331a).*

The essence of his message was captured by the *Daily Californian*'s headline the following day—"Stirring Words from President to Students: Molding Character Should be the Object of Our University."[6]

To improve communication with students he quickly initiated biweekly university meetings. His address at the opening meeting in 1900 was devoted to themes he repeatedly emphasized: constructive use of time; respect for property; developing "the right habits" of thinking and acting; establishing the foundations for a successful life. Wisdom, he insisted, was superior to knowledge; hence students were urged to seek out teachers who demonstrated creative scholarship and adhered to the highest academic and personal standards. The production of scholars was not a university's sole purpose, however. "The supreme test

of education," Wheeler declared, is good mental, spiritual, and physical health. Because good physical health is "as much a duty as any other" every student was to have "some daily exercise."[7]

Wheeler's formal inauguration took place on October 25, 1899, before a crowd the *San Francisco Chronicle* reported to be ten thousand. Promptly at 2:00 p.m. a large procession composed of regents, members of the Academic Senate, David Starr Jordan (president of Stanford University), Daniel Coit Gilman (president of Johns Hopkins University and president of the University of California from 1872 to 1875), Wheeler, the presidents' wives, and other invited guests left Stiles Hall and traversed the short distance to the temporary blue and gold festooned stands that had been erected on the university's athletic grounds.[8] Regent Hallidie opened the ceremony: "Today you are summoned to witness the inauguration as president of this University of a man alike distinguished in the world of letters as a scholar and in the world of affairs as a citizen." Following welcomes by Jordan and Gilman, Wheeler rose and addressed the audience concerning the university's condition. His words expressed both optimism and caution.

ENDNOTES

1 Letter from Benj. Ide Wheeler to Committee of the Regents of the University of California, June 24, 1899 printed in "Official Action," *University [of California] Chronicle*, 1 (1898), 311-312.

2 Verne A. Stadtman, *The University of California, 1868-1968* (New York: McGraw-Hill Book Co., 1970), 178-180.

3 Ibid., 87.

4 "Official Action," *University [of California] Chronicle*, 2 (1899), 311-313; Verne A. Stadtman, ed., *The Centennial Record of the University of California* (Berkeley: University of California Printing Department, 1967), 406. This consolidation of power would ultimately bring Wheeler into conflict with the faculty. By the 1910s there was a growing trend at leading research universities to increase faculty powers. In California, an amendment to the state constitution in 1918 established the bases for the strong faculty governance that has characterized the University of California for over half a century. See: Angus E. Taylor, *The Academic Senate of the University of California* (Berkeley: Institute of Governmental Studies Press, University of California, 1998).

5 "Stirring Words from President to Students," *Daily Californian*, October 4, 1899.

6 Ibid.

7 "President's Opening Address," *University [of California] Chronicle*, 3 (1900).

8 "California's New Era Ushered In," *Daily Californian*, October 26, 1899; "Inauguration Day," *1901 Blue and Gold*, 27 (1900).

INAUGURAL ADDRESS OF PRESIDENT WHEELER

GOVERNORS, MEMBERS, FRIENDS of the University of California: You have laid upon me a heavy task; you have entrusted me with a high responsibility; you have crowned me with opportunity. A consciousness of my own limitations, which time and experience have made reliable and definite, would have forced the gleam of opportunity into the thick shadow of the task, had not your hearty confidence, which placed both in my way, called faith to the seat of distrust.

As it were in a night a college has grown here into the dimensions of a university. A torrent influx of students has overwhelmed and burst the barriers of organization, equipment, funds, and shelter. A mass of rapidly developing professional schools drawn beneath the name and aegis of the University have become attached to its organization by bonds of varying strength, but all ill tested and uncertainly set.[1] The schools of the state have been recently brought into a close connection with the University, a connection which is still tentative, but which looks towards a fine unity of action, toward a common aim. To intensify the stress and confusion, all things have happened at a period when throughout the land the whole mechanism of university education is in progress of readjustment and adaptation to larger work. Shifting, experiment, and change are on every hand: nowhere have settled norms been reached. All has happened, too, at a time when the state universities of this country are passing through a gradual change in the form of their government regarding educational and internal affairs. The earlier conception of the relation of the governing board to the regulation of these internal affairs, fashioned after the analogy of the government of other state institutions, has been seen to place the state universities at such decided disad-

Inauguration of Benjamin Ide Wheeler on the university's athletic grounds, October 25, 1899. *University Archives (UARC PIC 4:1019).*

vantage to those of private endowment that the sound principle of internal self government in things spiritual has come steadily more and more to acceptance. All this has come into being—growth of the student list, the development of the professional schools into university stature, the consolidation of school standards under university co-operation, the liberalization of the state universities, the disturbance of general educational traditions—all this has come into being during a period at whose climax the unfolding of national and international history has suddenly laid the burden of a great responsibility upon the shoulders of California by setting it in the center instead of at the confines, by putting it in the fore rank for the great commercial, industrial, and social conflict that is to absorb the thought and effort of the twentieth century. All this it is which heaps the task, all this it is which opens the gate of opportunity.

If all the pressing needs of the University were marshalled in array, long would be the list. It will be enough if some few which force themselves on brief observation most obtrusively to attention be presented as examples. The enormous and constant increase in the number of students has been proving in recent years a positive embarrassment to the institution. As tuition, in accordance with the unmistakable desire of the State, is free to all, this increase brings no corresponding relief to the income. If the University work is to be maintained on its present level of efficiency, greatly increased supply of funds for the plain instruction must be supplied from some source, private or public.

The provision of buildings and equipment has lagged far behind the need, and only temporary expedients have in recent years been adopted. So thorough-going is the need that nothing short of entire rebuilding and equipping can now be proposed. The wisdom and foresight of one whose life and strength and means have been unreservedly consecrated to the service of the public good have provided a plan of building, which constitutes the one frank and competent recognition of the obligations laid upon this institution.[2] All else has been tentative, halting, doubting; this sees with the open eye of faith and the certain vision of conviction.

Among the demands for the internal development of the University none rank in my estimation with those of the library. The present collection has been made with great skill and sobriety. By universal consent it contains little waste material. But it is far too small and incomplete in any department to serve the purposes of advanced study and research. In their isolation from the Eastern store-houses of learning our scholars require and deserve more than ordinary resources of this kind. If the best men are to be brought here and kept here, we must be able to assure them first of all that the library will afford them means to keep their learning abreast of the times, and that their coming to California shall not mean the suicide of creative scholarship.

A library located here has also in more than one regard special opportunity and obligation. We are tangent to the domain of the farthest world—half of which the western world knows yet but little, but of which it will be called upon in the coming centuries to know much. Here on the borderland as in Alexandria of old must be garnered the accumulated lore of the east as well as the west.

We are located, furthermore, on the soil which Spain took as its portion of the New World. Now that her heritage has in large measure fallen to us we are bound to collect and establish here—and to do it before it is too late—all that records or can illustrate the history and fortunes of the Spanish occupation of North and South America. Instead of seventy-five thousand volumes there ought to be today three hundred thousand; instead of an income for purchases of four thousand dollars there ought to be thirty thousand. The library force is seriously overworked, the building is overcrowded. A fireproof building, equipped

with seminary rooms on the most generous scale, must be provided within the next three or four years.

The newly founded school of commerce[3] enters upon a wide and hopeful field. We have suddenly become an exporting nation instead of a home-market nation. Material civilization is extending in terms of iron, and we must supply the world with its mechanisms and with many of the products of its mechanisms. The study of international trade conditions and of foreign needs and markets becomes therefore a first interest of the American commercial world. Here of all places in the land is the chosen spot for the training of those who are to be the intelligent guides and emissaries of trade, whether as trade agents of private interests or as consuls who represent through the general government the public interest. Here can be collected to best advantage data concerning the condition of markets in the Asiatic world, and here can be taught to best advantage the manners, customs, social conditions, civilization, and languages of that world.[4]

The peculiar situation and condition of California makes certain definite demands upon this University which it cannot afford for one moment to neglect. In the field of mining engineering we must of course lead the world. In agriculture we must have the unquestioned best, and particularly in the applications of agriculture to pomology and horticulture, we must have the means of very decided extension and development beyond what is now provided. The dependence of California, with its long periods of drought, upon a reliable water supply for mining and irrigation, and its exposure during the rainy season to fearful losses by floods, demand that without delay the wit of the hydraulic engineer be directed to the problem of storing the flood waters of the State. It is a peculiar problem, and the University must guide accumulated capital and public beneficence to the solution of it. Not only the naked hills of California, but the whole desert western slope of the continent, call for special study of the forest problem. A school of forestry is an earnest and instant need. The waters that sent forth the *Oregon* deserve a school of naval engineering. The attention of the national government, which now has a Pacific as well as an Atlantic to care for, should be directed toward this need. But what it does can be done in cooperation with the University as an already established institution, and through development and differentiation of the existing courses.

The uncertain relation of the various professional schools to the body of the University will demand careful attention in the immediate future. The University cannot permanently lend the use of its name to departments or institutions over which it has no real control. The whole problem is not so much one of legality, however, or one of control, but one of thorough cooperation and of the prevention of duplication in academic work.

If I am not led astray by brief impressions, the tone and instinct of the people of California promises for the future a strong development of artistic taste and aesthetic demand. Signs of the presence of a strong bent toward literary art are unmistakable, and nowhere do I see more promise for the rise of a distinctive type of literary art than here in the freshness and vigor and warmth and alertness of the Pacific coast life. This movement it belongs to the University, already rich in excellent traditions of literary production, to stimulate and lead.

Among all the arts, that of architecture will, by common consent, be allowed to represent California's greatest present lack. When the University shall have once begun to teach this art by good example, it may also and must undertake to teach by good doctrine as well.

Under the stimulus of museums of archaeology and art already planned and whose equipment is already in generous purpose and act begun, and through the co-operation in practical training of the Art Association and Institute,[5] we have definite hope and prospect of great things in the field of art education.

Among the opportunities of lesser endowments now offer more immediate hope of appreciative reception and general usefulness than the establishment of lectureships which, under an annual income of $1000 to $2000, should call into temporary residence at the University the ablest scholars of the world. Both the isolation and the essential cosmopolitanism of this academic community demand and suggest such provision. The creation of traveling fellowships, which would allow the best of our students the opportunity for travel and study abroad, would prove stimulus to our own work and supplement powerfully that equipment of our University which aids its graduates to climb the ladder of professional attainment.

So the list of my examples draws itself out into unseemly length. The need is so vast—but it is a genuine opportunity that fashions the need! We appeal to a great people, noble and large-hearted as their domain is blessed and rich. Mountain-side and sea, soil and sunshine have dealt bountifully with them. The mines, the harvests, and the paths of the great deep have yielded to their zeal abundant tribute. They are liberal men, and the liberal man in the fullness of his heart deviseth liberal things. Only the best has in the past been good enough for California, and we propose now for the institution which shall represent and lead its higher life, nothing but the best. If watchfulness and incessant care can effect it, not a dollar shall be wastefully expended, but if the large view can hold the meager and the mean at bay, not a dollar shall go for what is inferior or less than the best.

But with all equipments and endowments and schedule, the University that we shall build here shall be and must be a thing of life. It will be, first of all, a continuation of the life of the University that stands here now. Not one drop of the life-blood of those who here, in wise forethought and loving toil, built their lives into the structure, can go to loss. The devotion and faith of those far-seeing men who laid the foundations of the College of California and the foundations of the University, the genial wisdom and nobility of him [Daniel Coit Gilman, president, 1872-1875] under whose leadership the pilgrim scholars came from Oakland to Berkeley, the unselfish service of those who since then have taught and led, preeminently the quiet, sound prudence of him [Martin Kellogg, president, 1890-1899] whose administration during the last nine years has leveled and prepared the ground for new building—all these as life elements are part and portion of the institution and will unfold their branches and yield their fruit through all the ages.

The University shall be a thing of life, too, in that it shall be a life-bond between those who together teach and study here. Between teacher and taught there is and can be in a true University no fixed boundary line. We are all students; we are all learners; we are all teachers. All teaching which does not deal in fresh new visions of truth, truth seen and felt each time it comes to expression as a new and vital thing, animating the whole personality of him who sees and who summons the vision to the thought of others, is a dead and hopeless exercise. Education is transmission of life. The supreme purpose of the University is to provide living beings for the service of society—good citizens for the State.

Between research and instruction there can be no fixed boundary line. Vital grasp upon new truth, the perpetual attitude of discovery must animate every work. Between the various forces and instrumentalities for uplifting life and society which this community provides there can be no barriers set. The students of the ancient literatures and of the modern literatures, of the humanities and of the sciences, of the arts and of the handicrafts are all working toward a common end under the inspiration of a common spirit. They are all seeking to give life perspective and power by delivering it from slavery to ignorance and to the rule of thumb. So, too, Berkeley and its sister university at Palo Alto, represent a common cause, and will labor together for a common end. We welcome the aid of this stout helper and we will share with it the work according to the human law of mutual helpfulness.

In the internal regulation of the university order there can be in the last analysis no fixed boundary line between the governing and the governed. The age of paternalism in university government is well nigh past. The rules and decrees of faculties which do not in the long run commend themselves to the best sense of the student public, I have found in my experience are probably wrong; they will be surely in the long run nugatory. Student bodies are to-day practically self-governing.

In a healthfully organized university the relations between the faculty and the president in his capacity as member of the university should tolerate no barriers. In the real university life the president must be a teacher among teachers, a colleague among colleagues, and the spirit of cooperation, not the spirit of authority, must determine their work together. The educational policy of the university must arise from within, from the body of teacher-colleagues and not be imposed from without by either president or governing board. Leaving aside the conception of the university as a business organization, the real university must be a family life in which loyalty of each member to the whole shall be the divine inspiring breath.

The office of president of an American university has grown with the development of American conditions into a unique institution. The great universities of the Old World have nothing resembling it. It represents neither the perpetuation of a tradition nor the introduction of an arbitrary innovation. The situation has gradually developed it. The necessity of giving the university a representative to its public constituency, whether that constituency take the form of state or sect or community of graduates and friends, and of mediating between the divergent ideals of the supporting constituency and those of the university life, has called this office into being and endowed it with very definite functions and extraordinary powers. Many of us in loyalty to the older conception of the university bond have deplored this development, but few who have come fully to appreciate the difficulty of harmonizing the university to the demands of its constituency have disputed the necessity. The presidency is to-day the medium of communication between the two main elements which give the university life and being. The incumbent of the office, as holding a dual relation, is not only subject to misunderstanding and to the consequent and common charge of duplicity, but is placed in a position that is frankly untenable except with the full confidence and loyal cooperation of faculty and regents alike. At the present stage of its development, the office, in demanding sympathy with two widely sundered points of view, demands almost the impossible and is the most difficult position which American society can call upon a man to fill. All this I have fully considered. None of this have I concealed from myself. I throw myself, Regents, Faculty, students, fully and frankly and trustfully upon your loyal support. Without that I am nothing; with that we can accomplish great things for California, for the University, for the nation, and for the cause of enlightenment among men.

Full in the face of many difficulties and many needs, but in the presence of an inspiring hope, in clear conviction of my own shortcomings, but in consciousness of a readiness, loyally and unselfishly, with such strength as I have to serve a public cause, I now assume with full sense of the responsibility it involves the headship of this institution. I will, in dealing with the various bodies that constitute it, consult frankness rather than tact. I will value plainness of speech more than flattery. I will not, God helping me, be tempted myself to use, nor will I suffer anyone else to use, the University for the advancement of personal interest or ambition. Here in this presence I pledge myself, with all I am of body, mind, and heart, to be dedicated to the service of the University of California; its interests, so far as I can discern them, shall be, under truth, the supreme guide of my official action. Governors, members, alumni of the University of California, let us all to-day join hands and hearts, and

here by the flaming house altar of our loyalty, in high enthusiasm for humanity and in the fear of God, dedicate ourselves together in holy covenant to the service of this University and the cause it represents. And may the Spirit which putteth wisdom into the heart of man guide us and the blessing which maketh rich abide with us forever.

ENDNOTES

These endnotes have been added by the editors to the text of Wheeler's 1899 Inaugural Address, which was published in the *1901 Blue and Gold.*

1 The Affiliated Colleges in San Francisco—School of Medicine, School of Dentistry, College of Pharmacy, Hastings College of the Law—as well as the Mark Hopkins Institute of Art.

2 Wheeler here is referring to the International Competition for the Phoebe A. Hearst Architectural Plan. Early in 1896 the Board of Regents had approved the necessity of "adopting a permanent and comprehensive general plan, to which all subsequent buildings of the University should conform...of erecting the successive buildings, so that each should contribute to the architectural whole, over a confused collection of independently erected and unrelated buildings, which conglomerate mass would destroy the possibilities of the natural site." George O. Brehm, "The Architectural Competition," *1899 Blue and Gold*, 25 (1898), 16-23. Architect Bernard Maybeck had conceived of the idea for such a project. In October 1896 the regents accepted Mrs. Phoebe Apperson Hearst's offer to contribute funds for an international architectural competition, the preliminary to be held in Antwerp, Belgium, the final in San Francisco. One hundred and four sets of plans were submitted. A distinguished international board of judges selected eleven sets of plans; nine of the architects accepted Mrs. Hearst's invitation to visit the Berkeley site. The September 1899 public exhibition of the plans of the finalists at San Francisco's Ferry Building attracted more than sixty thousand visitors. First prize was awarded to Émile Bénard, who had studied at the École des Beaux Arts and achieved high distinction for his buildings throughout France. Bénard never became supervising architect. His plan was modified and implemented by John Galen Howard (fourth-place winner). From 1903 to 1924 Howard designed twenty buildings that form the core of the campus (e.g., California Hall, Doe Library, Wheeler Hall).

3 The College of Commerce (presently the Walter A. Haas School of Business) established in 1898 with the aid of the Cora Jane Flood Foundation.

4 The activation of the Agassiz Professorship in Oriental Languages and Literature (a chair endowed in 1872) in 1896 and the foundation of the Department of Oriental Languages.

5 The San Francisco Art Association and the Mark Hopkins Institute of Art (presently the San Francisco Art Institute).

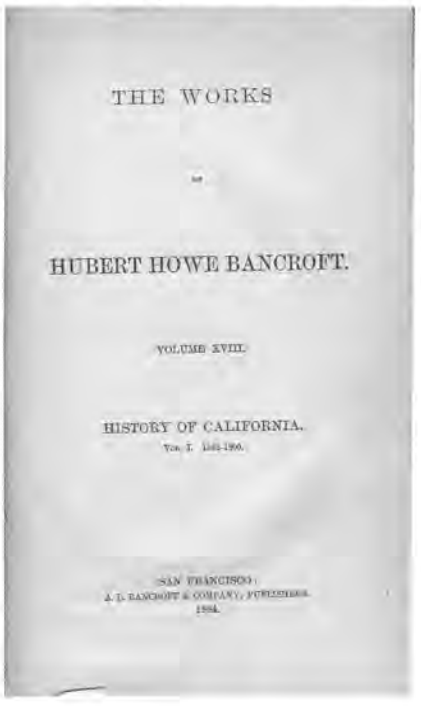
Hubert Howe Bancroft, about 1900.
The Bancroft Library (POR 12).

THE BANCROFT LIBRARY, 1900-2000

Charles B. Faulhaber

IN 1900 HUBERT HOWE BANCROFT WAS 68 YEARS OLD.[1] One of San Francisco's most successful businessmen, he could look back on almost fifty years of commercial and literary activity in California, beginning with his arrival in 1852 as a twenty-year-old salesman of a shipment of books consigned by his brother-in-law. By 1856 Bancroft had established his own bookstore in San Francisco; by 1860 he had already begun to form the collection of Californiana and western Americana that would bring him lasting fame. By 1870, with a not insignificant collection of 15,000 volumes, he had begun to contemplate the possibility of putting the library to some productive use: "On my shelves were tons of unwinnowed material for histories unwritten and sciences undeveloped. In the present shape it was of little use to me or to the world. Facts were too scattered; indeed, mingled and hidden as they were in huge masses of *débris*, the more one had of them the worse one was off."[2] Finally, in 1871, he conceived the idea of writing a history of California and the West and over the course of the next year devised a system of indexing his library "as one would index a single book" in order to make its contents available to the historian.[3] And the rest, so to speak, is history—to be more exact, Bancroft's *Works*, thirty-nine volumes of history covering Central America, Mexico, all of the states of the western United States, British Columbia, and Alaska, published between 1883 and 1890.[4]

But even before all thirty-nine volumes were published, as early as 1886-1887, Bancroft began to worry about the ultimate fate of the library. He was moved to do so by the disastrous fire of April 30, 1886, that destroyed his Market Street building and with it some 12,000 volumes of his *History* (an uninsured loss of $500,000). Since such a loss made it impossible for him to contemplate the gift of the library to some institution, he began to explore the possibility of its sale, putting its value at $250,000 initially—an average valuation of $5 a volume for its approximately 50,000 volumes.[5] Over the next twelve years Bancroft vigorously pursued such a sale; and bills were introduced in the California state senate in 1887 and 1889 and in the House of Representatives in 1892, proposing its purchase by the state of California and the U.S. government respectively.[6] In 1896 he offered it to the New York Public Library, which thought the asking price, then $300,000, too high.[7] No one was interested.


THE WORKS

OF

HUBERT HOWE BANCROFT.

VOLUME XVIII.

HISTORY OF CALIFORNIA.

SAN FRANCISCO:
A. L. BANCROFT & COMPANY, PUBLISHERS.

Bancroft kept trying. In the summer of 1898 he turned his efforts toward the University of California and found an ally in University Librarian Joseph C. Rowell. The latter prepared an "unofficial" valuation of the library in the form of a printed letter to

Bancroft's son-in-law, Charles O. Richards, who was evidently serving as an intermediary. Rowell's figure of $130,000, reduced to $116,100 because of duplicates of material already owned by the university, was much lower than Bancroft's. Rowell was fully aware of the danger he courted in proposing such a low valuation:

> I submit this unofficial report to you as the result of an unprejudiced attempt to arrive at the value of the Bancroft Library, in a commercial sense; and yet, if by an untoward fate the collection should be taken away from California and dissipated to the four ends of the earth, I am not sure that a century or so later some person will not be damning that fool of a librarian who valued the manuscripts at $81,000 instead of $150,000. Quien sabe![8]

Nevertheless, even that price was too rich for the university's blood, despite a vigorous letter-writing campaign orchestrated by Rowell in support of the purchase. Between December 1 and 6, 1898, he elicited enthusiastic letters of support from eleven civic leaders or professorial colleagues, including geologist Joseph LeConte, geographer George Davidson, San Francisco mayor James D. Phelan, historian and political scientist Bernard Moses, and professor of English Charles Mills Gayley, who wrote,

> I have no hesitation in saying that the acquisition of the Bancroft Library would be one of the greatest benefits, historical and literary that could accrue to the University. I sincerely trust that the opportunity may come our way, for we have, and shall have for years to come, no greater need than that of materials & sources with which to develop investigation & first-hand scholarship.[9]

Henry Morse Stephens, the first Sather Professor of History. *University Archives (UARC PIC 13:638).*

The matter lay dormant for seven years. In the interim a new century, and a new day, was dawning for the university. Benjamin Ide Wheeler had arrived from Cornell as the new president in 1899. The Phoebe Apperson Hearst architectural competition to design a master plan for the campus had received international recognition in 1900; and new buildings, designed by John Galen Howard, began to appear on campus. Off campus the history of Spanish and Mexican California was coming to be viewed, increasingly, with a nostalgia for the past that converted it in the historical imagination of the public from mere scholarly antiquarianism into a living symbol of California. The El Camino Real Association, to promote the study and preservation of the chain of California missions and the road that linked them together, had been established ca. 1900. Mary Austin's *The Land of Little Rain* (1903), with its sketches of traditional California Indian life on the eastern slopes of the Sierra Nevada, and *Isidro* (1905),

a romantic tale of old Monterey, responded to this popular mood perfectly.[10]

Wheeler's role was perhaps the most important, although indirectly so. He aggressively recruited new faculty members from the East, including his former Cornell colleague Henry Morse Stephens, professor of European history. It seems clear that the newly-arrived Stephens—he took up residence in 1902—was the key figure in moving the university's acquisition of The Bancroft Library. In his reminiscences Charles E. Chapman, a student of Stephens and compiler of one of the great catalogues of source materials for the history of the Southwest,[11] takes the latter's influence for granted: "Morse Stephens had for some time been endeavoring to persuade the University authorities to buy the great collection of printed materials and manuscripts that had formed the basis of Hubert Howe Bancroft's monumental work on Pacific Coast history."[12] We do not know when Stephens began actively to pursue the acquisition of Bancroft's library nor the arguments he used to persuade Wheeler and the regents to buy it. We do have some record of Stephens' feelings about the library (as recorded in several addresses written shortly after its acquisition). He is unstinting in his praise:

> The mass of material which he has gathered together for the history of the Pacific Coast is absolutely unique. . . . Mr. Bancroft's greatest characteristic as a collector was that he had imagination. He swept in with his dragnet all sorts of stuff—business directories, diaries, handbills, account books. He had the imagination even to see the importance of ship's logs and he took these in. He sent a man to Alaska for all the records of the early fur companies. As a result we have more of these than there are at St. Petersburg. . . . One knows not where to begin or end an enumeration. There are five thousand volumes of newspapers, many of them country newspapers at that, many of which exist alone in this collection. There is a magnificent pile of briefs in Spanish land cases; an extraordinary collection of records of the old Missions. We can trace the pious Father Serra, founder of missions, step by step on his journeys. We have also the entire records of the old Presidio in San Francisco; large masses of correspondence of old Spanish families; the actual minutes of the Vigilance Committees, which are under lock and key and not to be opened until all the participants have passed away.[13]

While acknowledging Bancroft's genius as a collector, Stephens joined the great French historian Charles V. Langlois in deploring his "machine-made" histories: "M. Langlois, and other critics, are perhaps right in pointing out that Mr. Bancroft was not a great historian, and that his endeavor to make a history by machine has not been a great success."[14] Concerning the library, however, he goes on to say that

> the reader of the Bancroft histories has therefrom a very poor idea of the wealth of the Bancroft Library. For Mr. Bancroft's staff, who drew up the histories, were not trained historians; and the real usefulness of the Library will only begin when its documents, its manuscripts, its printed books and newspapers, shall be made available to scholars all over the Pacific Coast. The State University of California understands the enormous value of the H.H. Bancroft Library. The President of the University and Regents are ready now to put the collection in order, which will be a matter of some years, and hope to print such a catalogue as will give some indication to scholars of its importance.[15]

Moreover, having the library at Berkeley was a matter of first importance for the university not only for research but also for instruction:

> A good collection of secondary books can always be purchased; but all the money in the world cannot get together in a moment a collection of books and manuscripts and newspapers which shall afford to the student examples of every type of historical source-material. All teachers of history away from the great centres of historical collections realize the impossibility of adequately training their students. They can give them books to read; they can even give them source books; they can occasionally show them some original documents; but they can practically never give them the use of such an amount of diversified material as shall illustrate the various sorts of historical material that the student of history should be able to understand.[16]

Stephens was careful to give full credit to the regents and Wheeler for their foresight in buying The Bancroft Library: "The genius of Mr. H.H. Bancroft as a collector, supplemented by the generosity of the Regents of the State University, and by the clear perception of its value by President B.I. Wheeler has made it possible at a comparatively early day in its history the foundation at Berkeley of a school of history which should in time take rank with the great schools of history in other universities and other countries; and the name of Mr. Bancroft will be perpetuated rather by his great library than by the volumes of his history."[17] Prescient. In February of 1906, just over three months after the purchase, he told the California Library Association that "all of the credit for the acquisition of the Bancroft Library belongs to the Regents of the University of California and to President Wheeler. The latter said that it ought to be done and it was done. The Regents were very appreciative of the ideas that were advanced regarding the worth of the Library."[18] Stephens carefully avoids mentioning the name of the person who advanced those ideas, but it seems clear that he was intimately involved in the purchase. In the same address he goes on to say that the regents'

> hard headed business sense saw at once the great opportunity and found a way to accomplish it. Mr. Bancroft deserves great credit also for placing the library at our disposal on the terms that he did. Mr. Bancroft has been very liberal. He has given the University of California a present of one hundred thousand dollars. More than this, for the library would bring in the open market at least half a million.[19]

Along with the support of Wheeler, that of Regent Rudolph J. Taussig was key, although the latter's motivations seem to have been mixed. The tart-tongued and somewhat cynical Chapman, who by the time he dictated his "Reminiscences" in 1924, had had a complete falling out with Frederick J. Teggart, The Bancroft Library's first curator, attributes Taussig's interest to a desire to help his friend Teggart find a suitable position.[20] The truth is undoubtedly more complicated than that, but there is little concrete evidence.

On September 15, 1905, Bancroft gave the regents a 60-day option to purchase his complete library at a price of $250,000, of which the regents would pay $150,000 over three years, while Bancroft himself would donate $100,000 to make up the difference. In the interim, Wheeler commissioned Reuben Gold Thwaites, superintendent of the Wisconsin Historical Society, to provide an independent valuation of the library, which was submitted to the regents on October 14, 1905, and printed on November 14, 1905. Thwaites begins:

> I take profound satisfaction in reporting that the collection is found to be astonishingly large and complete, easily first in its own field, and taking high rank among the famous general collections of Americana, such as exist at Harvard University, the Boston Public Library, the Library of Congress, the New York State Library, and the Wisconsin Historical Library.[21]

Thwaites' report valued the library as being worth at least $315,000, with the manuscript collection alone valued at $80,000. He sums up: "if, as I am still further informed, Mr. Bancroft now offers to donate to the University the difference between his estimate of value ($250,000), and his asking price ($150,000), I am clearly of the opinion that the Bancroft Library is a bargain which, in the interest of Pacific Coast scholarship, should be taken advantage of."[22] This was enough to convince Wheeler, who wrote to the regents on November 8, 1905, that

> I am convinced that it is the duty of the University, both as an educational institution and as an arm of the State, to purchase the Bancroft Library. I have seen enough of its rich material under the guidance of Mr. Thwaites to be sure beyond any doubt whatsoever that in acquiring that library the present Board will merit and will receive the thanks of all the coming generations of Californians.[23]

After outlining a method of paying for the library, he ends: "Upon no subject concerning which I have made recommendation to the Board is my mind clearer than it is in reference to the recommendation I hereby make, that the library should be purchased at once."[24]

Thus reassured, during a ten-day extension to the option period the regents' Finance Committee delegated to President Wheeler "the completion of the arrangements for the purchase, transfer, and present care of the Bancroft Library"[25] and, after Bancroft assured the regents that the History Company never had "any interest or ownership in the Bancroft Library,"[26] the agreement between Bancroft and the regents was finalized November 25, 1905.[27] A day later, Bancroft wrote to Stephens thanking him for his help in the sale.[28] The same day the agreement was consummated, Acting Secretary of the Regents Victor Henderson arranged for $200,000 insurance to be carried on the library, which was reduced to $100,000 on July 13, 1906, and then to $50,000 on October 15, 1906, evidently because the premiums were too high.[29] On December 7, 1905, Henderson sent Bancroft two copies of the corrected agreement for his signature.[30]

A press release was immediately sent out to papers across the country. Thwaites saw it in the *New York Times* and immediately (December 8, 1905) wrote to Wheeler congratulating him on the purchase as well as on his appointment of Frederick J. Teggart "as custodian of the collection during the stay of the Bancroft library in the city and during its removal. He has a thorough knowledge of the collection and is in strong sympathy with the project of getting it to Berkeley."[31]

Early on it had become obvious that someone would have to take charge of the day-to-day operations of the library. Stephens had neither the time nor the qualifications. Sometime in the fall of 1905 Wheeler reached an understanding with the thirty-five-year-old Frederick J. Teggart (1870-1946), at the time librarian of the Mechanics Institute in San Francisco, probably through the mediation of Regent Taussig.[32] The appointment was purely honorary, however; Teggart received no salary, although he was soon appointed as a lecturer for University of California Extension, which was directed by Stephens. On January 10, 1906, Wheeler invited Teggart to speak at the first University Meeting of the spring term for about

ten minutes "about the Bancroft Library, or anything else that interests you."[33]

Since Stephens and Teggart played such key roles in the university's acquisition of The Bancroft Library and its early history on the Berkeley campus, their contemporaries' perceptions of them may be of interest. Stephens was one of the campus's great figures from his arrival until his death in 1919 (while returning from the funeral of Phoebe Apperson Hearst). Jacob N. Bowman (1875-1968), who was appointed as professor of medieval history in the fall of 1906, just as Bancroft was opening its doors for readers, and who would go on to prepare a detailed and still heavily used set of indexes to Bancroft's "land cases," describes Stephens thus:

Frederick J. Teggart, ca. 1900. *University Archives (UARC PIC 13:3892).*

> He was slightly under average height, slightly over weight, wore a full beard and mustache, had a very pleasant voice and a very pleasant and engaging manner. Paul, his valet [how times have changed!], said that he had to tell Stephens when to buy a new suit or pair of shoes. . . . Stephens' marked ability seems to have been his great ability to make friends—his affability, friendliness, and conversational interests, readiness to talk informally or formally to individuals and groups. He was called on very frequently for addresses and lectures and he had the ability to adjust his talks to the audience. Once he told me that he had been asked to address the Berkeley Elks Club and he did so by reading to them the poems of Kipling.[34]
>
> [Stephens] himself went out of his way to court popularity with the students; on walking down the campus he would stop frequently to greet various students whom he knew with a few pertinent remarks. His standing as a scholar, speaker, head of a department, and widely and popularily [sic] known on and off the campus, made such greetings very appealing to the students. . . . Stephens' populari[t]y was not only with the individual students but also with them collectively. At their request he gave "pep" talks at their game rallies in the Greek Theater, standing on a raised platform with a student holding his hand for steadiness on the narrow platform. These talks were well received and illustrated his ability to adapt his remarks to his hearers. All this popularity with the students individually and collectively resulted in hi[s] name being given to the student building, Stephens Hall.[35]

Chapman was even more effusive. Stephens

> was a marvel of marvels, but I must confess that it is easier to describe a villain [i.e., F. J. Teggart] than it is a good man. Morse Stephens was utterly unselfish so far as he himself was concerned. He had no ambition to win high place or accumulate money. He lived only for his friends. He once remarked that his only estate was his friendships: "My friends will pay my debts and bury me when I die."[36]

Bowman mentions that when he came down to Berkeley in the summer of 1906 to discuss his appointment in the Department of History, Wheeler took him to the Faculty Club and arranged for him to be a guest of the university. "He stated that I was the second guest of the University, that the first was [Reuben Gold] Thwaites who had just completed his survey and inventory of the newly purchased Bancroft Library from the owner."[37] During that same visit he met with Stephens, who also had a room in the club ("an upper room on the south side above the pool room"),[38] which, in fact, he had had built at his own expense. He goes on to describe the arrangements of the history department and administrative offices in California Hall and notes that The Bancroft Library was housed in the attic and that "at the time of my arrival it was in good order and arrangement and was in actual use, under the direction of F. J. Teggart and an assistant."[39] Of Teggart Bowman says:

> F. J. Teggart was a Stanford man and had been long the secretary or librarian of the Mechanics Institute in S.F. before becoming the director of the Bancroft Library when it was acquired, and as director he attended the "fortnightlies" [see below]. He was tall, well built, smooth shaven and in some regards very Irish; he had his likes and dislikes and for some things had very decided views based on emotions, as illustrated by his remark about Thwaites who had just completed the survey and inventory of the Bancroft collection—that Thwaites had no ab[i]lity for the job which was poorly done. He was scholarly and critical in his collection of data for any subject he was interested in, but with a slightly narrow view of the whole of which an item was a part. Returning to Teggart—he attended the "fortnightlies" as director of the Bancroft but later became a member of the department. After I left in 1912 it seems that he had his troubles with Stephens and the department. Just what was the question at issue I never learned even though [Bancroft Director Herbert E.] Bolton told me many of the episodes in the matter.[40]

Chapman's opinion of Teggart was thoroughly negative, undoubtedly colored by a later falling-out:

> I remember the first time I saw him. I was working away at a table in the Bancroft Library when in came a stout, red-faced individual whom I took to be some tradesman or minor employe [sic]. I was a little surprised when I found that he was the distinguished Curator. I soon learned that he did indeed have intellect, even if he did have a red face that was redder even than my own. . . . Teggart was born in the north of Ireland. As Irish as anyone could be, he was nevertheless a rabid Protestant. According to him his family was a very famous one in Ireland, producing a number of Anglican bishops and other personages of high estate.
>
> Teggart himself went to the University of Dublin, where he received the A.B. degree. For some reason that is not quite clear, he then came to the United States, and has never gone back. He once told me that he was sent to California for his health. Personally I incline to the view that he was a "remittance man",—that is to say, a "black sheep" who was given an allowance provided he should leave home and stay away. Certainly, Teggart always had the habits of a first-class remittance man, including a fondness for conviviality that was far greater than his capacity to "carry the load." He told me many details of his early experiences in California, but they are hardly worth

> recording, as they were probably all lies. But there was one quality he possessed that helped him to get ahead; he was a wonderful dinner-companion, being a most attractive conversationalist on such occasions, especially if there were a glass of beer or two to serve as an open sesame. Perhaps on this account he eventually got a place as Assistant Librarian at Stanford University. Right away he began plotting to get the Librarian's job. The matter came to a head, and President Jordan "fired" Teggart, later saying that he hoped he would never come on the campus again. Through his friendship with Mr. Rudolph Taussig, a wealthy man who was also a trustee of the Mechanics Mercantile Library of San Francisco, Teggart now became Librarian at the Mechanics Mercantile Library. Now for a time he was at the head of something, but apparently could not stand the prosperity. He got the finances of that institution in disorder, and was dropped.
>
> Taussig, who was also Regent of the University of California, continued to be Teggart's friend, and now found a fresh opportunity to help him. Morse Stephens had for some time been endeavoring to persuade the University authorities to buy the great collection of printed materials and manuscripts that had formed the basis of Hubert Howe Bancroft's monumental work on Pacific Coast history. Taussig now came to Morse Stephens, and offered to help him put the thing over with the Regents if Stephens would appoint Teggart as Curator. Willing to do anything to get the collection, Stephens readily consented. The collection was bought and Teggart installed as Curator.[41]

The person who was actually responsible for the day-to-day running of the library from its inception until 1912 was the San Francisco author, printer, and artist Porter Garnett (1871-1951). Of him Chapman says: "Teggart was insanely jealous of his perfectly harmless Assistant Curator, Porter Garnett. There was no reason why he should have feared Garnett, as the gentle Porter never showed the slightest inclination to do any work."[42]

Almost immediately after the announcement that the university had bought Bancroft's library, scholars began to inquire as to its availability for research. Thus at the end of January 1906, University Librarian Rowell received a letter from a Samuel E. Parker of Shelter Island, New York, requesting permission to examine manuscripts relating to Spanish missions between 1769 and 1783.[43] Before it could be opened to scholars, however, the library first had to be brought to Berkeley. Bancroft had generously given the university permission to use the Valencia Street building in San Francisco for nine months from the date of purchase in order to allow time to make its new quarters in Berkeley available.[44] In the interim, the third floor of California Hall, the campus's newest building, had to be made ready to serve as the library's first home on the Berkeley campus.[45] At the time, the campus itself was composed of just six major (fifteen total) buildings: North and South Halls, the Bacon Library and Art Gallery (later renamed Bacon Hall), California Hall, Harmon Gymnasium, and Hearst Hall (the women's gymnasium), along with Stiles Hall, just off campus, the Faculty Club, and a few smaller wooden frame buildings, some still used as faculty housing.[46] In March the regents' Committee on Library and Museum reviewed the arrangements and consulted with Stephens on shelving. The latter replied that it would be preferable to build wooden shelves for the manuscripts rather than wait for steel shelves from the East.[47] University staff began to plan the move:

> The transfer of the Library cannot be made too soon, but the greatest pains should be taken to have the books thoroughly cleaned before they are brought over. As soon as the book cases are in place in (south end) the process of moving should begin. . . . For the actual work of removal it is recommended that covered furniture vans be secured by contract. A large number of rough wooden boxes—22 x 1 x 1—will be required.[48]

Undoubtedly the timetable for moving the collection was accelerated by the San Francisco earthquake of April 18, 1906, and the subsequent fire that ravaged the city. Fortunately, The Bancroft Library lay outside the fire zone; in fact, it was the only major library in San Francisco that was not destroyed by the fire.[49] On May 2, 1906, Wheeler formally placed the removal of the library in Teggart's hands: "This will certify that Mr. F. J. Teggart, Librarian of the Mechanics Institute Library of San Francisco, is hereby appointed by me as custodian of the Bancroft Library now located at Valencia and Army Streets, San Francisco, and has full charge of its removal to the University of California."[50] Bekins Van won the bid to move the library, and the process was well under way on May 9 when Wheeler wrote to Bancroft that "three great vans full consisting of over three tons have already arrived. . . . but it occupies five hours for a wagon to come from Valencia Street to Berkeley."[51] On May 10 Teggart reported "that the moving of the Bancroft Library is proceeding as satisfactorily as can be expected under present circumstances. It has been necessary to have a man at the library to supervise the packing & one at California Hall to arrange the books on the shelves in addition to Ellsworth who travels with the wagon."[52] By May 14, Acting Secretary of the Regents Victor Henderson was writing to the Superintendent of Buildings and Grounds for "a desk that we could put in the Bancroft Library for temporary use, together with a desk chair, and a few straight chairs."[53] After the transfer was finished (by the end of May), Rowell decided that the University Library's collection of Californiana should be incorporated into the Bancroft Library.[54] During the summer of 1906 work continued on California Hall. Stephens wrote to Henderson (July 23, 1906) with drawings and specifications for the manuscript cases: "I do not know where the money is to come from . . . but we must have a proper case for the manuscripts before we can let students use the library."[55] A month later Henderson reported to Regent Taussig that fifteen metal bookcases for the library (each nine feet long with seven shelves) cost $1820.[56]

Joseph Cummings Rowell, University Librarian, 1875-1919. *University Archives (UARC PIC 13:3482).*

Just as the work of preparing the library's physical space went forward, so too were measures taken for its organization and administration. On August 22, 1906, Henderson wrote to Stephens that at the regents' meeting the previous day "a commission consisting of yourself, Librarian Rowell, and Mr. R. J. Taussig as chairman, was requested to report to the Board plans for the future organization, regulation, and maintenance of the Bancroft Library."[57] Less than a month later (September 20, 1906) the commission reported back to the board with a detailed plan, later reprinted in toto in the *University of California Chronicle*,

with the imprimatur of Wheeler, who had also had himself appointed to the commission. The report is an extraordinary document. Perhaps its most interesting aspect was the recommendation, presumably at the instigation of Stephens, to create "an Academy of Pacific Coast History, the council of which should maintain the collection, should report annually to the Regents as to its growth, and should make recommendations as to its regulation and management."[58]

The commission also considered the relationship of Bancroft to the University Library, suggesting that, "as the work of cataloguing the Bancroft collection proceeds, copies of the catalogue cards should be incorporated in the catalogue of the University Library."[59] More importantly, the commission "proposed at once to organize the Council of the Academy of Pacific Coast History to consist of persons sufficiently interested in the building up of a great library and school of research to be willing to subscribe $500 a year each for a period, not to exceed three years."[60] The commission estimated that Bancroft would need at least $10,000 for operating expenses but recoiled at the thought that the regents should provide that sum: "It is neither possible nor desirable that the regents of the State University should appropriate so large a sum."[61] The regents in fact destined only $75 per month for the maintenance of the library—$900 per year—of which $60 per month was for the salary of Assistant Custodian Porter Garnett, while $15 per month covered janitorial service and cleaning.[62] No funds were appropriated at all for new acquisitions. Garnett was to be on duty from 9:00 a.m. to noon and from 1:00 p.m. until 5:00 p.m. every weekday; and the library was to be open to students, readers, and visitors during those hours. Graduate students were allowed to use the library with the permission of University Librarian Joseph C. Rowell and the secretary of the commission then in charge of the library, Stephens.

The academy's council boasted fifteen members originally, all leading figures in San Francisco society and business, including William B. Bourn, president of the Spring Valley Water Company, William H. Crocker, Phoebe Apperson Hearst, James K. Moffitt, Sigmund Stern, and Benjamin Ide Wheeler, ex officio. Stephens served as secretary. During the first two years of the council's operations, it raised over $8300 for Bancroft and projected an ambitious program to publish seven volumes of materials from the collections, including the official account of the Portolá expedition of 1769-70 and Portolá's own diary (in volume 1), the first volume of the Archives of California, covering the years 1768-69 (volume 5), and the letters of Father Junípero Serra (volume 7). Of these volumes, however, only the first four were ever issued. A year's membership in the Academy cost $10; a life membership, $100. Stephens and University Librarian Joseph C. Rowell were authorized to issue "general readers' tickets to persons who have given evidence of their desire to read regularly in the Bancroft Library, and of their possession of qualifications entitling them to this privilege."[63] From November 3, 1906, to February 5, 1908, nineteen persons were admitted as general readers. The first was Mrs. Charles A. Kofoid (November 3, 1906), whose husband was professor of zoology; the third was Professor Jacob Bowman (November 7, 1906); the fifth was Professor Alfred L. Kroeber (November 14, 1906).[64]

Perhaps more importantly, student readers were also admitted by permission of Rowell and Stephens. In one of his early descriptions of the importance and use of the collection, Stephens had pointed out its pedagogical value: "Historical research must be regarded as the prime result encouraged by the throwing open to scholars of the H.H. Bancroft Library: but not less important is its acquisition to the cause of historical teaching."[65]

Stephens ran Bancroft, and the Department of History, from his rooms in the Faculty Club:

> Stephens held "fortnightly meetings" [of the Department of History] in his room at the Faculty Club. . . . In the room was part of his library and the meeting room for visitors. In it were a number of chairs and the big black rocker in need of repair so that no one ever used it except Stephens who knew the method of balancing himself in it. On the table was the usual box of 100 Owl cigars, open to all who would try one but never a second. Stephens said he liked them and refused to accept cigars from anyone as he did not want to spoil his taste for Owls, which he bought in larger quantitie[s]. At the "fortnightlies" were Stephens, McCormac, Teggart as director of the Bancroft, Don Smith and myself.[66]

During its first years, Bancroft was financed primarily from the largesse of its council members, although such funding was precarious. On August 3, 1908, Secretary of the Regents Henderson wrote to Stephens to inform him that the Academy of Pacific Coast History account held only $843.75 as of June 30, 1908, and that the payroll ran $355 per month. He inquired anxiously, "Are you expecting the receipt of further funds during August or September?"[67] Gradually, however, the university began to accept the obligation of providing support for Bancroft. Just over a month later Henderson reported to Stephens that Wheeler had directed that the university pay Bancroft's monthly telephone bill of $7.50.[68]

In the meantime the Bancroft family continued to keep a proprietary eye on the library. Bancroft's sons commissioned a portrait bust of their father from New York sculptor Johannes S. Gelert (1852-1923). It was duly delivered in July of 1908 and the Bancroft brothers reimbursed the university for all shipping charges.[69]

The Bancroft Library, just inside the main entrance of the newly opened Doe Library, 1911. *University Archives (UARC PIC 9C:2).*

The Bancroft Library, Doe Library Annex, 1950. Bust of Hubert Howe Bancroft, gift of his sons in 1908, at left. *University Archives (UARC PIC 9C:6a).*

Albert H. Allen, compiler of the "University Record" in the *University of California Chronicle*, the university's official journal, mentions The Bancroft Library frequently in the next few years. Thus in 1907 he records the gift from the government of Mexico of "a rich collection of volumes bearing upon the history of our sister Republic" and notes the discovery of the papers of the last Spanish governor of Louisiana, Baron Carondelet.[70] In 1908 he lists the names of the graduate students who were engaged in "classifying and segregating the manuscripts, printed books and newspapers, and in making calendars, or analyses of the contents of important manuscript collections" as well as the gift of 117 volumes of Oakland newspapers from the president of the Oakland Enquirer Publishing Co.[71] Similarly, the annual or biennial reports of Wheeler to the governor on the state of the university usually devoted a section to the Academy of Pacific Coast History and Bancroft. The report from F. J. Teggart for the 1909-10 academic year is typical. It lists the staff (Teggart as honorary curator, Porter Garnett as assistant curator, and three student assistants who worked 75 hours per month); the condition of the library with respect primarily to processing, cataloguing, and conservation of the collections; additions to the collections, generally in the form of gifts, but also transcriptions of original documents such as those Stephens had prepared in Spain at the Archivo General de las Indias in Seville, and transfers from the University Library; use of the library, with a list of significant individual readers, of faculty members, of university departments whose students used the library, and of doctoral dissertations prepared there (six during 1909-10, including one done at Harvard and a second at Nebraska); publications, essentially the volumes of the academy's publications.[72]

The acquisition of The Bancroft Library was a significant step for the university. At a stroke it converted its library into one of the country's major research collections and the tiny town on the east side of San Francisco Bay (Berkeley had only 13,214 inhabitants in

1900)[73] and the small institution at the edge of the continent (2,839 students on the Berkeley campus in 1906)[74] into major centers of scholarly research.

The comparison of The Bancroft Library at the turn of the twentieth century and the turn of the twenty-first is instructive. There are both similarities and differences. The latter are perhaps the more obvious. The scale of everything is larger, by at least an order of magnitude. The initial Bancroft collection of 50,000 volumes has grown to over 400,000 printed books, 35,000 linear feet of manuscript and archival collections, some three million pictorial items, and 21,000 maps. The budget has increased from $11,000 per year to $5.34 million.[75] The two staff members and three students who tackled the Herculean job of putting the library in order in 1906 have grown to eighty career and temporary (grant-supported) staff members aided by a corps of forty student assistants. The growth in the collections and staff has been accompanied by a growth in the size of the facilities housing The Bancroft Library, from the attic of California Hall in 1906 to Doe Library in 1911 to the Doe Library Annex in 1950, supplemented almost from the beginning with off-site storage, initially under the bleachers at Edwards Field on campus, later in the old Ford assembly plant in Richmond, and, since 1982, in the Northern Regional Library Facility in Richmond. Today approximately two-thirds of the collection is stored off campus.

The scope of The Bancroft Library's collections has increased, dramatically. In 1963 the University Archives came to Bancroft; in 1965, the Regional Oral History Office (ROHO); in 1970 the University Library's Special Collections and the Mark Twain Papers and Project; finally, in 1973 the History of Science and Technology Program was created.[76] It can be argued that the University Archives, ROHO, and the History of Science and Technology Program are logical extensions of Bancroft's original mission of documenting the history of California and the American West; but the addition of the Special Collections fundamentally changed Bancroft from a specialized subject library into one of the great primary source libraries in the country, with superb collections ranging from Greco-Roman antiquity—the Tebtunis Papyri—to medieval manuscripts, incunabula, rare books and fine printing of the sixteenth through twentieth centuries, and modern literary manuscripts.

The similarities between 1906 and 2000 are just as striking if not so obvious. In 1906 the regents were only willing to fund 10 percent of Bancroft's budget, placing the burden of funding the rest into the hands of private supporters in the form of the Academy of Pacific Coast History. The regents' share of Bancroft's budget is larger today, just over 32 percent; but Bancroft still depends on private giving in the form of endowment income and gifts for almost 46 percent of its budget.[77] Just as in 1906 the current staff is inadequate to do the job at hand, particularly with regard to processing and making available the large backlog—in excess of 10,000 linear feet—of unarranged manuscript and archival collections. In 1906 the attic of California Hall was less than ideal storage space;[78] and the Doe Library quarters were not much better.[79] Today Bancroft occupies most of the Doe Library Annex, yet the space is still inadequate, even taking into account off-site storage. It is far too small to serve the needs of Bancroft's patrons and staff; even worse, it is at serious risk in the event of a major earthquake.

These problems seem to be endemic to libraries. Where one can report success rivaling the accomplishments of Hubert Howe Bancroft himself, however, is in the continued acquisition of significant materials for the study of western history and the use of technology to facilitate easier access to those materials. Just as Bancroft documented the California of his day, with the reminiscences of figures like General Mariano Vallejo, so too do Bancroft's curators today document contemporary California, with the archives of organizations like the Sierra Club or political figures like Governor Edmund G. "Pat" Brown, and the oral histories of winemen (and women), educators, and mining engineers.

In terms of access to those collections, perhaps the salient point is that Bancroft, Stephens, and their modern epigones have had precisely the same purpose and have followed exactly the same strategy: In order to make The Bancroft Library better known and more easily accessible, they and we have turned to the latest information technology. In Bancroft's case it was the steam-powered printing press combined with impressive Yankee entrepreneurship that scattered thousands of copies of what is in essence the catalogue raisonée of his library the length and breadth of California and the West in the form of Bancroft's *Works*. In so doing it set in cold type the canonical interpretation of the history of California, an interpretation which even today casts its spell, especially among the lay public. When the library came to Berkeley, Stephens, Teggart, and Rowell began to document it with the latest in information technology—the library card file. In The Bancroft Library at the turn of the twenty-first century we have similarly begun systematically to take advantage of the latest advances in information technology to make our and his collections better known and accessible from any point on the globe at any time of day or night. The first step in this process was the retrospective conversion of the card file, the lineal descendant of the catalog prepared by Stephens and Teggart, into an online catalog. The second step was the conversion of the finding aids for archival and manuscript collections into machine-readable form using the Encoded Archival Description format originally developed at Berkeley and now adopted as a national standard by the Library of Congress. The third step is the digitization of the collections themselves and their dissemination over the internet, which corresponds precisely to the original publication program of the Academy of Pacific Coast History.[80]

In all of these efforts of collecting and disseminating, we continue to carry out the work that Bancroft started, giving back to the general public, as well as to professional scholars, the wealth of information originally gathered from that public and interpreted by those scholars.

And one more similarity: the Bancroft family continues to keep a proprietary eye on the library. In 1999 the family of Paul Bancroft III, Hubert Howe Bancroft's great-grandson, donated Bancroft's original roll-top desk to the library; and it now stands proudly in the director's office, right next to the bookshelf containing Bancroft's *Works*.

ENDNOTES

1 This summary of Bancroft's life is drawn from John Walton Caughey, *Hubert Howe Bancroft. Historian of the West* (Berkeley and Los Angeles: University of California Press, 1946).

2 Hubert Howe Bancroft, *Literary Industries*. Vol. 39 of *The Works of Hubert Howe Bancroft* (San Francisco: The History Company, 1890), 231.

3 [Hubert Howe Bancroft], *Evolution of a Library* (New York: The Bancroft Company of New York, after 1898), 15.

4 Hubert Howe Bancroft, *Works*, 39 vols. (San Francisco: The History Company, 1883-1890).

5 Cf. [Henry L. Oak?], *Analysis and Valuation of the Bancroft Library*. (N.d., n.p. [San Francisco? 1886-87?]).

6 The Bancroft Library, *Building Bancroft: The Evolution of a Library*. A Checklist of the Exhibition Documenting the History of The Bancroft Library. [Berkeley: The Bancroft Library, 1995], 13-14. Exhibition curated by Bonnie Hardwick.

7 The Bancroft Library, *Building Bancroft*, 14. Several years later Samuel P. Avery remembered the discussions with bemusement: "I regret that I cannot give you anything definite regarding value—or what was the 'asking' price of the Bancroft library. The literature issued in connection of trying to sell that library, would make a small one! As one of the trustees of our N. Y. Public library, I was favored & all the board with letters, written and type written, pamphlets, volumes, 'interviews' until the matter became a night mare. The price varied according to time or the agent—I really forget the details (sorry I did not keep some of the matter for your study) but I think the prices never got as low as 100,000 dollars—at any rate the figures loomed so high in the beginning that the proposition never was seriously considered by our board, or other institutions which we approached on the subject." S. P. Avery to J. C. Rowell, July 23, 1898. Bancroft Library records, CU-12.1, box 1:8, University Archives, University of California, Berkeley.

8 Joseph C. Rowell to Charles O. Richards, September 19, 1898. Bancroft Library records, CU-12.1, box 2:28, 2.

9 Charles Mills Gayley to J. C. Rowell, MS copy of undated letter (ca. December 1, 1898). Bancroft Library records, CU-12.1, box 1:2.

10 Mary Austin, *The Land of Little Rain* (Boston and New York: Houghton Mifflin, 1903); *Isidro* (Boston and New York: Houghton Mifflin, 1905).

11 Charles E. Chapman, *Catalogue of Materials in the Archivo General de Indias for the History of the Pacific Coast and the American Southwest* (Berkeley: University of California Press, 1919).

12 Charles E. Chapman, "Reminiscences," 1924. Charles E. Chapman Papers, BANC MSS 83/153c, box 1, The Bancroft Library.

13 Henry Morse Stephens, "The Bancroft Library. Remarks by Prof. H. Morse Stephens Before the California Library Association. Feb. 27, 1906." Typescript. Henry M. Stephens Papers, BANC MSS C-B 926, carton 2, folder: "Address before the California Library Association: The Bancroft Library," 2-3. The Bancroft Library.

14 Henry Morse Stephens, "The H.H. Bancroft Library." Typescript, n.d. Henry M. Stephens Papers, BANC MSS C-B 926, carton 1, folder: "Academy of Pacific Coast History," 3. The Bancroft Library.

15 Ibid., 5.

16 Ibid., 2.

17 Ibid., 6.

18 Stephens, "The Bancroft Library. Remarks," 1. Stephens goes out of his way to praise Wheeler's initiative and the regents' response: "When the President of the state University brought before them [the regents] the proposition that the State University should own the unique collection of sources of Spanish-American, Californian and Alaskan history that had been collected as the life-work of years by Mr. H.H. Bancroft, the Regents rose to the occasion...." "The H.H. Bancroft Library," Henry M. Stephens Papers, BANC MSS C-B 926, carton 1, folder: "Academy of Pacific Coast History."

19 Stephens, "The Bancroft Library. Remarks," 1.

20 Chapman, "Reminiscences," 13-14.

21 Reuben Gold Thwaites, *The Bancroft Library. A Report Submitted to the President and Regents of the University of California upon the Bancroft Library.* Berkeley, November 14, 1905, 2. Reprinted in *University [of California] Chronicle*, 8 (1905), 120-43.

22 Ibid., 16-17.

23 Benjamin Ide Wheeler to the Board of Regents, November 8, 1905. Regents' records, CU-1, box 63:12, University Archives, University of California, Berkeley.

24 Ibid.

25 Victor H. Henderson to A. W. Foster, November 17, 1905. Regents' records, CU-1, box 37:22.

26 Hubert Howe Bancroft to Charles Snook, Attorney for the Regents, November 25, 1905. Regents' records, CU-1, box 37:22.

27 The Bancroft Library, *Building Bancroft*, 17.

28 Ibid., 18.

29 Union Assurance Society. Statement for $200,000 in insurance to cover The Bancroft Library, November 25, 1905; Victor H. Henderson to Mason-McDuffie Co., July 13, 1906; Henderson to Mason-McDuffie Co., October 15, 1906. Regents' records, CU-1, box 63:12.

30 Victor H. Henderson to H. H. Bancroft, December 7, 1905. Regents' records, CU-1, box 37:22.

31 Reuben Gold Thwaites to Benjamin Ide Wheeler, December 8, 1905. President's records, CU-5, box 36:65. University Archives, University of California, Berkeley.

32 Chapman, "Reminiscences," 13-14.

33 Benjamin Ide Wheeler to F. J. Teggart, January 10, 1906. President's records, CU-5, box 36:58.

34 J. N. [Jacob Neibert] Bowman. "Reminiscences of the University of California, 1906-1912." Typescript. BANC MSS C-D 5195, 9-10. The Bancroft Library.

35 Ibid., 11, 12.

36 Chapman, "Reminiscences."

37 Bowman, "Reminiscences," 2.

38 Ibid.

39 Ibid., 5.

40 Ibid., 15.

41 Chapman, "Reminiscences."

42 Ibid.

43 Samuel E. Parker to J. C. Rowell, January 30, 1906. Bancroft Library records, CU-12.1, box 2:33.

44 Hubert Howe Bancroft to Regents, November 28, 1905. Regents' records, CU-1, box 37:22.

45 California Hall was originally "to accommodate all the regular administrative officers, the University Press, and the Extension Division, and to furnish several faculty offices and seminar rooms, several large lecture halls, a room for meetings of the faculty, a paleontology storeroom, and space for a botany museum" (Caughey, *Hubert Howe Bancroft*, 392).

46 Bowman, "Reminiscences," 28-30. (The other buildings were: Civil Engineering, Mechanics, Chemistry, Conservatory, Observatory, Agriculture, Botany, East, Philosophy.)

47 Regents of the University of California. Committee on Library and Museum. Minutes of the meeting of March 7, 1906. Regents' records, CU-1, box 63:13. Henry Morse Stephens to V. H. Henderson, March 14, 1906. Regents' records, CU-1, box 37:22.

48 "Suggestions Relative to the Housing of The Bancroft Library," [undated (but ca. January-March 1906) and unsigned memo giving recommendations for removal and housing of the Bancroft Library in California Hall]. Regents' records, CU-1, box 63:12.

49 Caughey, *Hubert Howe Bancroft*, 393.

50 Benjamin Ide Wheeler "To Whom It May Concern," May 2, 1906. President's records, CU-5, box 36:58.

51 The Bancroft Library, *Building Bancroft*, 18.

52 On July 10, 1906 Teggart informed Wheeler that the removal was finished and praised Ellsworth for his part in the process: "The service rendered by Mr F. A. Ellsworth during the transfer was of so exceptional a kind and was characterized by so much devotion that I would feel gratified if you would send him a note expressing approval of his work. The hardship of travelling over inside the closed van with each load was added to by the condition of the streets in San Francisco. In addition to this it was necessary on one occasion for Mr Ellsworth to remain in the van all night, on another occasion the driver and his helper having been arrested Mr Ellsworth brought the load to Berkeley alone." Frederick J. Teggart to B. I. Wheeler, July 10, 1906. President's records, CU-5, box 36:58.

53 Victor H. Henderson to E. A. Hugill, May 14, 1906. Regents' records, CU-1, box 37:22.

54 Joseph C. Rowell to H. M. Stephens, June 25, 1906. Bancroft Library records, CU-12.1, box 2:48.

55 Henry Morse Stephens to V. H. Henderson, July 23, 1906. Regents' records, CU-1, box 37:22.

56 Victor H. Henderson to R. J. Taussig, August 27, 1906. Regents' records, CU-1, box 37:22.

57 Victor H. Henderson to H. M. Stephens, August 22, 1906. Regents' records, CU-1, box 37:22.

58 Benjamin Ide Wheeler, Rudolph Taussig, Joseph C. Rowell, and H. Morse Stephens, "Report of the Commission on the Organization, Maintenance, and Regulation of the Bancroft Library," *University of California Chronicle,* 9 (1907), 48-53.

59 Ibid., 49.

60 Ibid., 50.

61 Ibid.

62 Regents of the University of California. Committee on Library and Museum. Minutes of the meeting of June 6, 1906. Regents' records, CU-1, box 63:13.

63 Wheeler et al., "Report," 51.

64 "General Reader's Tickets—Bancroft Library." Henry M. Stephens Papers, carton 1, folder: "Academy of Pacific Coast History." [Covers period from November 3, 1906 to February 5, 1908.]

65 Stephens, "H. H. Bancroft Library," 4.

66 Bowman, "Reminiscences," 7.

67 Victor H. Henderson to H. M. Stephens, August 3, 1908. Regents' records, CU-1, box 47:31.

68 Victor H. Henderson to H. M. Stephens, September 28, 1908. Regents' records, CU-1, box 47:31.

69 Paul Bancroft to V. H. Henderson, July 15, 1908; Henderson to Paul Bancroft, August 3, 1908; Philip Bancroft to Henderson, August 14, 1908; Henderson to Philip Bancroft, August 19, 1908. Regents' records, CU-1, box 63:12.

70 Albert H. Allen, "University Record," *University of California Chronicle*, 9 (1907), 66-89, 180-96, 262-73, 360-85 ("Gifts to the University: Mexican Documents," 71-73; "Registration Statistics," 78-79; "The Carondelet Papers," 372-73).

71 Albert H. Allen, "University Record," *University of California Chronicle,* 10 (1908), 70-85, 195-207, 347-60, 493-505 ("Work in the Bancroft Collection," 78; "Files added to the Bancroft Collection," 352).

72 Frederick J. Teggart, "Academy of Pacific Coast History (Hubert Howe Bancroft Collection)" Berkeley, 1910. Reprinted from the *President's Biennial Report to the Governor of California*, 104-110.

73 Bowman, "Reminiscences," 26.

74 Allen, "University Record," 9 (1907), 78.

75 The Bancroft Library, "Annual Report 1998-1999," 4.

76 The Bancroft Library, *Building Bancroft*, 25, 27-29.

77 The Bancroft Library, "Annual Report 1998-1999," 4.

78 Associate University Librarian [Harold L.] Leupp later recalled that 'in those days you could have poached an egg on the skylight which formed part of the attic floor. Valuable newspaper files, in bundles, remained exposed to that intense heat, because the Bancroft Library had no budget, and no other funds with which to operate" (The Bancroft Library, *Building Bancroft*, 21).

79 "The new Director, George Hammond, found it in 1946 'wedged under the eaves in cramped quarters which not only provided improper housing for the Library's fine and rare materials, but hampered scholars in their research because of lack of facilities'" (The Bancroft Library, *Building Bancroft*, 22).

80 See, e.g., the California Heritage Digital Image Finding Aids in the Online Archive of California (URL: http://www.oac.cdlib.org/dynaweb/ead/calher), with, among much else, the complete digitized facsimiles of the Patrick Breen diary of the Donner Party (BANC MSS C-E 176) and the Robert B. Honeyman, Jr. Collection of Early Californian and Western American Pictorial Material (BANC PIC 1963.002:0001-1886).

A MUSEUM PREHISTORY

PHOEBE HEARST AND THE FOUNDING OF THE MUSEUM OF ANTHROPOLOGY, 1891–1901

Ira Jacknis

DURING A PERIOD OF FIN-DE-SIÈCLE, it is natural to look back to events a hundred years ago. At the University of California those were momentous times for the discipline of anthropology. On September 7, 1901, a group of friends met as an advisory council at the Pleasanton hacienda of Phoebe Apperson Hearst to discuss the founding of a department and museum of anthropology. In addition to Mrs. Hearst, those present included the university president, Benjamin Ide Wheeler, and three anthropologists: Frederic Ward Putnam, professor of anthropology at Harvard and director of its Peabody Museum, and two of his protégées, Zelia Nuttall and Alice Fletcher. In the midst of their discussions, the group learned the upsetting news that William McKinley had been shot the day before while attending the Pan-American Exposition in Buffalo. The president of the United States lingered throughout their meeting, dying on September 14. At its meeting of September 10, the university regents voted to establish the first anthropology department and museum west of Chicago, gratefully accepting the substantial collections and funds donated by Regent Hearst. Just as the presidency of Theodore Roosevelt marked a new era in the country, it was also a new period for American anthropology and for the University of California. This essay traces the dense sequence of interactions leading up to these new beginnings.[1]

The Making of an Anthropological Philanthropist

What had brought Mrs. Hearst to this moment? Education—from kindergarten to graduate research—was at the root of the many philanthropies supported by Phoebe Apperson Hearst (1842-1919). This interest undoubtedly stemmed from her youthful occupation as a school teacher in rural Missouri. Born to a prosperous farming family, Phoebe Apperson herself had a modest education—attending the local one-room school and another year in a nearby church-operated seminary. She began teaching at the age of seventeen, but gave it up in 1862 upon her marriage to forty-two-year-old George Hearst, a mining entrepreneur who had made his fortune in California and Nevada.[2] She moved with her husband to San Francisco, where her only child, William Randolph Hearst, was born the following year.

As the family fortune expanded from mining to real estate, her new wealth allowed Phoebe Hearst to make up for the formal education she never had. Hearst devoted herself increasingly to the arts, an interest that was deepened during a year-and-a-half trip to Europe in 1873. She had prepared herself for this grand tour—conducted partly for the education of her son—by extensive reading, and for the rest of her life Phoebe Hearst remained a passionate traveler. Of her constant "tramping," as she called it, she wrote: "Had I been a man I should have known my planet pretty thoroughly even if I had to go as a tramp. I so love new scenes, new countries, new people. Indeed I am not sure but the real tramp has a pretty good time of it."[3] Hearst did not mind putting up with some discomfort on her adventures. In February 1905, at the age of sixty-three, she spent a month traveling through Egypt by boat, camel, and donkey. "The air is very pure and good at the Pyramids and there

Phoebe A. Hearst on a camel (center), Giza, Egypt, 1899 or 1905.
Photographer unknown. *Hearst Museum (15-18884).*

is plenty of it. The views also are fine. It is most interesting to be there, but a bit uncomfortable at times. I don't at all mind living in mud and stone houses, but the lack of conveniences in such places are a little trying at times. However, it is all very good discipline and makes us appreciate home more than ever."[4] Writing to a friend of her visit to the excavation that she had funded, she spoke of her personal enthusiasm in the research: "We saw a tomb opened where they found two statues. If you had seen me hanging over the edge of the place looking down to see the figures as they were uncovered, you might have thought it right to class me with excavators. I was more excited than any one."[5]

These excursions opened her up to a fascinating world of non-European cultures, such as Egypt, India, and Japan. Of the Japanese princess she met in 1903, she wrote to a friend: "The little Japanese Princess looked very small in European dress. They wore wonderful gowns and jewels. One was extremely pretty but it is dreadful that they should not dress in their own exquisite costumes. The Prince and high officials were gorgeous in gold embroidered coats and many decorations."[6] Historian Richard Peterson has aptly glossed her attraction for foreign cultures. While impressed by material embellishment and appreciative of elites, Phoebe Hearst did respond positively to a people whose immigrants to America at the time were subjected to profound discrimination.

Upon her return from a second trip to Europe in 1879-80, Phoebe Hearst began to concentrate on public philanthropy, her principal occupation for the remainder of her life. Among her many causes were hospitals, orphanages, libraries, and schools. In 1886, with the appointment of her husband to the U.S. Senate, much of Mrs. Hearst's patronage became centered in Washington, D.C. Of all her areas of interest, the one dearest to her heart, per-

haps, was anthropology, "her favorite subject," according to her grandson.[7] It was on her first trip to Europe that she first encountered a museum of anthropology, and she continued to visit them on succeeding trips, but there is no indication that these had any special appeal to her at the time, beyond her general interests in culture and the arts.[8]

After these years of self-education and visits to museums of anthropology and expositions, the foundation for Phoebe Hearst's career as an anthropological patron was set by three events of 1891. On February 28, her husband George Hearst died, leaving her his entire estate. As her first act of independent patronage, on September 28, Phoebe Hearst established five scholarships for female students at the University of California. And it was in December of 1891, while she was living in Washington, that Mrs. Hearst met Dr. William Pepper, a Philadelphia physician.[9] It was Pepper who launched Phoebe Hearst on her career as a patron of anthropology.

Phoebe A. Hearst on an elephant, India, probably 1903. Photographer unknown. *The Bancroft Library (Hearst POR 51).*

Patronage of Museum Anthropology at the University of Pennsylvania (1895-99)

Phoebe Hearst began her patronage of anthropology at the University of Pennsylvania.[10] As provost from 1880 to 1894, William Pepper carried out the duties of a university president, but he was also an important financial patron. His favorite project was the anthropological museum, of which he was the principal founder in 1889.[11] The museum grew out of an expedition to Babylon, motivated by local interests in Biblical and ancient Near East-

ern archaeology. Pepper had a great entrepreneurial spirit, but his style was to keep loose relations between his pet projects and the university. Anthropology during the Pepper years was bound up in several separate but overlapping departments. Their independent governance led to tensions, including, eventually, with Mrs. Hearst. Although linguist Daniel G. Brinton was appointed professor of anthropology in 1886, the first in the country, he did little teaching.

Phoebe Hearst's first support for the Philadelphia museum seems to have been her general contributions to the American Exploration Society, which Pepper had established so the museum could get funds independently from the university.[12] Mrs. Hearst became more deeply involved with anthropology and the university beginning in February 1895, when she suffered heart problems and sought medical treatment from Dr. Pepper. The first projects she supported centered around Smithsonian anthropologist Frank Hamilton Cushing, another patient of Dr. Pepper.[13] Famous for his pioneering fieldwork at Zuni pueblo, Cushing had been invited to Philadelphia in 1895 to study prehistoric "Cliff Dwellers" material from Mesa Verde, Colorado. This miscellaneous collection, amassed by Charles D. Hazzard, had been displayed at the Chicago world's fair of 1893 and deposited, pending a sale, at the museum in 1895. In January 1896, Phoebe Hearst purchased the collection for the museum.[14] At the same time, she agreed to fund, jointly with Pepper, an archaeological expedition to Key Marco, Florida. After a brief reconnaissance in May of 1895, Cushing led a full-scale expedition during the winter and summer of the following year, and upon his return he stayed as her house guest in Washington. For two years thereafter, Mrs. Hearst paid Cushing a stipend to write up his research.[15] His vivid stories of lost worlds and aboriginal peoples stimulated her growing interest in anthropology.

In mid-1896, Mrs. Hearst funded yet another collection for the Philadelphia museum; she sent Zelia Nuttall to Russia to gather ethnological objects.[16] Nuttall, who turned out to be the most critical influence on Hearst's career as an anthropological patron, had been a friend of Hearst's many years before. Ethnohistorian and archaeologist, Zelia Nuttall (1857-1933) was born in San Francisco to wealthy parents.[17] She moved with her family to Europe in 1865, soon after Phoebe Hearst arrived in the city. For the next nine years, Nuttall obtained an informal but excellent education. Nuttall returned to San Francisco in 1876, where she met and soon married ethnologist and linguist Alphonse Louis Pinart in 1880. After a honeymoon trip to France, Spain, West Indies, and Mexico, Nuttall returned in late 1881. Although she soon separated from her husband, she did become interested in his research, and it was during this period that Hearst met Nuttall.[18] In 1884, Nuttall spent five months in Mexico, her mother's birthplace, which became the principal subject of her research for the rest of her life. In 1886, Nuttall settled in Dresden, Germany, where she remained until 1900. Also in 1886, her first publication attracted the attention of Frederic Putnam who then appointed her an honorary assistant in Mexican Archaeology in Harvard's

Zelia Nuttall, San Francisco, 1879. Photographer unknown. *The Bancroft Library (Nuttall POR 1).*

Peabody Museum.[19] As her biographer states, Zelia Nuttall "was not merely a scientist; she was also a socialite. . . . She was often able to serve as a mediator between two worlds: the world of patronage and the world of scientific projects in need of patronage."[20] It was through Nuttall's connections that Hearst became part of a dense web of anthropological patronage.

It is not clear how Nuttall became associated with Pennsylvania and renewed her acquaintance with Hearst, but it was most likely through her friendship with Sara Yorke Stevenson (1847-1921). Born in Paris to Louisiana aristocracy, Sara Yorke spent her early years in France and Mexico before settling in Philadelphia in her twenties and marrying a wealthy lawyer. As a member of an elite circle of writers and scientists, Stevenson became an amateur archaeologist, and it was in this connection that she worked with William Pepper, a close personal friend, to found the anthropology museum and raise funds for its building (which opened in 1899). Stevenson served on the governing board from its inception in 1892 until 1905. In 1890, she was appointed the first curator of the museum's Egyptian section, and in 1894, the curator of the Mediterranean section. Stevenson was an active supporter of the American Exploration Society, which joined forces with England's Egypt Exploration Fund. For its contributions to the fund, the museum received excavated collections. Stevenson made an ambitious trip to Egypt in early 1898 to organize the museum's first Egyptian field project.

Sara Stevenson joined the larger world of American anthropology through her participation with the display of anthropology at the Chicago world's fair of 1893.[21] Directed by Frederic Putnam, almost all the leading anthropologists of the time were involved in some capacity. Among those that Putnam mentored were Franz Boas and the female anthropologists Alice Fletcher, Zelia Nuttall, and Sara Stevenson. (Frank H. Cushing and Stewart Culin also played key roles). Stevenson and Nuttall, who combined wealth and scientific interests, soon became friends.[22] Phoebe Hearst met Sara Stevenson in May of 1896, and it was probably in this connection that Hearst renewed her acquaintance with Nuttall.[23]

It was through Zelia Nuttall that German archaeologist Max Uhle came to work for the University of Pennsylvania, and thus came to know Phoebe Hearst.[24] Noted for being the first to apply "modern principles of stratigraphy and seriation to American materials" and the first to establish a chronology for ancient Peruvian civilizations, Uhle (1856-1944) excavated principally in Peru and Bolivia, but he also did some ethnological and linguistic research, most of which remains unpublished.[25] Born in Dresden, Max Uhle obtained his Ph.D. in linguistics from Leipzig in 1880. He started working with anthropological, specifically South American, collections at the museum in Dresden (1881-88). Then he joined the anthropology museum in Berlin, which sponsored his first trip to South America in November 1892. In 1893, while he was still in Argentina, Nuttall had heard many good things about Uhle from her associates in the world of Berlin anthropology. She proposed to Stevenson that the University of Pennsylvania support his expeditions, but it was not until early 1895 that the necessary funds had been raised.[26] Uhle collected for the university in Bolivia (March 1895-January 1896) and Peru (January 1896-February 1897). While Pepper was Max Uhle's principal Philadelphia patron, between 1897 and 1899, Mrs. Hearst supported him while he wrote up his research (his report on Pachacamec and some shorter papers) and gave lectures in Philadelphia.[27]

The fourth and final major collection that Mrs. Hearst donated to Pennsylvania was Etruscan. These archaeological specimens had been originally collected by James Jackson Jarves, and purchased by Robert Coleman about 1881. Hearst acquired it for the museum in 1897, in addition to a few other pieces given that year. At the same time she funded Princeton professor Arthur L. Frothingham's collection of Etruscan objects in Italy.

Phoebe Hearst's most active years of support to Pennsylvania were 1895 through 1897 for the four main collections and many miscellaneous objects. The situation changed dramatically, for the museum and Mrs. Hearst, on July 29, 1898, when William Pepper died at Hearst's home in Pleasanton, California.[28] Mrs. Hearst experienced a deep sense of loss, as she felt that Pepper had saved her life, and she remembered his "wise council and judgment [which] helped me to solve many serious problems."[29] With her closest Philadelphia contact gone, Phoebe Hearst began to shift her anthropological patronage westward to her adoptive state.

Hearst's General Patronage for the University of California (1891-98)

Although Phoebe Hearst's establishment of the University of California scholarships was among her first philanthropic acts, higher education and her adoptive state were not the focus of her donations until the middle of the 1890s.[30] Her earliest contributions supported hospitals and kindergartens in San Francisco and Washington, and the National Cathedral School for Girls in Washington, among others. It was the actions of her headstrong son in April 1895 that called her attention back to the state. While his mother was away in Europe, William Randolph Hearst attempted to build a house at a family ranch in Pleasanton. This presumptive act caused Mrs. Hearst to arrest his plans, and she decided instead that it would be the site of her own principal residence. Around July of 1896, she moved into this palatial mansion which she called the Hacienda del Pozo de Verona.

Perhaps this construction stimulated her thoughts architecturally, for sometime during 1895, Mrs. Hearst approached Martin Kellogg, the University of California's president, with an offer to construct two buildings for the campus: the Hearst Memorial Mining Building (designed by John Galen Howard, completed 1907) and Hearst Hall, a campus center for primarily female students (designed by Bernard Maybeck, completed January 1900, later used as a women's gymnasium). However, it was not until October 22, 1896, that she made a formal written proposal to the regents about erecting the two buildings.[31]

Since at least 1894, Bernard Maybeck had dreamed of a comprehensive campus plan, and Mrs. Hearst agreed to fund an architectural competition for the Berkeley campus. Undoubtedly as a result of this largesse, on August 10, 1897, Phoebe Hearst was appointed a university regent, the first female incumbent. The winner of the competition was announced in the late summer of 1899, and significantly, Emile Bénard's plan included both a fine arts and a natural history museum.[32] Although Bénard soon departed the scene, the campus plans of his successor, John Galen Howard, maintained a place for a university museum.

Early University Collections (1868-1901)

By 1898 the university still had no separate museum building, although collections had been accumulating for decades.[33] In fact, in 1863 geologist Josiah Dwight Whitney, director of the State Geological Survey, recommended that the legislature establish a state museum as the foundation for a university, the museum serving as well as a repository for the survey's collections. This so-called "Museum Plan" was never adopted,[34] but museum buildings were included in the very first plans for the Berkeley campus. In his 1874 report to the regents, engineer and landscape architect William Hammond Hall made the museum one of eight proposed structures.[35] Hall's plan guided campus planning for the next twenty-five years, even if it was not carried out in every detail.

The first home for the university collections—in fact, the first university building erected in Berkeley—was South Hall. It opened in 1873, when instruction began on the campus. In addition to housing the College of Agriculture, South Hall contained "temporary"

South Hall, west facade, 1901. Photographer unknown. *University Archives (UARC PIC 5:5).*

rooms for the university museum. These natural science collections were variously defined and redefined, but for the 1870s and most of the rest of the nineteenth century they revolved around anthropology, geology, and botany.[36] Among the four initial collections of 1873 were two holding anthropological materials: the Voy-Mills and Pioche.[37] The early natural science collections were derived from multiple sources—from philanthropic citizens, casual collectors, as well as university professors. Acquisitions were rarely obtained through university appropriations. As the president noted in 1886, "Our collections at Berkeley now grow slowly through the personal solicitations of the Curator to his personal friends or acquaintances."[38]

Four years after South Hall opened, the possibility to display fine arts appeared when Henry D. Bacon donated his personal library and art collection, along with funds toward a university library and art gallery in 1877. The Bacon Art and Library Building, completed in 1881, held an art gallery on an upper floor.[39] The core of the university holdings in the fine arts were the paintings and statues donated with books in the 1870s by Bacon and Francis Louis Alfred Pioche, both major contributors to the library.[40] One hears little about the university's art collections in the annual reports, and what items it did own were not organized into a formal museum. This emphasis might be expected at a land-grant college devoted primarily to the practical arts of agriculture, mining, and mechanical arts. As President William T. Reid explained in 1884, the university collections possessed a practical value for solving problems of the state's "miners, farmers, fruit growers, and manufacturers."[41]

Throughout the nineteenth century, university presidents complained constantly about the lack of adequate storage and display space for the museum collections. As a result of the rapidly accumulating museum and library collections, in 1877 President John LeConte put a new library and museum at the top of his list of "wants of the University."[42] A report issued that year noted that "only a small part of the Museum material can be exhibited for want

of space and means."[43] Citing the continuing need for a museum building, President Reid discussed a faculty plan in 1884 to add on two museum wings to the Bacon Art and Library Building, thus unifying all the university collections.[44] In light of Hearst's later concerns, it is interesting that in 1888 the university solicited donation of a women's hall as well as a museum. Two years later the president was forced to note the lack of a fireproof building and of heat in the winter.[45]

University presidents were keenly aware of the relevance of museums for both science and public education. On the one hand, President Reid cited the new discoveries and growing specialization of study and collection in natural history, while President Edward S. Holden advocated supplementing Berkeley's specialized collections with a general, public museum in San Francisco. Despite these pleas, neither the legislature nor private patrons were forthcoming.[46]

The prime justification for university collections, of course, was their role in teaching and research.[47] In the early years, Professor Joseph LeConte was the entire natural science faculty, teaching geology, botany, and natural history. From 1874 on, botany was also covered by agriculture professor Eugene Hilgard. The basic geology courses taught by LeConte were supplemented in 1879 by instruction in petrography given by A. Wendell Jackson. Geology and geological collections were of keen interest in a land-grant college with a school of mining. In the 1890s, the natural sciences at Berkeley became more formalized. Two specialized biology departments were created—botany in 1890 under Edward L. Greene and zoology in 1891 under William E. Ritter. In 1890, the geology department was aided by the appointment of Andrew C. Lawson, who taught a range of specialized courses including the first field geology course in the West.[48] In 1894, John C. Merriam, a student of LeConte's, returned to the campus as professor of paleontology and the history of geology. With an

Bacon Art and Library Building (at left), East Hall (center), and Botany Building (right), 1899. Photograph by O. V. Lange. *University Archives (UARC PIC 700:19).*

Art Gallery, Bacon Hall, 1887. Photograph by Runnels and Stateler.
University Archives (UARC PIC 700:4).

interest in early man and the peopling of California, Merriam played an early role in the anthropology department.[49] And it was during this decade that two of the existing university collections were founded, both dealing with plants. The Botanical Garden, originally sited on the north branch of Strawberry Creek near the library, was first planted in 1880 and formally established in 1891. The University Herbarium was founded in 1890 around a core of specimens collected during the Geological Survey of California (1860-67).[50] Although drawing on older university collections, the museums of paleontology, vertebrate zoology, and the Jepson Herbarium were all twentieth-century creations.[51]

The contemporary anthropology collections were often referred to as the Ethnology Museum, but the objects seem to have been mostly archaeological—largely miscellaneous items of stone (mortars and pestles, obsidian arrow points, hammer stones, stone dishes), shell (beads), and bone, in addition to human skeletal remains. While most objects were from California, including the Berkeley environs and even the campus itself, specimens also came from farther afield: Oregon, Arizona, New Mexico, Alaska, Polynesia, and ancient Mexico, Peru, and Egypt.[52] The two principal anthropological collections before 1900 were amassed by C. D. Voy and F. L. A. Pioche. Both consisted largely of minerals, rocks, and shells, but included in Voy's collection of almost 8,000 specimens were archaeological artifacts and human bones, mostly obtained from the so-called "auriferous gravels" of Central California. The collection was purchased by banker (and later, regent) Darius Ogden Mills and presented to the university in 1873.[53] In the same year, the university was given the Pioche collection, which was especially rich in wooden and other implements from the Pacific Islands.[54] These two donations allowed the university to claim in 1873 that "An excellent beginning has been made of a collection to illustrate the characteristics of primitive man."[55]

Anthropological collections, South Hall, 1893. Photograph by O. V. Lange. *University Archives (UARC PIC 500:15).*

In addition to these miscellaneous holdings, there was another anthropology collection which came to the university just as Phoebe Hearst was making her plans for California. The most important of the nineteenth-century anthropology collections at the university, it was actually formed independently of the institution. Between about 1870 and about 1889, the Alaska Commercial Company, a general mercantile operation based largely on the fur trade, had gathered a native ethnology collection. In 1896-97, Louis Sloss, ACC president and treasurer of the university, arranged for its donation to the university.[56]

The anthropology collections never had a dedicated exhibition space or curator. For most of the nineteenth century, they were cared for by a succession of biology curators, with the oversight of a museum (and library) committee of the Board of Regents.[57] Professor Joseph LeConte seems to have been the initial supervisor of the university collections, but the first to hold the position of "curator" of the University Museum was entomologist John James Rivers. In 1877, Rivers was assisting in the museum, apparently as a janitor, but he was made curator the following year.[58] Among his responsibilities were the Museum of Archaeology, Museum of Ethnology, Museum of Zoology, Museum of Botany, and Museum of Paleontology.[59] Rivers was also the collector of many of the early anthropological specimens.

The circumstances of Rivers's departure, and the university's changing plans for the museum, are unclear. As of August 1895, the regents declared that the positions of Museum Curator and Assistant to the Curator be abolished.[60] The University Museum was placed temporarily under the control of Professor LeConte, who would delegate care of the various sections to his assistants.[61] Paleontology professor John C. Merriam seems to have inherited the anthropology collections, as it was he who transferred most of them upon the founding of the anthropology museum.[62] One source claims that the University Museum was dis-

Anthropological collections, South Hall, 1893. Photograph by O. V. Lange. *University Archives (UARC PIC 500:12).*

banded by the regents in 1898 because of the "inaccessibility of specimens for students."[63]

It may seem curious that the university was undermining its museum precisely at the time that various disciplines were becoming more formalized at Berkeley, and thus finally in a position to make proper use of the collections. Yet there is evidence that, in fact, this was actually a time of revitalization. In 1899, a committee found that "there is not and never has been a catalogue of the Museum."[64] The botanical collections had just been reorganized and those for zoology and paleontology would soon follow.

Anthropology was like related disciplines in the nineteenth century as it precipitated out from a generalized tradition of natural history. As knowledge became more specialized, so did its related collections.[65] These university reorganizations were thus a sign that museums were being taken more seriously, and for anthropology the changes would come soon.

Hearst Collections for California (1898-99)

Gradually Phoebe Hearst's support for the University of California, formalized with her 1897 appointment as a regent, and her growing disenchantment with the University of Pennsylvania, coalesced with the idea of independently gathering anthropological collections that she could donate to a California museum.

Following the July 1898 death of Pepper, Sara Stevenson took on the effective (if not official) direction of the Philadelphia museum, including arranging for the exhibition and publication of the Peruvian and Etruscan collections supported by Phoebe Hearst.[66] In this capacity she wrote urgently to Mrs. Hearst in the fall, presenting an opportunity that catapulted the Californian into a new phase of her patronage. Max Uhle's contract with Penn-

sylvania was set to expire on November 1, and Stevenson made it clear that the university had no desire to support his further collecting; if Hearst was not interested, he would return to Germany. If she were, the next question was whether Uhle would be paid directly by Mrs. Hearst or through her contributions to the American Exploration Society.[67]

Phoebe Hearst agreed to finance Uhle's new research, with the understanding that all his collections would be coming to California. She also accepted Stevenson's suggestion of contributing through the society, as she had already embarked on an extended trip to Europe and, for the first time, to Egypt.[68] Uhle's initial contract with Hearst—to begin officially on March 1, 1899—called for two years of field work, with a possible third year spent in California writing up his research.[69] On June 19, Uhle left for South America, where for much of the year he concentrated on the sites around Moche on the northern coast of Peru.[70]

We do not know how long Phoebe Hearst had contemplated founding an independent museum of anthropology in California, but her hiring of Uhle stimulated the first references to such an institution. In the Hearst-Stevenson correspondence during the fall of 1898, there are repeated references to "your new Department of Archaeology" and "your California museum."[71] Perhaps in anticipation of these arriving collections, Hearst seems to have begun plans for a museum building. In January 1899 she sent Maybeck to consult with Stevenson "about organizing a Department of Archaeology for your University." The "idea seemed new to him," reported Stevenson.[72]

At the same time Phoebe Hearst began to think about collecting in Egypt, Sara Stevenson had also taken on the organization of the museum's purchases of Egyptian antiquities, which Hearst had funded.[73] Arriving in Egypt with guidance from her Philadelphia friend—who had visited the ancient sites earlier in 1898—Mrs. Hearst met a local archaeologist who was to encourage her own plans. At the time, George Andrew Reisner had no field experience, but he was very well trained. Born in Indiana, Reisner (1867-1942) had studied at Harvard for his undergraduate and graduate degrees (Ph.D., 1893).[74] Going to Germany for further study, he had spent 1894-96 as a temporary assistant at the Berlin Museum before returning to Harvard for a year of teaching. In 1897 Reisner went to Egypt, where he worked for the International Catalogue Commission at the Cairo Museum. In arranging for an agent in Egypt, Sara Stevenson had considered Reisner "a good man" but a second choice.[75] Hearst, however, seems to have thought highly of him, and hired the young archaeologist on her behalf, although again through the auspices of the American Exploration Society.[76]

George A. Reisner (left), with Mohammed Abd Andeh Belles and Ahmed Shangal Moh. Kela, Giza, Egypt, 1904. Photographer unknown. *Courtesy of Museum of Fine Arts, Boston (A-11651).*

According to some contemporary news accounts (as

well as more recent scholars), the Egyptian collections were to be shared jointly by the Universities of Pennsylvania and California, but the extant correspondence clearly shows that Reisner's collections, like Uhle's, were for Hearst alone.[77] In both cases, Hearst took the initiative in finding and hiring her field agents, paid completely for their work, and arranged for all their collections to go directly to California. What has been confusing was the formal sponsorship through the American Exploration Society—which was related to but administratively separate from the University of Pennsylvania—and Stevenson's coordinating role as its secretary.

By June, Hearst was arranging for Reisner to begin his excavations. However, already irritated by what he considered Mrs. Stevenson's meddling with his work, Reisner was urging Mrs. Hearst to break all ties with Pennsylvania.[78] On September 1, Reisner began his five-year contract for California by surveying the area of Coptos and Shurafa, about twenty miles north of modern Luxor.[79] As assistants, he engaged British Egyptologist Frederick W. Green and Albert M. Lythgoe, a Harvard graduate who had dug in Greece but not in Egypt. In his memoirs, Reisner wrote that Mrs. Hearst "agreed that I should have three years to develop scientific methods of excavating and recording. During this time, I would work on unimportant sites and would not be expected to produce important antiquities."[80] Hearst's enlightened encouragement of young scientists (as well as artists) contrasted with Sara Stevenson's feeling that "the broad minded effort to develop new men and . . . give new scholars a chance is too costly and uncertain to be profitable."[81] Somewhat independently of Reisner, Mrs. Hearst was at the same time supporting the excavations of England's Egyptian Exploration Society. For the digging season beginning December 1899, she underwrote the excavation of Ptolemaic and Roman period material at Tebtunis by British papyrologists Bernard P. Grenfell and Arthur S. Hunt.[82]

Workmen sawing a stone stele at Reisner's excavations, Deir-el-Ballas, Egypt, January 1901. Photographer unknown. *Courtesy of Museum of Fine Arts, Boston (C-1776).*

Having already begun to plan for some kind of anthropology museum in California, Phoebe Hearst warmly greeted the selection of a new university president on June 16, 1899 (although he was not inaugurated until October 25). Before accepting the position, Benjamin Ide Wheeler met with Regent Hearst, who fully supported his more activist conception of the position. Wheeler (1854-1927) had also studied in Germany, obtaining his doctorate in classical philology in 1885. He had taught a year at Harvard and then at Cornell (1886-99) before coming to Berkeley. Relatively young at the time, Wheeler was quite different from earlier university presidents in his insistence on wielding a firm control over the administration.[83]

It was perhaps through Wheeler's Cornell association that Hearst began to plan for collecting in yet another area: classical Greek and Roman antiquities. On June 20, the day after Uhle left for Peru, classical archaeologist Alfred Emerson sent her a lengthy report.

Phoebe A. Hearst wearing a Chinese gown, with President Benjamin Ide Wheeler, during a YWCA conference at her Pleasanton hacienda, summer 1911. Mrs. Hearst planned to display costumes from France, Sweden, Denmark, Egypt, Persia, India, China, Japan, and Mexico, to teach the 350 participants about the cultures of other nations. Photographer unknown. *The Bancroft Library (Hearst POR 13:26).*

Emerson (1859-1943) had first become interested in archaeology while spending several years in Greece as a boy.[84] Born in Pennsylvania, he had attended schools in France, Germany, and Italy. Like Reisner and Uhle (and Wheeler), he studied in Germany, earning his philology doctorate from the University of Munich in 1880. Before working for Hearst, Emerson held fellowships at Princeton (1881-82) and Johns Hopkins (1882-87), and taught Greek and Latin at Miami University (1887-89) and Lake Forest University (1889-91). Emerson then assumed the chair of classical archaeology at Cornell, where he organized the Museum of Casts of Classical Sculpture. In 1898, Emerson had left Cornell to take up an archaeology professorship at the American School of Classical Studies in Athens. In his letter to Hearst, Emerson focused on the educational importance of examples of classical art and explained the practical problems in acquiring them.[85]

Finally, toward the end of 1899, Mrs. Hearst began to support collecting in her home state. Thinking perhaps of the existing university strength in California antiquities, she arranged with Dr. Philip Mills Jones to make field collections from western North America but primarily from California. Before beginning his work for Hearst, Jones (1870-1916) had practiced as a physician in Brooklyn, New York. In late December, he spent two weeks making archaeological excavations in Kern County.[86]

So by the fall of 1899, Phoebe Hearst had long-term agreements with the four collectors (Uhle, Reisner, Emerson, and Jones, all archaeologists) who were to form the basis for her new museum.[87] All except Emerson—whose contract began April 1, 1900—were already in the field.[88] At this time, the collections were being made on behalf of Phoebe Hearst, not the university. Although that was clearly her intended destination for them, such arrangements were yet to be formalized.

Institutionalization (1900)

The creation of a museum out of the personal Hearst collections was undoubtedly precipitated by Zelia Nuttall's return to America from Europe in 1900.[89] Although she traveled often before moving permanently to Mexico in 1902, upon arriving in America Nuttall selected her birthplace of San Francisco as her home.[90] And it was precisely during these years that Phoebe Hearst herself gradually moved her home from Washington.[91]

In June of 1900, almost as soon as Nuttall had landed in New York, she consulted with Frederic Putnam and Franz Boas, two of the leading American anthropologists, at the meetings of the American Association for the Advancement of Science, held at Columbia University.[92] Frederic Ward Putnam (1839-1915) had been trained in zoology at Harvard, but

was soon attracted to archaeology.[93] Between 1876 and 1878 he had excavated in California for the federal geographical survey led by Lieutenant George M. Wheeler. In 1875 Putnam was appointed curator and director at Harvard's Peabody Museum of American Archaeology and Ethnology, the first specifically anthropological museum in the nation, founded in 1866. In 1887 he became professor of anthropology, beginning the first active university program in America. Putnam directed anthropology at the Chicago world's fair, where many of his protégés and associates met and worked together. The German-born Franz Boas (1858-1942) was one of these, having served as Putnam's assistant at the fair (1892-93) and then at Chicago's new Field Columbian Museum (1893-94). Since 1894, Putnam had been directing a reinvigorated department of anthropology at New York's American Museum of Natural History, where he had again hired Boas (1895-1905).

It was probably Nuttall who introduced Phoebe Hearst to Frederic Putnam. During much of 1900 Nuttall was in Boston consulting with Putnam over the completion and publication of her book by the museum.[94] By November, Putnam was corresponding with Hearst and Wheeler.[95] Perhaps not coincidentally, about this time he was also continuing his California research. Putnam spent the summer of 1900 in California, where he studied the Calaveras site and gave a lecture at the university, which, he reported, "aroused interest in the subject of early man in California."[96]

Meanwhile, the Hearst collectors were working away throughout 1900. In March, P. M. Jones purchased an important Central California Indian collection from Charles P. Wilcomb, the founder of the ethnology collections at the Oakland Museum. Jones spent part of the summer (July 27-August 15) excavating in the San Joaquin River delta around Stockton.[97] In May Mrs. Hearst transferred "the official sponsorship" of Uhle's research to the University of California, which obtained the collections he had been making for her since 1899. During 1900 Uhle continued his important work at Moche before moving to the Peruvian highlands and south coast, as well as attending to expedition business.[98] In the early part of the year, Reisner excavated in Deir el-Ballas, near his previous site, and during May through August he was at El-Ahaiwah, sixty miles upriver.[99] In April and May Emerson gave a series of lectures in the Department of Greek, funded by Mrs. Hearst, before setting out for Europe.[100] These expeditions were made nationally known that spring in the *American Anthropologist*.[101] Attributing these collections to Hearst, a brief note explained that "The report that Mrs. Hearst proposes to establish a Museum of Archeology in connection with the University of California is not authorized." What motivated this expression is unknown, but clearly the official arrangements were still to be completed.

The collections were sent to the Berkeley campus for storage, where nearly one hundred cases of specimens awaited unpacking and display by the end of 1900.[102] For his part, President Wheeler was listing a museum as one of the university's "needs." His choice of words is indicative of both his interests and that of his patron. After de-

Frederic W. Putnam. Photographer and date unknown. *Hearst Museum (15-14327).*

cades of associating the university museum with the natural sciences, he spoke of an "Art Building" for the "objects illustrative of art, archaeology, anthropology, etc." and of a future Museum of Archaeology and Art. He also called for the creation of a "Department of Archaeology." Although he did not specifically mention teaching, he felt that these collections would need to be overseen by "a number of curators . . . under the general oversight of the incumbent of the 'Chair of Archaeology.'"[103]

At the same time, Mrs. Hearst was pulling away, literally, from the Philadelphia museum, and it was not just a matter of adding new collectors and collections for California. That July, she informed director Stewart Culin that she intended to found a museum in California. Accordingly, she wanted to arrange for the transfer of a portion of her previously donated Philadelphia collections (Mesa Verde and Etruscan) back to California.[104] This letter contains the best expression of her motives in founding an anthropology museum:

> But the very great pleasure it has been to me to help in opening up these records of the past and in placing them where our own people may study them, is, of course, the sole reward I want for myself personally. . . . In looking at the true object in view in centralizing collections, which, as I take it, is the dissemination of knowledge among the many, not the pride of possession by the few, I think it must be obvious to your Board that most real good can be done by placing in this distant West some portion of the collections referred to as a nucleus of what may one day became a great educator. . . . My purpose now is to turn my every effort to giving the people of California every educational advantage in my power to secure.

Hearst felt "fully justified" in asking for duplicates of these collections, and she thought that Stevenson and Culin understood the division.[105] In the months following, into December, and January 1901, Culin discussed the sticky situation with museum "manager" Robert G. Brock. Naturally, they were resistant, especially as they had no record of what Hearst admitted was an oral agreement with Pepper. By March, however, Brock was recommending to the Board of Managers that they accede to her desires.

Endgame: The Founding of a Museum (1901)

The final train of events that would culminate in the formation of the university museum of anthropology began in February 1901. Putnam had been sidelined with heart trouble in January. Between mid-February and mid-March, Zelia Nuttall was Hearst's house guest in Washington. Nuttall complained to her friend about the poor treatment she had received from Stewart Culin. When Nuttall had visited Philadelphia earlier in the year to help install her Russian collection, she was shocked to find the collection not on display, and, in fact, most of it still unpacked. At the same time, Hearst and Stevenson were fighting over the division of the Etruscan collections. Although Nuttall was friendly with both, she sided with Hearst. Nuttall's experience added to Hearst's own desire to conduct her patronage within a new institution.[106]

Soon another participant entered the picture, as Nuttall introduced Phoebe Hearst to Alice Fletcher, with an exchange of dinner invitations in Washington during April.[107] Alice Fletcher (1838-1923), yet another Putnam protégée, worked for the Smithsonian's Bureau of American Ethnology. Fletcher was known for her work with Plains Indian tribes, music, Indian reform and education. While traveling as a lecturer, she had met Putnam, who interested her in anthropology and American Indians. Through her contact with Putnam, Fletcher

Building for the anthropology department and museum (commonly called the "tin shack"), Berkeley campus, fall 1903. Photograph by Alfred L. Kroeber. *Hearst Museum (15-1487).*

obtained a special assistant fellowship at the Peabody Museum in 1891. At first there was something of a rivalry between Fletcher and Nuttall, but the two women became good friends at the Chicago world's fair. In 1894, Fletcher spent two months with Nuttall in Dresden, and upon her return Fletcher was invited to speak at the University of Pennsylvania and have dinner with Sara Stevenson.[108]

By April Franz Boas had joined these conversations. Mrs. Hearst met with Putnam, Boas, and Nuttall during the meeting of the National Academy of Sciences in Washington, April 16-18, at which time she gave a grand reception. The following month Nuttall wrote to Boas, at the behest of Mrs. Hearst, inquiring about the possible cooperation between the American Museum and the University of California, and seeking his suggestions for suitable staffing.[109] Nuttall asked Boas if he would come to California, and she mentioned Kroeber as an assistant. The correspondence is notable because instead of a brief, factual reply, Boas took the opportunity to outline his position on the state of American anthropology. Boas agreed that California was an important region for research. In general, he recommended close cooperation between museums and university departments, as the training of professionals was most important to him. Practically, he thought that neither his own student Alfred Kroeber nor Putnam's student Roland Dixon, already collecting in California, were qualified for such a position. Instead, he recommended that Mrs. Hearst fund, for five years, four fellowships for ethnology at Columbia and two for archaeology at Harvard. These would be transferred to California in a few years, as soon as an individual was suitably trained. Boas offered to direct this program for the initial period.

Nuttall recommended heeding Boas's advice, but Hearst and Wheeler did not want to wait.[110] On July 20, the university offered young Alfred Kroeber a job as instructor.[111] Although he had just obtained his doctorate, the first to be given under Boas's direction at Columbia, Kroeber was no stranger to California. In August of the preceding year, he had been hired by San Francisco's California Academy of Sciences. Due to a lack of fieldwork funding, he left in December and was looking for a permanent position. With the Berkeley offer Kroeber returned to California in August, before the formal founding of the museum and department. At about the same time, the university hired Pliny E. Goddard as assistant. Goddard, a lay missionary to the Hupa, had enrolled at Berkeley in 1900 to study linguistics with Wheeler. At the time of his hire he was still a graduate student, obtaining his doctorate in 1904.[112]

Meanwhile, Mrs. Hearst's field collectors worked away. Philip Mills Jones spent most of the year engaged in fieldwork. In January he surveyed San Nicolas Island in the Santa Barbara Channel Islands group of California, excavating on nearby Santa Rosa Island between February and June.[113] Later that year (July-September), he gathered the incipient museum's first ethnological specimens. Traveling up the coast from San Francisco, Jones collected from the Pomo, the Indians of the Round Valley Reservation, and the Hupa in California, as well

as from the Chehalis of Washington state and the Blackfoot of Alberta. As he had earlier negotiated for the Wilcomb California collection, he also acquired an important Kiowa Indian collection from General Hugh L. Scott and one of Pomo baskets from John P. Stanley, a Santa Rosa undertaker.[114] As Reisner gained experience, he moved in February 1901 to the important sites at the cemetery of Naga ed-Deir, in the same area as Deir el-Ballas, which he explored systematically from 1901 to 1904.[115] Uhle spent much of the year excavating in the Ica Valley of Peru. It was here that he discovered the source of the Early Nazca pottery style, known previously only from museum specimens. He did not return to California until December.[116]

Collections in storage, view from the mezzanine of the Anthropology Building, Berkeley campus, fall 1903. Photograph by Alfred L. Kroeber. *Hearst Museum (15-1483).*

The final details of the museum and department were worked out during an extended seminar/vacation at Phoebe Hearst's hacienda. Over the late summer, her guests began to arrive. In July, Nuttall and Fletcher were together at the world's fair in Buffalo. Traveling to the west coast, they arrived in San Francisco on the last day of the month. Nuttall stayed with her family, while Fletcher went on to Pleasanton.[117] To alleviate Fletcher's homesickness, Hearst invited her adopted son, Omaha Indian and ethnologist Francis La Flesche, who arrived in early September. The guests were entertained by La Flesche's singing at evening concerts.[118] Frederic Putnam, who spent part of the summer with paleontology professor John C. Merriam continuing his exploration of the Calaveras caves, arrived at the hacienda in early September, as did Nuttall.[119] On September 7, the advisory council for the new department and museum, consisting of Hearst, Wheeler, Fletcher, Nuttall, and Putnam, convened at the hacienda.[120] In addition to the formal participants, other house guests included anthropologists Alfred Kroeber and George H. Pepper. A student of Putnam's then working for the American Museum, Pepper had accompanied Putnam to Mrs. Hearst's April reception,[121] and in June he went to Philadelphia to make a selection of the Mesa Verde collection for California.[122] Also present were various companions of the principals: Francis La Flesche, Mrs. Putnam, Mrs. Wheeler, and Nuttall's daughter, Nadine.[123] Perhaps significantly, neither Boas nor Merriam was there.

Three days later, on September 10, the regents agreed to establish a department and museum of anthropology. With Mrs. Hearst's funding for the first five years and the donation of her collections and a temporary home on campus, the anthropology program was devoted to: "(1) Coordinating special researches in the field and laboratory in the various subdivisions of the Department, (2) The preservation of materials and facts secured and the formation of a Museum, (3) The diffusion of knowledge by publication and lectures, (4) The final establishment of courses of instruction and researches in the University."[124] The found-

ing was marked by another note in the *American Anthropologist*, which reviewed the collections on hand, staff, and current research.[125] No director for the program was announced at the time, although Putnam served as chairman of the advisory committee until 1903, when he became the museum's first director and chair of the department. The committee planned the department's work, and the details of administration were carried out by Professor Merriam, as secretary, and J. G. M. E. d'Aquin, as assistant secretary and executive officer.

The work of the museum's existing collectors—Reisner, Uhle, Emerson, and Jones—continued, while Kroeber and Goddard's research among California Indians began. By the end of the year, Phoebe Hearst had donated an estimated 26,000 objects (out of a total 60,000 that she would ultimately give).[126] But after September 1901, the story becomes history rather than prehistory.[127]

Who Founded the Anthropology Museum?

In many of the historical accounts of the museum's founding, Frederic Putnam, rather than Phoebe Hearst, has been given the dominant role. Ralph Dexter, a Putnam scholar, seems to have been the first to single him out. Writing of his "initiatory role," Dexter begins his story with Putnam's correspondence with Wheeler and Hearst in 1900.[128] Joan Mark seems to follow Dexter: "Putnam had interested Mrs. Phoebe A. Hearst, who was a friend of his proteges [sic] Alice Fletcher and Zelia Nuttall, in his search in California for evidence of early man. In 1901 Mrs. Hearst became interested in encouraging anthropological work at the University of California and in establishing a museum to house her rapidly growing collections."[129] Nuttall biographer Ross Parmenter puts it this way: "Then in 1900 Putnam had put a new bee in Mrs. Hearst's bonnet, suggesting to her that she sponsor a museum and a department of anthropology at the University of California. Simultaneously, he had made the same proposal to Benjamin Ide Wheeler, the new president of the University."[130]

Regna Darnell, author of the most comprehensive account of turn-of-the-century American anthropology, makes Hearst a mere financial backer of Putnam's plans:

> Until 1901, Mrs. Hearst had been involved with the plans of Provost William Pepper (1843-1898) of the University of Pennsylvania and local philanthropist Mrs. Sara Stevenson for the ethnological museum founded in Philadelphia in 1889. After Pepper's death in 1898, however, she transferred her attention to Putnam's new museum at Berkeley. Mrs. Hearst had begun to acquire archaeological collections for the University in 1899 with her expeditions to Egypt. Wheeler was unable to house the specimens and persuaded Mrs. Hearst to accept Putnam's advice and turn the incipient collections into a permanent research museum affiliated with the University. Mrs. Hearst realized that "in order to make the collections of greater value, systematic and scientific researches and explorations were essential" (Kroeber 1905a:3-4). More accurately, Putnam had persuaded Mrs. Hearst to direct her philanthropy in support of science. Her interest in archaeology, although seminal for the development of the Berkeley department, was superficial and, indeed, scarcely mentioned in her privately printed biography (Bonfils 1928). Putnam also managed to placate University officials by stressing the potential educational role of the museum in a state university (Kroeber 1905a:3-4).[131]

From the account offered in the present essay, it should be evident that these views have seriously underestimated Hearst's critical role. In contrast to the early biography, a current biographer goes so far as to claim that Hearst "wanted to be viewed by those at the University as an expert in archeology and ethnology."[132] While she never intended to conduct archaeological research, in the manner of patron-scientist friends like Nuttall and Stevenson, she certainly had a serious personal interest in the subject as early as 1895. Unlike Stevenson, who had no use for professional archaeologists, Hearst always held great respect for scholarly expertise.[133] Moreover, all the available evidence suggests that the earliest ideas for an anthropology museum in California were Hearst's, and that Putnam's involvement, though no doubt important, was relatively late. Putnam himself always cited his patron's priority. Commenting on Nuttall's plans for an independent museum in San Francisco, Putnam maintained: ". . . I should have nothing to do with the establishment of a museum anywhere that did not meet with the approval of Mrs. Hearst, for I should consider it disloyal to her when she has given the start to the whole matter. . . . [She] was the first to undertake this great work in California."[134]

Hearst's founding of the California museum was a gradual and overlapping process, but perhaps the precipitating factor was the July 1898 death of William Pepper. Pepper drew Hearst into the world of anthropological patronage, and without his death, she might have continued her East Coast support. Yet at the same time, her ties to California, where her husband had made the family fortune and where her son was spending it, made her realize that she could play a more formative role in the West. The foundation established by the time of Pepper's death was quickly built upon during the following fall and winter, when she began to support Uhle's and Reisner's new collections, which would ultimately come to California.

The University of California museum clearly came about because of a complex and dense interaction among a group of friends and colleagues: Hearst, Nuttall, Putnam, and Wheeler, with subsidiary roles for Pepper, Stevenson, Fletcher, and Boas. The new California museum was allied with social networks associated with the anthropology museums at Harvard and Pennsylvania. Common to all was Zelia Nuttall, who played the most critical role in putting Hearst in touch with the relevant actors. It was she who introduced Hearst to Putnam and made the initial contacts with Boas and Kroeber. Perhaps not coincidentally, only after Nuttall's return from Europe did Putnam come into the picture. Putnam's marginal role is further underscored by the Nuttall-Boas correspondence of 1901, in which the Harvard curator is nowhere mentioned, even though he was nominally Boas's boss at the American Museum.

Regent Hearst's ambitions for the new discipline of anthropology also came at a propitious moment in the history of the University of California. Her campus philanthropy was wide-ranging (including scholarships, teaching positions, and books), but one important focus was her interest in buildings and collections. Although she was never able to fund the construction of a museum building, she undoubtedly intended the museum to hold a commanding place in the campus plan that she had funded. Among the university's academic departments, disciplines such as zoology, botany, and geology were formed out of a generalized natural history in the 1890s, and several social science departments were created around the same time as anthropology—economics in 1902 and political science in 1903.[135] The miscellaneous collections generated by the natural sciences over the previous three decades were reorganized to better serve the teaching needs of the university. As this occurred, it was only natural to formalize the extensive anthropology collections that had been accumulated. More generally, anthropology became but one part of Benjamin Ide Wheeler's ambitions to build up a great research university.[136] Regionally, another incentive for the

University of California was the rapidly expanding campus museum of Jane Stanford.[137]

Finally, on a national level, the turn of the century was a critical period in American anthropology. During the 1890s, university departments were initiated at Harvard, Pennsylvania, Chicago, and Columbia, and the California department was directly linked to several of these. Franz Boas had begun teaching at Columbia only in 1896, and his first student, Alfred Kroeber, obtained his doctorate in the year that California established its own department. In 1902, as the discipline gradually professionalized, the American Anthropological Association was founded. These institutional developments coincided with an intellectual shift, as the field moved, under Boas's direction, from comparative, evolutionary explanations to historical and culture-specific analyses, based on intensive fieldwork. Kroeber's work in California ethnography was joined with the ongoing archaeological research of Reisner and Uhle, both of whom were noted for beginning systematic collection in their respective regions.

Perhaps it was a coincidence that all these developments coincided with the beginning of a new century, but at the University of California, at least, Phoebe Hearst decided that this was the proper time to place her passions and her fortune at the service of a new museum of anthropology. The institution she founded, the oldest and largest of its kind west of Chicago, has long outgrown her personal vision. One can safely say, however, that without her stimulus, it might never have happened.[138]

Reisner collections: Egyptian sarcophagi placed in the main entrance of the Anthropology Museum, at the Affiliated Colleges site on Parnassus Heights, San Francisco, October 1911. Photograph by S. M. Grow. *Hearst Museum (15-5393).*

ENDNOTES

For research assistance in the preparation of this article (particularly on the earlier university collections), I would like to thank Rachel Goddard, Rebecca Graff, and Ian Whitmarsh; and for conversations and sharing of research materials: Gray Brechin, Crawford M. Greenewalt, Jr., Curtis Hinsley, Joan Knudsen, Alexandra Nickliss, and Ross Parmenter (deceased), as well as a reading of the manuscript by J. R. K. Kantor, Ann Lage, and Roberta Park.

1 There is no comprehensive history of the department and museum of anthropology at the University of California at Berkeley. Useful sources are Alfred L. Kroeber and Frederic W. Putnam, *The Department of Anthropology of the University of California* (Berkeley: University of California, 1905); Albert B. Elsasser, *Treasures of the Lowie Museum* (Berkeley: Lowie Museum of Anthropology, University of California, 1968); Timothy H. H. Thoresen, "Paying the Piper and Calling the Tune: The Beginnings of Academic Anthropology in California," *Journal of the History of the Behavioral Sciences* 11:3 (1975), 257-75; Frederick Alexander Long, "'The Kingdom Must Come Soon': The Role of A. L. Kroeber and the Hearst Survey in Shaping California Anthropology, 1901-1920" (master's thesis, Simon Fraser University, 1998); Ira Jacknis, "Museum Anthropology in California, 1889-1939," *Museum Anthropology* 17:2 (1993), 3-6; Ira Jacknis, "Patrons, Potters, and Painters: Phoebe Hearst's Collections from the American Southwest, "in Shepard Krech III and Barbara Hail, eds. *Collecting Native America, 1870-1960* (Washington, D.C.: Smithsonian Institution Press, 1999), 139-71. The current paper is an extension of my earlier Hearst essay, focusing explicitly on the decade leading up to the museum's founding. Please see the conclusion to that essay for a more analytic and comparative discussion, pp. 156-62, as well as pp. 152-53 for a discussion of her personal collecting.

2 The best current biography of Phoebe Hearst is Alexandra Marie Nickliss, "Phoebe Apperson Hearst: The Most Powerful Woman in California" (Ph.D. diss., University of California, Davis, 1994). See also Judith Robinson, *The Hearsts: An American Dynasty* (Newark: University of Delaware Press, 1991), and a good review by Richard H. Peterson, "Philanthropic Phoebe: The Educational Charity of Phoebe Apperson Hearst," *California History* 64:4 (1985), 284-89, 313-15.

3 Cited in Nickliss, "Hearst," 286, from Incomplete Letters-Correspondents, unidentified; fragments of letters. From a letter beginning, "is full of fizz," Phoebe A. Hearst Papers (hereafter, PAH), box 59, The Bancroft Library, University of California, Berkeley.

4 Phoebe A. Hearst to Janet Peck, February 7, 1905, quoted in Richard H. Peterson, "Philanthropist and the Artist: The Letters of Phoebe A. Hearst to Orrin M. Peck," *California History* 66:4 (1987), 280; see also, Robinson, *The Hearsts*, 307.

5 Phoebe A. Hearst to Orrin Peck, February 9, 1905, quoted in Peterson, "Philanthropist and the Artist," 280. This was the excavation of George Reisner.

6 Phoebe A. Hearst to Orrin Peck, November 5, 1903, quoted in Peterson, "Philanthropist and the Artist," 280.

7 William Randolph Hearst, Jr., with Jack Casserly, *The Hearsts: Father and Son* (Niwot, CO: Roberts Rinehart Publishers, 1991), 119.

8 Hearst's European trip in the summer of 1889, when she was investigating kindergartens, was particularly important in the development of her anthropological interests. A highlight was the ethnographic and anthropological museums in St. Petersburg, Russia. Nickliss, "Hearst," 108; Robinson, *The Hearsts*, 220.

9 William Pepper to Phoebe A. Hearst, February 24, 1895, PAH; cf. Nickliss, "Hearst," 143, 179; Thoresen, "Paying the Piper," 259.

10 One of Hearst's first acts of anthropological patronage was her contribution to Carl Lumholtz's Mexican expeditions for the American Museum of Natural History. See Carl Lumholtz, *Unknown Mexico: A Record of Five Years' Exploration Among the Tribes of the Western Sierra Madre; in the*

Tierra Caliente of Tepic and Jalisco; and among the Tarascos of Michoacan (New York: Charles Scribner's Sons, 1902), xviii; and letters from Lumholtz to Hearst, April 1890, February and April 1891, PAH. I am grateful to Martha Graham, American Museum, for sharing her research on Lumholtz.

11 For the University of Pennsylvania, see Regna D. Darnell, "The Emergence of Academic Anthropology at the University of Pennsylvania," *Journal of the History of the Behavioral Sciences* 6 (1970), 80-92; Dilys Pegler Winegrad, *Through Time, Across Continents: A Hundred Years of Archaeology and Anthropology at The University Museum* (Philadelphia: The University Museum, University of Pennsylvania, 1993); Bruce Kuklick, *Puritans in Babylon: The Ancient Near East and American Intellectual Life, 1880-1930* (Princeton: Princeton University Press, 1996), 27-31, 59-63, 78-81, 101-3.

12 Kuklick, *Puritans*, 101-02. In time, she served as a member of the Society's Board of Directors and as Honorary President (a position created for her); Thoresen, "Paying the Piper," 260; Sara Y. Stevenson to Phoebe A. Hearst, December 1, 1898, PAH.

13 When she suffered a heart attack in 1895, Phoebe Hearst sought relief from Dr. Pepper, who was also treating Cushing at the time; Robinson, *The Hearsts*, 255.

14 The Mesa Verde collection has a tangled history, with many collections taken from many sites over an extended period. It was assembled from three sources by Charles D. Hazzard of Minneapolis, representing the H. Jay Smith Exploring Company, a commercial enterprise. Hazzard combined a collection gathered by rancher Richard Wetherill and his three brothers between 1889 and 1892 with one brought together by C. M. Viets, a local pothunter, and exhibited both at the World's Columbian Exposition. After the fair, Hazzard bought a third collection from the region and stored them all in Chicago as he tried to find a buyer. See Rebecca Allen, "The History of the University Museum's Southwestern Pottery Collection," in J. J. Brody, *Beauty from the Earth: Pueblo Indian Pottery from The University Museum of Archaeology and Anthropology* (Philadelphia: The University Museum of Archaeology and Anthropology, University of Pennsylvania, 1990), 61-87; Duane A. Smith, *Mesa Verde National Park: Shadows of the Centuries* (Lawrence: University Press of Kansas, 1988).

15 Frank Hamilton Cushing, "Exploration of Ancient Key Dwellers' Remains on the Gulf Coast of Florida," *Proceedings of the American Philosophical Society* 35 (1896), 329-448; Marion Spjut Gilliland, *The Material Culture of Key Marco, Florida* (Gainesville: University of Florida Press, 1975), 3-6, 23, 181; Cushing to William Pepper, April 27, May 10, May 18, 1896; Phoebe A. Hearst to Stewart Culin, July 24, 1900, Archives, University of Pennsylvania Museum.

16 Hearst herself had intended to accompany Nuttall to Moscow, partly to attend a coronation, but due to the illness of her son, Nuttall went alone. Zelia Nuttall to Phoebe A. Hearst, April 16, 1896, PAH, cf. Thoresen, "Paying the Piper," 260.

17 Nuttall's father was a doctor and her mother was the Mexican-born daughter of John Parrott, one of San Francisco's richest bankers. Ross Parmenter, "Glimpses of a Friendship: Zelia Nuttall and Franz Boas," in June Helm, ed. *Pioneers of American Anthropology: The Uses of Biography* (Seattle: University of Washington Press, 1966), 88-147; Parmenter, "Zelia Maria Magdalena Nuttall," in *Notable American Women* (Cambridge: Harvard University Press, 1971), vol. II, 640-42; Parmenter, "Zelia Nuttall and the Recovery of Mexico's Past," unpublished manuscript, [1993]; a copy of one section of the manuscript is in the possession of Jacknis; the original manuscript will eventually be deposited in Tulane University Library, Special Collections.

18 Parmenter, "Nuttall," 123; Parmenter, "Glimpses of a Friendship," 93; Thoresen, "Paying the Piper," 258.

19 Nancy Oestreich Lurie, "Women in Early American Anthropology," in Helm, *Pioneers of American Anthropology*, 67.

20 Parmenter, "Glimpses of a Friendship," 94.

21 Lurie, "Women," 40. Phoebe Hearst's attendance at the Chicago fair was very meaningful to her, especially for her conception of architecture and urban planning. Nickliss, "Hearst," 154.

22 Christine Moon Van Ness, "Sara Yorke Stevenson (1847-1921)," in Ute Gacs, Aisha Khan, Jerrie McIntyre, Ruth Weinberg, eds. *Women Anthropologists: A Biographical Dictionary* (New York: Greenwood Press, 1988), 346.

23 Sara Y. Stevenson to Phoebe A. Hearst, May 26, 1896, PAH.

24 Zelia Nuttall to Phoebe A. Hearst: "It is a strange combination of unforeseen circumstances that has brought us both to share the same interests in the same persons and things. Through Sara Stevenson I learnt that it was your generosity and interest in his work that enables Dr. Uhle to continue his explorations in Peru." January 1, 1897 [96 written on it], Alphabetical correspondence, Archives, University of Pennsylvania Museum; a similar passage is in Nuttall to Hearst, April 16, 1896, PAH.

25 John Howland Rowe, *Max Uhle, 1856-1944: A Memoir of the Father of Peruvian Archaeology*, University of California Publications in American Archaeology and Ethnology, 46:1 (1954), 1.

26 Rowe, *Uhle*, 4.

27 Rowe, *Uhle*, 6.

28 In 1898 Hearst was a member of the Board of Managers, Executive Committee, and several subcommittees, and a contributor to the building fund. Hearst biographical file, Archives, University of Pennsylvania Museum.

29 Phoebe A. Hearst to Mrs. William Pepper, ca. August 2, 1898, PAH.

30 In early 1892, a year after her husband's death, Phoebe Hearst had announced her intention of donating her personal art collection as the nucleus for a general art museum in San Francisco's Golden Gate Park. Nothing came of the plan, however, possibly because of indebtedness against the estate. Although abortive, it was an early indication of Hearst's interests in founding a museum in California. Robinson, *The Hearsts*, 248.

31 Bernard Maybeck, then teaching drawing in the engineering college, was given the responsibility for the design of both buildings, but in the end, he only did Hearst Hall. Nickliss, "Hearst," 182, 185.

32 Loren W. Partridge, *John Galen Howard and the Berkeley Campus: Beaux-Arts Architecture in the "Athens of the West"* (Berkeley: Berkeley Architectural Heritage Association, 1988), 12.

33 Perhaps the best summary of the museum's pre-1901 years is the "Early history of the University museum, especially the Museum of Anthropology," a memo prepared by May Dornin of the Archives Department of the University Library for Professor Edward W. Gifford, June 14, 1951. Consisting largely of extracts from regents' reports, it was clearly used by Gifford in his "Historical Retrospect," included in the *Annual Report of the Museum of Anthropology for the year ending June 30, 1951*, 21-29. A copy is in "Museum History: Regents meetings relating to U.C. Museums, 1886-1904," Archives, Hearst Museum of Anthropology, University of California, Berkeley.

34 However, "a choice collection of mineralogical specimens" constituted "the beginning of a cabinet" for the College of California in 1867. *Catalogue of the College of California for 1866-67*, cited in Dornin. For the Museum Plan, see Verne A. Stadtman, *The University of California, 1868-1968* (New York: McGraw-Hill, 1970), 26-27; Michael L. Smith, *Pacific Visions: California Scientists and the Environment, 1850-1915* (New Haven: Yale University Press, 1987), 33-34; and Gunther Barth, *California's Practical Period: A Cultural Context of the Emerging University, 1850s-1870s*. Chapters in the History of the University of California, no. 2 (Berkeley: Center for Studies in Higher Education/Institute of Governmental Studies, University of California, 1994), 21-22. It is not exactly clear where all the survey collections were deposited, but they seem to have been taken in by the California Academy of Sciences as well as the university. The California situation contrasts with that at Washington, where the university also served as the locus of the state

museum. After 1900, however, Berkeley became the de facto repository for survey collections in anthropology under Kroeber (cf. Long, "Kingdom"), botany with Jepson, and zoology under Grinnell.

35 In addition to the existing buildings for the agriculture college and College of Letters, Hall contemplated schools of mines, engineering and mechanic arts, practical agriculture and horticulture, and three service buildings for a museum, library, and assembly hall. Kent Watson, *The University in the 1870s: William Hammond Hall and the Original Campus Plan*, Chapters in the History of the University of California, no. 6 (Berkeley: Center for the [sic] Studies in Higher Education/Institute of Governmental Studies, University of California, 1996), 44.

36 Botany was sometimes divided into economic and systematic botany, and geology was sometimes accompanied by a separate mineralogy museum. Verne A. Stadtman, ed. *The Centennial Record of the University of California* (Berkeley: University of California Printing Department, 1967), 87; Nelson H. H. Graburn, Molly Lee, and Jean-Loup Rousselot, *Catalogue Raisonné of the Alaska Commercial Company Collection, Phoebe Apperson Hearst Museum of Anthropology* (Berkeley: University of California Press, 1996), 3.

37 The two other collections were the State Geological Collection (which held a wide range of plants and animals in addition to rocks, minerals, and fossils), and Ward's Series of [Fossil] Casts. *Report of the Regents of the University of California, 1872-73*, cited in Dornin.

38 *Biennial Report of the President of the University of California, 1886*, 36.

39 Stadtman, *University of California*, 109; Stadtman, *Centennial Record*, 77; Watson, *The University in the 1870s*, 35; Nickliss, "Hearst," 176.

40 *Report of the Regents of the University, 1880*, 18.

41 *Biennial Report of the President of the University, 1882-84*, 17.

42 Stadtman, *University of California*, 109.

43 *Report of the Regents of the University, 1877*, cited in Dornin.

44 *Biennial Report of the President of the University, 1882-84*, 16-18, citation p. 18.

45 *Biennial Report of the President of the University, 1888*, 17; *Biennial Report of the President of the University, 1890*, 16, 103; *Biennial Report of the President of the University, 1893*, 93.

46 *Biennial Report of the President of the University, 1882-84*, 16-18; *Biennial Report of the President of the University, 1886*, 35-36.

47 For an excellent review of university museums of natural science in the nineteenth century, see Sally Gregory Kohlstedt, "Museums on Campus: A Tradition of Inquiry and Teaching," in Ronald Rainger, Keith Rodney Benson, and Jane Maienschein, eds. *The American Development of Biology* (Philadelphia: University of Pennsylvania Press, 1988), 15-47.

48 Stadtman, *Centennial Record*, 87.

49 John C. Merriam was also one of the faculty members who added to the university collections with field expeditions; he collected fossils during the summers of 1899 and 1900; *Biennial Report of the President of the University, 1899-1900*, 41.

50 The Survey's plants were collected by William H. Brewer and others. The Botanical Garden moved to its current site at the head of Strawberry Canyon in 1926. Stadtman, *Centennial Record*, 117-18. According to Jean Lang, the garden was begun in 1890 by Willis Linn Jepson and Edward Lee Greene, *The Berkeley Natural History Museums* (Berkeley: Berkeley Natural History Museums and the Office of Vice Chancellor for Research, University of California, 1994), 14. For the herbarium, see Stadtman, *Centennial Record*, 304; Lang, 26. By 1900, reports also refer to a Botanical Museum, consisting primarily of California woods and seed cones, in addition to the herbarium and garden; *Biennial Report of the President of the University, 1900-02*, 45.

51 The Museum of Vertebrate Zoology was founded in 1908, with an endowment from Annie Montague Alexander, as was the Museum of Paleontology, which "began in 1872 around materials collected by the California Geological Survey in the 1860s" and "was officially established in 1921." The Jepson Herbarium was founded in 1950. Lang, *Berkeley Natural History Museums*, 22, 18, 26.

52 In addition to the anthropology accessions cited below, a good sample was listed in the *Report of the Regents of the University, 1880*, 79.

53 Excerpts from regents minutes, April 1, 1873, also *Report of the Regents of the University, 1872-73;* Museum History: Regents meetings relating to University of California Museums, 1886-1904, Hearst Museum.

54 Cited in Dornin; also in Stadtman, *University of California*, 108.

55 *Register of the University of California, 1873*, cited in Dornin. Cf. Graburn, *Catalogue Raisonné*, 3, where the final phrase is cited in *Register, 1877-78*, 32.

56 Hearst Museum, accession 167; Graburn, *Catalogue Raisonné*, 1-3, 14. Lacking a formal museum building, the Alaska Commercial Company collections were displayed in the old Ferry Building in San Francisco, from April 1900 to November 1904. They were physically and legally transferred to the new museum of anthropology in November 1904, when they were moved to the university's anthropology museum on Parnassus Heights in San Francisco, present site of the University of California, San Francisco. Graburn claims that other university ethnology collections were exhibited in the Ferry Building, along with those from the ACC; *Catalogue Raisonné*, 2, 17.

57 *Biennial Report of the President of the University, 1886*, 35.

58 *Report of the Regents of the University, 1877*; cited in Dornin. The volunteer service of C. D. Voy was also noted for that year. June 4, 1878; Excerpts from regents minutes, in Museum History: Regents meetings relating to University of California Museums, 1886-1904, Hearst Museum. Dornin claims that Rivers served as curator from 1881 to 1894.

59 Minerals were transferred to the care of A. Wendell Jackson's Museum of Economic Geology, Museum of Petrography, and Museum of Mineralogy. *Report of the President of the University, 1881*, cited in Dornin.

60 Excerpt from regents minutes, April 14, 1896, in Museum History: Regents meetings relating to University of California Museums, 1886-1904, Hearst Museum.

61 *Biennial Report of the President of the University, 1896*, cited in Dornin.

62 Graburn, *Catalogue Raisonné*, 3. After the founding of the new museum of anthropology, the ethnological and archaeological specimens from these "Older University Collections" were gradually accessioned: accession no. 35 (January 1902), 36 (January 1902), 78 (April 1903), 85 (July 1903), 91 (August 1903), 100CF (1921), 118 (February 1904?), 134 (April 1904), 159 (March 1904), 166 (March 1905), 661 (date unknown); see Graburn, *Catalogue Raisonné*, 2. Most of these are listed as coming from Professor Merriam, mostly from South Hall, but some from the Ferry Building.

63 Unattributed note, Alfred L. Kroeber to Frederic W. Putnam: A Map of Ethnological Work in California and Hearst Museum, misc. notes, 1901-02, Museum History.

64 Report of a committee on library and museum, 1899, cited in Dornin.

65 Steven Conn, *Museums and American Intellectual Life, 1876-1926* (Chicago: University of Chicago Press, 1998).

66 Sara Y. Stevenson to Phoebe A. Hearst, August 29, 1898, PAH.

67 Sara Y. Stevenson to Phoebe A. Hearst, October 10, 1898, PAH.

68 Sara Y. Stevenson to Phoebe A. Hearst, October 10, November 4, 1898, PAH. After spending the fall in Europe, Hearst seems to have arrived in Egypt in January of 1899, staying perhaps as long as two or three months; Sara Y. Stevenson to Phoebe A. Hearst, January 18, 1899, PAH.

69 Minutes of American Exploration Society, November 10, 1898, in Stevenson correspondence, PAH. Uhle was to begin work on March 1, 1899, but as he stayed longer in Germany, his contract was adjusted to May 1. Sara Y. Stevenson to Phoebe A. Hearst, June 9, 1899, PAH.

70 *Biennial Report of the President of the University, 1898-1900*, 109-10; Rowe, *Uhle*, 6, 7-8.

71 Sara Y. Stevenson to Phoebe A. Hearst, October 10, November 4, 1898, cf. Minutes of American Exploration Society, November 10, 1898, in Stevenson correspondence, Sara Y. Stevenson to Mr. Clark, April 24, 1899, PAH. As Phoebe Hearst saved very little of her own correspondence, here, as elsewhere, we must rely primarily on her incoming letters.

72 Sara Y. Stevenson to Phoebe A. Hearst, March 1, 1899, PAH. Also, Sara Y. Stevenson to Phoebe A. Hearst, January 18, 1899, PAH. The last 8 in the year was crossed out and 9 written clearly over it. This was evidently a slip of the pen for 1899, especially as Stevenson says she had been hoping to hear from Mrs. Hearst from home or Egypt. See Nickliss, "Hearst," 248-49.

73 Sara Y. Stevenson to Phoebe A. Hearst, November 4, 1898, PAH.

74 John A. Wilson, *Signs and Wonders Upon Pharaoh: A History of American Egyptology* (Chicago: University of Chicago Press, 1964), 228, 144; cf. 144-50; Dows Dunham, *Dictionary of American Biography*, suppl. 3, 626-28; Warren R. Dawson and Eric P. Uphill, 3rd revised edition by Morris L. Bierbrier, *Who Was Who in Egyptology* (London: Egypt Exploration Society, 1995), 351-52. In the years after the museum was founded, Reisner's major excavations for California were at the sites around Giza. When his collecting for Hearst was over in 1905, Reisner spent the rest of his career working jointly for the Boston Museum of Fine Arts and Harvard.

75 Stevenson idolized the English Egyptologist William M. Flinders-Petrie, believing that the English were "our natural allies." Pennsylvania had already engaged Charles H. Rosher, and she was attempting to secure the services of James E. Quibell, "a rare personality." She distrusted Reisner because "his proclivities are German," but she felt that he was "the best man available," next to Quibell; Report by Stevenson on her 1898 Egyptian trip; Sara Y. Stevenson to Phoebe A. Hearst, November 4, 1898, PAH.

76 Sara Y. Stevenson to Phoebe A. Hearst, April 28, 1899; also Stevenson to Hearst, June 9, September 30, November 1, 1899, PAH. See Parmenter, "Nuttall," 65; Thoresen, "Paying the Piper," 260; Nancy Thomas, et al., *The American Discovery of Ancient Egypt* (Los Angeles: Los Angeles County Museum of Art, American Research Center in Egypt, distributed by Harry N. Abrams, 1995), 56; cf. 56-58 for general discussion of the Berkeley Egyptian collections.

77 Sara Y. Stevenson to Phoebe A. Hearst, June 9, 1899, PAH; George A. Reisner to Sara Y. Stevenson, June 9, 1899, Dept. of Ancient Egyptian, Nubian, and Near Eastern Art, Boston Museum of Fine Arts (BMFA); cf. Kuklick, *Puritans*, 102.

78 George A. Reisner to Phoebe A. Hearst, June 9, 1899, BMFA; cf. Thoresen, "Paying the Piper," 260; Parmenter, "Nuttall," 65.

79 *Biennial Report of the President of the University, 1898-1900*, 109-10; Thomas, *American Discovery*, 56.

80 Reisner, autobiographical ms. [p. 3], Dept. of Ancient Egyptian, Nubian, and Near Eastern Art, Boston Museum of Fine Arts, quoted in Thomas, *American Discovery*, 56. Arthur C. Mace joined Reisner and Lythgoe later, in November 1901 (Thomas, *American Discovery*, 57). In addition to Phoebe Hearst's collections, in 1899-1900 the university received from her son an independent "collection of Greek and Egyptian antiquities." *Biennial Report of the President of the University, 1899-1900*, 105. The younger Hearst had actually preceded his mother's first trip in 1898-99 to Egypt, which he first visited in 1893, and again in 1899 and in 1900-01; Ben Procter, *William*

Randolph Hearst: The Early Years, 1863-1910 (New York: Oxford University Press, 1998), 70-71, 151-52, 165. While working for Mrs. Hearst, Reisner also made purchases for her son; George A. Reisner to Phoebe A. Hearst, February 13, and May 15, 1900, PAH.

81 Sara Y. Stevenson to Phoebe A. Hearst, August 29, 1898, PAH.

82 Thomas, *American Discovery*, 58. Sir Eric Turner mistakenly lists the season as 1900-01; "The Graeco-Roman Branch," in T. G. H. [Thomas Garnet Henry] James, ed. *Excavating in Egypt: The Egypt Exploration Fund, 1882-1982* (Chicago: University of Chicago Press, 1982), [161-78], 171. The earlier date is amply documented in contemporary correspondence; cf. Arthur M. F. W. Verhoogt, "The Tebtunis Papyri at The Bancroft Library," *Bancroftiana* 107 (June 1994), 4-7.

83 Wheeler's relative youth and energy may be one reason why Phoebe Hearst delayed establishing a museum under the former president. A long-time professor of Latin, Martin Kellogg became acting president in 1890 at the age of sixty-two, before taking over officially in 1893. He was noted for his competent but not spectacular running of the university (cf. Stadtman, *University of California*, 175-78). Wheeler, on the other hand, was forty-five at his inauguration in 1899, twelve years younger than Hearst. For whatever reason, Hearst and Wheeler forged a long and productive partnership that was unlike her previous ties with the university administration.

84 Harold N. Fowler, "Alfred Emerson," *American Journal of Archaeology*, 48, 1 (1944), 80; "Alfred Emerson," obituary, *New York Times*, October 20, 1943. From 1905 to 1916, Emerson served as Curator of Antiquities and Assistant Director at the Art Institute of Chicago. In addition to some brief teaching, he worked as a linguist and translator for the U.S. Army during and after World War I. Following his retirement in 1921, he traveled extensively in the Mediterranean.

85 Alfred Emerson to Phoebe A. Hearst, June 20, 1899, PAH.

86 According to Robert F. Heizer and Albert B. Elsasser, Jones was appointed in March of 1900; Philip Mills Jones, *Archaeological Investigations on Santa Rosa Island in 1901*, Robert F. Heizer and Albert B. Elsasser, eds. Anthropological Records, 17:2 (Berkeley: University of California Press, 1956), 201. But Jones sent Hearst a letter dated January 11, 1900, reporting that he was returning from Kern County, PAH.

87 Mrs. Hearst appropriated the following annual allocations (covering excavations as well as purchases): $10,000 for Reisner, for five years; $3,500 for Uhle, for five years; $10,000 for Emerson, for two years, and $6,000 for Jones. *Biennial Report of the President of the University, 1898-1900*, 55.

88 Ibid., 109-10.

89 This date has been given variously as 1899, 1900, and 1901. The earlier date was given by Parmenter ("Glimpses of a Friendship," 94, and "Nuttall," *Notable American Women*, 641), where he says Nuttall returned from thirteen years in Europe in 1899. This date has also been reported in Alfred M. Tozzer's obituary, "Zelia Nuttall," *American Anthropologist* 35 (1933), 476; and Beverly Newbold Chiñas, "Zelia Maria Magdalena Nuttall (1857-1933)," in Gacs et al., eds. *Women Anthropologists*, 270. Joan Mark, who is mistaken about other Hearst dates, says Nuttall returned home in 1901, *A Stranger in Her Native Land: Alice Fletcher and the American Indians* (Lincoln: University of Nebraska Press, 1988), 283. Parmenter's unpublished manuscript ("Nuttall," 1) has her returning in June of 1900, a date which he gave to Thoresen in a 1974 letter, "Paying the Piper," 261. As Parmenter was the leading Nuttall scholar, I take his later date to be a revision, based on more complete information.

90 Parmenter, "Glimpses of a Friendship," 94.

91 In addition to her Pleasanton hacienda, Hearst built a Berkeley home in 1900. Mark A. Wilson, *A Living Legacy: Historic Architecture of the East Bay* ([San Francisco]: Lexikos Press, 1987), 105. In 1902 she finally sold her Washington, D.C., residence. James M. Goode, "Hearst House," *Capital Losses: A Cultural History of Washington's Destroyed Buildings* (Washington, D.C.: Smithsonian Institution Press, 1979), 96.

92 Parmenter, "Glimpses of a Friendship," 95. Nuttall was renewing her acquaintance, as the trio had first met at the 1886 meeting of the American Association for the Advancement of Science; Parmenter, "Glimpses of a Friendship," 87. Nuttall had met Putnam earlier that year, but Boas, who had just arrived from Germany, was introduced to both Nuttall and Putnam at the Buffalo meeting.

93 Ralph W. Dexter, "The Role of F. W. Putnam in Developing Anthropology at the American Museum of Natural History," *Curator* 19 (1976), 303-10; Joan Mark, *Four Anthropologists: An American Science in its Early Years* (New York: Science History Publications, 1980), 14-61.

94 Parmenter, "Nuttall." However, Parmenter speculates that Fletcher "first introduced Mrs. Hearst to Putnam," "Nuttall," 123. Zelia Nuttall, *The Fundamental Principles of Old and New World Civilizations: A Comparative Research Based on a Study of the Ancient Mexican Religious, Sociological and Calendrical Systems* (Cambridge, Mass.: Peabody Museum of American Archaeology and Ethnology, 1901).

95 Thoresen, "Paying the Piper," 262, also Parmenter, "Nuttall," 65, 125. The earliest Hearst letters in the Putnam papers at Harvard, concerning their visits, are from November (Correspondence, 1901-1910, Re: University of California, Dept. of Anthropology). The Putnam-Hearst correspondence in the Hearst papers is even later, beginning in 1902.

96 *Science*, no. 351 (September 20, 1901), 462; cf. *Thirty-fourth Report on the Peabody Museum of American Archaeology and Ethnology, Harvard University, 1899-1900*, 8. Geologist James D. Whitney had discovered the so-called "Calaveras skull" in the 1870s, around the same time that Putnam first visited California on the Wheeler Survey. Although the specimen was later found to be a hoax, Whitney's conclusion that human beings had occupied the state since the Pliocene (two million years ago) set the agenda for Californian archaeological research for the rest of the century; cf. Long, "Kingdom," 2-4.

97 Philip M. Jones, "Mound Excavations near Stockton," in Alfred L. Kroeber, ed. *Phoebe Apperson Hearst Memorial Volume*, University of California Publications in American Archaeology and Ethnology, 20:7 (1922), 115.

98 Rowe, *Uhle*, 6-7.

99 Thomas, *American Discovery*, 57.

100 *Biennial Report of the President of the University, 1898-1900*, 35; "The Phoebe Hearst Archaeological Explorations," *University [of California] Chronicle* (1901) 4:1, 49-50.

101 Anonymous, "Mrs. Phoebe Hearst," *American Anthropologist* 2:2 (April-June, 1900), 403.

102 *Biennial Report of the President of the University, 1898-1900*, 55.

103 Ibid., 55-56.

104 Phoebe A. Hearst to Stewart Culin, July 24, 1900, Stewart Culin, director's correspondence, Archives, University of Pennsylvania Museum. This letter is the first documented indication of Hearst's intentions to withdraw some of her Philadelphia collections. However, late in the previous year she announced to Mrs. Stevenson that she was withdrawing her support from Pennsylvania's "archaeological enterprises" in favor of her California expeditions; Stevenson to Hearst, November 1, 1899, PAH.

105 Phoebe A. Hearst to Sara Y. Stevenson, [1899-1900; probably 1900, around the time of the Culin letter]. In the letter, Mrs. Hearst writes of her resignations (from the board and the honorary presidency of the Exploration Society) and of "centralizing all my Museum interests hereafter in the west."

106 This account is based on Parmenter, "Nuttall," 45-48, 98, 125, passim. For Stevenson's side of the story, see her detailed letter to Hearst, February 12, 1901, PAH.

107 Mark, *Stranger in Her Native Land*, 283.

108 Mark, *Stranger in Her Native Land*, 235; 242-45; 282. Fletcher was a kind of "scientific mother confessor to Zelia Nuttall, who was almost twenty years her junior," 243. Note that Mark is in error on the dates of Hearst's support at University of Pennsylvania (282-83). Fletcher turned out to be more of a confidante and advisor for Hearst in 1902 than during the year that the museum was being formulated. Fletcher, who stayed with Hearst in the summer of 1902, maintained an extensive and critical correspondence with Putnam about the running of the museum. After this Hearst and Fletcher grew apart (286-89).

109 From Boston, Zelia Nuttall to Franz Boas, May 14, 1901; and reply, Franz Boas to Zelia Nuttall, May 16, 1901; cf. Parmenter, "Glimpses of a Friendship," 96-101, also Franz Boas, "The Boas Plan for American Anthropology" [Franz Boas to Zelia Nuttall, May 16, 1901], in George W. Stocking, Jr., ed. *The Shaping of American Anthropology, 1883-1911: A Franz Boas Reader* (New York: Basic Books, 1974), 286-89.

110 Zelia Nuttall to Phoebe A. Hearst, May 19, 1901, PAH; cf. Parmenter, "Nuttall," 107. However, contrary to Boas's recommendations, Nuttall advocated the immediate hiring of Alfred Kroeber. Perhaps, as she wrote, she was worried that "this chance of securing this promising young man will . . . be missed and that he may be lost to us by being employed by another institution."

111 Thoresen, "Paying the Piper," 264; Long, "Kingdom," 28.

112 Another student at the time was Samuel A. Barrett. Barrett had enrolled in the university as early as the fall of 1900, but after meeting Kroeber in 1902, he reentered in order to study anthropology. Barrett conducted a great deal of important California research in these years, obtaining the department's first doctoral degree in 1908. Sherrie Smith-Ferri, "Introduction: The Human Faces of *Pomo Indian Basketry*," Samuel A. Barrett, *Pomo Indian Basketry*, reprint (Berkeley: Hearst Museum of Anthropology, University of California, 1996), 9, 52.

113 Jones, "San Nicolas Island Archaeology in 1901," *Masterkey*, 43:3 (1969), 84-98. See also Jones, *Santa Rosa Island*, 201.

114 After an autumn in southern California, Jones's last collecting trip for Mrs. Hearst, in 1902, was devoted to the Hopi, Navajo, and Eastern Pueblos of New Mexico and Arizona. The major goal of the expedition was actually photography; see Jacknis, "Patrons," 147. After leaving her employ, Jones devoted the rest of his life to public health.

115 Thomas, *American Discovery*, 57.

116 Rowe, *Uhle*, 7-8.

117 Parmenter, "Nuttall," 114, 117, 120.

118 Mark, *Stranger in Her Native Land*, 286.

119 John C. Merriam, "Recent Cave Exploration in California," *American Anthropologist* 8:2 (1906), 221-28. Cf. Frederic W. Putnam, "Evidence of the Work of Man on Objects From Quaternary Caves in California," *American Anthropologist* 8:2 (1906), 229-35; Mark, *Stranger in Her Native Land*, 284-86.

120 Mark, *Four Anthropologists*, 43; *Stranger in Her Native Land*, 285; Parmenter, "Nuttall," 126.

121 Parmenter, "Nuttall," 90, 125, 88. Nuttall had met George Pepper at the 1900 AAAS meetings.

122 George Pepper to Stewart Culin, June 11, 1901, Hazzard-Hearst collection, correspondence, Archives, University of Pennsylvania Museum. Later, in 1903, Pepper made an important pueblo pottery collection for Mrs. Hearst; Jacknis, "Patrons," 146.

123 Parmenter, "Nuttall," 126, 128, citing a letter of Nuttall to Putnam's secretary, Miss Mead; Phoebe A. Hearst to Frederic W. Putnam, July 12, 1901, Harvard Archives, inviting George Pepper or Putnam to the hacienda.

124 Minutes of the Board of Regents, September 10, 1901; copy in Museum History, Hearst Museum.

125 Anonymous [Frederic W. Putnam?], "Anthropology at the University of California," *American Anthropologist*, 3:3 (July-September, 1901), 582-83.

126 Gifford, "Historical Retrospect," 21.

127 Thoresen, "Paying the Piper;" Long, "Kingdom."

128 Ralph W. Dexter, "Contributions of Frederic Ward Putnam to the Development of Anthropology in California," *Science Education*, 50 (1966), 315.

129 Mark, *Four Anthropologists*, 42.

130 Parmenter, "Nuttall," 65, also 125. Unfortunately, Parmenter cites no sources for this conclusion.

131 Regna D. Darnell, *And Along Came Boas: Continuity and Revolution in Americanist Anthropology* (Amsterdam/Philadelphia: John Benjamins Publishing Company, 1998), 148-49; on Berkeley, 148-55.

132 Nickliss, "Hearst," 247, cf. 247-61. As Hearst explained to Stewart Culin, she had accepted the position of honorary president of the American Exploration Society, "though I had no technical knowledge of archaeology, having only the enthusiasm acquired through general reading and visits to the world's greatest museums. . . ." July 24, 1900, Archives, University of Pennsylvania Museum.

133 Darnell, "The Emergence of Academic Anthropology," 81. Cf. Jacknis, "Patrons," 160-62.

134 Frederic W. Putnam to Zelia Nuttall, November 19, 1901; Frederic W. Putnam, Correspondence, 1901-1910, Re: University of California, Dept. of Anthropology, Harvard University.

135 Stadtman, *Centennial Record*, 88.

136 Henry F. May, *Three Faces of Berkeley: Competing Ideologies in the Wheeler Era, 1899-1919*, Chapters in the History of the University of California, no. 1 (Berkeley: Center for Studies in Higher Education/Institute of Governmental Studies, University of California, 1993).

137 Jane Stanford played an active, even intrusive, role in forming the museum at her private university. Although large, her collections were largely monuments to her personal taste. Phoebe Hearst, on the other hand, supported research by leading professionals at the state university. Cf. Carol M. Osborne, et al., *Museum Builders in the West: The Stanfords as Collectors and Patrons of Art, 1870-1906* (Stanford: Stanford University Museum of Art, 1986); Jacknis, "Patrons," 162.

138 The significance of Hearst's initiative with respect to anthropology is suggested by the late date for the formal founding of the University Art Museum—1970—dedicated to what is a much more popular discipline and institutional form.

The Occident, April 18, 1900.

SUMMER COURSES, SCHOOLS, AND SESSIONS, 1891–1920

Roberta J. Park

IN HIS STUDY OF THE GROWTH of American research universities Roger Geiger has pointed to the 1890s as a period of major changes that "set the stage for far-reaching transformations in what was taught, how, and to whom."[1] Undergraduate enrollments steadily increased; more subjects entered the curriculum; professional schools proliferated. These changes required larger faculties, additional—and often specialized—buildings, and more income to defray operating costs. The expansion of graduate work was dependent upon securing faculty members who had been appropriately trained in the desired research specialties. "Young scholars with German or American Ph.D.'s," as Geiger observes, "were eagerly sought"; and scholars with distinguished reputations suddenly found themselves in demand at other universities.[2]

Among many other turn of the century developments was the creation of summer sessions, the "brainchild" of William Rainey Harper, president of the newly opened University of Chicago in 1891. In *Great American Universities*, published in 1910, Edwin Slosson observed: "The summer quarter was the most radical and the most successful of [Harper's] innovations. . . . Its most marked effect was to loosen up the college system and give it a flexibility that enabled it to adapt itself to varying conditions as never before."[3] By 1899, the year that Benjamin Ide Wheeler became president of the University of California, summer school courses were being offered at an increasing number of American universities, including the University of California.

The new summer schools served a variety of clients and purposes. Most directed considerable effort to training public school teachers. During the 1880s and 1890s, Harvard's President Charles William Eliot repeatedly stressed the importance of "uplifting and reforming" secondary education. According to Arthur Powell: "[Eliot] never questioned Harvard's responsibilities to reform schools, claiming throughout his life that educational innovations were always invented at 'the top' and then 'descended' to lower levels."[4] In 1891, Harvard's Lawrence Scientific School initiated a summer school whose purposes were to "influence teachers in all fields," instill in them "warm feelings toward Harvard," and secure a larger student body.[5]

By taking the appropriate courses men and women could prepare themselves to become matriculated students. As the University of California's Dean of Summer Sessions C. H. Rieber pointed out in 1910, there were no formal requirements "except that applicants must be persons of good moral character and must be considered by the Faculty to be of sufficient maturity and intelligence to profit by attendance." In the case of regularly enrolled students who had neglected their studies during the regular term "because of social and other distractions," Rieber believed they were more likely to do "serious uninterrupted work" in the summer—in part because they had to pay a fee to attend.[6]

According to Geiger, summer schools came to be viewed as a valued addition "because they attracted serious, mature students who could follow advanced courses."[7] Among the major research universities in the early twentieth century, only Princeton, Yale, Johns Hopkins, and Stanford resisted the trend.[8] The journal *Midland Schools* reported that 6,007

students had attended one of forty-one summer schools in Iowa in 1906; another 29,318 had attended one of another fifty-one summer schools conducted by research universities, normal schools, medical schools, and other institutions across the United States.[9]

Summer Sessions at the University of California—The First Two Decades

Six students had enrolled in an elementary chemistry class offered by the University of California in summer 1891; a course in physics soon was added. By 1898, the Academic Council's Committee on Summer Schools was urging the regents to appoint a committee of three to draft "a complete and permanent plan for Summer Schools of the University in such departments as future needs may determine." The regents immediately assented.[10] During the summer of 1899 courses in chemistry, physics, mathematics, history, and pedagogy were offered; a total of 161 students attended.[11]

On January 25, 1900, Wheeler wrote to the regents stating:

> In accordance with the vote of the Board of Regents at its last meeting, authorizing the President of the University to formulate a plan for a Summer School which should carry out the policy recommended by the Academic Council for the gradual enlargement and development of the summer instruction, the President begs leave to offer the following. First: The Summer School should be broadened and enlarged in its work, particularly in the direction of the needs of the teachers of the state.[12]

Women students outside living quarters, ca. 1900. *University Archives (UARC PIC 4:334b).*

He recommended that courses in ten fields be offered in 1900; that the session be limited to six weeks; that professors, instructors, and assistants be remunerated according to their rank and their duties; and that students be charged ten dollars for instruction no matter what work they took rather than the current five dollars per class. Although most of the teaching positions were to be "filled from the university force," he considered it desirable to employ some faculty from outside. An enrollment of 250 students and an income of $2,500 were projected.[13]

The popularity of the 1900 summer offerings was considerably greater than President Wheeler had anticipated. Eleven departments accommodated 433 students (several of whom enrolled in more than one class) in a total of thirty-five courses. The numbers enrolled in one or more classes were as follows: education (264); history (230); English (148); physics (103); chemistry (99); botany (82); Latin (62); mathematics (35); philosophy (27); Greek (11); Semitics (4). A substantial number of those who participated were public school teachers who were graduates of normal school programs. Of the others, 90 were college graduates; 147 were regularly enrolled college students (120 of whom were from the University of California). [14] The twenty-two faculty in summer 1900 included five men from other institutions (Stanford, Clark University, San Francisco State Normal School, Chico State Normal School, Ventura High School).[15]

Wheeler was especially gratified that income had been $4,330, but expenses only $2,700. The library, which offered "the greatest service to the University as a whole," was the recipient of the $1,630 surplus. He looked forward to an enlarged summer school in 1901 and to "a new and greatly extended plan for the University Extension classes" that also would help to bring the university into closer association with the teachers of the state.[16]

The 1901 summer session, "designed mainly for teachers and other persons who [were] unable to attend the University during regular sessions," offered sixty-eight courses distributed among seventeen departments. Among the twenty-four professors, instructors, and assistants, the University of Chicago's John Dewey taught Educational Psychology and Ethical Thought of the Nineteenth Century; Stanford's Elwood P. Cubberly, taught School Administration; and Cornell's Henry Morse Stephens (soon to become professor of history at the University of California) taught History of British Rule in Asia and History of British Colonies and Colonial Policy.[17]

By 1904 instruction was offered in twenty-five departments. Of the thirty-five professors, whose work was supplemented by that of more than twenty instructors and assistants, eleven were from European and other American universities. Hugo de Vries (University of Amsterdam) taught Natural Plant-breeding and the Botanical Seminary; Svante August Arrhenius (University of Stockholm) taught Physical Chemistry and Application of Physical Chemistry to Serum-Therapy; Frederick Jackson Turner (University of Wisconsin) offered The Teaching of American History and The Beginnings of the West.[18]

Leon J. Richardson (professor of Latin and summer session dean from 1902 to 1904) reported that two types of courses had been in demand during the summer of 1904: (1) those of an elementary character, such as the introduction to a language; and (2) "those of a distinctly advanced grade, accommodated to the needs of specialists and professional people." Because increasing numbers of advanced students had begun to attend, four graduate courses had been offered.[19] Although some faculty had been concerned that six weeks was not adequate for such work, Richardson maintained that experience had "established that students may carry on courses of this character, provided . . . they devote themselves to a single subject." He also was of the opinion that the quality of the undergraduate experience was not diminished if the number of courses the student was permitted to take was limited.[20]

In 1906, "well-known men of letters and science" from eastern universities and Europe provided instruction in botany, physics, English, mathematics, French, history, and psychology. Joining Turner in teaching history was Yale's George Burton Adams, who lectured on his "favorably known" book, *Civilization During the Middle Ages*. The presence of Mexico's Dr. Ezequiel A. Chavez, Sub-Secretary of Public Instruction and Fine Arts, was thought to be indicative of "a growing harmony in educational work" between the two countries.[21] Of the 707 attendees, 330 were men and 377 were women. The largest number once again were enrolled in education courses (304 were secondary, grammar, and primary teachers; 20 were college instructors). The second largest group consisted of men "preparing to enter the regular engineering courses in the university." In science, the largest numbers had enrolled in botany, physiology, geology, and chemistry. Nearly 70 percent of those attending in 1906 were regular students; the remaining 224 "auditors," who participated without taking examinations or receiving credit, were from a wide range of occupations.[22] The following year, Mary L. Jones, Director of the Summer School of Library Methods, reported that twenty-four females (most of whom were employed by public libraries in towns and cities throughout California) had enrolled in that program. In addition to instructors drawn from the university's ranks, individuals from the California State Library, Stanford, Chico State Normal School, and Los Angeles' Barlow Medical Library provided instruction.[23]

Model playground, Summer Session, 1912. *University Archives (UARC PIC 4:797).*

The demand for upper division and graduate courses had grown considerably by 1909, the year the Academic Council gave "full recognition to the work of the Summer term in fulfillment of the residence requirement" for all degrees. Formerly a year-by-year appointment, in 1910 the office of Dean of the Summer Session was "made a permanent one." C. H. Rieber (associate professor of logic), who had served as dean since 1907, assumed the position.[24] Enrollment that year was 1,052, slightly over half of whom were public school, normal school, and college teachers. The fifteen dollar summer session fee was no longer sufficient to cover expenses, and it had become necessary to call upon the regents to pay the deficit; Rieber did not think this inappropriate "in view of the fact of the large service that our Summer School renders." However, he did ask "how far we should make our Summer School self-supporting."[25] (Rieber resigned the dean's position in 1915 and was replaced by Walter M. Hart, professor of English.)

For several years railroad companies in California, at the request of the university, had offered students reduced fares to and from summer sessions. They had done likewise for those who were enrolled in Berkeley's Summer School in Surveying, which had been conducted since the late 1890s. This enabled students to spend a month of "continuous work in the field . . . under the direction of two or three of the Engineering faculty" learning land surveying, running lines of roads and railways, etc.[26] By 1914, two hundred students were enrolled. The Southern Pacific and Ocean Shore railroad companies reaffirmed their agreements to provide round trip tickets at one-third cost, making it possible for groups of fifty students, over the course of several weeks, to travel to Swanton (near Santa Cruz) to par-

ticipate in the Summer School of Surveying.[27]

The 3,049 enrollments at the 1914 session, the largest to that date, were greatly exceeded the following year when 5,271 students attended. Much of the reason for this dramatic increase was the chance to combine attending courses with visits to the 1915 Panama-Pacific International Exposition in San Francisco.[28] The "Faculty of the Summer Session" section of *1915 Summer School Directory of Officers and Students* listed a teaching force of 237 individuals, about 15 of whom were from major research universities and a considerable number from colleges and normal schools.[29] According to the June 15, 1915 *Summer Session Californian*, "because the problems of social welfare are arousing nowadays a greater interest" the university had made this the central theme of "an entire group of courses."[30] Additionally, a faculty of twenty physical education experts had been assembled to meet the current interest in playground management, "community recreation facilities, and "the whole great movement for healthy bodies as homes for healthy minds." Other popular subjects were household economics, public and social hygiene, and "Nineteenth Century English Poets."[31]

Summer School of Surveying, 1907. *University Archives (UARC PIC 15:110).*

In 1917, enrollments in the regular summer session were 3,979; another 524 attended a five-week Inter-session that was devoted to "special wartime subjects" (e.g., nutrition, physical education, methods of charitable relief).[32] Registrations in 1918 declined by about 12 percent, although a 25 percent decrease had been anticipated. The drop in enrollment was caused by (1) America's entry into World War I (only 522 of the registrants were male); (2) the initiation of a summer quarter at Stanford; and (3) the availability of a University of California summer session in Los Angeles. Adjustments in the calendar in 1918 also made it possible to hold a second six-week term; 594 students attended. The focus was war work (e.g., War Emergency Course in Social Economics; a Course for Laboratory Technicians; a School for the Training of Reconstruction Aides, a precursor of the physical therapist).[33]

Wheeler expressed regret that a return to the regular academic calendar in 1919 would not permit continuance of the two summer sessions. He spoke favorably about the absence of formal entrance requirements, which made it possible for "all those who can profit by its courses" to attend, and noted the merits of the fact that the summer session was "sufficiently independent of the University" to enable it to experiment with course offerings.[34]

Summer Sessions Begin at Los Angeles

A request in 1916 to establish a summer session branch in Southern California had been rejected on the grounds that Berkeley's "full resources of laboratories, libraries, museums, and [academic] atmosphere" made possible far better educational experiences. However, a Summer Assembly in Science (directed to the needs of teachers) was held at the Scripps Institution for Biological Research at La Jolla that year.[35] Shortly thereafter, the regents approved the organization of a 1918 summer session "under the sole control and management of the University" in Southern California and also approved $15,000 (for the years 1917-19) to be devoted to University Extension work in the area. Monroe E. Deutsch (professor of Latin) was appointed Dean of the Summer Session at Los Angeles. To accommodate the planned offerings, the Los Angeles Board of Education placed at the disposal of the university the new Los Angeles High School building (completed in 1917 at a cost of $600,000); the city offered the use of its recreation center for choral work; a club house rented near the center of the city provided accommodation for a number of public lectures. A total of 630 attended in 1918.[36]

The popularity of the offerings persuaded the regents to authorize a second summer session in 1919. This was held at the campus of the twenty-five acre Los Angeles State Normal School, which was accessible by a trip of "about half an hour" from the city center on one of two local railway lines.[37] Additionally, summer courses in vocational agriculture were given at the University Farm in Davis and special summer lectures in citriculture were held at the Riverside Experiment Station.[38]

By 1920, summer session offerings were so popular that 312 courses (taught by a faculty of 220) were offered at Berkeley and 114 courses (taught by a faculty of 75) were conducted at Los Angeles. An aggregate of 6,449 students (4,007 at Berkeley; 1,437 at Los Angeles; and an additional 1,005 who registered for the May 10 to June 19 Intersession) enrolled in University of California summer session courses in 1920.[39]

ENDNOTES

1 Roger L. Geiger, *To Advance Knowledge: The Growth of American Research Universities, 1900-1940* (New York: Oxford University Press, 1986), 10.

2 Ibid., 10-11; 281. However, much of the teaching still was provided by "instructors, whose numbers were adjusted annually according to enrollments."

3 Edwin E. Slosson, *Great American Universities* (New York: The Macmillan Co., 1910), 406.

4 Arthur R. Powell, *The Uncertain Profession: Harvard and the Search for Educational Authority* (Cambridge, MA: Harvard University Press, 1980), 21-22.

5 Ibid.

6 C. H. Rieber, "The Dean of the Summer Session," *Biennial Report of the President of the University of California, 1908-1910,* 143.

7 Geiger, 14.

8 Ibid.

9 "Summer Schools—Attendance in 1906," reprint from *Midland Schools: A representative Educational Journal of Iowa.* President's records, University of California, CU-5, box 26:5. University Archives, University of California, Berkeley.

10 "Report of the Committee on Summer Schools to the Honorable Board of Regents of the University of California," April 11, 1899. Regents' records, CU-1, box 26:12, University Archives.

11 *Biennial Report of the President of the University of California, 1898-1900*, 26-27.

12 [Benjamin Ide Wheeler], "To the Regents," January 25, 1900. President's records, CU-5, box 5:112, University Archives.

13 Ibid.; See also Verne A. Stadtman, ed., *The Centennial Record of the University of California* (Berkeley: University of California Printing Department, 1967), 113.

14 *Biennial Report of the President of the University of California, 1898-1900*, 27.

15 Ibid.

16 Ibid. The Department of University Extension was formally organized during the year 1902-03; however, the university had been providing extension lectures in agriculture, farmer's and teacher's institutes, forestry conventions, etc., for a considerable length of time. *University of California Register, 1904-1905*, 311-313.

17 *University of California Register, 1901-1902*, 290-297.

18 *University of California Register, 1904-1905*, 302-310.

19 Leon J. Richardson, "The 1904 Summer Session," *University [of California] Chronicle*, 7 (1904), 74.

20 Ibid., 74-75. To support his assertion, Richardson pointed to the courses "in philosophy by Professor Ward, in mathematics by Professor Haskell, and in astronomy by Professor Leuschner."

21 "The University of California Summer Session of 1906," typescript signed by Farnham P. Griffith, Secretary to the President (with a notation: "To be published in the March number of the 'Midland Schools' Des Moines, Iowa"). President's records, CU-5, box 26:5, University Archives.

22 Ibid. Compilations done in 1911 listed 232 individuals as "Miscellaneous Occupations —Unclassified" and another 189 as "Miscellaneous Occupations—Classified." Among the latter were architects, attorneys, electricians, housewives (the largest group), nurses, physicians, and stenographers. "Miscellaneous Occupations." Regents' records, CU-1, box 89:8, University Archives.

23 Mary Letitia Jones to Joseph Cummings Rowell, August 2, 1907. Regents' records, CU-1, box 69:9a, University Archives.

24 Rieber, 141-144.

25 Ibid.

26 *Biennial Report of the President of the University, 1898-90*, 42.

27 F. S. Foote, Jr. (professor of civil engineering) to C. M. Torrey, February 3, 1914; Charles S. Fee (Southern Pacific) to C. M. Torrey, February 6, 1914; I. M. Randall (Ocean Shore Railroad Company) to C. M. Torrey, February 11, 1914. President's records, CU-5, 1914: 277, University Archives. The *Summer School in Surveying* numbers typically were not included in compilations of summer session enrollment totals.

28 "Throngs Flock to Exposition on Decoration Day," *San Francisco Chronicle*, June 1, 1915. An attendance of ninety thousand was estimated.

29 *Directory. Officers and Students, University of California. Summer Session, June 21 to July 31, 1915* (San Francisco: Ginn and Co., Publishers, 19[15]).

30 "Social Welfare, Theme," *Summer Session Californian*, June 19, 1915, 3; "Enrollment to be 4000," ibid. 1, in President's records, CU-5, 1915:667.

31 Ibid.

32 "The Summer Session," *University of California Chronicle*, 19 (1917), 497.

33 *Annual Report of the President of the University of California, 1917-1918*, 44-46.

34 Ibid.

35 "Dean Rieber Leaves Summer Session," *University of California Chronicle*, 18 (1916), 256; "Branch Summer Session Requested," ibid., 256-257; "Summer Assembly at Scripps Institution," ibid., 257-258.

36 *Annual Report of the President of the University of California, 1917-18*, 44-45; *University Register: Summer Session 1917-18*, 38-39.

37 "Summer Session, Los Angeles, 1919," *University of California Bulletin: Summer Session 1919*, No. 12, 39-51.

38 *University of California Bulletin. Summer Session, June 30 to August 19, 1919*, 3rd series, 23-26.

39 "Summer Sessions," *University of California Chronicle*, 22 (1920), 61; "6449 Students In 1920 Summer Sessions," ibid., 82.

Delta Upsilon members ca. 1900. *University Archives (UARC PIC 4:2146).*
Juniors and seniors wore distinctive "plugs" in the late 1890s and early 1900s. The seniors wore black top hats, somewhat battered but mainly undecorated. The junior plugs were gray, very battered and highly decorated with class numbers, scenes reflecting their majors, fraternities emblems, and with campus scenes.

University of California caps available on the Berkeley campus in 2000. *ASUC Catalog.*

EDUCATION IS A YEAR-ROUND OPERATION

SUMMER SESSIONS AT BERKELEY IN THE TWENTY-FIRST CENTURY

Gary Penders

WHEN A COURSE IN CHEMISTRY was offered to the public for the first time in the summer of 1891, the announcement stated: "This course is intended primarily for teachers who desire to prepare students for the entrance examinations in elementary chemistry, both in the classroom and in the laboratory. Other qualified persons may attend also. A fee of five dollars to cover cost of materials used will be charged."[1] With these words, the character of the summer sessions program was established. Enrollment in the summer program would not be restricted to matriculated students, but would be open generally to anyone who could benefit from the experience and who was willing to pay a fee for that privilege. For several years, faculty taught summer courses without compensation. But by 1900, when the popularity of summer classes was well established, faculty began to earn a summer stipend for their work.[2] In that year, thirty-seven courses were offered and 433 students were enrolled.[3]

Over the next hundred years, the program with such modest beginnings became one of the largest in the nation. In 1999, 12,845 students were enrolled in more than four hundred classes, taught by six hundred professors, lecturers, graduate student instructors, and teaching assistants. Of the enrolled students, 9,098 were Berkeley students; another 3,747 were visitors from every county in California, every state in the union, and more than fifty countries.[4] In addition to college students, the summer population included more than a thousand international students, more than eight hundred adults seeking personal enrichment, and several hundred high school students.

Tidal Wave II

As if it were not enough to be so successful, now the summer program at Berkeley is poised on the threshold of extraordinary growth. In the first ten years of the twenty-first century, demographic projections predict a significant increase in the number of California citizens who will graduate from high school and who will seek access to higher education. Called "Tidal Wave II" by many to distinguish it from a period of rapid increase when the "baby boomers" reached college age in the 1960s, the increased demands for enrollment by the year 2010 are expected to add 63,000 students.[5] This represents a 43 percent increase, and would move systemwide enrollments from 147,000 to 210,000 students.[6] Berkeley's share of this increase has been set at 4,000 students, a significant number given the fact that the campus has been at capacity for years and had actually planned for a deliberate, if modest, decline in headcount over the next few years.

Expanding a research university is problematic, at best. In order to teach more students while maintaining the commitment to academic excellence that is at the heart of its identity, the size of the faculty must be increased, which means new research facilities will be needed. There is little room, however, for physical expansion on the Berkeley campus. This is one of several barriers to increasing enrollment, and exemplifies the fact that expansion of such magnitude is bound to change us in meaningful ways. The problem facing the campus, simply stated, is how to accommodate growth without a decline in quality. While there

are several possible approaches, the one with the greatest potential to accommodate a sizable number of new students is the expansion of summer sessions.

Expanding the Summer Program

Currently, Berkeley enrolls about 40 percent of the undergraduate population in the summer, a higher percentage than any other University of California campus, and more than most comparable universities. Systemwide, the campuses enroll approximately 25 percent of the total undergraduate population during the summer. The Berkeley summer enrollment trend over the past decade has been a continuous increase, as shown below.[7]

Table 1. Berkeley Summer Sessions Enrollment, 1990–1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
UCB	4506	4886	5016	5681	6072	6908	7254	8252	8630	9098
Visitors	2934	3308	3331	3059	3198	3584	3440	3807	3660	3747
Total	7440	8194	8347	8740	9270	10492	10694	12059	12290	12845

Given this level of growth—an average of about 4.2 percent per year for ten years—the first question that must be considered is, how much expansion is possible? Balancing need and capacity, the answer may be that we can double in size. This rather startling possibility deserves some qualification. First, measures of the size of the enrollment in any term are usually expressed as the equivalent of full-time enrollment over the course of an academic year. During that nine-month period, normal academic progress for a student is thirty semester units, or fifteen units per semester. One FTE (Full Time Equivalent) can be one student enrolled in thirty units, or it could be two students enrolled in fifteen units each, or three students enrolled in ten units each, and so on. So doubling the size of the summer program could mean doubling the number of units taken rather than doubling the number of individuals who enroll. The most reasonable approach at this point is to assume the summer session program will increase both the headcount and the average units per student.

Traditionally, summer students have averaged about five units in the summer, which probably means that about half of the students are enrolled in a single course. For the nine thousand or so who enrolled in 1999, that translates to fifteen hundred FTE (9,000x5=45,000/30=1,500). To see what mix of headcount and units will work to achieve a target of 3,000 FTE, see the following table.

Table 2. Projected Additional Headcount and FTE Needed to Meet Expansion Target

Current Headcount	Average Units per Student	FTE	Additional FTE Needed	Additional Headcount Needed
9,000	5	1,500	1,500	9,000
9,000	6	1,800	1,200	6,000
9,000	7	2,100	900	3,857
9,000	8	2,400	600	2,250
9,000	9	2,700	300	1,000
9,000	10	3,000	0	0

This table shows how every increase in the average units per student reduces the need for additional students. What is the most likely and most reasonable mix? Given the fact that many students work during the summer and that others desire to travel, it is not likely we can enroll more than 50 percent of the present total student population. This means a population just under 13,000 students should be the target, a number that would require an average of seven units per student to achieve our goal. If the visiting student population remains at the present level, the total summer student body will be close to 17,000 students. Presently, it appears that state funding may be provided in full by 2004—after three years of partial funding beginning in 2001. Growth, therefore, will not only be steep, it will be swift.

The Consequences of Expansion

What are the consequences of this kind of unprecedented expansion on the summer session program, the campus, and the community? There will be more classes, more frequently taught by permanent Berkeley faculty, with a lower average class size, and no particular need to be cost-effective as has been true with the self-supported summer program. There will be programs designed for different cohorts of students, including more classes for entering freshmen, who may find it strategically sound to start their Berkeley career in the summer. It is even possible that the academic calendar will be adjusted to make it easier for new students to attend in the summer. Presently, the summer starts in late May, and the fall term begins in mid-August. New admits are generally still attending high school classes until mid- to late June. Shifting the academic calendar forward about a month would place the summer term conveniently just after high school graduation, although a fall university term that starts in September would probably mean that fall final exams would take place in January, after the winter holiday.

To the campus, an expanded and state-supported summer program means more work. More students will require more services, and three major cycles a year will cost more than two. Planning will have to occur earlier, publications will have to be available earlier, and all of the registration and enrollment processes will have to fit into a new, three-part annual cycle. The campus will lose the benefit of summer as "slack time" when a variety of ad hoc events can be accommodated, when conferences, outreach programs, and other campus-based activities can find meeting rooms, and when maintenance and seismic upgrade projects are usually scheduled. Students will find themselves taking classes in the late afternoon and early evenings in the summer, very much as they do now in the fall and spring. Many of them very well may respond to a range of incentives to enroll in the summer and graduate in four years.

A key component of the new summer offerings will be the continued involvement of visiting students. Summer traditionally has been the most significant opportunity for visitors and the community to participate in the academic life of the university. Maintaining that policy is crucial to the character of the summer term and to the campus as a whole. It is not unimportant to note that visitors also create a revenue surplus in the summer, a surplus that is shared with the academic departments and is an important part of their annual expenditure budget.

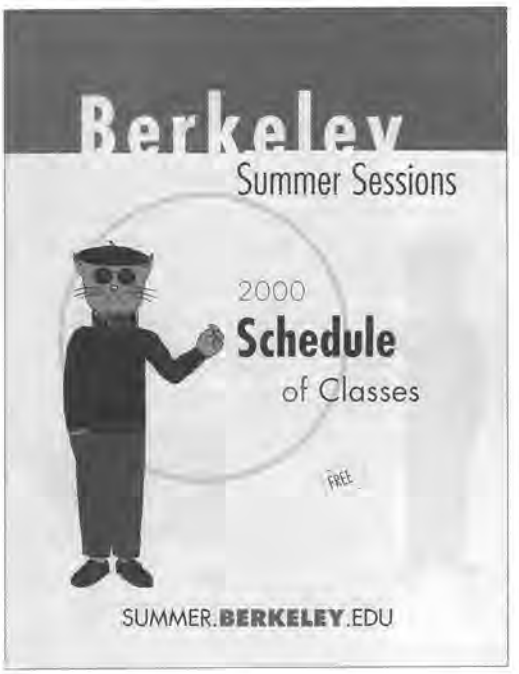
While there will be some impact on the community be-

cause of the higher number of people on campus in the summer, most of the effects should be beneficial. Businesses will sell more books, coffee, pizza, and T-shirts; transportation systems will have more riders; and more people will be employed to handle the increase. Unfortunately, traffic will be a bit worse and parking will become as scarce as it is during the rest of the year. Even at 17,000 students, however, the summer population will be only about half the size of the academic year population and will retain some of its reputation as a slower, quieter period.

Does Expansion Guarantee Acceleration?

In all of the deliberations about expanding capacity by using the summer term in new and creative ways, it is assumed that if more students enroll in summer classes, more of them will graduate on time. The assumption is that summer enrollments will cause students to accelerate progress toward their degree. There is an alternative view, however: students may use the summer as an opportunity to take more courses, rather than to take the same number over a shorter period. If students continue to graduate at the same rate, but with more units completed, we will not have accommodated more students. Only if students graduate in less time will there be an opportunity to enroll more students overall.

Does the present summer term cause acceleration toward the degree? The answer is that we do not know. Berkeley's graduation rate is good—57 percent of the class admitted in the fall of 1992 graduated after eight semesters of enrollment, 73 percent after nine semesters, and 82 percent after ten semesters.[8] This is as good as or better than the graduation rate at most comparable public universities, and much better than our own record in the sixties and seventies. We also know that as many as one-fifth of all enrollments in "gateway" courses take place during the summer. These are courses students need as prerequisites to a number of majors and areas of study. Anecdotally, therefore, we can say that if summer did not exist students would, in fact, take longer to graduate. Summer is also the time when students will re-take a course they have done poorly in, or will take a course outside the major for personal enrichment. In these cases, it is the ability to focus on one course that attracts students to the summer, but their participation enhances their education without accelerating it.



Acceleration itself is not without some controversy. The major argument in favor of acceleration is economic. Legislators, administrators, and parents understand this reasoning very well, and generally agree that four years, or eight semesters, is an adequate amount of time in which to earn a degree. Academic matters constitute the major argument against acceleration. Both faculty and students recognize that opportunities to change majors, take a double major, and to become immersed in Berkeley's academic offerings can result in an enriched undergraduate education.

Given the problematic nature of acceleration, then, how will the new summer program

deal with the need to tie expanded summer enrollment to faster graduation rates? An ad hoc subcommittee in the Office of the President addressed this issue, and determined that there should be incentives for a student to graduate on time. According to the report: "These incentives should be structured in an educationally sound fashion, leading to successful completion of undergraduate programs, and demonstrating respect for the quality of student life."[9] Included were the provision of financial assistance, more campus housing, improved transferability of courses among University of California campuses, and incentives that would attract more faculty to summer teaching. The ad hoc committee avoided any consideration of disincentives, which at some colleges include such draconian measures as an absolute limit on the number of terms a student is allowed to complete the degree, or charging substantially higher fees after eight semesters.

Summer in the Twenty-first Century

The new summer term, if we do it right, will be a combination of the best aspects of the self-supporting program with improved access brought about by state funding. From the hundred-year history of self-support, we have learned that success comes from giving students multiple options for enrollment, from scheduling courses that meet student needs, and from treating the summer term like a business enterprise which is responsive and flexible. With state support we should be able to increase student participation rates, as well as acquire the ability to offer low demand courses, improve the scheduling of requirements, and attract more of the permanent faculty as summer instructors.

Of course, long-range prospects for the new summer term rely completely on the continuation of state support after the initial period of development. This was not the case in the 1960s, when the creation of a summer quarter was funded for two or three years and then abandoned in favor of a return to the self-supporting model. The chief attribute of self-support is that a large and useful summer program can be mounted with no outside funding of any kind, a benefit that is more appreciated in times of economic scarcity than it is during times of economic plenty. A hundred years from now, the beginning of state support in the summer may be seen as the start of a greater recognition of the need to provide all of California's citizens with a lifetime of education. Given the value of public higher education to California's economic and social life, it is appropriate that state support grows to accomplish that goal.

ENDNOTES

1 William Warren Ferrier, *Origin and Development of the University of California* (Berkeley: The Sather Gate Book Shop, 1930), 450.

2 Ibid., 452.

3 *Profiles of Summer Sessions*, Association of University Summer Sessions, 1994.

4 Summer Sessions Archives, 1999.

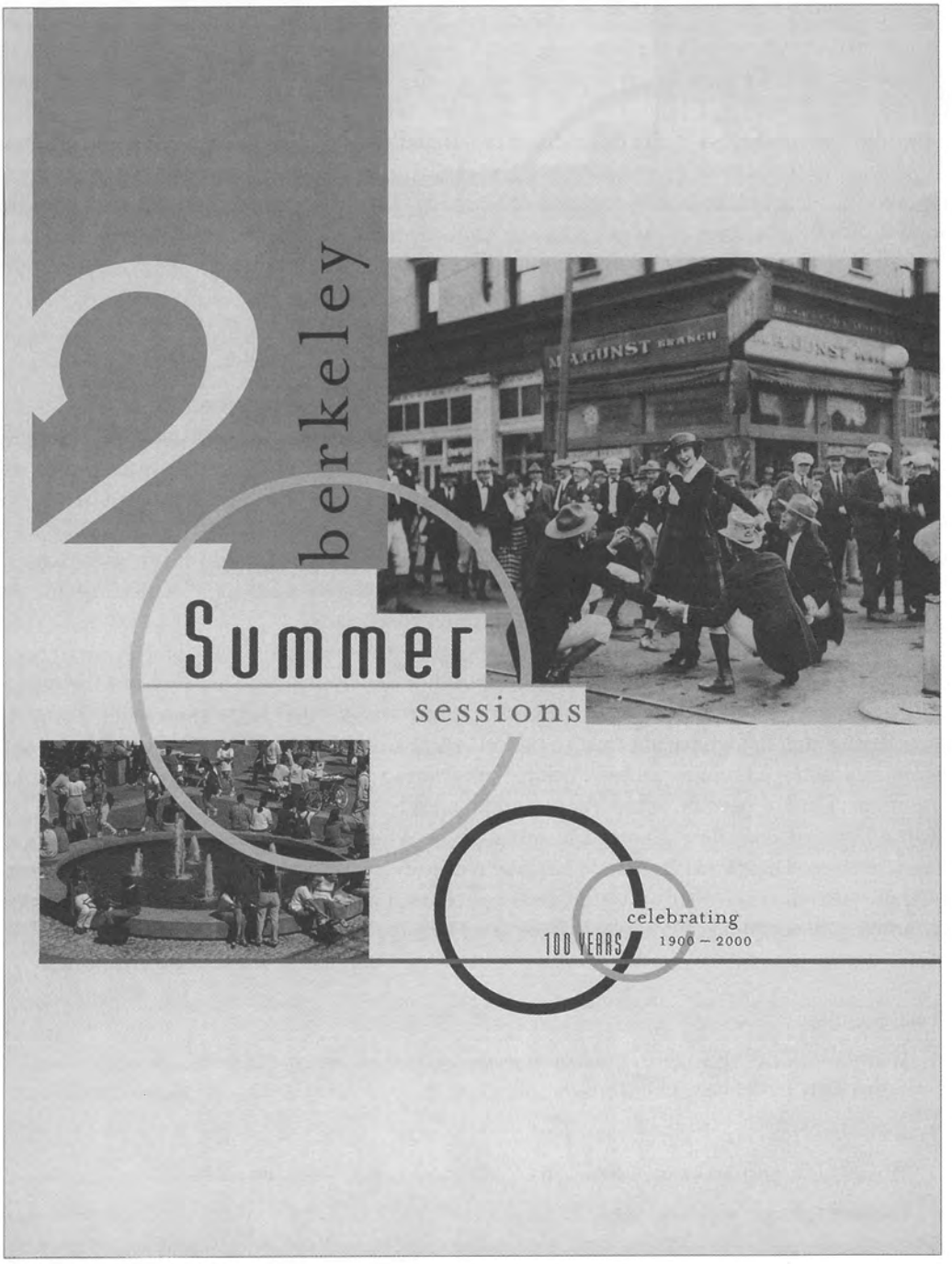
5 *Report from the Study Committee on Expanded Enrollment*, Office of the Chancellor, 1999, 4.

6 *Meeting the Challenge of Tidal Wave II*, Committee on Educational Policy, University of California Board of Regents, October 14, 1999, 4.

7 *1999 Summer Sessions Registration Report*, Summer Sessions Archives, 1999.

8 *Report from the Study Committee on Expanded Enrollment*, Office of the Chancellor, 1999, 45.

9 *Report of the Workgroup on Student Incentives for Summer Enrollment*, Office of the President, March 2000.



Catalog, summer 2000.

A TALE OF TWO UNIVERSITIES OF CALIFORNIA
A TOUR OF STRATEGIC ISSUES PAST AND PROSPECTIVE

John Aubrey Douglass

If the University of California ever fails to keep up with the growth of the state, it will lose its greatness . . . relaxation or retrenchment for even one year could throw it so far out of adjustment that it might take a generation to recoup.

—Earl Warren, Chief Justice of the United States, 1967
(University of California B.L., 1912; Governor of the State of California, 1943-1953)[1]

IT MAY NOT HAVE BEEN THE WORST OF TIMES, but it certainly was not the best. Benjamin Ide Wheeler became the new president of the University of California in 1899, traveling from New York to the Berkeley hills, fresh from the heights of a prosperous Cornell University. Wheeler had deftly acquired substantial new powers from the University of California Board of Regents before accepting the presidency. Since the university's chartering in 1868, the regents had enjoyed micromanaging the affairs of what was an under-funded and struggling institution. Wheeler had gained greater authority to manage, reorganize, and build the institution—with the cooperation of faculty who, as Wheeler noted, "perform services in the regulation of internal details which in many institutions fall to the official mechanism."[2] But upon his arrival in Berkeley, he surveyed a difficult situation.

There were advantages. In his first report to Governor Henry T. Gage, Wheeler cited a few of them. The Berkeley campus was "a sound, sturdy, dignified institution, strongly entrenched in the love of its alumni and in the pride of the State." A respectful beginning, to be sure. The campus also had the proximity of "a great city of world importance." But beyond this, the new president was less sanguine. Rapid enrollment increases and a failure by California lawmakers to make significant increases in funding (then largely based on a minor provision in the tax code based on property taxes) created a bad brew. There was the prospect of a flood of students without any strategic method or financial ability to accommodate their numbers—déjà vu for contemporary policymakers.

In many other states at the turn of the century, a similar mixture was simply overwhelming public universities, leading to academic programs of distinctly undistinguished character. Student attrition was rampant. Still, Wheeler thought Berkeley's problems acute: "Its equipment and income have been steadily outgrown in its rapid development; its buildings are entirely unworthy of its standing and its work."[3] Only three other states exceeded California in the number of high school graduates who went on to college, noted Wheeler: Massachusetts, Connecticut, and Maryland.

For reasons that will be partially explained in this essay, California would soon have the highest participation rates, and its university would soon become the largest in enrollment in the nation. No institution, argued Wheeler in 1900, was forced to educate so many students with so few resources: "the estimated income for the present year provides for the 2,300 students entrusted to our care an average of $134 per student . . . the cheapest education *per capita* attempted by any university in the country of like, or approximately like,

standing."[4] He was appalled at the large classes and the heavy workload faced by faculty. "The situation here at present is, I sometimes think, pathetic, and sometimes ludicrous." Wheeler wrote to the governor in another communiqué: "The students have come down like an avalanche. We have no elasticity in our budget by which to provide for them. We are doing our best, but it is only by a miracle that the multitude can be fed with the seven loaves."[5]

From these beginnings, the university grew and prospered, perhaps unmatched by any other single institution of higher learning in its influence on society and its contribution to economic growth. At the start of a new century, this brief and ambitious essay attempts to offer two stories. First, to contemplate and chart in elementary terms the path of the University of California from a struggling campus at Berkeley into a multicampus "mega-university." And second, to discuss the sheer magnitude of this transformation and offer conjecture on the future.

TWO CHOICES, ONE PATH: 1900–2000

A comparison of the size and scope of the University of California a hundred years ago with today offers a dramatic picture of change. The year after Wheeler came to California, the university had one general campus in Berkeley; the affiliated schools of medicine, dentistry, and pharmacy, along with Hastings College of the Law and the Mark Hopkins Institute of Art, all in San Francisco; and the Lick Observatory at Mount Hamilton. Total enrollment stood at 2,906 students (353 more than when Wheeler arrived), with a mere 183 enrolled in graduate programs (a paltry 6 percent of the student body). Forty-two percent of all the students were women—this at a time in which many higher education institutions in the United States excluded women or had quotas to keep the number of women to a small fraction of the student population.

Today, the university includes a nine-campus system (and soon ten, with a new campus planned in Merced), with research stations throughout California and in many foreign nations. And since World War II it has had managerial responsibility for three national laboratories. In total, the university now enrolls over 182,000 students (approximately 51 percent of whom are women), with a graduate student population of 42,000 (or 23 percent of the total enrollment). Other spectacular increases can be cited: from 207 faculty in 1900 to 12,310; from a state budget of $183,000 in 1900 representing 44 percent of the university's operating expenditures to nearly $2 billion from state coffers and equating to approximately 26 percent of its total budget (excluding the national laboratories). And the contrast between the total operating budget (not accounting for inflation and again excluding the national laboratories) offers a staggering picture: $422,000 a hundred years ago compared to over $9.6 billion today.[6]

Such impressive numbers are not the main interest of this essay, however. In 1900, university leaders stood before a crossroads. The choices they made fundamentally changed the institution and included a number of significant managerial innovations in higher education. The actions of the university, in turn, provided the catalyst for the creation of California's present tripartite public higher education system—including California's community colleges and the California State University, in addition to the University of California. And without this system, the University of California would not be what it is today.

Table 1. A University of California Profile at Century's Beginning and End: 1900 and 2000*

	1900-01	2000-01
Enrollment (headcount)		
Undergraduate students	2,058	140,500
Graduate students	183	41,700
Total enrollment	2,241	182,200
Percent women students (both graduate and undergraduate)	42%	51%
Percent graduate students	6%	23%
B.S. degrees conferred as a percent of all undergraduate degrees	40% **	33%
Professional degrees as a percent of all degrees conferred	36% **	4%
Summer school enrollment	433	42,000
University Extension enrollment	0	435,000
Faculty/Staff (headcount)		
Ladder-ranked (tenure & tenure-tracked)	152	8,830
Lecturers and other	55	3,480
Faculty subtotals	207	12,310
Student/Ladder-ranked faculty ratio	10.8	20.8
Staff/Management ratio (est. for 1900)	152**	99,040
Staff /Faculty ratio	0.7**	8.0
Budget		
Total University of California Budget***	$422,000	$9.6 billion
Percent from state of California	43%	26%
Percent from student fees/tuition	4%	11%
Percent from gifts, grants and contracts	13%	23%
Total value of endowments	$3,785,000	$6.3 billion
Budget/Endowment ratio	0.11	1.52
Assessed value of land/buildings	$3,767,000	$15.2 billion
Retirement fund	0	$44.2 billion

* Sources include *President's Biennial Report 1900* (The University Press, 1900); William Carey Jones, *Illustrated History of the University of California* (San Francisco: Frank H. Dukesmith, 1895); Verne A. Stadtman, ed., *The Centennial Record of the University of California* (Berkeley: University of California Printing Department, 1967); *A Century of Discovery: University of California* (Office of the President, 2000); "Profile of the University of California" (Office of the President, 2000).

** Most professional degrees were at the undergraduate level in 1900; staffing estimate projected by using 1895 data.

*** Not including the budgets of the national laboratories at Berkeley, Livermore, and Los Alamos.

Berkeley in Context

Wheeler came to California to help create a high quality academic institution following the emerging and compelling model of the American research university. It would be focused on undergraduate education and advanced training, with an equal dedication to research and a commitment to public service—including efforts to bolster local economies.

The university's second president, Daniel Coit Gilman (1872-1875), articulated this venture. But it was in Wheeler's term that a true, multifaceted research university emerged.

In the years after Wheeler's appointment, the Berkeley campus retained its role as a center of classical study; but California's state university also gained a clearer definition as a utilitarian and democratic institution and as a center of basic and applied research. These often competing missions had torn at the university and other land-grant institutions. Wheeler found the means, as observed by Edwin E. Slosson in his 1910 study of America's thirteen "great American Universities," to mitigate such inherent conflict: "The combination of qualities that are quite diverse and even antagonistic give the institution a unique attractiveness. I know of no other university," Slosson wrote, "which cultivates both mechanics and metaphysics with such equal success or which looks so far into space, and, at the same time, comes so close to the lives of the people; or which excavates the tombs of the Pharaohs and Incas while it is inventing new plants for the agriculture of the future."[7]

At the same time, perhaps no other state embraced to such an extent the promise of postsecondary education as a tool of socioeconomic and political change. California suffered from its own particular brand of class conflict, gender discrimination, racism, political corruption, flawed institutions, and social upheaval. Yet its people and government were in the initial phase of embracing a reform movement that elevated public higher education as a vehicle for socioeconomic mobility, as a tool of social reform, and the primary means to create a labor force suitable for a changing economy. California "Progressives," of which Wheeler was one, professed the ideals of a classless society, rooted in a meritocracy, and flavored by an explicit rejection of the classism that remained dominant along the eastern seaboard. The caveats were many and often ugly, but the altruism was real. And within this political framework, California's burgeoning population increasingly sought access to a postsecondary education. In 1900, fed by a surge of migration largely from the Midwest into counties such as Los Angeles, California ranked as the twentieth largest state in population. Ten years later, the state would rank as the twelfth largest state.

This alone is an inadequate explanation of the causes of a subsequent wave of high school graduates who sought entrance to the university in Wheeler's time—the first of a succession of tidal waves. There are other dynamics to consider. One was the lack of viable alternatives. While Stanford opened its doors in 1891 and for a brief moment rivaled the Berkeley campus in enrollment size, the number of private institutions in California was small when compared to states such as New York and Massachusetts. Initially, Californians looked to Berkeley to open its doors and absorb the seemingly insatiable appetite for access to a higher education. As a result, at the end of the nineteenth century, the University of California was already the fifth largest university in the nation, exceeded only by Harvard, Columbia, the University of Michigan, and the University of Minnesota.[8]

Creating the Tripartite System

Other state land-grant institutions faced a similar demand for access, yet not the magnitude of numbers that confronted Wheeler and the Berkeley campus. The reaction in these states followed three general patterns. One, political pressure, legislation, and a general desire to meet growing demand for access caused public land-grant universities to lower admissions standards and, essentially, attempt to serve all the higher education needs of a state. The overextension of these institutions often led to mediocre academic programs and high student attrition rates. Here lies a constant tension for public institutions: how to expand access while maintaining or improving quality. Two, many states responded by creating a number of new four-year, independent state universities and colleges that essentially com-

peted with the existing land-grant institution in its mission and for state funding. A third and perhaps most common scenario was a mixture of these two approaches. What all three responses lacked was a coherent, statewide approach. What they represented was an open market design to expanding higher education—a sharp contrast to the standardized framework employed at the elementary through secondary level.

California's response was different. Two factors help to explain the emergence of the first coherent approach to fulfilling the higher education needs of a state—what I have called the *California Idea,* in part because of its profound influence on the development of other state systems of higher education.[9] Each factor relates to the legal position of the University of California and the desire of university leaders such as Wheeler.

First, unlike almost all other public universities, the University of California was a "public trust" under the state's constitution—a status shared by only five other public universities, including notably the University of Michigan. This was the result of a constitutional convention held in 1879. California's land-grant institution, and specifically its Board of Regents, gained an unprecedented level of autonomy in managing its internal affairs. While subject to the normal legislative process in gaining a state budget and state law relating to fiduciary responsibilities, how the university spent those monies was the regents' responsibility. This meant that statutory law passed by the legislature related to the university's management of academic programs and operations was, and remains, nonbinding.

In turn, the university had an unusual ability to chart its role within California's evolving higher education system. Wheeler, the Board of Regents, and faculty thought the university could best serve society by remaining a selective institution in admissions, with a broad research and public service mission. And indeed, even though a number of state lawmakers proposed that the university might have a more open-door admissions policy, only a constitutional amendment could alter this path.

A second factor that helps explain California's unique response was the idea of establishing public junior colleges. While university leaders such as Wheeler, and in particular Professor Alexis Lange in the Department of Education, wanted to focus Berkeley's mission as a research university, they also wanted to broaden access to postsecondary education. Lange emerged as a leader in this cause, and offered a vision of how it might be done. California, he argued, should establish the nation's first public network of junior colleges. A member of the state board of education by virtue of his position as chair of the Department of Education at Berkeley, Lange argued that these new colleges should be both vocational and liberal arts in function.[10] They should operate initially as extensions to local high schools, and later mature into their own independent institutions located throughout the state and open to all high school graduates. In their liberal arts programs, they could offer a two-year degree based on standards developed by Berkeley faculty who would accredit these programs, just as they accredited California's high schools (a practice that changed over time, but extended from 1884 to 1963).

On route to the idea of the junior college, Berkeley faculty created a formal lower and upper division curriculum in 1905 and developed the requirements for what became the Associate of Arts degree—what was intended to be the equivalent to the first two years at the Berkeley campus. All of this was in preparation for making the public junior college a viable component of an evolving system of public higher education. Students who completed the two-year degree under a junior college curriculum would be guaranteed a spot for their junior year at Berkeley. A similar agreement was made with the state's five normal schools.

At the urging of Lange, and with the support of Wheeler and other notable figures in California, including David Starr Jordan, president of Stanford, the California legislature passed an historic bill in 1907 allowing local school districts to create junior colleges. Soon

afterwards, the state provided funds for these new institutions and enabled the establishment of junior college districts. California led the nation in this advent, fundamentally reshaping access to higher education. Between 1910 and the 1960s, nearly two junior colleges (or what were renamed community colleges) were created each year. Here was the promise of the "open door" to a higher education.

Completing the emergence of California's tripartite system, a 1920 review of California public education by the California legislature resulted in the elevation of the state's network of normal schools. These institutions, including the teaching school at San Jose, which pre-dated the Berkeley campus, focused largely on teacher training. Each had developed as a hybrid high school and college. Each institution had its own board of governors. The 1920 review resulted in legislation that reorganized these schools under the state board of education, renaming them the "state teachers colleges" and promising to convert these institutions into regional colleges focused on teacher training and liberal arts programs at the undergraduate level. These state teaching colleges grew into the California State University system.

No other state pursued such an aggressive effort to create a cohesive and multilevel system of public higher education. For much of the twentieth century, California had the highest rate of high school graduates going on to college—although the state can no longer claim this title in the wake of post-cold-war budget cuts to public education and demographic shifts that have influenced college-going rates. The decline began in the early 1980s. The number of eighteen- to twenty-four-year-old Californians going to college dropped from 61.3 percent to 51.1 in 1999. California is now just below the national average—an historic and sad first. Yet there is reason for hope with a return to a healthy economy and new-found political interest in supporting education.

Historically, the tripartite system promised and has delivered broad access by offering specialized institutions to serve the varying needs of California society. The establishment of the junior colleges and the emergence of regional state colleges had a profound impact on the University of California. The university was now relatively free to pursue the ideal of the research university, empowered to refine its admissions standards and claim its role as the primary public research entity in the state.

One or Two State Universities?

The creation of public junior colleges and later the development of regional state colleges did not relieve the University of California of its need to expand enrollment. Far from it. California's population growth and the university's objective to enroll approximately the top 15 percent of the state's high school graduates resulted in continued and substantial enrollment increases. As noted, in 1900 only four other universities were larger than the University of California; by late 1916, and with an enrollment of 7,477 students, the Berkeley campus was the largest university in the nation.

How to accommodate additional enrollment growth became the focus of an often bitter public debate. Wheeler had gained a substantial increase in state funding for the operating budget of the university. Between 1900 and 1910, dramatic increases were provided in each state budget: from a total of $183,000 to $770,000, a 320 percent increase. Perhaps more importantly, during the 1911 session of the legislature a frenzy of reform legislation resulted in the university gaining the first enrollment-driven budget. Prior to this advent, the state simply provided an allocation devoid of any workload assessment. An enrollment-driven budget created a further incentive for the university to accommodate more and more Californians.[11]

The creation of a relatively stable budget environment allowed Berkeley to continue

to grow in enrollment and, at the same time, develop quality academic programs. Yet the success of the university, the centrality of the institution to the political and economic agenda of the state's Progressives, and the rising value of a university education, all contributed to a new conundrum. When the university was established, most Californians lived in the northern section of the state. By 1915, more people lived in southern California. Indeed, more students at Cal came from the region around Los Angeles than from the Bay Area. Los Angeles boosters wanted a public university campus in their community, whether it be a part of the University of California or a new public institution. And they were quickly gaining the political power to do something about it in the state legislature.

Again, momentous choices confronted university officials and state lawmakers, in part conditioned by the university's unusual status as a public trust. With the glaring exception of the sole regent from southern California, Edward Dickson, the board opposed any geographic expansion of the university to a new campus in the south. Faculty and alumni also noted their staunch opposition to such a development lest it detract resources and political influence from Berkeley. The legislature could not legally require the regents to expand southward, but they did have the authority to create a new entity. Wheeler and other university leaders looked ahead and saw two paths. One, the regents could ignore the pleas for a southern branch and leave the higher education needs of the fastest growing area of the state to providence. Or two, they could move against their instincts and expand the university into what would become the first multicampus university in the nation.

The first choice would likely result in the legislature chartering a new public university in Los Angeles. Also, the prospect of Berkeley growing to a suitable enrollment size to meet the needs of all Californians appeared bleak—this at a time when a campus of 25,000 students seemed an administrative impossibility. The second path would be a formidable task. No other university had attempted to create what might result in another, co-equal general campus (with liberal arts programs, and the prospect of graduate degrees and a full research mission). Unsatisfied with the promised expansion of university extension programs in downtown Los Angeles, and wanting programs in place immediately, Regent Dickson insisted that the university acquire the campus and programs of the Los Angeles State Normal School. The president of the normal school, Ernest C. Moore, a former professor at Berkeley and past member of the Los Angeles School Board, led the plot. Even the turmoil of World War I failed to delay the dream of Dickson and Moore—indeed, the thought of having a University of California campus ready to enroll throngs of male students in the aftermath of war was one more cause for expediency.

Like the public land-grant universities found in Wisconsin and Michigan, the University of California already had satellite operations in various parts of the state. As noted previously, research stations and agricultural extension programs existed in numerous locations, including Davis, Riverside, La Jolla, and the Lick Observatory on Mount Hamilton. There were also professional schools in San Francisco, including the medical center and the California School of Fine Arts. These facilities and programs were viewed as extensions of the Berkeley campus.

The 1919 absorption of the Los Angeles State Normal School as a "Southern Branch" inaugurated the transformation of the University of California into a new beast: a multicampus university. The forced marriage did not result in an immediate equilibrium. Threats of divorce, charges of subjugation, and petty quarrels over mountains and molehills followed. Most importantly, the establishment of the Southern Branch, which would soon become UCLA, changed the dynamics of the university's internal organization. Its establishment assumed that further university enrollment expansion would occur via a geographic distribution of campuses. The path was circuitous, but the results were significant. The ad-

ministrative innovations at Berkeley, including significant management powers for the faculty in the area of academic affairs, a rigorous academic personnel process based on peer review, and a commitment to research and public service, would be a model for new campuses as they came along. But how to manage it?

A Multicampus Experiment

At first, the Southern Branch was to have a status similar to the various research stations, with no significant internal administrative structure, and subject to the rules and regulations set by the Berkeley faculty and the university president some 500 miles away. The Los Angeles campus was seen by many in the university community as an unwelcome addition that would need to be stringently regulated.

Fulfilling the need for greater higher educational opportunities among a burgeoning Los Angeles metropolitan population and supported by a corresponding expansion in the political power of the region, the Southern Branch was soon arguing for equal status with the Berkeley campus. The establishment of the Los Angeles campus came at the end of Wheeler's reign. Subsequent battles over academic programs and management occurred under the presidencies of David Prescott Barrows and William Wallace Campbell.

Change came slowly. By 1927, the Southern Branch was officially renamed the University of California at Los Angeles. In 1933 the campus gained the authority to grant the M.A. degree, and three years later the Ph.D. These developments were thought painfully slow for UCLA faculty and their supporters. The same tension and sense of rivalry that helped to create the Los Angeles campus now became a major concern in the internal management of the university. Both Berkeley and UCLA supporters began to lobby for a secession. In the late 1930s, President Robert Gordon Sproul was forced to bring the matter to the regents. He wanted to preserve the union, yet felt compelled to offer three choices to the board:

President Robert Gordon Sproul, 1950. *University Archives (UARC PIC 13:4277).*

a. The division of the institution into two separate universities, one centered in Berkeley with control over programs in northern California, and the other in Los Angeles with management responsibility for activities in Riverside and San Diego.

b. A single university in name, but with a decentralized administration at the campus level—essentially a confederation.

c. The "one university model" with a centralized administration.

It was for this last option that Sproul ardently argued. In the midst of a significant push by supporters of California's emerging regional state colleges for authority in graduate education (functions thus far reserved to the university), Sproul argued that the first two options were unacceptable. They would, he thought, lead to the creation of multiple competitors for state resources and pose substantial risks. For example, the first option might en-

courage lawmakers to create new publicly supported research university campuses, or convert state colleges to that function. These competitors would then have equal claims to state funds. The proliferation of programs could likely result in mediocrity and the destruction of the University of California's ability to maintain quality academic programs. The state would simply not have adequate resources to fund such an expansive system of higher education.

Equally important to Sproul, a change in the university's organization would require a change in the state constitutional charge to the regents. In turn, the result might be the end of the university's status as a public trust—the subject of frustration among many legislators seeking greater control over university affairs.

The second option, argued Sproul, the decentralized model, would bring an end to effective leadership for the university. It would promote tensions and the sense of rivalry between Berkeley and Los Angeles. "The logical end product of [this] system," he argued before the regents, "will be a president for each part of the institution and a chancellor connected with no part but maintaining general oversight over all parts," essentially "a coordinating officer."

On the basis of Sproul's recommendation, in February 1937 the regents approved the "one university" model. The commitment to "one university" provided a rationale for building the academically strong multicampus system that remains, in one form or another, in place today. Sproul had articulated an effective approach to the university's long-term development, one that made sense for the internal management of a high-quality academic enterprise. It also served Sproul's desire for detailed control of the university's varied activities—a level of control that became arduous as the university grew in enrollment and complexity in the post-World War II era. By the early 1950s, and two decades into his twenty-eight-year tenure as president, Sproul had become an extremely rigid and conservative force. He diligently resisted significant and seemingly inevitable changes in the institution's internal management.

The Emergence of Campus Administrative Structures

The combination of Sproul's domineering administrative style, continued enrollment growth, and the expansion in the number of campuses, along with the rivalry between the Berkeley and Los Angeles campuses over resources and authority, provided the context for a significant transition in the university's administration in the post-World War II era. The "one university" model would be retained, but it would undergo redefinition in yet another era of enrollment and program growth.

In 1943, a group of Los Angeles alumni leaders implored the regents to appoint an executive officer for the campus with the power to appoint faculty and department chairs. It was argued that this person should have greater budget authority, including the formulation of formal budget requests to the regents—powers closely controlled by Sproul. Since its founding, UCLA was led by the provost. But the position of the provost was administratively weak. He was essentially dependent on the president in virtually all key areas of campus management. Adding to the frustration of UCLA supporters, faculty, and deans at Los Angeles, was Sproul's failure to appoint a new provost for the campus for over a year. Instead he established a three-member administrative committee to manage the campus in the interim.

As appointees to the Board of Regents included more boosters of the Los Angeles campus, pressure increased for greater autonomy. In 1948 a report by the Public Administrative Service (a private consulting firm located in Chicago) urged decentralization. A state-funded

study on the future of higher education also criticized the over-centralized power of the president.[12] Yet Sproul fought all innovation in this regard. In the immediate post-war era, the president effectively defeated proposed reforms. However, the struggle over the internal management of the university initiated a long-term erosion in Sproul's political power. The result was a slow if limited process of decentralization.

The first significant organizational shift came in 1952, on the heels of a university loyalty oath controversy that garnered Sproul additional enemies. On the insistence of Regent Dickson and others, Sproul reluctantly agreed, and the regents approved, the new positions of chancellor at the Berkeley and Los Angeles campuses.[13] Clark Kerr was appointed at Berkeley and Raymond Allen at Los Angeles. Kerr was a professor of labor economics at Berkeley and a seasoned if young labor negotiator. His appointment by the regents followed his eloquent defense before the regents of faculty who refused to sign a loyalty oath. Allen came from the presidency of the University of Washington where he had just fired a number of faculty for refusing to sign a similar oath.

Sproul initially managed to limit the role of the chancellors. "The chancellors had authority (nominal) over the campus business manager, and authority (real) over the selection of department chairs," remarks Clark Kerr. They were "in the stream of recommendations on faculty appointments and promotions on the way to the president and the regents, and also on budgets. . . . The chancellors, however, did not administer the campuses as the 'executive heads,' as the regents had said they would."[14]

Building a Multicampus Administration

Clark Kerr's appointment in 1958 as the new president of the University of California resulted in a major reorganization effort, creating the last major period of reform. Between 1958 and 1963, both the organization of the Academic Senate and the administrative structure of the university were altered. Decentralization of authority describes one motivating force. The desire to create equity, in representation in universitywide deliberations and budgeting, another. Yet how to do this while keeping a core leadership and a sense of a single university serving the needs of California? Restructuring the relationships between campuses during the Kerr administration balanced these sometimes competing needs. The intent was to give greater coherence to the university's rapidly expanding multicampus system.[15] Three general administrative changes describe this period:

- *The Movement to a Divisional Model for the Academic Senate*

Changes in the responsibilities and organization of the Academic Senate provide a glimpse into the administrative history of the University of California. Since its establishment in the university's 1868 charter, the Academic Senate, consisting largely of all tenured and tenure track faculty, has had a major management role in California's land-grant university. The Academic Senate, stated the charter, would be "created for the purpose of conducting the general administration of the University." The organization of the senate and its relationship to the university president and the governing board, however, was the prerogative of the regents. In an era that pre-dated the rise of the administrative and professional class now crucial to the operation of the university, faculty served as both teachers and administrators. The president, in turn, was the head of the faculty, and not the vast administrative structure that would emerge in later decades. The president served as the head of the Academic Senate, and focused his energies largely on academic affairs.

Two major transformations would follow. These provide the context for the reforms of the 1960s. The first occurred in the aftermath of President Wheeler's reign. As the university grew in complexity, an administrative structure emerged to manage new activities.

Wheeler had gained substantial powers to expand the university. At the outset of his presidency, he gained the regents' agreement that he should become the "sole channel of communications between the faculty and the Regents." Further, he would provide recommendations to the board regarding the hiring and promotion of faculty. These broad powers helped in his quest to create extension programs and a summer session, and his effort to secure funding for new buildings and dormitories, the establishment of new off-campus research stations, and development of new administrative positions. But after over a decade of a strong president, criticism increased among a growing contingent of faculty regarding Wheeler's management approach—criticism that included not only frustration with his autocratic style, but also charges of German sympathies during World War I.

Wheeler stepped down in 1919. Declining health and consternation related to the establishment of a Southern Branch in Los Angeles provide additional context to his decision. By 1920, the regents faced repeated requests from the leadership of the Academic Senate to gain additional responsibilities—this in an era of expanding faculty concerns over academic freedom, the catalyst for the establishment of the American Association of University Professors in 1915. In 1921, the Standing Orders of the Regents of the University of California gave an even greater delegation of responsibilities to the Academic Senate. This included a larger voice in budget and administrative issues (the right to be consulted and to give advice, but not to decide). More importantly, the regents delegated to the senate the right of self-organization—the result of faculty criticism that the president had acquired too much power over the activities of the senate.

The so-called "Berkeley Revolution" of 1920 marked not only the expansion in the delegated responsibilities of faculty, but also the initial stages of a clearer differentiation between two spheres of policymaking by the regents. One sphere focused on the management of academic programs and was and remains largely the responsibility of the Academic Senate. The second sphere is devoted to the administrative operation and budget of the university in support of its academic mission. This sphere initially was undertaken by the regents, and then increasingly by a body of administrators.

A second transformation came in the wake of the new Southern Branch. Absorption of the state normal school in Los Angeles by the university in 1919 set the stage for the movement toward a multicampus system. At first, the Academic Senate based at Berkeley was to make all major academic decisions for the campus in the southland. Faculty in Los Angeles repeatedly requested additional powers. By the early 1930s, the senate established a northern and a southern section—the first one including programs at Davis and Lick Observatory and dominated by Berkeley, the second one including faculty at Riverside and San Diego and dominated by UCLA. The northern and southern division of the senate proved cumbersome as the university grew in the number of campuses and research stations. It also accentuated rivalries, not only between Berkeley and UCLA, but also among the emerging campuses in each section. Meetings were held either at Berkeley or UCLA. Membership on universitywide and sectional committees was apportioned by the number of faculty, and hence heavily favored Berkeley and UCLA. Faculty at the new campuses, for example Santa Barbara, which became part of university in 1944, were not regarded as full members of the senate until 1955.[16]

By 1960, both President Kerr and faculty members were asking how might the Academic Senate once again be restructured in an era of rapid expansion in enrollment and new campuses. In a 1961 discussion at the All-University Faculty Conference regarding the university's future, a faculty committee announced that the senate was to be the "means of preserving a common policy and uniform standards for the University."[17] Kerr supported major changes in the senate's organization to assist in policy development and to reflect the

shift of greater authority to the campuses.

Major changes were incorporated by 1963 following an extensive review of the senate's activities. In turn, these changes provided the framework for the contemporary organization of the Academic Senate—essentially a federated model that has proven key in creating high quality new campuses. The northern and southern sections were disbanded, and divisions were created for each campus, each with its own network of committees. A new universitywide Academic Assembly was then established with proportional representation from each of the campus divisions. The assembly now had the authority to pass changes in the senate's universitywide bylaws and regulations and to initiate resolutions and memorials to the president. Universitywide committees were to continue, but their number would be increased and membership determined by equal representation from each division. An Academic Council would function as the executive body of the universitywide senate.[18]

• *Budget Equity*

Because of the university's unusual status as a public trust, California state government has historically provided funding for instruction and research costs in a lump sum payment each year to the regents—and still does. In most other states, legislators have more direct authority over how those monies are distributed and spent within their public universities and colleges. The University of California, and specifically the Board of Regents and the president, enjoyed the autonomy to distribute these monies as they see fit with relatively few restrictions.

Yet prior to 1960 the process of submitting a budget to the state, and then the distribution of those funds, followed a rather unimaginative pattern. A line-item budget was submitted to the state, and that same budget (e.g., so much for this campus and that program) was used in the distribution process. The Office of the President made these allocations on a year-to-year basis, and while there was a relation to student enrollment at individual campuses, both Berkeley and UCLA tended to garner the vast majority of funds. The development of new campuses required a different systematic approach to the distribution of state dollars to help jump-start, if you will, the new campuses. Kerr and the regents agreed to a formula that provided a steady flow of funds to new campuses, while also protecting the graduate and research programs at the two more-established campuses, Berkeley and UCLA.

Under a "performance budgeting" model orchestrated by Loren M. Furtado, Kerr's budget officer, the university negotiated with the state and the campuses a new approach. By 1962, the university provided a proposed budget to the state that emphasized to a greater extent enrollment workload and general program funding needs that were not campus specific—instructional costs, libraries, plant maintenance. The specifics of how those funds would be spent were no longer spelled out in the budget request. The distribution of most of the state funds was then determined by the level of instructional workload. Lower-division instruction would generate the smallest amount of state funding; allocations were higher for upper-division instruction, and higher yet again for master's degree students. The highest allocation was for doctoral students. The rationale was simple enough: costs increased according to the type of instruction. Graduate training was not only the costliest in terms of the amount of faculty time required for teaching and mentoring students, but also integrating students into the research activity of the university. Core funding support for research was thus directly tied to the instruction mission of the university.

Conceptually, this model gave the regents and the president greater autonomy in managing enrollment expansion. It also provided a level playing field upon which all campuses of the University of California could compete for the state funds generated by enrollment workload. There were a number of caveats created to provide for special needs of

campuses (e.g., agricultural research programs at Davis). This helped to reinforce a notion that Kerr strongly advocated: that each campus would have a particular character, with academic programs that were sometimes unique or academically distinguished within the system of campuses.

While the enrollment surge at new campuses helped subsidize the graduate and research programs at Berkeley and UCLA, each campus had the potential to gain similar funding support if its graduate programs grew. This model then provided an incentive for the new campuses to develop graduate programs and to mature into academically strong research institutions.

Chancellor Vern O. Knudsen (left) and newly appointed Chancellor Franklin D. Murphy touring the UCLA campus, 1960. *University Archives (UARC PIC 15:242).*

• ***Universitywide and Campus Administrations***

Kerr and the regents agreed to give more direct authority to the individual campuses—including Berkeley, Los Angeles, San Francisco, the relatively new general campuses at Santa Barbara, Davis, Riverside, San Diego, and eventually the campuses planned in Santa Cruz and Irvine. This included giving chancellor and campus staff direct authority over most faculty hiring. For the first time, chancellors also could approve research grants and make budget transfers—all areas viewed today as vital to the day-to-day operation of a campus. Campuses also gained control over graduate education, replacing the administrative structure of a northern and southern council of deans reporting directly to the university president.

The staff in the Office of the President was reduced by 26 percent in less than a two-year period by the establishment of chancellorships at the campuses of the university other than Berkeley and UCLA. Campus business officers, as well as the deans, now reported to the chancellor, with access to budgetary information previously controlled by the president and Sproul's long-time associate Vice President James Corley.

These organizational changes gave the president a greater ability to focus on major issues confronting the university. They provided greater authority for campus officials who would need to rapidly expand programs and manage and serve unprecedented enrollment increases. Between 1960 and 1975, the university would grow from 55,887 students to over 124,000. Still, for many chancellors, and in particular Franklin Murphy at UCLA, these changes were not enough—he wanted, essentially, a confederation of campuses that had no need for a university president. To help reinforce the concept of "one university" in the midst of decentralization, Kerr established a Council of Chancellors to meet regularly with him. Here he could garner input and coordinate activities. But he maintained his role as the sole communicator with the regents.

These three areas of management reform—the federal model for the Academic Senate, the changes in budgeting, and the corresponding decentralization of administrative authority—were all important advents. And as discussed in this essay, they are part of a series of advents and fortunate circumstances—not the least of which is the university's status as a public trust. What emerged over a century of policymaking and enrollment growth was an extremely effective model for managing a multicampus system. It allowed for a significant level of autonomy for each of the campuses; yet it retained a "one university" vision (in culture, in admissions, in academic personnel, in academic programs). It is these distinctive features that helped propel the University of California into becoming the best public university system in the world.

While coping with massive enrollment increases, the overall quality of this multicampus system, not just that of the oldest and most mature campuses, has risen dramatically in the second half of this past century. Surveys of graduate programs and faculty research productivity rank all nine campuses among the top in the nation. Six of these are members of the elite American Association of Universities. In a recent ranking of the top public research universities, four University of California campuses were in the top ten. These are just a few of the indicators of the success of this system.

CONTEMPLATING THE PAST AND PROJECTING A FUTURE: 2000–2050

At century's end, one can look back on the path chosen by the university and see how things could have been very different. California has been an innovator in business, in social affairs, in government, and certainly in creating its internationally renowned higher education system. But this was not fate. The circumstances are peculiar. As noted, California's land-grant university has enjoyed an unusual ability to chart its own future. This has occurred in a state with a continuously growing population and with an economy increasingly dependent on trained labor and research supplied by higher education. And within this context, California has nurtured a political culture and a level of affluence that, in turn, has invested substantial public funds in public universities and colleges.

These peculiarities aside, the story of the University of California could have been more typical. For one, the university could have succumbed to a more populist mold, attempting to be all things to all people. This scenario, played out in many other states, would have included lowering admission standards and taking on an even larger flood of students. The efforts of Wheeler, the regents, and faculty to construct a high quality enterprise would have

surely suffered. By taking on the burden of a larger market share of California students wanting a higher education, the development of California's public higher education system might have also been very different. At the extreme end of this conjecture, the university might have retarded the growth of the junior colleges. Essentially, the university was allowed to pursue the vision of a meritocratic-based elite public university only because of the development of a vibrant and multilevel public higher education system.

Another alternative path was the very real possibility of the establishment of a rival public university in Los Angeles. At a critical juncture, the university could have rejected the pleas of the state's southern constituents and avoided or seriously delayed the transition to a multicampus system. And from this failure could have come other developments, including the specter of multiple entrepreneurial efforts to create new state-funded research institutions. There are many instances where political influences from Sacramento and local communities have led to poor decisions within the university. In this case, the geo-political pressures exerted from Los Angeles forced the university into an innovative organizational model—a model that would prove its salvation.

Each of these alternative paths (opening admissions to a much wider pool of high school graduates, and failing to become a multicampus system) could have led to a more common pattern of higher education governance found in other states. The proliferation of largely independent four-year public colleges and universities resulted in a significant effort by other states to reorganize their collection of higher education institutions. In the post-World War II era, many states attempted to impose coherency on their public higher education systems by creating centralized governing boards—what have been termed "superboards." Shotgun weddings became the norm as states struggled to manage the costs and programs of public colleges and universities.[19]

In California, the idea of placing all four-year institutions (including the state colleges and the University of California) under a reconstituted Board of Regents was first proposed in 1932.[20] But this path was resisted, in large part because of the coherency of the tripartite structure that had emerged in the Progressive Era. University of California officials had other worries. Merging the state colleges and the university would have meant that a single board would govern essentially two rapidly growing institutions with different missions: one devoted, at that time, primarily to teacher training and liberal arts four-year degrees; the other focused on undergraduate education, advanced training, graduate education, research, and public service. The new board's vigilance in maintaining the distinct role of the university as the sole source of advanced graduate degrees and the primary purveyor of academic research would have waned, particularly in light of the growing interest of the state colleges to expand their mission. Perhaps most importantly, and reiterating a persistent theme, any such reorganization of the Board of Regents would require an amendment to the state constitution. The result would be an opportunity for university critics—and there have been many—to curtail or eliminate the University of California's unusual level of autonomy.

Reorganization of California's public higher education system under a single board (including possibly the junior colleges) was one threat posed by lawmakers that resulted in the 1960 Master Plan for Higher Education. Another threat that led to the negotiation of this plan was the proliferation of state college programs and campuses and the expressed desire of many college presidents to develop graduate programs and a state-sanctioned role in research.

The importance of the 1960 master plan is not so much what it invented, but what it prevented: the very real possibility of a forced reorganization of California's burgeoning higher education system by lawmakers and, in its wake, the possible redefinition of the university's mission and role. University faculty and officials had helped to conceptualize this system. The university then became a powerful conservative force against reorganization.

Irvine campus site, 1963. View of Chancellor Daniel Aldrich at site. *University Archives (UARC PIC 15:183).*

The Scope of Future Enrollment Growth

What challenges will the twenty-first century present to the University of California? The following is conjecture and focuses largely on the potential scale of enrollment and program growth. One might assume, for the moment, that the organizational structure of a multicampus system developed over the past one hundred years will be sustained, in some form, in the new millennium. There are market shifts on the horizon. Virtual universities (on-line programs with little need for the infrastructure of a major campus) are beginning to prove a significant source for meeting the expanding demand for a higher education—particularly in specific professional fields. Is this a "revolution" that will, as some have proclaimed, mean the end of the traditional university campus? Or will on-line courses simply be another additional method of providing education and training—more a complement to the existing and already diverse mix of institutions and services?

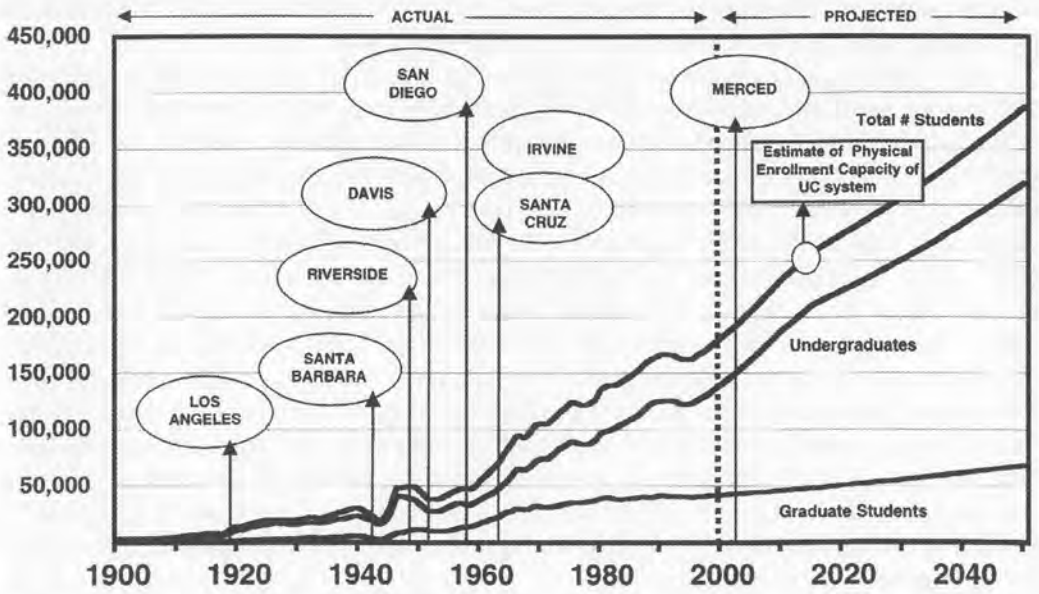
One thing is certain, higher education is a growth field and, for some, a booming business. The value of advanced education beyond the high school has steadily grown over the last century. This trend will continue. Assume that the higher education world of tomorrow will include a diverse public and private mix—in other words, that the traditional university and college in its varying forms does not become obsolete; instead, it retains a role in this more diverse market as a provider of liberal arts education and graduate training. Add to this the significant projections of population increase in California, along with the continued expansion of high technology economic sectors with their need for labor and research, and you have the ingredients for huge enrollment growth demand in this state.

In addition, while the internet and other communication technologies are becoming a tremendous tool for learning and research, one might argue that the value of human con-

tact in education and mentoring will actually increase. At the undergraduate level, there is also the process of socialization for teenagers making the move to adulthood and work. For many, the desire to transition from the high school and the home to a collegiate environment will remain strong. Research universities provide a unique and extremely valuable community of students and scholars that cannot be underestimated. The internet and distant learning techniques provide another tool to complement this community, not to replace it.

Using this set of assumptions, the following three charts provide a longitudinal picture of the University of California, past and future. The first offers the historical record of the twentieth century's enrollment increases, the establishment of new general campuses (e.g., when liberal arts programs opened), and a glimpse of a possible future, employing estimates derived from a model I have created for this exercise. This model will be outlined shortly.

Chart 1. University of California Enrollment and Campuses: 1900 to 2050



Source: Actual data and campus enrollment limits are derived from the *Centennial Record* and the University of California Office of the President. The projections are based on the author's model.

As shown in Chart 1, the historical dips and valleys of enrollment are familiar enough. Both World War I and II led to declines in enrollment. The GI Bill and the return of veterans to California created a huge bulge in enrollment demand that the university valiantly met, followed by a return to normalcy and then an unremitting and exponential increase in enrollment. Two general observations: when Wheeler arrived in California, the university faced a perplexing task of increasing enrollment. Since then, the university has grown in total enrollment on a scale no one imagined in Wheeler's time. The university was, in fact, slow in creating new campuses, reluctantly absorbing Santa Barbara State College in 1944 to create in 1958 the third general campus. As in the case of UCLA, establishing the Santa Barbara campus came after intense political pressure. From this episode emerged a more aggressive agenda to create new campuses.

The frenzy of new campus development largely planned in the late 1950s provided a new geographic distribution of the University of California's academic programs. The building programs of the 1950s and 1960s created an infrastructure capable of expanding enrollment without new campus construction in the 1970s and 1980s. This pattern was replicated in what is today the California State University system. Almost as quickly as it arose as a means to both expand enrollment and bolster regional economies, new campus construction ended with the completion of UC Irvine, UC Santa Cruz and CSU Bakersfield—all opened in the mid-1960s. A decided political shift by the late 1960s, fluctuations in California's economy, and tax revolts, all contributed to a general lack of state investment in public institutions and public works.

It is only recently that new campus construction is once again entering the thoughts and lexicon of Californians. A revitalized economy helps to explain this shift. But perhaps more important is the anticipation of a continued increase in enrollment demand. Existing campuses are nearing their total enrollment capacity. In anticipation of this potential mismatch of demand with capacity, in the late 1980s, University of California President David Gardner initiated a planning process that asked each existing University of California campus to determine its enrollment capacity and building plans.

Forecasting the future is a murky undertaking. Planning assumptions can change rapidly. A trend worth noting: when comparing past projections and the historical record, projections, thus far, have tended to underestimate enrollment growth. Chart 1 provides what could be a conservative projection of increasing enrollment demand and, as noted, is my own invention—with the use of some official numbers up to 2015. It is based on an estimate of enrollment growth of initially 3 percent at the undergraduate level (headcount), and then shifting to a lower projection of 2.2 percent after 2010, and then to 1.2 percent beginning in 2016. These estimates reflect planning figures generated by the California State Department of Education and the University of California Office of the President. Such projections become more difficult in the years past 2015 when one must then guess the cohort of new school-age children that might be in the pipeline.[21] A drop to 1.2 percent is closer to the historical average and so is used here—in essence, an attempt to moderate what is already an ominous projection. Also projected is a .9 percent increase at the graduate level over the next ten years, and then going up to 1 percent. This is an estimate partly based on University of California planning up to 2010. It also reflects a sense that graduate training will increase in importance in the coming decades.

There are a number of additional assumptions that bear mentioning. One, California will continue to grow in population at a pace similar to the post-World War II era. Two, the University of California will maintain a similar market share of enrollment demand and will continue to meet its obligation to serve the top 12.5 percent of California high school graduates. Retaining this market share will also be critical for expanding access to disadvantaged groups, and, in the near term, Latino and African-American students. And three, and perhaps most important, that state and other resources will adequately fund enrollment growth within the university.

Will other sources of education and training, such as for-profit virtual universities and new private colleges, reduce this projected market demand? Will California's one hundred and fifty-year trend of population growth continue through the next millennium? Such variables may prove these projections too high. Yet there is an equal if not greater chance that they underestimate total demand. The one percent growth rate in graduate education after 2010, for instance, may be a very conservative projection. The California and global economies are increasingly dependent on professionals and a highly educated workforce. Demand for a higher education will continue to expand at both the undergraduate and graduate lev-

els, and the University of California provides a known and, thus far, affordable and highly desirable brand name. Even if there is a drop in California's astonishing rate of population growth, this suggests an increasing participation rate among the state's citizens, and continued out-of-state and international interest in attending a University of California campus—whether in physical presence at a campus or in some off-campus virtual mode.

The variables in any such projection are substantial. The intent of this discussion is to provide a general scope of the challenges that lie ahead. Recognizing some of the caveats for such an enrollment projection, Chart 1 also provides an optimistic estimate of 2013-15 when the university will reach a mismatch between enrollment demand and enrollment capacity—and including official university projections of UC Merced growing at a difficult pace of 800 students a year.[22] In coming to this estimate, an allowance has been made for the development of alternative methods for increasing capacity. For one, it can be assumed that a proportion of this demand will be absorbed in on-line courses where a student might not need to use the facilities of a campus for, say, a semester or more. A more likely scenario: instructional technologies will supplement on-campus teaching programs and thus result in only a modest increase in total enrollment capacity.

Two, the expansion of summer sessions will also increase capacity—although such an expansion of the university's teaching program into a "year-round operation" may also displace other important activities, including research, outreach, and conference programs operated in the summer. Other options are under consideration within the university, including increasing student enrollment in off-campus programs such as education abroad and off-campus centers; increasing the instructional day or week; improving time-to-degree rates (thereby moving students more quickly through their degree programs and providing room for additional students); and expanding the physical capacity of existing campuses.

For the purposes of more conjecture, perhaps 15 percent of all student enrollment (and not simply the additional student cohort) could be absorbed under these "alternative" modes. This is probably a very generous estimate, equating to approximately 35,000 students in 2010—a number that equals the combined current enrollment of UC San Diego and UC Santa Barbara. Even with such efficiencies and advents, the disparity between enrollment demand versus capacity, as noted, would first hit the university around 2013-14. By 2015, enrollment demand would be at 258,000 students, and capacity (with alternative modes accounted for) at 252,000—a disparity of 6,000. If "alternative" modes of increasing capacity equated to only 10 percent of all enrollment, then the disjuncture would be much larger: a total of 19,000 students could not be accommodated. However, for this risky excursion into the future we will keep with the more optimistic 15 percent.

Again, based on these enrollment projections, over a twenty-five year period (2000 to 2025) the university would grow by a staggering 108,000 students, or approximately 4,300 a year. To say the least, this is a pace that would strain the operation and budget of any university system. Only during a brief period in the mid-1960s was there a higher rate of growth: nearly an additional 6,000 students a year over a seven-year period. In that era, three new campuses helped to take some 28 percent of this increase. By 2025, the disparity between enrollment demand and capacity would be 22,000 students. And even further out, the University of California would face a total enrollment demand of 387,000 students by 2050. If we assume that by then some 25 percent of all enrollment could be accommodated in alternative modes, the disparity would reach 85,000 students.

In the late 1980s, the University of California Office of the President estimated a need for three new campuses by the early portion of the twenty-first century—one in the 1990s, and another in the decade following, and yet another by 2020.[23] Enrollment projections offered one reason for new campus development; another intent was to create a large enough

infrastructure to avoid huge yearly increases in enrollment for a new campus. The recession of the early 1990s ended any such vision. Concerned with California's economic decline and significant constraints on state and local government to expand its revenue flow, a number of critics of higher education professed a need to limit the development of new campuses, particularly research university campuses. Limited state funds, the argument goes, should be focused on those institutions that will yield the greatest number of undergraduates and the least cost—primarily the community colleges. In this view, all undergraduate education is alike; campuses are factories for delivering essentially one product, and one should invest in the most prolific producer.

In light of the historic and dynamic contribution of the University of California to the economy, and continued and rising public demand for access, such an approach appears parochial—a bureaucratic and myopic vision of what colleges and university are for. It is a curious twist of fate that the twentieth century ended with such a limited sense of the horizon. And this has come in the midst of great affluence, major socioeconomic challenges, and the growing value of a college education and university-based research.

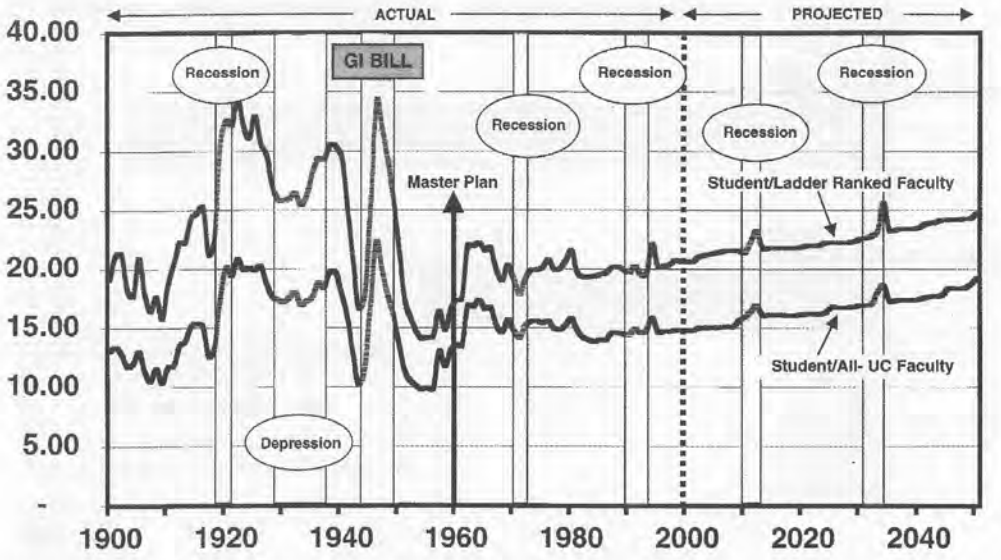
Organizational Challenges Ahead

If the enrollment projections provided for the fifty-year period ahead are reasonably accurate, the University of California should be actively planning for at least two to three new campuses beyond UC Merced. It takes tremendous political acumen and foresight to choose the appropriate site for a new campus; it then takes almost gargantuan organizational skills and time, and substantial resources, to develop a viable and high quality campus. To reiterate, a campus, whether new or old, only has limited capacity to grow each year—a process that requires hiring faculty, staff, and an infrastructure of support services and facilities. Add to this the relatively new adoption of environmental regulations and community concerns over local population increases, and you have another important constraint on expanding the enrollment of a campus.

Using the projected enrollment figures developed for this essay, one can create a model that estimates the number of faculty the university may require. Student to faculty ratios have long been the standard for generating state funds, and a simple ratio projection provides one method to arrive at an estimate. Historical data provide a glimpse of how this ratio has changed over the past century.[24] During the Progressive Era, the university grew in enrollment and in faculty, but the slow pace of new faculty hires drove the ratio up. The subsequent fluctuations, as Chart 2 outlines, relate to economic shifts (recessions and depression and the rate of state financial support) and surges in enrollment (wars and returning veterans being one important influence). Perhaps most interesting is the evidence of stability in this ratio after the 1960 master plan. As noted previously, lawmakers and the higher education community developed agreements that fostered ordered enrollment and program growth—this in the midst of yet another wave of student enrollment demand throughout the tripartite higher education system.

Good economic times have tended to provide a partial resurrection of budget support. Bad economic performance and the subsequent loss of tax revenues have almost always led to increases in the student-to-faculty ratio. Recognizing that recessions do happen, and that this phenomenon is likely to be repeated, the projection shown in Chart 2 (based on the previous enrollment estimates), includes a simulation of two possible recessions. Also included is a projection that student-to-faculty ratios will likely move upward for two general reasons. One, the adoption of instructional technologies will enable faculty to increase their teaching workload at the margin (a big assumption). And two, the promise of such a

Chart 2. University of California Student (Undergraduate and Graduate)-to-Faculty Ratios: 1900 to 2050



Source: Actual data are derived from the *Centennial Record* and the University of California Office of the President. The projections are based on the author's model. To match with historical records, projected data are based on headcount and include medical school students and affiliated Academic Senate faculty.

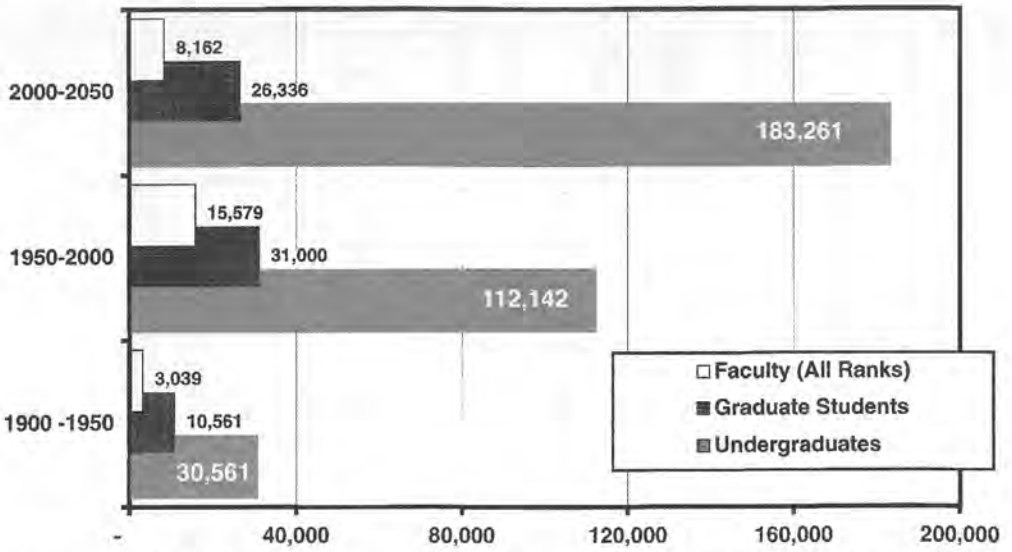
change (both real and imagined) will result in pressure by state government to reduce, at the margin, its per student contribution to the university's budget.

One probable scenario is that each time there is a recession, state funding per student will decline. Economic recovery follows, funding is restored, but not at the previous level on a per student (and, ultimately, per faculty) basis. Other sources could stabilize the funding base for faculty positions: for example, fees and tuition, endowment funds and patent income. But for this exercise, let us presume not.

The challenge of expanding access in the first half of the new century will include, according to this analysis, accommodating not only 183,000 additional undergraduates and nearly 26,000 graduate students, but also a net increase of over 8,000 faculty. Again, this is an attempt at a conservative projection. It assumes an increase in the student-to-ladder faculty (tenure and tenure-tracked) ratio from approximately 21.4 today to 24.7 by 2050. Will faculty become primarily the purveyors of packaged internet courses? This might imply that the university will need fewer faculty, fewer campuses, and less human interaction between scholars and students.

A version of this story has been included in the projections shown in Chart 3. Table 2 outlines these and other planning assumptions used to imagine the university's future. Under this scenario, faculty hires in the coming half-century would not keep pace with the totals from 1950 to 2000. Again recognizing the numerous and substantial problems of making such an estimate, the purpose is simply to gauge the huge task that lies ahead. Such an increase in student-to-faculty ratios would, I believe, come at a cost for the quality of teaching and other core university activities. If student-to-faculty ratios were to remain stable, the needed increase of faculty would be 14,000 by 2050—slightly less than the new hires during the 1950 to 2000 era.

Chart 3. Increase in Numbers of University of California Faculty, Graduate and Undergraduate Students: 1900 to 2050, Actual and Projected



Source: Actual data are derived from the *Centennial Record* and the University of California Office of the President. The projections are based on the author's model.

Beyond these numbers are more and extremely important issues for the university. These include, but are not limited to, the racial and socioeconomic mix of students, the role of instructional technologies in expanding access, and the changing nature of the professoriate.

For all the visions of a new world of "delivering" higher education more "efficiently," one can also see a future that includes a healthy increase in traditional campuses. The building of active (versus virtual) new communities of scholars and students is, for many, an environment critical for a liberal education and for promoting scholarly research. One must also recognize the historical relationship of University of California campuses with geographic regions and the politics of creating new campuses. Historically, those areas with a University of California campus have the highest enrollment rates by local high school graduates. That correlation, it appears, will remain salient. But local communities want the university's physical presence not only to increase college-going rate, but also to reap substantial economic benefits, including the prospect of attracting high technology industries, creating high-quality labor pools, and, not least, gaining a substantial employer.

Expanding the number of campuses within the University of California system, as well as the California State University system, it has been argued, is an issue of equity. Particularly in growing population centers of the state, to be without a traditional university campus is a significant disadvantage. And indeed, the very concept of the tripartite system was to spread higher education access to all major population areas of the state. These types of regional economic and quality of life issues will undoubtedly continue to drive policymaking.

Table 2. A Set of Planning Assumptions for the University of California

Enrollment	**Increase per year 2000–2010**	**Increase per year 2010–2015**	**Increase per year 2016–2050**
Undergraduate students	3.0%	2.2%	1.2%
Graduate students	0.9%	1.0%	1.0%
Alternative Enrollment Modes (including On-line/Summer/Other)	**By 2010**	**By 2025**	**By 2050**
Percent of total est. enrollment	15.0%	20%	25%
Total alternative enrollment	35,000	58,000	97,000
Student-to-Faculty Ratios (headcount)	**By 2010**	**By 2025**	**By 2050**
Student/Ladder-ranked faculty	21.4	22.2	24.7
Student/All faculty	14.9	15.3	16.4

Another Century

No state in the union has experienced California's rate of population growth and economic expansion. One might suppose that some Malthusian limit will arrive and, to paint a positive picture, result in both a relative stable population and a productive high tech economy. Yet the historical record suggests the largest expansion is yet to come. With it will come significant implications not only for higher education, but also for the state's over-congested infrastructure and already taxed natural and built environment.

If the patterns of the next fifty years are to hold true for the entire century, the university could grow from a system with nearly 180,000 students to a mega-university with more than 600,000.[25] By the year 2100, let us say that the university could accommodate some 30 percent of all students in virtual and off-campus alternative modes. That would equate to 188,000 students—the total size of today's university. Beyond the new campus planned for Merced, the University of California would then need to plan for at least seven to eight additional campuses (assuming a general limit of 25,000 students for each new campus) in this new century. As noted, at least two of these are needed in the very near term. In the century just ended, seven campuses were established.

Such projections are easily discredited. Thinking about the projections over the next ten years is enough food for thought. Contemporary university officials and lawmakers, like Wheeler and his compatriots in his era, are busily scanning California's horizon and searching for possible answers. The University of California has had a remarkable ability to shape its future and, in turn, carve a unique and valuable role in society. The university entered the twentieth century having attained the status of a public trust and with an initial organizational structure that gave the faculty a significant role in university management. From this base, the university leaders undertook the daunting task of creating a multicampus institution that is an internationally acclaimed model. Why has the University of California been so successful? One can point to good management decisions and the tremendous support of Californians and lawmakers. Yet another important factor is the timing of decisions and the early and pioneering development of a larger system of public higher education in California. The result: the university successfully struggled with the process of becoming a

multicampus institution for most of this past century and earlier than any other university system.

Can the contemporary organization of the University of California be sustained in future years? Or will the changing nature of higher education, budget constraints, possible revolutions in governance, and a multitude of other variables force a radical departure? The academic community should reflect on its history and more actively discuss the current and projected world. Equally important, policymakers and Californians need to do the same and think more analytically about the value of investing in long-term solutions. Californians might then return to the most positive aspects of their political heritage and, in some more aggressive form, embrace the future. This essay has provided a glimpse into two possible paths that confronted the University of California in the century past. What will be the tale of the new millennium?

ENDNOTES

1 Quoted in "Warren Joins Others in Urging Greater Understanding of UC, Academic Freedom," *University Bulletin*, 15:36, May 8, 1967.

2 *Biennial Report of the President of the University—1898-1900* (Berkeley: The University Press, 1900), 7. Virtually every major administrative position—a total of forty in 1909—was held by faculty with appointments in one or more academic departments, including the deans of the various colleges, a new dean of the graduate school, a dean of the lower division, a dean of academic faculties. Further, the Recorder of the Faculty (later called the Registrar) was a faculty member and reported to four different Academic Senate committees that set admissions standards, selected students, and accredited California's high schools and junior college programs.

3 Ibid., 8.

4 Ibid., 24.

5 Cited in Clark Kerr, "Remarks by President Kerr: Ninety-Second Charter Day Ceremonies," University of California, Berkeley, March 21, 1960, University Archives, University of California.

6 Sources: Verne A. Stadtman, ed., *The Centennial Record of the University of California* (Berkeley: University of California Printing Department, 1967); University of California Office of the President, *University of California Annual Financial Report 1997-98*; University of California Office of the President, *UC Means Business: The Economic Impact of the University of California*, 1995.

7 Edwin E. Slosson, *Great American Universities* (New York: The Macmillan Co., 1910), 148-49.

8 *Biennial Report of the President of the University—1898-1900*, 7.

9 John Aubrey Douglass, *The California Idea and American Higher Education: 1850 to the 1960 Master Plan* (Stanford University Press, 2000).

10 Lange was a member of the state board of education due to his position as the chair of the Department of Education on the Berkeley campus. A California Teachers Association had originally proposed this official link between the board and the university in the 1880s, and helped push through legislation. The board was reconstituted in 1913 to include only lay representatives, and hence removing Lange.

11 This transition to an enrollment-driven budget reflected the move by many states during the Progressive Era to adopt a formula for funding local schools based on average daily attendance (ADA).

12 George D. Strayer, Monroe E. Deutsch, Aubrey A. Douglass, *A Report of a Survey of the Needs of California in Higher Education* (Sacramento: State Printing Office, 1948).

13 See Eugene C. Lee, *The Origins of the Chancellorship: The Buried Report of 1948* (Berkeley: Center for Studies in Higher Education and the Institute of Governmental Studies, 1995).

14 Clark Kerr, *The Gold and the Blue—A Personal Memoir of the University of California,1952-1967* (forthcoming University of California Press, 2001).

15 For a comparative look at multicampus systems in the post-World War II era, see Eugene Lee and Frank Bowen, *The Multicampus University: A Study of Academic Governance* (New York: McGraw-Hill Book Co., 1971).

16 See John Aubrey Douglass, "On Becoming an Old Blue: Santa Barbara's Controversial Transition from a State College to a Campus of the University of California," *Coastlines* (Spring 1994), 6-11.

17 Ibid.

18 See Russell H. Fitzgibbon, *The Academic Senate of the University of California* (Berkeley: Office of the President, 1968); Angus Taylor, *The Academic Senate of the University of California: Its Role in Shared Governance and Operation of the University of California* (Berkeley: Institute of Governmental Studies, 1998); see also John Aubrey Douglass, "Shared Governance at the University of California: An Historical Review," Universitywide Academic Senate, November 1997.

19 Hugh Graham, "Structure and Governance in American Higher Education: Historical and Comparative Analysis in State Policy," *Journal of Policy History,* 1:1 (1989), 80-107.

20 The Carnegie Foundation for the Advancement of Teaching, *State Higher Education in California* (Sacramento: State Printing Office, 1932).

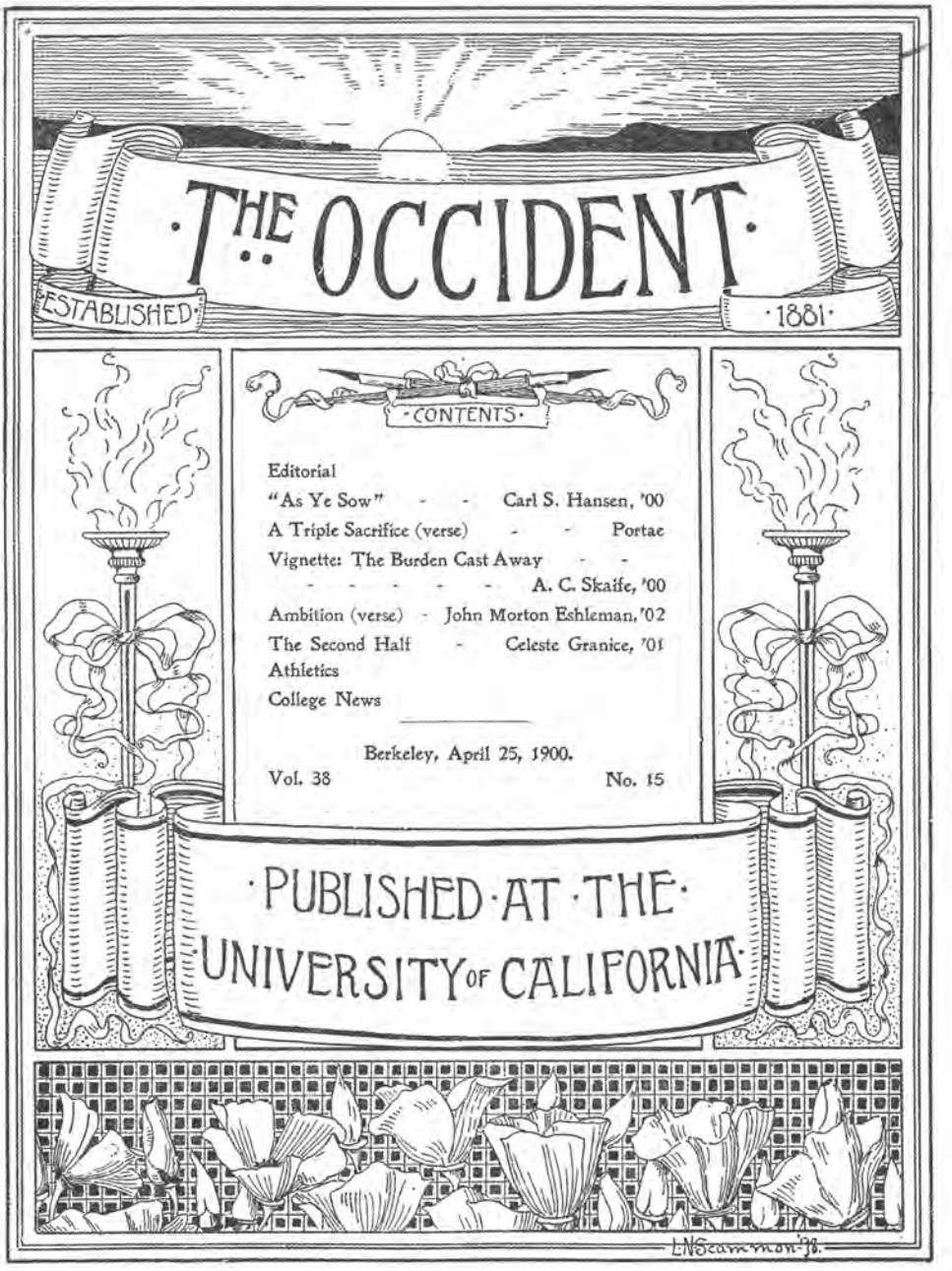
21 See University of California Regents, "Providing Access to the University of California—A Progress Report on Long-Range Enrollment Planning," Committee on Educational Policy, Item 303, February 10, 1999; Planning and Analysis, Office of the University of California President, "Educating the Next Generation of Californians in a Research University Context: University of California Graduate and Undergraduate Enrollment Planning Through 2010," February 1999.

22 This is based on the following estimate of enrollment capacity: Current Long-Range Development Plans (LRDP) provide for a total enrollment capacity of 187,500 (headcount) for all nine campuses of the university; it is estimated by the University of California's Office of the President that the LRDP plans for these campuses (and hence, not including UC Merced) could be increased to accommodate possibly 12,500 additional students by 2010; plans call for UC Merced (which is scheduled to open in 2004) to accommodate 5,000 students by that year. This provides an estimate of an enrollment capacity of 205,000 by 2010. Plans currently call for UC Merced to grow at a rate of 800 a year—an optimistic estimate of possible growth and resulting in Merced reaching its capacity in 2021-22 of 25,000 students. As noted, in making a rough calculation of capacity, I have added an assumption that 15 percent of all enrollment will come in alternative modes by 2010 and by 25 percent by 2025, thereby expanding capacity. See University of California Office of the President, "Options for Expanding Enrollment Capacity at the University of California, Report to the Legislature," March 1999.

23 For insight into this planning process, see David Pierpont Gardner, *A Life in Higher Education: Fifteenth President of the University of California, 1983-1992,* an oral history conducted 1995 and 1996 by Ann Lage (Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1997), 447-459; also John Aubrey Douglass, "Planning New UC Campuses in the 1960s: The Role of Universitywide Academic Senate Special Advisory Committees," Universitywide Academic Senate, Brief for the Task Force on UC Merced, December 1998.

24 Again recognizing the limits of such an analysis, it is important to note that information on student and faculty numbers has historically been kept in terms of what is called "headcount"—actual people, versus the post-1957 advent of looking at full-time equivalent workload data (for instance, one student equals fifteen units taken in courses).

25 This estimate simply adds the projected growth rate between 2000 and 2050 and multiplies it by two to create a conservative projection. However, if one assumes that the growth rate between 2000-2050 (118 percent) will hold true for 2050-2100, the projected demand level would be over 800,000.


THE OCCIDENT

ESTABLISHED 1881

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Berkeley, April 25, 1900.
Vol. 38 No. 15

PUBLISHED AT THE UNIVERSITY OF CALIFORNIA

L.N. Scammon '98.

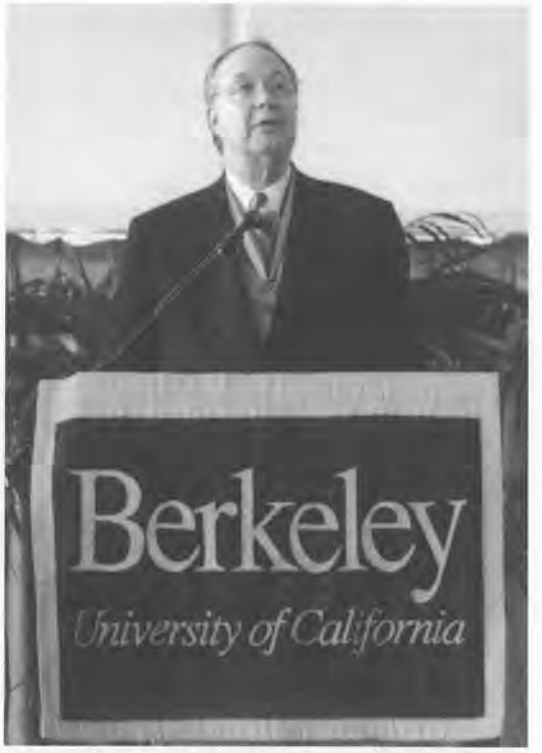
The *Occident* is the oldest college literary magazine on the west coast. Begun in 1881, it carried on, with a few gaps in publication, until 1990, providing an outlet for the highest quality serious writing on the Berkeley campus.

THE INAUGURATION OF ROBERT M. BERDAHL

EIGHTH CHANCELLOR OF THE UNIVERSITY OF CALIFORNIA, BERKELEY

IN 1899, FEWER THAN 2,000 STUDENTS had been enrolled in four undergraduate colleges (Letters, Science, Natural Science, Commerce); the library's holdings had not yet reached 100,000 volumes; about a dozen buildings, several of which were quite small, comprised the campus. In 1997, the year that Robert M. Berdahl became the eighth chancellor at Berkeley, 21,738 undergraduate and 8,552 graduate students were distributed among fourteen schools and colleges, the largest of which was the College of Letters and Science.[1] Over one-hundred buildings, a great many of which were large and multistoried, had been built on the 1,232-acre campus; an additional five hundred owned, leased, and satellite facilities dedicated to a multiplicity of university-related functions were distributed throughout the Bay Area. With its 8,792,009 volumes and 79,125 serials the library's aggregate holding (as of 1999) was the fourth largest in the United States and Canada;[2] and Berkeley was widely recognized as one of the foremost research universities in the world.

Robert Max Berdahl, a graduate of Augustana College, had begun graduate study at the University of Illinois, where he became deeply interested in German history. When his mentor professor Otto Pflanze relocated to the University of Minnesota the young scholar did likewise, and received the doctoral degree in 1965. Faculty appointments at the Boston campus of the University of Massachusetts and at the University of Oregon (where Berdahl became dean of the College of Arts and Sciences) were followed by an invitation to become provost at the University of Illinois at Urbana-Champaign—a move that led him to decide to devote his career in higher education to administration. In 1993, he became president of the University of Texas at Austin.[3]



Robert M. Berdahl, 1998. Photograph by Peg Skorpinski. *Office of Educational Development.*

The formal inauguration of Robert M. Berdahl as chancellor of the University of California, Berkeley, coincided with the celebration of the 130th anniversary of the founding of the university and took place on April 24, 1998. An editorial in the *Daily Californian* on the day of the event aptly summed up the challenges and the possibilities that he would face. "Leading a place like UC Berkeley," the writer observed, would be a demanding task. "The nature of our social, political and academic diversity must make any sort of consensus a tough thing to achieve. . . . With so many different campus voices, Robert Berdahl

most definitely has a role to play, but that doesn't mean it is an easy one." As the editorial pointed out, the new chancellor had been extremely busy with strengthening the university, building "a stronger sense of community, and raising funds to advance the university's educational, research, and public service missions"[4]—efforts to which Robert Berdahl has given unswerving commitment during his now three plus years of service.

Students, staff, alumni, faculty, and former chancellors and regents filled Zellerbach Hall to witness and participate in the inaugural ceremonies, which were presided over by Meredith Khachigian, chair of the Board of Regents, and University of California President Richard Atkinson. Among those who formally welcomed the new chancellor were keynote speaker Secretary of Health and Human Services Donna Shalala, Chancellor Albert Carnesale of the University of California at Los Angeles, and President Gerhard Casper of Stanford University, "whose red gown stood out in a sea of Cal blue and gold."[5]

ENDNOTES

1 According to *2000 Cal Facts, University of California, Berkeley*, these numbers had risen to 22,705 and 8,642 in fall 1999. In addition to the College of Letters and Science there are the College of Chemistry, College of Engineering, College of Environmental Design, College of Natural Resources, Boalt Hall School of Law, Graduate School of Education, Graduate School of Journalism, Richard and Rhoda Goldman School of Public Policy, School of Information Management and Systems, School of Optometry, School of Public Health, School of Social Welfare, and the Walter A. Haas School of Business.

2 Ibid.; "Berkeley Chancellor Vows to Improve Library," *San Francisco Chronicle*, April 25, 1998, A13. For informative assessments regarding the problems and prospects facing Berkeley's libraries (and those of other research universities in the twenty-first century) see in this issue: Marianne Constable, "The University Library at the Turn of the Century" and Charles B. Faulhaber, "The Bancroft Library 1900-2000."

3 Russell Schoch, "A Conversation With Robert Berdahl," *California Monthly* (September 1997), 27-30.

4 Barney McManigal, "Go Bears, Go Berdahl," *Daily Californian*, April 24, 1998, 4.

5 "Berdahl," *Oakland Tribune*, April 25, 1998, 11.

Chancellor Carnesale, Chancellor Berdahl, Secretary Shalala, President Atkinson, and President Casper. Photograph by Peg Skorpinski. *Office of Educational Development.*

ON THE THRESHOLD OF THE TWENTY-FIRST CENTURY

Robert M. Berdahl

TODAY WE CELEBRATE THE ANNIVERSARY of the chartering of the University of California on March 23, 1868. However honored and grateful and humbled I am to be standing here as the eighth chancellor of the University of California, Berkeley—and I am enormously honored, genuinely grateful, and profoundly humbled—this occasion is more than anything an opportunity to celebrate the founding of this great university in all of its blue and gold glory. It is difficult for us, removed from that event by 130 years of history, to appreciate fully the boldness and the vision that it took to build a university on this distant shore of the American continent, just twenty years after California's frontier existence was forever shattered by the discovery of gold. Not everyone shared that optimistic vision of the future of California held by our founders. One disappointed seeker of fortune wrote, in 1855, for the benefit of those considering coming to California:

> No rain falls between the first of April and the middle of November, in consequence of which the earth becomes so dry and hard that nothing will grow . . . . On the other hand, from the first of December to the last of March it rains, as a general thing, so copiously and incessantly, that all outdoor avocations must be suspended . . . . the average general surface of the country (California) is incapable of sustaining a dense population.

He proceeded to describe the natural calamities he had witnessed: earthquake, fire, flood, and mud.

But those early builders, with a vision that extended beyond whatever an El Niño may have brought to California in their time, chartered a university that anticipated the great future of California. It was to balance carefully the practical disciplines of agriculture, mining, and the mechanical arts, qualifying it for federal land-grant status, with the letters and sciences that characterized the older eastern universities. They chartered a university that was, as President Daniel Coit Gilman said in his inaugural of 1872, a "University of this State. . . . It is 'of the people and for the people'—not in any low or unworthy sense, but in the highest and noblest relations to their intellectual and moral being."

A burning drive for excellence in all that it undertakes has been the sustaining continuity distinguishing the history of the University of California from the time of Gilman to the present. The vigilant keepers of that flame have been the faculty. Measured by whatever standard one wishes to apply, by whatever national survey one wishes to make reference, the preeminence of Berkeley is sustained by its faculty. The supporters of this university can be enormously proud of its faculty. During the past decade, it has prevailed despite circumstances that would destabilize any university, including dramatic cuts in state funding that necessitated widespread early retirements of senior faculty and staff. Under the vigorous leadership of Chancellor Tien and with the recovery of California's economy, however, Berkeley is again thriving. The appointment of young new faculty has brought vitality and new direction to academic programs. Providing our faculty with the means to excel must be—

and will be—the determined passion of this administration as it has been of all those that have preceded it.

In reviewing the history of the university, I am particularly drawn to the inaugural of Benjamin Ide Wheeler simply because, with his inauguration in 1899, the university was then, as we are today, poised on the threshold of a new century. Wheeler was a visionary who anticipated the close linkages between Berkeley and Asia that have developed in the twentieth century. These bonds will be ever more important in what has been predicted by some to be the Pacific Century.

Wheeler defined his task as representing the needs and the aspirations of the University community to its external supporters, on the one hand, and conveying the external perspectives to the faculty, students, and the staff of the university on the other. He described his role as "mediating between the divergent ideals of the supporting constituency and those of the university life." The role, he acknowledged, posed the danger of being misunderstood by both sides. Reading the mail that I receive weekly would be sufficient to convince anyone that working to satisfy the conflicting demands of our various constituencies has not become any easier since Wheeler's day.

Because this is a rare moment when representatives of those various constituencies are gathered, this day offers an appropriate opportunity to speak frankly about the challenges the Berkeley campus faces as we are about to cross the threshold into a new century. Is our vision as bold and compelling as the vision of those who founded this great university? Are we as willing as they were to risk "undertaking things new and unforeseen?" Do we, to use Robert Gordon Sproul's inaugural words of 1930, "regard ourselves still as the founders rather than as the descendants?"

I

The early years of the University of California witnessed remarkable growth and development. Yet they do not compare with what we have faced and will face in the future. In the past decade, we have witnessed an explosion of information and communication technology. Whole new fields of inquiry have come into existence. Donald Kennedy has reminded us of what he calls the "implacable law of the economics of knowledge" first observed by the German physicist Max Planck. It is that each increase in knowledge costs more than the last; we tackle the easier problems first and we build upon the knowledge gained in the process. But each incremental increase costs more because it requires more sophisticated equipment and a larger investment. These increased costs put heavy stress on both the research and the teaching activities of universities at a time when government funding, both federal and state, is in decline. When Chancellor Heyman was inaugurated in 1981, he observed that state support for Berkeley had dropped to fifty percent of the operating budget. Today, it stands at thirty-four percent. Consequently, our research infrastructure has deteriorated. Our laboratories are, in many cases, too old to meet the needs of modern research. The capital funds we receive from the state are available only for the seismic retrofitting of buildings, not for renovating the work spaces within them. And we now know that the seismic retrofitting of the Berkeley campus alone will cost nearly $1 billion in current dollars.

Renewing our research infrastructure must be our highest priority if we are to sustain our preeminence as a research university into the twenty-first century. This will require capital expenditures by the state, by the university, and by our supportive donors.

Central to the research foundation of the campus is the library. In his inaugural address, ninety-nine years ago, President Wheeler paid special attention to the importance of the library. He said:

> Among the demands for the internal development of the University, none rank in my estimation with those of the library. . . . If the best men [the faculty in those days were all men!] are to be brought here and kept here, we must be able to assure them first of all that the library will afford them means to keep their learning abreast of the times, and that their coming to California shall not mean the suicide of creative scholarship.

That is clearly as true today as a century ago.

Since my arrival, no issue related to research and teaching support has been brought to my attention more repeatedly and more emphatically than that of the library. Ravaged by inflation for library materials—inflation that is three times the consumer price index during the past decade—and grappling with managerial problems resulting from budget and staff reductions, our library has fallen seriously behind where it needs to be. We cannot allow this to continue. We must catch up. A Blue Ribbon Task Force has just completed its review and recommendations for the library. To begin the rebuilding of the library, we will invest a total of $5.5 million of new permanent money in the library over the next three years with the objective of bringing the collections budget to parity with peer institutions.

We will also be investing substantially more to improve the ability of departments to support the teaching and basic needs of faculty. Talking about telephones and travel and photocopying budgets does not create a stirring vision of the future, but these are also fundamental to our mission.

Investing money is essential to sustain the research environment of the campus, but it is also vital that we make certain that the administration of the campus be fully responsive to the needs of the faculty and staff who work here. I hear a recurrent criticism of what is described as the "unnecessary and burdensome bureaucracy." Now, bureaucracy is three things: it is people, it is policies, and it is process. This criticism should not be interpreted as directed largely at people. We have a wonderfully dedicated, loyal, intelligent, and hardworking staff. But our policies are often too restrictive and our processes are too complicated. We need to review all aspects of how we conduct our business, with the aim of streamlining decision-making and assuring that our processes are truly aimed at providing speedy, efficient, and friendly services to everyone—students, faculty, and staff. We must make certain that the same ethos of excellence that marks our teaching and research permeates all of our operations.

The future research capacity of this university, which we take so easily for granted, is neither inevitable nor assured. But it must be. Because the future vitality of our economy, our society, and our culture in an information age depends on it.

II

The dimensions of the known world are expanding dramatically and rapidly, generating new knowledge and new certainty to our understanding of the physical world. Yet, we should avoid being seduced into believing that only knowledge and learning produced by science is useful or practical or worth learning. We must also appreciate the importance of re-interpreting, of reapplying knowledge that has been known for a long time. As we are awed by greater certitude about the physical world, we ought also to be challenged by an appreciation of what can be called the "arts of uncertainty." I have always liked the German term for the humanities, *Geisteswissenschaften*, the sciences of the spirit, because of its focus on

spirit and its reminder that there are still many things about the human spirit that are unknowable, vague, unpredictable, immeasurable, unanswerable.

Professional education has always been and will always be central to our mission, and we will explore new ways to strengthen our professional schools. But to those who argue that students should learn only what is practical and useful, we will respond emphatically that nothing is more practical and useful than a refined and educated mind. Nothing is more practical than critical thinking, nothing more useful than a mind that can grasp the genuine complexity of difficult human problems and avoid the lure of simplistic explanations. Nothing is more useful than understanding the moral dilemmas that confront the human condition. And nothing is more needed by our country than citizens who understand the fundamental ecology of a just society—that you have to give back as much as you take from it. The education we provide our students must therefore aim at their full education, at the development of their civic sensibilities as well as their technical expertise or professional skills.

Our education must derive from the recognition that few problems, few issues, and few discoveries are any longer, if they ever were, the province of a single discipline. Amidst greater specialization must also come greater reintegration. That reintegration is taking place in virtually every corner of the campus with the initiatives underway in bioengineering, neuroscience, and material science to name but a few new examples; it is also evident in the Townsend Center for the Humanities and the newly proposed Center for the Arts.

III

At the very outset of this great university, President Gilman foresaw it would be funded from a mixture of public and private support. One cannot walk across this beautiful campus without being made aware of the early contributions of Charles Franklin Doe, or Mrs. Peder Sather, or Elizabeth Josselyn Boalt, or, above all, Phoebe Apperson Hearst. Private support has always been necessary to lift Berkeley into the front rank of American universities. And that has never been more true than today, when the generosity of a new generation of donors—names such as Haas and Goldman and Moore—has lifted us as state support has slipped. Our alumni and friends have responded magnificently to the campaign launched by Chancellor Tien to raise $1.1 billion, the largest campaign of any public university without a medical school.

Many have worried that an increasing reliance on private philanthropy will change the fundamental character of Berkeley. But the fundamental mission of this university, stated in the charter we celebrate today, to be a "public trust," a university as Gilman said, "of the people and for the people" of California cannot change.

The greater challenge to our public mission does not come from our becoming more a privately funded university, but from the rapidly changing demographics of California and the nation. In a few years, just after the turn of the century, California will have no majority population. If nothing changes in the composition of our student body from that which we are likely to enroll in our freshmen class of 1998, it becomes clear how unrepresentative our student body will be of the population of California. If nothing changes, almost half of California's population will provide only about six percent of our student body.

It is not our mandate to mirror precisely the population of California, but how are we to sustain public support if we do not better represent the impressive diversity that distinguishes this state? More significant, however, is the compelling educational, moral, and public obligation we have to make certain that we are accessible to students of all ethnic

backgrounds and experiences. It is this obligation that will require us to reassert the historic land-grant mission of this university.

Originally aimed at directing research to improve the condition of a rural, agriculturally based society, we now must redirect this educational ethic of service to society to improve the lives of people in today's urban America as well as the rural regions of our states. And there is no greater need in our cities than to improve the educational opportunities of America's children.

We at Berkeley must marshal our intellectual and imaginative resources to renew and rebuild public education in California. We must bring the research capacity we enjoy to collaborate with our colleagues in secondary and elementary schools so that we can improve the education of every young person in our state. We must encourage more of our students to become involved in the schools, to consider teaching careers, and we need to develop the means to help the teachers already in the profession, struggling mightily against difficult odds, to help youngsters succeed. This should be seen by faculty in all disciplines, not merely in the Graduate School of Education, as a task vital to our future.

Only if we do this can we continue to lay claim to being a public university, fulfilling completely the public obligations given us as a "public trust" by our charter. Only if we do this can we realize as an institution what I have called the "ecology of a just society," giving back what we take from it.

IV

I have spoken primarily about what I perceive to be the agenda for the university as it prepares for the next century. But there is a difference between an agenda as an organizing principle and a core value that binds us together and that gives a transcendent meaning to our endeavors. How should we characterize the core value that defines what we are as an institution?

There are many values, of course, that we share. But I believe there is one overarching value to which we should renew our commitment, for it is a value that emanates from all of the pages of our history. It is the determination to build a community of learners that transforms the lives of all who come in contact with it.

I was struck by the advice offered me by Clark Kerr, Berkeley's first chancellor and one of the towering figures in the history of higher education in America. Recently, Kerr observed that, "The campus has been slowly disintegrating as a human community. It is much bigger, more fractionated in knowledge, much more externally oriented." "Make sure," he advised, that "the campus is a vibrant human community." This is an important message.

I do not believe it is possible to create community. Rather, community is something that happens. It happens when people speak to one another and listen to one another in an effort to discern the truth and to discover themselves in the process. It happens only in an environment of freedom and openness. Community happens only in an atmosphere of honesty and tolerance. Community happens when people care about one another and when they are willing to take responsibility for themselves as well as for each other. Community happens with education, as Hannah Arendt said so eloquently:

> Education is the point at which we decide whether we love the world enough to assume responsibility for it and by the same token to save it from the ruin which, except for the coming of the new and young, would be inevitable. And education, too, is where we decide whether we love our

> children enough not to expel them from our world and leave them to their own devices, nor to strike from their hands their chance of undertaking something new, something unforeseen by us, but to prepare them in advance for the task of renewing the common world.

Renewing the common world must be our ultimate goal. In the final analysis, what we are as a university is not determined by rankings or prizes, important as they may be. What we are as a university will be determined by how we enhance and transform the lives of all of the people—those who become a part of this university that we cherish and the many more whom we, as a public institution, also serve. Today, as we celebrate Charter Day, 1998, let us dedicate ourselves to the further building of a university at this hallowed place that will enable our children to inherit and renew the common world and to undertake things new and unforeseen by us as they prepare for leadership in the twenty-first century.

Photograph by Peg Skorpinski. *Office of Educational Development.*

Editor's note: The Chancellor's inaugural address may be found at http://www.chance.berkeley.edu/cio/chancellor/sp/inaug.html

THE TEMPLE OF NEMEAN ZEUS, A CALIFORNIA LANDMARK

Stephen G. Miller

IN 1937 THE DEPARTMENT OF CLASSICS instituted a Ph.D. program in classical archaeology. It was intended to give expression to those remains of antiquity which could not be studied solely through the philological curriculum for which the University of California was already justly recognized.

In 1967 a review by the then Dean of the Graduate Division, Sanford "Sandy" Elberg, revealed that two Ph.D. degrees had been awarded during the 30-year existence of the classical archaeology program. The dean was not impressed. The Department of Classics decided that an excavation in a classical land would bolster the program and attract students of a quality that would insure their passage through the demanding program. The excavation site chosen was Nemea in Greece. Since I joined the Berkeley faculty only after that decision, I do not know all the factors that entered into this choice, although the Sanctuary of Zeus, which was the religious focus of the Nemean Games, must have been an attraction. Those games were, like the more famous games at Olympia, one of a cycle of four "stephanitic" games in Ancient Greece. Each of these games offered only a crown of vegetal matter as token of victory, and the most famous athletes were those who won the circuit with crowns of olive at Olympia, laurel at Delphi, pine at Isthmia, and wild celery at Nemea. These four festivals also offered an internationally recognized safe passage through enemy territory for athletes and spectators who were attending the games. This principle of a regularly recurring truce and the history of its successes and failures as expressed at Nemea may have played a role in the selection of Nemea.

In any event, excavations have continued annually since 1973 and resulted in the creation of, among other things, a research center for California faculty and students, a museum and park for the display of the antiquities discovered, and the revival of the ancient games for the first time in 1996 when former chancellors Bowker (Fig. 1) and Tien ran in the ancient stadium together with 669 other people from 29 different countries. Chancellor Berdahl was one of the 752 runners from 45 countries at the Second Modern Nemead held June 3-4, 2000. The excavations have also helped to revitalize the Ph.D. program in classical archaeology.

Fig. 1. Former Chancellor Albert Bowker at the city limits of Ancient Nemea, 1996.

Whatever other reasons played a role in the selection of Nemea, I must believe that one was the existence of three columns of the Temple of Zeus that had been standing since their erection in about 330 B.C. The temple and

Fig. 2. Lithograph showing the Temple of Nemean Zeus from the southwest in 1766.

its three columns have been known since travellers began to visit Greece in the eighteenth century (Fig. 2),[1] and the drums of the other columns lying scattered where they fell have frequently caused visitors to speculate on the possibility of a reconstruction of them (Fig. 3).[2] It was only in 1966, however, that a study of the temple was published that established many of the details of its architecture.[3] As a result, the Temple of Nemean Zeus[4] began to take its place as a landmark in the history of architecture, for it was constructed at the end of the Classical period and the beginning of the Hellenistic period, and it exhibits both traditional

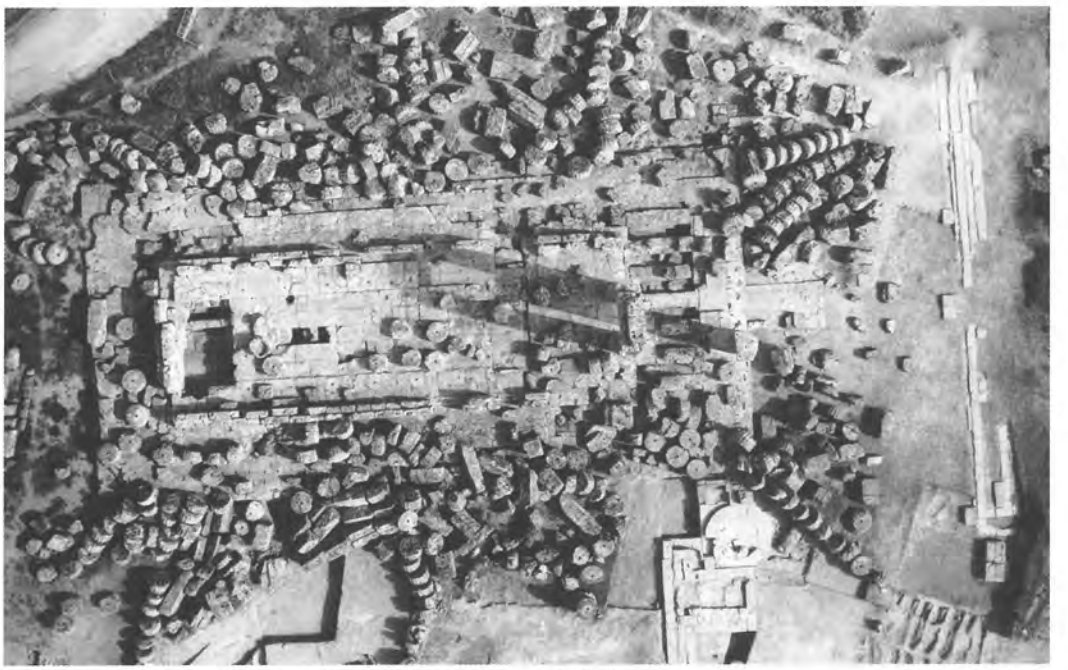


Fig. 3. Aerial view of the Temple of Nemean Zeus in 1977.

motifs and innovative foreshadowings of the future of Greek religious architecture.

Thus, for example, the Doric columns of the exterior (Fig. 4) are extremely tall and slender in their proportions with a height of 6.34 lower column diameters. The columns of the Temple of Apollo—200 years earlier than the Temple of Zeus—at nearby Corinth are 4.15 diameters in height. The plan of the Nemean building (Fig. 5) shows the typical six columns across the facade, but the side is only 12 columns long, a column shorter than was the norm in the Classical period, and a preview of the ever-shorter temple plan of the Hellenistic age. Again, the interior of the temple had a double colonnade (Fig. 6) in the tradition of, for example, the Early Classical Temple of Aphaia on Aigina, but unlike the Doric interior columns used there, the Temple of Zeus uses Corinthian columns for the lower colonnade (Fig. 7) and Ionic columns for the upper. The Hellenistic mixing of the three basic orders of Greek architecture is obvious.

Fig. 4. View of the Temple of Nemean Zeus from the southwest in 1999.

An anomaly in the plan of the building is the sunken crypt that replaces the normal back porch of the Classical period (Fig. 5). This element seems to have served some purpose specific to Nemea, for it has no successors. So, too, the use of Pentelic marble for the sima that collected rainwater on the edge of the roof of the otherwise completely limestone building reflects a desire for a more durable material at that point of the building where the potential for weathering is the greatest. Practical and aesthetic considerations mingle.

The study of these and other details gave a renewed impetus to the idea of a physical reconstruction of the temple, and such a possibility was discussed when the University of California began to plan its work at Nemea in the early 1970s. Not everyone agreed that a reconstruction was a good idea, but the economic realities were such that the subject was moot. Property had to be purchased for the excavations, a museum had to be constructed,[5]

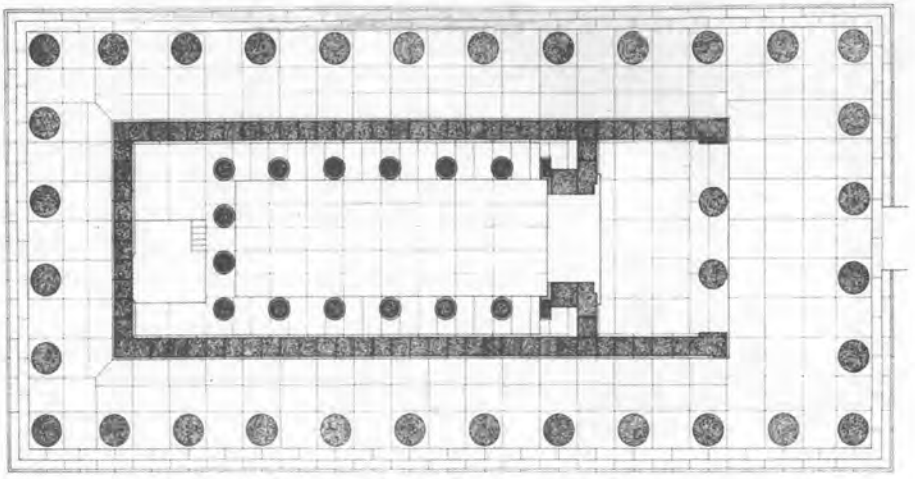


Fig. 5. Ground plan of the restored Temple of Nemean Zeus.

the local workforce had to be paid, and the expenses of student participation had to be covered. Where would it ever be possible to find the money for a reconstruction?

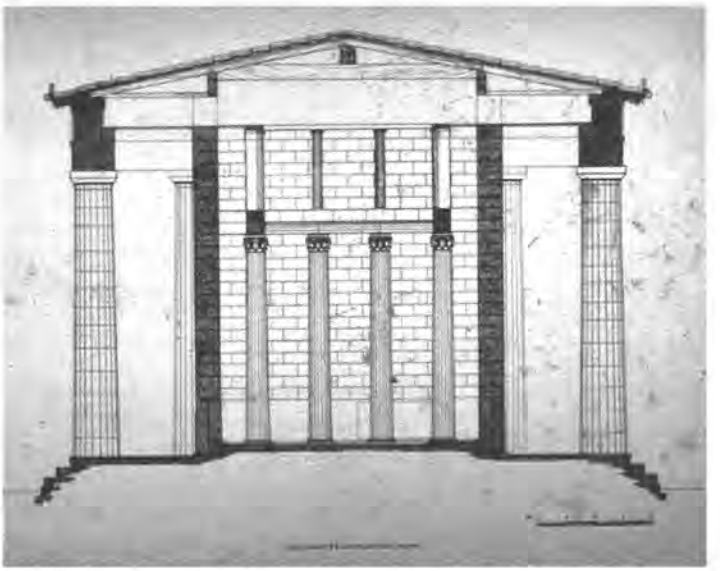


Fig. 6. Cross section through restored Temple of Nemean Zeus.

Then, one day in September, 1978, the telephone rang and the familiar voice of State Senator Nick Petris came across the line to ask "Why don't you reconstruct that temple at Nemea?" When I explained the financial obstacles—including the lack of support from the state budget—Senator Petris responded that he thought the reconstruction project might be the special responsibility of the Greek-American community of California. Fundraising began, and Nick soon found help from many people, most notably Angelo Tsakopoulos of Sacramento. Thus it was possible to begin the detailed study that had to precede a reconstruction. Unlike the presentation that was given in the book *The Temple of Zeus at Nemea* (1966), every extant block would have to be examined, measured, drawn, and assigned its precise original position in the temple. Professor Frederick Cooper of the University of Minnesota agreed to lead this effort, and he was assisted by volunteers from many universities in North America and especially from the University of Ghent in Belgium.

This "feasibility study" took place in 1980-1982 and involved the cataloguing of some 1,107 ancient blocks with an average weight of 2 tons. The Caterpillar front-end loader that we had brought to Nemea to remove the earth excavated from our trenches found a new use. The result was the placement, on paper, of all the blocks that survived to us. Hence we are able to see, for example, that much of the material of the columns and entablature survive on the north side (Fig. 8).[6] The accuracy of these placements is assured by the fact that no two drums are exactly the same. Because the diameter of the columns diminishes toward the top, and because the height of each drum is unique, and because of the place where each drum was found, the process of reassignment is more straightforward than it might seem.

Fig. 7. Drawing of restored Corinthian capital.

The next step was to shift public opinion in Greece (which was not always positive or pro-American in 1982-1983) to a climate that would ensure approval from the Ministry of Culture for the actual reconstruction. This was accomplished, in part, by an exhibition in 1983 at the Benaki Museum where sev-

eral officials such as the late Melina Merkouri and the erstwhile Californian, Margaret Papandreou, lent their support.[7] This support was augmented the following year when the then Prime Minister and former chair of the University of California's economics department, Andreas Papandreou, inaugurated the Peterson Archaeological Museum at Nemea. Permission was soon granted for the reconstruction of two columns on the north side of the temple. The sense was that of a trial to see what problems would be encountered and whether the resulting aesthetics would be satisfactory. If all was well, more columns might be re-erected.

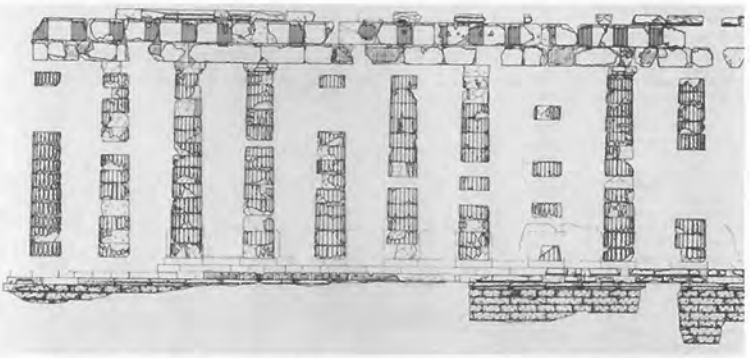


Fig. 8. Drawing of north side of temple with blocks assigned to their original position in the building.

But why should we re-erect any columns at all? There are many aspects—positive and negative—to this question, but for me the most serious reason for putting the columns back in place is to preserve them. A comparison of the upper surfaces of the fallen drums, badly eroded (and eroding) from ice and snow and sun and weeds, with the surfaces of the standing columns shows how much damage is being done to the ancient material in its fallen position (Fig. 9). At the same time, we should never think of a total temple standing at Nemea.

Fig. 9. Fallen drums showing erosion of exposed surfaces in contrast to well-preserved surfaces of lower parts of blocks.

Fig. 10. Lithograph of the Temple of Nemean Zeus in 1805, from the east, by William Gell.

We lack many of the interior Corinthian columns, 34 orthostates from the base of the interior wall, and 1,120 blocks from the upper part of the wall. Even the exterior colonnade—where so many of the columns are preserved—is lacking 241 blocks from the steps below the columns. The lack of so much material is an important reason why the complete Temple of Nemean Zeus cannot be reconstructed. The replacement of so many ancient blocks with modern stone would have to be considered a new building on ancient foundations rather than a reconstruction of the ancient temple.[8]

Another aspect of the reconstruction has to do with seismic considerations and the precautions that should be taken in the reconstruction. It was thought, years ago, that the greatest destruction to the temple was caused by earthquake.[9] In the 1970s, then Vice Chancellor Ted Chenoweth—a geologist—looked at the aerial view of the temple (Fig. 3) and asked the cause of its destruction. "Earthquakes," I responded. "All the archaeologists say so—it must be true." "Well," he returned, "you certainly have neat earthquakes at Nemea. All the columns on the north side fell to the north, all those on the east side to the east, all on the south side to the south. That's not the way earthquakes normally work," he concluded.

He was, of course, correct, and we have been able to show that earthquakes played a minor role—perhaps no role at all—in the destruction of the temple. As early as 1766 the English traveller Chandler noted that the capital on the single column was unbalanced and ready to fall (Fig. 2). In 1805, William Gell showed the temple from a different angle, and thereby revealed another detail (Fig. 10). The stylobate upon which the single column with its unbalanced capital stood had been cut away so that perhaps 20 percent of the column was already then standing on air.

One of the earliest photographs of the temple was by the Swiss photographer Boissonnas in 1908 (Fig. 11), more than a century after Gell's drawing. The capital is still unbalanced and the column is still standing partly on air. The significance of these documents becomes clearer when we know the history of seismic activity during the intervening century. In 1858 an earthquake that measured about 7.0 on the Richter scale struck the Nemea valley. The column and its capital did not fall. Three years later, in 1861, another earthquake struck and again the column did not fall. This second earthquake measured 7.3 on the Richter scale. In other words, there is strong evidence that earthquakes are not particularly dangerous to the Temple of Nemean Zeus.[10]

Moreover, it is clear that even though the columns have fallen they are still extant, but that other parts of the Temple of Nemean Zeus have largely disappeared. Thus, the blocks upon which the columns once stood have disappeared, and man—not earthquake—was clearly the cause of their disappearance. These blocks—unlike the cylindrical column drums—were useful for building, and the iron clamps that held those blocks together were also a source of metal. That is why there are so many gouged holes where the iron clamps

were removed. The process is visible in two rare examples where the clamps were being pried out when something interrupted their removal (Fig. 12).

What did the ancient Greeks know about civil engineering that allowed them to build such an earthquake-resistant structure? It hardly need be said after the fatal earthquakes of August and September, 1999, in Turkey and in Greece, respectively, that Nemea lies in a very active earthquake zone. Although my friends in the engineering department will probably tremble at my way of expressing it, I think they will agree that the Greeks had discovered the principle of flexibility in their construction. Thus, in the earliest years of Greek temple building, the columns were monolithic; the Temple of Apollo at Corinth of about 540 B.C. will serve as the example nearest to Nemea. By the time the Temple of Nemean Zeus was constructed 200 years later, columns were made up of individual drums—13 in each column at Nemea[11]—that could absorb the shock of earthquakes. The drums might slip and "dance," but the effect of whiplash in a rigid monolithic column was minimized by the flexibility that the horizontal joints of the column allowed. Although I await a graduate student to carry out in a dissertation the necessary detailed analysis of the ancient texts and monuments

Fig. 11. Photograph of the Temple of Nemean Zeus in 1908, from the east, by Boissonnas.

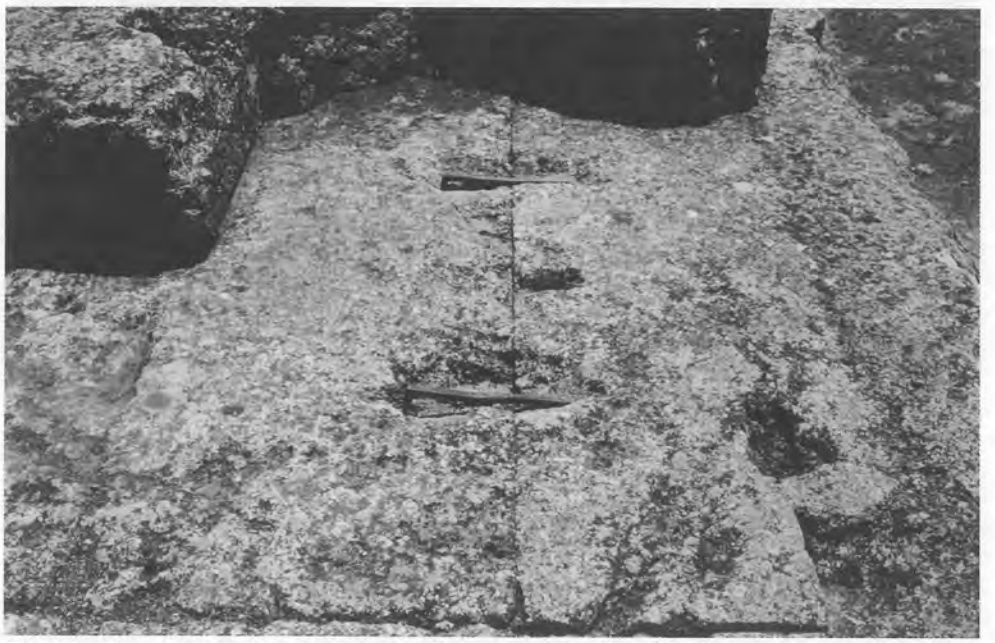


Fig. 12. Two ancient iron clamps partially pulled from their blocks.

that will prove this theory, it seems that ancient architectural nomenclature indicates its validity. The ancient column drum was called a sphondylos (σφόνδυλος); the basic meaning of the word sphondylos, however, is vertabra. The human spinal column with its flexibility served as the model for the ancient Greek column.[12] In other words, the study which has been a necessary prerequisite to the physical reconstruction of the Temple of Nemean Zeus has resulted in an expansion of our knowledge of the underlying principles of ancient architecture.

So, too, the physical reconstruction itself has already given us new understanding of ancient construction techniques. That reconstruction actually began with the foundations in 1984, but financial problems prevented the work from going forward. Nonetheless, advances in our knowledge were gained already then. I will offer one example here. One of the hallmarks of ancient Greek masonry was the ability to create joints between blocks that were so tight that neither water nor even air could pass through. The examples of such joints are nowhere better known than on the Athenian acropolis and particularly in the Parthenon where wooden plugs 2,450 years old are still preserved between the drums of the columns. But the Athenians were working with Pentelic marble of fine quality.

The stone of the Temple of Nemean Zeus came from quarries lying 3 kilometers to the east where roughly worked column drums—prepared but never moved to the temple or used (Fig. 13)—still lie. The stone is a sandy limestone with pockets of "rotten" stone or even earth interspersed with areas of very hard stone. This is the stone which we must cut and use to replace the blocks robbed out of the base of the temple centuries ago.

Fig. 13. Rough worked column drums still in the quarries.

Our attempts to make perfect joints between new blocks of this irregular limestone were unsuccessful, for the chisel would gouge out the soft areas and bounce off the hard and leave a surface that might match that of the adjacent block perfectly in one place, but leave a gap between the surfaces in another. Different chisels and abrasives were tried, electric grinders and even marble floor polishers were used, but the perfect joint eluded us. Finally, in frustration and contrary to what we are taught in modern books about ancient stone masonry, the local workmen resorted to the woodworker's trick of running a saw through the joint in

order to create precisely conforming surfaces—if the saw went a little more deeply into the surface of one block, it automatically left a corresponding convex bulge in the surface of the adjoining block (Fig. 14). The surfaces were not necessarily perfectly straight, but they were perfectly parallel. Not only did this use of the saw solve our problems, but it forced us to look at ancient joint surfaces where we discovered that there are still clear traces of saw marks from antiquity (Fig. 15). The local workmen were proud that they had discovered one of the secrets of their ancestors, and became convinced that the saw was the tool of choice on our sandy limestone, including even the creation of the horizontal joints between column drums. Again, the workmen were correct for the ancient surfaces show the long and curving lines left by the saw. And again, I await a graduate student to do a dissertation on the use of the saw in ancient stone masonry.

Fig. 14. Sawing a joint.

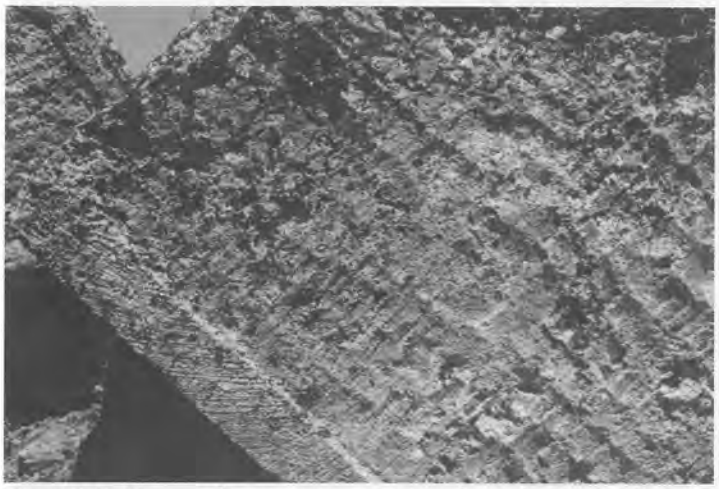


Figure 15: Saw marks on narrow joint surface of epistyle block contrasted with chisel marks on recessed, non-joint (anathyrosis) surface to the right.

The Temple of Nemean Zeus is a laboratory and a classroom where we learn and share our newly rediscovered knowledge. We are returning to that classroom thanks to the generosity of an Athenian businessman, Theodore Papalexopoulos, who has provided the funds to re-erect those two columns that were planned already fifteen years ago. At the end of November 1999, they were growing (Fig. 16) and are now more than half done. Our hopes do not stop there, however. It is now our goal to see not three, nor five, but twelve columns re-erected including the whole of the eastern facade by the time of the Olympic Games in Athens in 2004.

We recognize that, beyond the need to preserve this monument of our past and beyond the new knowledge that we gain from the reconstruction, there is another, deeper reason for putting the Temple of Nemean Zeus back together again. The original construction of this building more than 2,300 years ago was not an act of necessity, nor is its reconstruction forced upon us today. Nonetheless the ancient Greeks and we share—through the desire to build this temple then and to rebuild this temple now—a fundamental creativity that marks the human spirit at its best; we share an impulse toward a higher civilization that leaves a record of human accomplishment, and that serves as a beacon to future generations.

Fiat Lux.

Fig. 16. Two "new" columns going back in place (six drums set on one, two on other, of total 13 in each) on November 29, 1999.

ENDNOTES

1 The first modern record of the Temple of Zeus was in the drawing by William Pars published by the Society of the Dilettanti in *Antiquities of Ionia* II (London 1797) pl. 15, and the verbal description by Richard Chandler, who visited Nemea with Pars in 1766, in *Travels in Greece* (Dublin 1776), 244-245.

2 E.g., by Abel Blouet, *Expédition scientifique de Morée* III (Paris 1838), 33: "In reassembling the fragments of geisa, architraves, friezes, and capitals (which are quite well-preserved and which exist here and there in a very large number) it would be easy to re-establish the temple in its entirety." (trans. from French).

3 Bert Hodge Hill, *The Temple of Zeus at Nemea* (Princeton 1966).

4 Nemean Zeus should be carefully distinguished from Olympian Zeus. The latter is the well-known King of the Gods, thunderer and philanderer, who rules from Mt. Olympus and whose best-known sanctuary is at the site of Olympia, 170 miles away from the mountain—as the crow flies— and much further over the rugged terrain that intervenes.

Nemean Zeus seems to have been the god of shepherds and of grazing as the root of the word implies. The verb νεμειν ("to pasture, to drive to pasture, to graze") seems to have applied to our

site because it naturally is a swampy basin surrounded by low hills and suitable only for grazing. The cult of Nemean Zeus was not widespread, but it did exist elsewhere. For example, the poet Hesiod was told by an oracle that he should "beware the pleasant grove of Nemean Zeus for there death's end is destined to befall you." Hesiod never visited Nemea, but inadvertently entered the Sanctuary of Nemean Zeus at Oinoi in Lokris in central Greece. There he died. See Thucydides 3.96, and Alkidamas, *The Contest of Homer and Hesiod,* 119-129.

5 The museum was built thanks to the generosity of Rudolph A. Peterson (Alumnus of the Year, 1968; see *A Career in International Banking with the Bank of America, 1936-1970, and the United Nations Development Program, 1971-1975* [Berkeley 1994], 382-387) and it was opened to the public in 1984. The study and conservation rooms in the museum are the center of work by students and faculty from the University of California and elsewhere, and they serve a central need of the ongoing excavations.

6 The situation toward the west end (right in Fig. 8) is not so desperate as it appears. Subsequent excavations west of the temple have revealed that 11 blocks from the west end of the temple had fallen into a river of Byzantine times.

7 Frederick A. Cooper, Stella G. Miller, Stephen G. Miller, and Candace Smith, *The Temple of Zeus at Nemea: perspectives and prospects. A Guide to the Exhibition* (Athens 1983).

8 Many of the missing blocks were reused in the Early Christian Basilica (constructed ca. A.D. 475) that lies less than 100 meters south of the temple, and it was clearly the construction of that monument that accounts for much of the missing material. See Mark Landon, "The Basilica and the Early Christian Community," in *Nemea: A Guide to the Site and the Museum* (ed., Stephen G. Miller, Berkeley and Los Angeles, 1990), 78-90.

9 Hill, *Temple of Zeus,* 1-2.

10 Stephen G. Miller, "Poseidon at Nemea," *Filia Eph* I (Festschrift G. E. Mylonas, Athens 1986), 261-271.

The workmen who were at the temple on the afternoon of September 6, 1999, when the earthquake hit north of Athens report that the two columns of the pronaos seemed not to move at all, but that the single column of the exterior rocked back and forth. After the earth stopped shaking we could find no sign of damage.

11 The number of drums in each column at Nemea—13—is standard throughout the building, but the heights of the drums are not. These variations are visible, for example, in Fig. 8, and seem to be due to the size of the blocks that could be quarried from the stone layers that vary dramatically in thickness.

12 Lest it be thought that the visual impact of the drummed column occasioned the comparison with the vertebrae of the human spinal column, we should remember that the ancient column was covered with plaster and the individual drums (sphondyloi—vertabrae) were not visible in the finished building.

University Library, 1893. Librarian Joseph C. Rowell at left.
Photograph by O. V. Lange. *University Archives (UARC PIC 700:22).*

THE UNIVERSITY LIBRARY AT THE TURN OF THE CENTURY

Marianne Constable

> *If we take out one book after another, how long does [a library] remain a library? . . . we see already that all the individual books together do not make up a library. "All," understood as summative, is quite different from all in the sense of unity of the peculiar sort that is not so easy to specify at first.*
>
> —Martin Heidegger[1]

WHAT IS A LIBRARY? I used to think I knew: a library holds books. It is not simply a collection of books, of course; it holds much else besides. Today, I wonder what a library has to do with books as such. The library at Alexandria, before books, was a sacred place. The library at the University of California, Berkeley, which acquired its nine-millionth book this year, is clearly another sort of place.

Or is it? The questions of what a library has to do with books and what kind of place a library is confront the University of California in the "information age" as never before. These questions arise not simply as matters of budgetary and administrative concern, although it may indeed seem that it is in such contexts that they receive the most sustained attention. Nor are the questions easily addressed by appeals to experiences of serendipitous browsing or by eloquent testimonials as to scholars' celebrated accomplishments. Histories or genealogies that begin with Alexandria or Gutenberg are equally unsatisfying. It seems that the answer to the question—what kind of a place is the library?—is not easily known.

The current inability to ascertain or determine what a library is, at one level, seems straightforward: the library, like the university, is in flux. At a time when departments and disciplines are being reorganized and renamed, when the amount of scholarly material outstrips the capacity of production and review of university presses and learned societies, when even the universities' hallways and chairs have become naming opportunities, it is little wonder that the so-called "traditional" library—with its reliance on a particular organization of knowledge and of knowledge production and dissemination, and with its commitment to higher education—too, must, does, and will change. The university library is clearly different from what it was and from what it will be.

Yet more is at stake in the unanswerability of the question of the place of the library than that it is changing. The question, what is a library, is unanswerable today because we do not yet—or perhaps no longer—have the language to say what our library could possibly be. The articulations of library-goers in 1990 or 2000 cannot predict what the future will make of the library at the time of the library-goers' experience, even with records of that experience. Neither can library planners and policymakers of our time who, seeking to engineer the library of the future, treat the question of what a library is as the task of determining what it will be, tell us what the library of today will turn out to have been.

In the best of intellectual traditions, of course, the unanswerability of a question does not preclude attempts to explore it. Indeed, how something comes to be a question is often more interesting than its putative answer. This essay takes up the challenge to think about the question of what the university library is, rather than to answer it. The essay draws on

a variety of texts (themselves largely drawn from the library), events, and experiences, to explore the emergence of the particular and peculiar question of what the library has to do with books. It then suggests the sort of question that "What is a library?" may become. Along the way, it aims to inform readers about the history of the University Library at both turns of the twentieth century and about current university/library issues, as well as to gesture toward ways of knowing or being that cannot be articulated as strictly information or policy issues.

Part I introduces Berkeley's library and its collection as university concern at both turns of the twentieth century. Parts II and III present two institutional histories that describe the book-oriented library before and after 1900. Part IV suggests that from the vantage point of the 1990s, the most striking similarity between the two works is that, despite depicting concern for the growth of the early library collection and its budget, neither account attends to the now-ubiquitous themes of the economics of publishing, the challenges posed by new technologies, nor the anxiety generated over indefinite expansion and costs. These matters are absent insofar as both works presume the physicality of the library and its collection. Part V then contrasts such presumptions to late 1990s aspirations for the University of California Library of Tomorrow, suggesting that the current focus on the library of yesterday and the library of tomorrow means (as a character in *Alice in Wonderland* might put it) no library today.[2] Part VI thus returns to the place of the library at Berkeley today.

I. The Turns of the Century

September '99: In a letter addressed to colleagues and sent to the Berkeley faculty, Berkeley's top administrator writes:

> Since arriving at Berkeley I have stressed the importance of . . . improving the facilities that are essential to sustaining the high quality work of our faculty and students. Our investment in the Library has been central to this effort. . . . The Library must remain a priority.[3]

October '99: In a speech addressed to governors, members and friends of the university, Berkeley's top administrator states:

> Among the demands for the internal development of the University none rank in my estimation with those of the library . . . [O]ur scholars deserve more than ordinary resources. . . . If the best . . . are to be brought here and kept here, we must be able to assure them first of all that the library will afford them means to keep their learning abreast of the times, and that their coming to California shall not mean the suicide of creative scholarship.[4]

The first passage comes from Chancellor Robert Berdahl in 1999; the second from President Benjamin Ide Wheeler in 1899.

Although separated by a century, Wheeler's words resonate today. Indeed, in his inaugural address, in spring 1998, Berdahl noted that, "In his inaugural address, ninety-nine years ago, President Wheeler paid special attention to the importance of the library." After stating that "central to the research foundation of the campus is the library," Berdahl quoted Wheeler on the priority of the library directly, adding that those words were clearly as true today as a century ago. "Since my arrival, no issue related to research and teaching support has been brought to my attention more repeatedly and more emphatically than that of the library."[5]

In 1899, Wheeler had added:

> The present collection . . . is far too small and too incomplete in any department to serve the purposes of advanced study and research. . . . Instead of 75,000 volumes there ought today to be 300,000; instead of an income for purchases of $4000, there ought to be $30,000. The library force is overworked, the building is overcrowded. A fireproof building equipped with seminar rooms on the largest scale must be provided within the next three or four years.[6]

Ninety-nine years later, at a time when the collection numbered roughly eight-and-a-half-million volumes, Berdahl added:

> Ravaged by inflation for library materials—inflation that is three times the consumer price index during the past decade—and grappling with managerial problems resulting from budget and staff reductions, our library has fallen seriously behind where it needs to be. We cannot allow this to continue. We must catch up. A Blue Ribbon Task Force has just completed its review and recommendations for the library. To begin the rebuilding of the library, we will invest a total of $5.5 million of new permanent money in the library over the next three years with the objective of bringing the collections budget to parity with peer institutions.[7]

The same words about the poor state and high importance of the library and its collections occur at both ends of the twentieth century. Intended to prop up the library, the words are preserved in the archives, replicated on microfiche, accessible on the chancellor's web site. Bookends, rather than books, they nevertheless lie squarely within the space and the story of the library.

II. What the Library Was before 1900

Two works shelved in open stacks on the bottom level of the Main Library, where many of the materials from the old School of Librarianship—judging from penciled annotations on title pages—have been moved and rub shoulders with the latest (print) versions of journals on information management, allow the researcher of 2000 entry into Berkeley's library of 1900. One book, "digitized from the official carbon copy and printed on acid-free paper by the University of California Printing Department and bound by the University of California Library Bindery in July 1996," contains Dora Smith's 1930 M.A. thesis in librarianship, entitled "History of the University of California Library to 1900."[8] The other consists of, if not Kenneth Gerard Peterson's 1968 Ph.D. dissertation in librarianship, "The History of the University of California Library at Berkeley, 1900-1945," at least an "authorized facsimile . . . produced by microfilm-xerography in 1971 by University Microfilms, a Xerox Company, Ann Arbor, MI, U.S.A." thereof.[9]

Smith's institutional history of the library before 1900 makes somewhat dull reading for one expecting the color of contemporary cultural history or the ostensible impressionism of the New Historicism. Smith draws heavily on official university documents, student newspapers, library correspondence and interviews. Her two major chapters—"General Administration of the Library" (further subdivided into sections on buildings, income, book fund and committees, and rules and issues regarding use of the library) and "The Collection" (with sections on accessions and records, gifts and exchanges, and special collec-

tions)—are thoroughly descriptive and not deep. So too are the three shorter chapters on the early history of the university, the library of the College of California, and staff; there is no conclusion. The work as a whole reads to some extent like a well-deserved paean to the labors of Joseph Cummings Rowell, to whom the work is dedicated and who served as librarian from 1875 to 1919, before becoming emeritus librarian and university archivist from 1919 to 1938.

And why not? For the first six of his sixty-three years of service, according to Smith, Rowell worked alone on the first floor of South Hall, where the library of the College of California had been moved in 1873—and where the School of Information and Management and Systems is now housed. When the University of California had opened in 1869 in Oakland, with a faculty of ten and a freshman class of about forty, it had inherited the 1,036 volumes—about half of which were religious—of the College of California. When, in 1881, Rowell's sixth year, the library moved its now 17,000-plus volumes from South Hall to the new Bacon Art and Library Building, Rowell hired a student assistant whose title was "janitor," to "care for the building primarily, but also to assist the librarian, incidentally."[10] By 1890, the library held 44,000 volumes and Rowell had one full-time assistant in addition to a student-janitor. By 1898, Rowell reported to the president that

> the Library has grown from 48,000 to 71,000 volumes in the last six years; the number of students from 648 to 1560—And yet the evident greatly increased work of the Library is still performed (satisfactorily, I believe) with practically the same staff as was on duty six years ago—but only by reason of its thorough efficiency and assiduous application.[11]

At this time Rowell had two librarian assistants (for whom he was requesting raises), one female "mere beginner," and a janitor (whose position he wanted to make full time).[12]

Rowell established the basis for what would come to be considered an exceptionally strong collection. (As Wheeler did acknowledge, "The present collection has been made with much skill and sobriety."[13]) Rowell's policy, according to an interview he gave to Smith, was "to build up a reference collection, and to this end he devoted as much of the book fund as possible to the purchase of sets of periodicals, transactions of learned societies, etc."[14] The "etc." included maps, pamphlets, manuscripts, state and federal government depository materials, and foreign works. Rowell prided himself on completing sets, not only of periodical literature, but also of "transactions and memoirs of learned bodies, literary or philological, scientific or technical." In 1885 he reported acquiring or completing 40 sets of publications.[15]

Although Smith does not say so directly it is clear that the collection was integrally tied to the librarian's relationship with others. Much of the collection's early growth, according to Smith, occurred through gifts and donations of private libraries and collections, many of which Rowell himself pursued. He attended private auctions, developed friendships with local bookdealers, and was in contact with book agents in Paris and Germany.[16] He wrote to California authors and publishers, as well to those who wrote about California, asking for copies of their works for the library.[17] Archival material shows that he wrote letters of thanks under his own signature and reminded regents and faculty on the library committee to send theirs. He constantly petitioned for allocations to the library, which came from the state legislature as well as from the Board of Regents through the general fund. He served too as secretary to the library committee, composed initially of regents and faculty, and later simply of faculty. Although the structures and processes of the library committee shifted somewhat, the committee generally allocated book funds to departments, whose faculty then

submitted lists to the committee and librarian.

Smith describes—via long quotations from Rowell's annual reports and correspondence—Rowell's work through 1900.[18] Without a typewriter—note that the typewriter was first used in the Berkeley library in 1902[19]—Rowell carried on the correspondence needed to ship or mail thousands of volumes to Berkeley. He developed a card catalog—an innovation that had recently been adopted at Harvard and the Boston Public Library. He prepared an index of the content of newly received periodicals and books, which he began by interspersing notations in a copy of the Quincy, Massachusetts, public library catalog before realizing its space limitations. He compiled the first list of periodical literature to be found in nine libraries in the San Francisco Bay area—one of the first attempts at a union catalog, writes Smith. He prepared an analytical author catalog. He created the "Rowell Scheme of Classification" which was "based on a classification of books rather than on divisions of knowledge," published in 1894 and used at Berkeley until reclassification according to the Library of Congress method began in 1913. He began a program to exchange University of California-printed material for other publications. Finally, he initiated, in the 1890s,a system of inter-library loans in California and then across the country.

Meanwhile, Rowell also revised the library rules (in 1876, 1886, and 1893), considered the pros and cons of increased library hours (evening hours required the installation of an electrical lighting system in the 1890s), and agonized about the tradeoff between "free access of college students to the shelves" and "the loss of books under [the librarian's] charge."[20] Although students were originally (under the 1876 rules) to check out books only with the permission of instructors, Rowell found that

> the students, having free access to the shelves, and needing books for study and reference over night, rather than trouble professors for orders for books, would take the latter from the library without permission, concealing the same in their garments, etc. The librarian considering the moral degradation accruing to the student body from such practice and the ultimate necessary confusion and injury wrought thereby to the library, interpreted the rule [as allowing the Librarian "to have the right to loan books, at his personal risk and cost, to students"]. The practice of taking books without permission ceased—entirely and immediately for the time being . . . and the custom was, at least tacitly, approved.[21]

Rowell later established more formal circulation policies, distinguishing between "works of excessive rarity" and/or "used for reference only" which could not circulate, works which could be taken out "upon receipt of a signed order" from an instructor, and all other works "to be taken out without restriction (except as to number of volumes and time of use)." He experimented with a library fee, and in 1894 changed "the method of drawing books from the Library" from inscription of a student's name and the title in a Day Book to the filling out by borrowers of their names, the date, and title of the book, on "blanks" which were presented, with the book as verification, to the librarian assistant. The problems of losses of books increased steadily through the 1890s, however, to the point where faculty threatened to restrict student access. In 1899, Rowell instituted fines for overdue books.[22]

Rowell thus faced for the first time many of the issues now confronting Berkeley. From where are moneys for the collection to come? How does or shall the library fit into the capital campaign? Is it time to revamp the current catalog and/or to establish or switch to another union catalog? Can student demand for extended hours be accommodated? How can interlibrary cooperation be developed?

Construction of north facade of Doe Library, 1909. *University Archives (UARC PIC 9:24).*

III. The Library after 1900

In his 1968 dissertation on the library, Peterson argues that by the middle of the twentieth century, a transition had occurred in the Berkeley library away from the nineteenth-century library described by Smith. Peterson confirms the current widespread view that the library has shifted from book repository to an information and use- or user-oriented facility and that the scholar-librarian has given way to the library administrator. His chapters—on "amassing a research collection," on librarians and their staff, on other university administrators and personnel, on the buildings, on library government, on "organizing books for readers" and on "serving the community of scholars"—are prefaced by a two-chapter account of social and economic conditions in California and chapters on the role of the university in the state and the meaning of "a library for higher scholarship." Unlike Smith, Peterson includes a conclusory chapter (although he foregoes an index), in which he summarizes his argument: a close reciprocal relationship existed between the university and the library, and adequate financial support was key to the library's development. "During the twenties and thirties the figure of a strong administrator-librarian emerged," and "from 1900-1945 California represented the transition from the 'book repository' view of academic libraries that prevailed in the nineteenth century to the mid-twentieth century concept of an information and use-oriented facility."[23]

Peterson emphasizes that for seventy years, from 1875 to 1945, the library was administered by only two men—Rowell, who Peterson argues "accepted his role as a librarian with great respect, seeing himself mainly as a bibliographer and book collector," and Harold Lewis Leupp. In the first decade of the 1900s, Peterson argues, Rowell turned from his various "bibliographical ventures" to book collection, writing projects, and overseeing plans for the new library building that Wheeler had promoted in his inaugural address. During this period, staff as well as collection grew tremendously—there were four staff members (and about

80,000 volumes) in 1900; 6.5 additional appointments were made in 1910, 10 more in 1911.[24]

Leupp, a 1910 associate librarian appointment, had unlike Rowell been to library school (although he never submitted his thesis). He came to the Berkeley campus with six years of librarian experience in Chicago. One of his former professors had recommended him to Wheeler who, impressed by his "administrative ability . . . turn[ed] over to the new associate librarian, within the first year after his arrival, the major responsibility for the library's operation." While Rowell continued to be active in book selection and collection development, Leupp took charge of public services, staff relations, finances, and building matters, and supervised acquisition and cataloging. In addition he took over from Rowell responsibility for the Doe Library, which opened in 1911 (with about 210,000 volumes).[25] Leupp made the decision in 1913 to switch to Library of Congress classifications and taught and directed in the library instruction program. After his return from military service in 1917-1918 and Rowell's retirement in 1919 (the same year Wheeler retired as president), Leupp was formally appointed University Librarian, a position whose responsibilities, Peterson argues, he already bore.

Under Leupp and through 1945, Peterson argues, book selection remained largely in the hands of faculty and to some degree Leupp himself. The first formal articulation of selection principles and the first systematic attempt at evaluation of the collection occurred under Leupp's administration in 1930 when the library committee called for a special survey. The (faculty) survey committee sought the advice and opinions of faculty members about the collection. Its report, approved by the Academic Senate, served as springboard for a ten-year acquisition program. Despite attempts to open selection to professional library staff, their involvement in this area of acquisition or "accession," as it was called, remained "very limited." Their role was to order and purchase books and subscriptions, prepare lists of faculty-recommended books, cross-check dealers's catalogs against library catalogs and other records, bind and repair books, wrap and unpack them, cut leaves in books and periodicals, "perforat[e], plat[e] and pocket books."[26]

Leupp also established "a system of departments and divisions to which the various responsibilities of the library were assigned" and in which, Peterson argues, increasing attention was paid to readers. In contrast to the old Bacon Hall, for instance, Doe Library had space for a reference and a loan desk, as well as separate rooms for special services. In 1922, Leupp established a "Readers' Department," later renamed "Public Services," to coordinate reference and circulation.[27]

Many of the changes Peterson attributes to the first half of the century seem to resonate with changes now associated with the latter half of the century. Indeed, the library of the 1990s seems to re-undergo some of the very transformations Peterson attributes to the earlier period. The five university librarians whose tenures at Berkeley have in part or in whole occurred within the past decade have had to struggle with issues of administration and management of a collection whose size and scope no single scholar can master. Like Leupp, they have reorganized departments and staff and sought new ways to evaluate the library and how it serves its patrons. They have dealt with committees inside and outside the library about the articulation—or lack of articulation—of selection principles. The 1998 Blue Ribbon Committee report argues precisely for what it considers the current need to switch from (what it recognizes is falsely perceived as) a model of comprehensive collection and ownership to a model of access and user satisfaction.[28]

If the issues surrounding the library of the 1990s seem to resemble both those of Smith's library of the 1890s and Peterson's ostensibly different library of the 1910s through 1945, then one begins to wonder just how different Smith's and Peterson's libraries are from one another—and from ours. To what extent can Smith and Peterson be relied on to have articu-

Staff of the library at the north door to Doe Library, 1914.
University Archives (UARC PIC 4:180).

lated what is most essential to their libraries as libraries? To what extent might their emphases be attributable to factors extraneous to the libraries they study? to records that happen to remain? to the sort of history fashionable in the periods they write? to their own attributes or interests—to differences in their preparation or backgrounds or abilities?

IV. The Library at the End of the Twentieth Century

From the vantage point of the 1990s, Smith's 1930 account of the late nineteenth-century library seems to resemble Peterson's 1968 account of the early twentieth-century library as much as it diverges from it. The most striking similarity between the libraries of the two accounts, however, is not mentioned explicitly in either text. It lies in a common absence, an absence which speaks volumes about the differences between then and now.

Despite Peterson's attempt to provide social context and both authors' accounts of the library budget, that is, neither text locates its library within any analysis of the economics of publishing or of scholarly production; neither hints at any anxiety about the long-term implications for cost and storage of exponentially increasing print materials; neither suggests any uncertainty about the challenges which new technologies pose to the book. They pay no attention to the likes of Thomas Edison, for instance, who had already proclaimed in 1913 that books would soon be obsolete in the schools—replaced, he thought, by the silent motion picture.[29]

The obsessiveness and repetition with which precisely these issues—the economics of scholarly publishing, the impossibility of sustaining storage and costs for an indefinitely expanding collection, and the implications of new technologies—arise in 1990s library reports and discussion foregrounds their absence in earlier accounts of Berkeley's library.

Insofar as one can rely on Smith's and Peterson's texts, the absence of these issues reveals the extent to which library culture at Berkeley—in 1968, as in the 1930s, as in the 1890s—not only revolved around the book, but also took for granted a particular kind of book culture.

The place-bound book presumed by Smith and Peterson—as in the libraries they describe—becomes visible with the advent of digitalized and digital information. A book, or a paper, stands or lies on one shelf, or cart, or desk, at a time. Today, "information" need no longer occupy a particular spot. Electronic information thus allows one to see, retrospectively, the taken-for-granted physicality that had motivated and circumscribed efforts to describe, classify, store and find the book.

Smith and Peterson implicitly orient their descriptions of the library around practices for dealing with books as physical things. Smith depicts Rowell's primary concerns as the gathering and selecting, ordering and mailing, classifying and storing, protecting and distributing of things in places: Rowell visited booksellers, wrote out lists on paper of what to order from where, worried about the damage that taking library property off campus could do, and so on. And while Peterson shows the routinization of activities for the collecting and sorting of books and increased attention to readers—whose interests were not as easily classifiable as had become the contents of books—the tasks dispersed among library staff still centered around maintaining and manipulating things in places. Finding things—bringing books into the library, recording their whereabouts, keeping them somewhere dry and insect-free, getting them to and from readers—still remained key to public service.

Even as electronic information allows the taken-for-grantedness of the library book as thing-in-place to appear, though, the library book can no longer be taken for granted; information turns the book into an object-in-space. At the moment when, in retrospect, the materiality of the book appears to have been taken for granted, that is, the book's materiality for the first time also appears as needless constraint. As informational object-in-space, the book's form is separable from its content. The book's newly contingent character allows it to become the subject-matter, and its library, the site of debate. The book-as-object and library-as-space are inserted and become issues—in a way that the book-thing and library-place cannot—in socioeconomic and policy discourses about commodities, communications and technological futures.

University of California, Berkeley, Law Librarian Robert Berring has argued that librarians traditionally carry out three functions vis-à-vis the "data" they collect: gathering and protecting, organizing and storing according to some system, and distributing to a user.[30] (Berring's vocabulary—contrasted, for instance, to that of purchasing, shelving, and lending to patrons—is already designed to accommodate both the physical volumes libraries own and the electronic material they license.) Berring shows how all three librarian functions change with the widespread use of digital information. Licensing and leasing information replaces owning and guarding material. Organizing information and designing retrieval systems fall increasingly under the bailiwicks of database creators and providers. And distribution via circulation and service desks gives way to systems and networks.

Berring argues that information has already become a commodity, albeit a commodity whose market structure is still in flux, and that librarians will have to adjust. For librarianship to retain its commitment to service, he explains, librarians will have to take advantage of current possibilities for developing access systems and use their knowledge of patron needs to work with vendors to structure tools for distributing information. Conversely, they will have to be prepared to serve users who will need more help, not less, in negotiating large-scale databases.[31]

Berring's argument, sensible and informed as it is, shows how the idea of the book-oriented library as a determinate place where librarian-guides help readers to find things gives

way to a different model. Libraries become networks of relations situated within a broad context of economic production, consumption, representation and circulation of information. As such, libraries lend themselves to different sorts of analyses than traditional comparative surveys or internal institutional studies about which libraries hold what where (and how much they got from whom) or who wants to read what when. Proactive librarians now interface with data providers to help structure arrangements through which information users will gain—and even help produce their own—access. As calls for new business models of scholarly publishing emerge, the library enters the world of university and communications policy as never before.

Not only do librarians and university discourses change to accommodate the brave new world of digital information, but the very practices surrounding print collections undergo a sea change. No longer do the book and the card catalog reign supreme.[32] The celebrated digitizing of rare pictorial and manuscript collections, such as those of The Bancroft Library, is a happy case. More problematic are the many cases of bibliographies prepared by undergraduates who are convinced that no journal articles address their topics before 1991—or whatever year the database that was consulted begins. The main library's stacks come to resemble less an open book than the compacting of files on one's computer. To the chagrin of many (human) browsers, for instance, one must sometimes move as many as nine rows of shelves at once to gain access to a volume in the David Pierpont Gardner stacks established in 1994. Half the collection is relegated to the uncomfortable and unbrowsable (because books are not arranged by call number) Northern Regional Library Facility (NRLF) in Richmond. Finally, the clicking of information users at Information Center work stations or at tables in the stacks send library patrons who seek silence elsewhere.

Changes in the library and its practices cannot be attributed simply to digital technology, of course. For one thing digital information technologies themselves draw on the vo-

Compact shelving in the Gardner stacks, Doe Library, 2000.
Photograph by Catherine Dinnean.

cabularies and structures of print, as page formats, references to "archiving" and "browsers," and the use of "bookmarks" suggest. Further, the actual adoption of any technology—whether printing, duplication, digitization—coincides with economic and political developments which, as much as the technology itself, contribute to that technology's cultural uses and implications. The development more than two decades ago of the relatively cheap copy machine that produced copies cleaner than originals, like the printing press before it, had already contributed to the mass availability of texts. But judging from the 1968 date of Peterson's study, readers and writers at the time still took for granted the need to go to the library or the bookstore to get material to copy or read—just as they had in 1890.

V. The Library of the Future

When Chancellor Berdahl in 1998 spoke of a library "ravaged by inflation" and "grappling with managerial problems" he did not exaggerate the destruction and struggle that has characterized and surrounded the Berkeley library and touched all librarians and staff during this decade. (And perhaps not only in this decade: "The staff of the University Library has never been satisfied with the place accorded it in the university organization," stated a Library Staff Association document in 1925.[33])

Neither do budget and staff exhaust the areas in which contestation over the library has occurred. As fraught as issues of budget and management are and have been, the fight over the future of the library extends much further, with implications for the future of humanities and social sciences and for the public university more generally.

A 1997 report prepared by the University[wide] Committee on Research Policy, entitled "The Deteriorating Environment for Conducting Research at the University of California: A Qualitative Analysis of Frustrations and Rewards," highlights the importance of the library to the humanities and arts and the social sciences. In noting differences among academic groups, the report states, "Library cutbacks ranked first and fifth [as concerns] with these fields, but only eleventh through seventeenth for other fields."[34] The singular importance of the library to particular segments of the university is reiterated in the refrain popularized in the late 1990s by Berkeley's Blue Ribbon Committee Chair Anthony Newcomb and others that "the library is the laboratory of the humanities." The claim echoes a 1920 Committee on Library Research and Publications report to the regents that "[i]n certain departments of the University, the library is the laboratory."[35]

The metaphor of library as laboratory is interesting, often invoked, as above, to impress on nonhumanists that the library may have different uses or significance for different disciplines. But if libraries have changed over the course of the century, so too have laboratories—and public universities. As much as the analogy of library to laboratory is meant to press the need for funding, it also suggests that the library may be susceptible to the sort of modification that university science and research have undergone in past decades. Local money-making strategies such as document delivery services (as at Boalt Hall) or library database links to bookstores (turned down by the Senate Library Committee) are one thing. They pale in comparison to grander schemes of public-private partnerships, though. However uncertain these schemes at the moment, they may turn out to be the only financially viable options the university perceives.

Squeezed simultaneously by inflation in print materials as well as in non-library costs and by cuts in their budgets, that is, universities have come to realize that their scholars produce information or knowledge that is virtually given away to publishers who sell it back to campus research libraries at horrendous rates. (Those rates are generally higher for serials than monographs, and higher in the sciences than in the humanities.)[36] The rates point to a nationwide problem, which a veritable alphabet soup of university coalitions and library

associations seek to address.[37] Proposals aim to set up the university or its library as partner and player in the new electronic publishing business, in long-distance education, and/or in copyright of research or instructional material.[38]

Actual and suggested innovations, such as pre-print servers, university-sponsored e-journals, on-line courses, and university retention of copyrights, work to situate the university within the "information marketplace." They also benefit some users in some fields. They do not address the initial problem of print inflation and budget cuts, however. And they tend to downplay the opinions and needs of humanists for whom the library matters so much. Instead they capitalize on current enthusiasms for the new digital technology ("liberation technology," as one writer calls it).[39] Few deny that commitments to electronic innovations will lead to even greater costs for the library and the university in the future. The rationale for such investment, however, is that in the short term, it will produce financial benefits for those who invest first.

At the University of California, the eighteen-month Library Planning and Action Initiative (LPAI) Advisory Task Force, established by the Office of the President in 1996, ostensibly had "one primary goal in mind, that UC should seek innovative and cost-effective means to achieve comprehensive access to scholarly and scientific communication for all members of the University community."[40] The task force was positioned to deal with issues involving the libraries of the nine campuses principally as matters of centralized economics and management. The task force presumed that its only rational strategy was to help campus libraries "evolve" along the lines of digital technology under the rubric of "One University, One Library." The task force description noted "an urgent need to develop a sustainable business model to accommodate the evolution of our libraries and to implement actions that fit with that model," a compulsion to "take leadership in establishing 'the UC Library of Tomorrow' that can both support traditional modes of scholarship and take advantage of emerging technologies to establish new modalities," and a need for "a fresh approach . . . with new incentives to stimulate strategic change."[41]

Building on the efforts of the Digital Library Working Group, the task force ultimately gave the idea of library as laboratory new meaning. It recommended seven unranked strategies to "guide our libraries during the transition to the digital future."[42] It then took "several initial action steps to further these strategies."[43] Most notably, it established the California Digital Library (CDL), which opened in October 1997 as "UC's library without walls." According to University of California President Richard Atkinson: "Instead of seeking out information in place-bound libraries, limited by what is only available on the bookshelves, the California Digital Library will allow scholars of all ages and interests to range worldwide in their quest for knowledge, using the Internet, the World Wide Web, and a computer.[44]" The press release announcing the founding of the non-"place-bound" CDL went on to explain that by "building" on the campus libraries, "the charter collection in the new virtual library will center on the topics of science, technology, and industry as the library creates new ways for the campuses to share their resources statewide among UC's faculty and students."[45]

At a meeting with the Berkeley Senate Library Committee, the new CDL librarian had emphasized that the science, technology and industry collection, or STIC, was an "experiment."[46] The press release, by contrast, pointed out his expectation that the library would "grow as fast and as far as the new technology allows."[47] Celebrating, with the state librarian, the "growing partnership" between public and private libraries, President Atkinson added that the university stood ready to "bring together the talents and resources of the state's colleges and universities and our public libraries with the entrepreneurial energies of the private sector to build this latest link for sharing information."[48] A memo sent from the president's office to a faculty committee about CDL also noted that "Electronic collections

will be enriched and sharing mechanisms strengthened," as entities "such as . . . private corporations become partners."[49]

In pursuing public-private partnerships, the University of California is doing no less than any number of formerly public institutions in the United States have done during the past twenty-five years. Such partnerships have met with a range of success. CDL and STIC may indeed be successful (even as one wonders what standards will measure the success of the "experiment"). More relevant for the purpose of this essay, however, is the way that public-private partnerships restructure institutional relations and purposes. Administrative agencies—welfare and health service organizations, for example—have increasingly become subject to governance by audit and to evaluation by efficiency experts rather than by substantively informed supervisors or external reviewers. Developments of policies and practices vis-à-vis the University of California and the Berkeley campus libraries suggest that the university is not exempt from similar changes.

Administrative agencies today are characterized not only by reliance on a particular sort of management expertise, but also by their relation to their clients. Quasi-public, quasi-private agencies increasingly seek to ostensibly "empower" those they serve—through mechanisms that call on subjects to take responsibility for local situations by providing information that enables partnerships between "communities" of these so-called citizen-experts and local governments, policymakers, and police. So too, library service "users," no longer simply readers or patrons, are called on as so-called shareholders in their own futures to fill out surveys as to their preferences about the distribution of scarce resources and to serve on joint task forces, which can ultimately legitimate "difficult administrative decisions."[50]

Meanwhile, whether they are empowered users or tools of legitimation, scholars and students in the humanities and other fields at Berkeley complain that they cannot find the books and articles they need quickly and easily. (About fifty faculty members sent letters to Dean Newcomb in May 1997 articulating ways that their teaching and research had been affected by problems in the library.[51]) Some of the mundane concerns that determine whether the library works for its readers can be addressed relatively easily: faster turnaround in reshelving, for instance, more informed circulation staff, typos corrected in databases.

Other issues about the collection are more problematic, however. Figures from the Association of Research Libraries suggest that inflation has had a disproportionate impact on the Berkeley library, whose rankings have fallen relative to other university libraries.[52] Those rankings measure traditional concerns, such as volumes added per year, annual operating budgets, and so forth. The various rankings must be read together: Berkeley's overall ranking, for instance, remains as high as it is because of a relatively large preexisting base number of volumes (one librarian has been heard to say the Berkeley "does not have a research collection for the 1990s").[53] Critics argue that the rankings are no longer useful measures—as indeed they are not, at least for "The Library of the Tomorrow" whose name is spread, with the University of California logo, across the top of LPAI web site's letterhead.[54]

But the rankings—and the criticisms—do indicate something about Berkeley's library of today. They suggest that if the library of today is not yet the library of tomorrow, neither is it any longer the library of yesterday. Those who use the library today need something *other* than yesterday's collection plus tomorrow's library without walls.[55] Yesterday's collections must be maintained within walls, while tomorrow's new information has yet to be selected, organized, and archived, so as to constitute a research or teaching collection.[56] Yesterday's reader went to the library; tomorrow's libraries, according to President Atkinson, "at the press of a button can come to us." But where—and how—exactly will libraries come? Today's reader awaits the place to which the new information will come, the buttons and the infrastructure needed for the new information to encounter the eyes or ears or hands of the seeker of

knowledge. Today's writer speculates that without a place and without librarians, the user ranging on a worldwide quest will no longer be *at* a university library.

VI. The Library Today

In a recent article, Berkeley faculty member Carla Hesse points to an "almost unwitting impulse to reconceptualize the key institutions of modern literary culture—the book, the reader, and the library in terms of time, motion, and modes of action, rather than in terms of space, objects and actors." She suggests that metaphors of electronic systems and cyberspace point to new rhetorics of library architecture and of knowledge, in which both are cast "in temporal rather than spatial terms."[57] Certainly the language of former university Presidents Robert Gordon Sproul or David Prescott Barrows, for whom the library was the "heart of the university," "the center of its most serious work," "the common meeting ground and unifying influence for all departments," and "a repository of the wisdom of the past" holding "reservoirs of experience . . . " now strikes one as quaintly old-fashioned.[58]

And yet the rhetoric of motion is itself a rhetoric of space, if not of place. Workstations, like books, must be located somewhere, especially in an era of seismic retrofitting and building renovations. The questions have already arisen: Do workstations belong in libraries? Do libraries belong on campus? Do books? Do workstations?[59] That libraries have always held more than books (Part I), that collections have always been more than an aggregate of books (Part II), that libraries have always been more than their collections (Part III), show that all the individual books together do not make up a library. But if we take out one book after another, how long does a library remain a library?

Book-oriented library rankings vie with futuristic visions of libraries without walls to address that question. But the answers of both antiquarian and technocrat are inadequate. Their appearance together reveals that today's library is poised between a past that took the book for granted (Part IV) and at least one possible future that threatens to grant no place to the book (Part V).

Do we have language within which to think about what a library could be? Perhaps. Berkeley faculty member and former Academic Senate Library Committee Chair Leon Litwack recently contributed to the discussion of the library by asking, in Berkeley's alumni magazine, whether the library had lost its "soul."[60] Strangely—for today one expects a psyche or an unconscious, even a liberal conscience, but a soul?—many responded.[61] Perhaps those who grasp what it means to have—and to lose—a soul in a secular age and a university like ours, know what Berkeley's library at the turn of the twentieth century will turn out to have been. The University Library may not be so different from the library of Alexandria, a sacred place whose treasures had been devalued and lost, tales tell, even before the barbarians destroyed it.

ENDNOTES

The author wishes to thank the many university librarians and others who have willingly and steadfastly educated her—throughout their differences—about the university library and other libraries in the past few years. She thanks Suzanne Calpestri, Frederick Dolan, Jeremy Elkins, Olga Kotlyarevskaya, Tom Leonard, Michael Smith, and the editors of the *Chronicle* for helpful comments on this essay.

1 Martin Heidegger and Eugen Fink, *Heraclitus Seminar*, trans. Charles H. Seibert (Evanston, IL: Northwestern University Press, 1993), 20. (Translation changed slightly after checking original.)

2 See Lewis Carroll, *Alice in Wonderland and Through the Looking Glass* (Kingsport, TN: Grosset and Dunlap, 1946), 209, where the White Queen says,

> "The rule is, jam tomorrow and jam yesterday—but never jam today."
> "It *must* come sometimes to `jam today,'" Alice objected.
> "No, it can't," said the Queen. "It's jam every *other* day; today isn't any *other* day, you know."

3 September 13, 1999, letter from Chancellor Robert M. Berdahl addressed to "Colleagues."

4 *Daily Californian*, October 26, 1899.

5 Berdahl quoted Wheeler's words: "Among the demands for the internal development of the University, none rank in my estimation with those of the library. If the best men [the faculty in those days were all men!] are to be brought here and kept here, we must be able to assure them first of all that the library will afford them the means to keep their learning abreast of the times, and that their coming to California shall not mean the suicide of creative scholarship." University of California at Berkeley, Office of the Chancellor, "Inaugural Address," 4/24/98, website http://www.chance.berkeley.edu/cio/chancellor/sp/inaug.html.

6 *Daily Californian*, October 26, 1899.

7 University of California at Berkeley, Office of the Chancellor, website, note 5 above.

8 Dora Smith, "History of the University of California Library to 1900" (master's thesis in librarianship, University of California, Berkeley, 1930).

9 Kenneth Gerard Peterson, "The History of the University of California Library at Berkeley, 1900-1945" (Ph. D. diss. in librarianship, University of California, Berkeley, 1968.)

10 Smith, "Library to 1900," 93, 106-107, 158-159.

11 Ibid., 163.

12 Ibid., 154.

13 *Daily Californian*, October 26, 1899.

14 Smith, "Library to 1900," 54.

15 Peterson, "Library at Berkeley, 1900-1945," 48 (citing Rowell).

16 Smith, "Library to 1900," 102-103; Peterson, "Library at Berkeley, 1900-1945," 108.

17 Peterson, "Library at Berkeley, 1900-1945," 52.

18 See Smith, especially 54-55, 97-99, 126-127, 145-149, for information from which this paragraph is drawn.

19 See Peterson, "Library at Berkeley, 1900-1945," 252.

20 Smith, "Library to 1900," 59-91.

21 Ibid., 70.

22 Ibid., 69, 83, 90.

23 Peterson, "Library at Berkeley, 1900-1945," 350-351.

24 Ibid., 112, 103.

25 Ibid., 118-119, 190.

26 Ibid., 38, 45, 55, 62, 94.

27 Ibid., 128-129, 352.

28 See Blue Ribbon Committee on the Library, Office of the Vice Chancellor and Provost, Final Report: Executive Summary and Final Report - April 1998; see also Berkeley Academic Senate Library Committee, Response to Blue Ribbon Committee Final Report, May 1998. (Both are available in the records of the Academic Senate or through the Berkeley website.)

29 Larry Cuban, *Teachers and Machines* (New York: Teacher's College Press, Columbia University, 1986), 11.

30 Robert C. Berring, "Future Librarians," in R. Howard Bloch and Carla Hesse, eds., *Future Libraries* (Berkeley and Los Angeles: University of California Press, 1993), 94-116.

31 Ibid. See also Robert C. Berring, "The Siren Song of Cyberspace," *California Monthly* (February 1998), 16-18.

32 For discussion of the card catalog, see Nicholson Baker, "Discards," *The New Yorker* (April 4, 1994); for discussion of books, see Nicholson Baker, "Books as Furniture," *The New Yorker* (June 12, 1995), 84-92.

33 Peterson, "Library at Berkeley, 1900–1945," 234. Peterson is citing "Statement concerning the status of the Library Staff of the University of California" (unpublished), 4 pp., in Minutes, University of California Staff Association (1933-46), University Archives, University of California, Berkeley.

34 UCORP Report, "The Deteriorating Environment for Conducting Research at the University of California: A Qualitative Analysis of Frustrations and Rewards," May 1997 (Bruce Rickborn, UCSB, chair), 29.

35 Peterson, "Library at Berkeley, 1900–1945," 144.

36 "Between 1986 and 1996," writes David E. Shulenburger, Provost, University of Kansas, "the Consumer Price Index increased by 44%; medical care, a commodity identified in the public mind as being out of control, increased by 84%; *serial costs went up by 147%*," while monograph costs went up 62%. Shulenburger's figures appear in "Can We Save Scholarly Publishing," an article that has been circulating and much cited in discussion about scholarly publishing in the last three years or so. I received my copy as "Attachment D1" to some agenda materials with no further reference. Shulenburger's figures also appear, attributed to him but without bibliographic citation, in "To Publish and Perish," *Policy Perspectives*, 7:4 (March 1998), 1-2, a newsletter co-sponsored by the Association of Research Libraries, the Association of American Universities, and the Pew Higher Education Roundtable.

37 Berkeley is a "Founding Member" of SPARC (Scholarly Publishing & Academic Resources Coalition), for instance, an initiative of the ARL (Association of Research Libraries) whose concept has been endorsed by the AAU (Association of American Universities); the AAUP (Association of American University Presses); the ACRL (Association of College and Research Libraries); the NASULGC (National Association of State Universities and Land Grant Colleges); and others. See http://www.arl.org/sparc/factsheet.html. CLIR is the Council on Library Resources, whose DLF (Digital Library Federation) seeks to "create the conditions under which distributed digital libraries can be federated." See *CLIR Issues*, no. 5, (September/October 1998), 1.

38 See "To Publish or Perish." For the University of California in particular, see California Digital Library, "Inaugural Year Highlights," handout distributed at "Alternative Models for Scholarly Publishing in Higher Education Conference," UC Berkeley, Clark Kerr Campus, November 6, 1998—and other material available at www.cdlib.org. Regarding copyright, see the various drafts and comments on the "Universitywide Task Force on Copyright Report," University of California, 1998-99.

39 Paul Duguid, "Material Matters: The Past and Futurology of the Book," in Geoffrey Nunberg, ed., *The Future of the Book* (Berkeley and Los Angeles: University of California Press, 1996).

40 "Library Planning and Action Initiative Advisory Task Force Final Report," University of California, March 1998 (5th paragraph of Summary).

41 See "Description of the Initiative," The Library of Tomorrow, University of California, Library Planning and Action Initiative at http://lpai.ucsf.edu:8080/description.html (downloaded 7/6/1997).

42 "Library Planning and Action Initiative Advisory Task Force, Final Report," section on "Recommended Strategies for Transition." The proposed strategies were: strengthening resource-sharing, establishing the California Digital Library, supporting campus print collections [a belated effort during summer '97 (or '98) to turn this into something meaningful in terms of funding, via "Resolution F," failed], collaborating with "Libraries, Museums, other Universities and Industry," developing an information infrastructure, leading a "national effort to transform the process of Scholarly and Scientific Communication," and organizing "an environment of Continuous Planning and Innovation" (quotations taken from "Summary").

43 Ibid. from "Summary."

44 University of California, Office of the President, NEWS, "UC Announces Founding of the California Digital Library," October 14, 1997, 1.

45 Ibid.

46 Minutes, Berkeley Academic Senate, Committee on the Library, October 15, 1997. Richard Lucier, newly-appointed Executive Director of the CDL and Assistant Vice Chancellor for Academic Information Management, indicated that the STIC collection was an "experimental prototype project."

47 University of California, Office of the President, NEWS, October 14, 1997, 2.

48 Ibid., 2, 3.

49 Item for Discussion for Meeting of October 16, 1997 (Attachment A), Memo on California Digital Library, to Members of the Committee on Educational Policy, from Office of the President, October 8, 1997, 2-3.

50 Peter Lyman, "What is a Digital Library? Technology, Intellectual Property, and the Public Interest," *Daedalus*, 125:4 (Fall 1996), 1-33. Former Berkeley librarian Peter Lyman observes acutely that "the name given to the reader of digital documents, 'user,' reminds us that the computer reader does not have perfect freedom, since all of these choices are given by the technical structures designed by the programmer" (p. 7). Contrast the argument made in the context of health care, that the "user" of the services of a provider, unlike "patient," "client," or "consumer," "conveys action rather than passive acceptance, confidence rather than bewilderment, power rather than dependency." Abigail Zuger, M.D. "Essay: Patient Suffers from Connotations," *New York Times*, August 31, 1999, D5. The extent to which strategies of user-involvement in governance are best characterized as empowering or legitimating no doubt depends on context.

51 These letters were on file in the Dean's Office.

52 The ARL's 1997-98 statistics, published in *Chronicle of Higher Education*, September 17, 1999, A26, shows Berkeley ranked fifth overall, down from third in 1992-93. Overall rank is based on an index that takes into account "number of volumes held, number of volumes added during the previous fiscal year, number of current serials, total operating expenditures, and size of 'permanent' staff."

53 For 1997-98, Berkeley's total volumes numbered 8,792,009. The University of California at Los Angeles ranked third overall with a total of 7,212,229 volumes. UCLA added 210,975 volumes and held 94,748 current serials; Berkeley added only 155,007 and held 79,125 current serials.

54 See for instance, LPAI Task Force Final Report cited in endnote 42, section on "Description."

55 See note 2: "jam tomorrow, jam yesterday; no jam today."

56 Satisfactory long-term techniques for the preservation and archiving of digital material have yet to be developed. RLG (Research Libraries Group) and CPA (Commission on Preservation and Access) are good sources on this issue.

57 Carla Hesse, "Books in Time," in Geoffrey Nunberg, ed., *The Future of the Book*, (Berkeley and Los Angeles: University of California Press, 1996), 21-36, at 30.

58 See Peterson, "Berkeley, 1900-1945" for quotations from University of California presidents: Barrows: "heart," 150; Sproul: "heart," 153; Sproul: "reservoirs," 154; Barrows: "center," 150; Sproul, "meeting ground," 153; Sproul, "repository," 154.

59 Indeed, do faculty and students? See, for instance, Carol Christ, Executive Vice Chancellor and Provost, "Interactive University Ties Outreach with Internet-Based Efforts," *Berkeleyan*, April 5, 2000. Christ writes:

> At a symposium on the future of the university, Stanford President Gerhard Casper remarked that universities originally developed around libraries because professors and students needed to be near books. With the extraordinary resources of information technology, teachers and students no longer need to share a physical space. Texts and reference material are available through our desktop computers that would stock a respectable library, and the Internet has provided a vehicle through which teachers and students can work together without being in the same place.

60 Leon Litwack, "Has the Library Lost Its Soul?" *California Monthly*, 108: 4 (February 1998), 15-18.

61 See for instance *California Monthly*, 108: 6 (June 1998), 10-12.

Josh, November 1895.

"ENTIRELY UNWORTHY OF THE UNIVERSITY'S STANDING AND ITS WORK"

THE PHYSICAL CAMPUS IN THE LATE 1890s AND EARLY 1900s

THE CAMPUS TO WHICH BENJAMIN IDE WHEELER had come in 1899 consisted of scarcely more than a dozen buildings. The majority were wooden structures that ultimately had to be razed because they were fire hazards or to make way for new structures. The oldest, South Hall (still standing today and designated as a campus landmark), had been completed in 1873 at a cost of $197,000 with funds appropriated by the state of California.[1] The 29,500 sq. ft. fire-resistant brick and stone structure initially housed laboratories for the agricultural, physical, and natural sciences as well as the university's library. Directly to the north, and aligned along the same axis, was North Hall, a wooden building of comparable size, also completed in 1873. Designated as the College of Letters, it also housed social sciences, mathematics, and the offices of the president and the recorder. Student activities were located in the basement.[2]

In 1874 the regents had approved the construction of eight one-story, eight-room cottages (also known as the "Kepler Cottages")[3] for the use of students. Six were located south of the Eucalyptus Grove, the other two some distance up the hill near the site upon which the Faculty Club would be built. Harmon Gymnasium, an 1879 gift of A.K.P. Harmon, provided space for instructional classes in physical education and served as the university's armory and indoor auditorium[4] until the completion of the new men's gymnasium in 1933. A gift of $25,000 from Henry Douglas Bacon (who also donated his library) and a state

Class in practical astronomy and geology, in William Carey Jones, *Illustrated History of the University of California*, 1895.

appropriation of $52,000 funded the construction of the brick and stone Bacon Art and Library Building (29,000 square feet), completed in 1881. (This was the university's first library building; an art gallery occupied the third floor.) The Mechanic Arts Laboratory (originally the machine shop for the College of Mechanics) was built with a state appropriation of $3,500 in 1885. The Students' Observatory, with its six-inch equatorially mounted refractor[5] and several small adjoining buildings, and the cinder track (the university's first formal athletic grounds) were completed in 1886.

During the 1890s, another six structures appeared. The brick Chemistry Building (1891) and the glass and steel Conservatory (1894), which was used for agricultural studies, were built with university funds. So was the Mechanical and Electrical Engineering Building completed in 1893. A second Agriculture Building, erected in 1897, replaced an earlier structure that had burned. Small Philosophy and Botany buildings and East Hall, which housed the Department of Zoology, became available in 1898. Hearst Hall, completed in 1900, was donated by Phoebe Apperson Hearst shortly thereafter and moved to a site west of College Avenue, where it was converted into a gymnasium and social hall for women. (In 1922, Hearst Hall burned to the ground—one more indication of the undesirability of large wooden structures.)

South front, Chemistry Building, in William Carey Jones, *Illustrated History of the University of California,* 1895.

Wheeler had devoted several sections of his 1898-1900 *Biennial Report* to the importance of gifts and endowments in "upbuilding" the university, citing their importance in providing scholarships, funds for archaeological explorations, equipment, endowed chairs, professorships,[6] and campus buildings. Shortly before his arrival at Berkeley, the final judging of plans submitted to the International Competition for the Phoebe Hearst Architectural Plan for the University of California had taken place at the Ferry Building in San Francisco. Funding for the competition had been provided by Mrs. Hearst in 1896. One hundred and

five entries were received by the July 1, 1898 deadline; eleven plans emerged from the initial judging at Antwerp, Belgium. The winner was French architect Emile Bénard's monumental Beaux-Arts inspired plan.[7] However, it was fourth-place winner John Galen Howard, not Bénard, who became supervising architect and directed the course of building on the Berkeley campus for nearly a quarter of a century.[8]

Shortly after his arrival Wheeler had gone to Sacramento to address the legislature on the need for funds to replace outworn equipment, create new departments, and relieve overcrowded classrooms by constructing new buildings—a dialogue that he continued in ensuing years. He also traveled widely throughout the state, meeting with groups and giving lectures about the growing University of California. The Spreckels Physiological Laboratory (1903), one of the first campus laboratories intended primarily for research, was a gift of Rudolph Spreckels. The initial portion of the Faculty Club, financed by initiation fees, life memberships, bond sales, and regents' gifts, was completed in 1902 and the following year saw completion of the Greek Theatre, a gift of William Randolph Hearst. The large open concrete structure, with a seating capacity of ten thousand, has been the site of university ceremonies, dramatic, theatrical, and musical performances, student bonfire rallies, convocations, and many other events.

Although it did little damage in the East Bay, the 1906 earthquake focused attention on the dangers of brick and wooden structures. Steel and granite, at least for larger buildings, became the preferred construction materials. California Hall, which served as the administration building from its completion in 1905 until 1941 (when it was remodeled for classrooms) was built from state appropriations and university funds. The Hearst Memorial Mining Building (105,000 square feet), named for Senator George Hearst, was completed in 1907 with a gift of $700,000 from Phoebe Apperson Hearst. Boalt Hall of Law (completed

View from the west showing Doe Library, California Hall, Wheeler Hall, and Boalt (later Durant) Hall, ca. 1920. *University Archives (UARC PIC 3:396).*

in 1911; renamed Durant Hall in 1951), also built of steel and granite, was a gift of Elizabeth J. Boalt and California lawyers' subscriptions. Agriculture Hall (1912), financed by the Permanent Improvement Fund and a state bond issue, housed the Department of Entomology and Parasitology.

The concrete, granite, and bronze Sather Gate, which once marked the southern entrance to the campus, was donated by Jane K. Sather in 1910 as a memorial to San Francisco banker and College of California trustee Peder Sather. Sather Tower, usually known as "the campanile" because of its resemblance to St. Mark's campanile in Venice, another of Mrs. Sather's gifts, was completed in 1914. A bond measure that alumni had succeeded in having placed on the state ballot was approved by the voters in 1914, making $1,800,000 available for the construction of new buildings and the completion of the Doe Library.[9]

Three major buildings appeared on campus in 1917. Doe Memorial Library, partly completed in 1911, was financed by a gift of $779,000 from the estate of Charles Franklin Doe and a $525,000 state bond issue. Gilman Hall, which housed the administrative offices of the College of Chemistry and the Department of Chemistry and provided accommodations for instruction in physical chemistry and chemical engineering, was financed by a state bond issue. Wheeler Hall (also financed by a state bond issue) included an auditorium with a seating capacity of nine hundred, classrooms for the humanities and the social sciences, and faculty offices on the top floor.

When Benjamin Ide Wheeler retired in 1919, over thirty buildings and structures had been built at Berkeley.

ENDNOTES

1 Unless otherwise noted all the information that follows is derived from Verne A. Stadtman, ed., *The Centennial Record of the University of California* (Berkeley: University of California Printing Department, 1967), 52-70.

2 After the upper floors of North Hall were razed in 1917 the remaining portions continued to be used as the student store and A.S.U.C. offices until 1923. Subsequently used by Naval Science, the building was demolished in 1931.

3 Cottage No. 1 was used as quarters for the football team.

4 In 1917, the auditorium in Wheeler Hall took over this function.

5 William Carey Jones, *Illustrated History of the University of California* (San Francisco: Frank H. Dukesmith, 1895), 196.

6 *Biennial Report of the President of the University of California, 1898-1900*, 52-57, 104-110, passim.

7 For a contemporary account, see George O. Brehm, "The architectural plan," *1899 Blue and Gold* (1898), 16-23.

8 "Designing the Campus of Tomorrow: A Retrospective on the Hearst International Architectural Competition for UC Berkeley," which emanates from an attractive and informative exhibition titled "Roma/Pacific: The Phoebe Hearst International Architecture Competition and the Berkeley Campus, 1896-1930" that was recently held on campus, is to be published by the Center for Studies in Higher Education and the Institute of Governmental Studies Press, 102 Moses Hall, University of California, Berkeley, CA 94720-2370.

9 Verne A. Stadtman, *The University of California, 1868-1968* (New York: McGraw-Hill Book Co., 1970), 187-189, 216, 218, 270, 273.

THE PHYSICAL CAMPUS: ENTERING THE TWENTY-FIRST CENTURY

Thomas A. Koster

FOR THE PAST SEVERAL DECADES the University of California, Berkeley has been considered a fully developed campus. Its most recent long range development plan (LRDP) projected no overall growth in the campus's population or programs. In fact, the 1990 LRDP described the campus as "oversubscribed" and projected a slight decline in total population. This decline was predicated on maintaining the size of the faculty, with fewer students and an increased population associated with research.[1]

Nevertheless, the plan identified substantial new construction to address unmet needs, and many of these projects have now been completed: new buildings for business, computer science, chemical engineering, life sciences, space sciences, student health, and the main library; acquisition of University Hall for campus use; and major expansions for humanities, law, and optometry. A further project, unforeseen in the LRDP, recently transformed Harmon Gymnasium into an expanded basketball pavilion, and a number of planned but unbuilt projects—in particular, new buildings for East Asian studies and the music library—remain on the campus's priority list for early completion.

Clearly, then, the lack of a growing population has not limited new construction. In fact, there has not been a decade in the history of the campus without some additional buildings, though the Great Depression, World War II, and the shift of growth to the newer University of California campuses in the 1970s curtailed construction during those periods. With the resumption of building to reinvigorate Berkeley's biology program later in the 1980s, construction has continued unabated and has benefited many disciplines. For a combination of reasons outlined below, there is no end in sight to this construction activity. Even the constraint on campus growth is now in question, and it is safe to say that as the campus enters the twenty-first century, no department will remain unaffected by physical change in one way or another.

In the following pages, I discuss some major issues likely to influence physical change on the campus in the coming decades. These include heightened concerns about the safety of buildings, renewed attention to infrastructure, existing unmet space needs as well as needs arising from changing program directions or emphases, and demographic projections that have created pressure to increase the campus population. To help address these issues, the campus is preparing a master plan to provide a framework for a new long range development plan that is likely to transform the campus in significant ways.

Photograph by Catherine Dinnean.

Making the Campus Safe

The Berkeley campus is located in a region of high seismic activity. The Hayward Fault passes through the eastern part of the main campus, posing a very serious threat to campus facilities and programs. Public concern about earthquake hazards heightened significantly in California in the aftermath of the 1971 San Fernando earthquake, and the need to reinforce buildings was studied by the state and the university over the next ten years. Beginning with South Hall in the mid-1980s, projects at Berkeley were systematically carried out with the expectation that all necessary seismic corrections would be at least in design by century's end and completed shortly thereafter, thereby solving the problem. More recently, however, a series of major seismic events in urban areas, including Loma Prieta (1989), Northridge (1994), and Kobe (1995), provided new knowledge about the nature of earthquakes and the behavior of buildings, particularly those located very close to a fault. In light of renewed concerns, the Berkeley campus commissioned a reexamination of its buildings by engineers, who concluded that many additional buildings required structural reinforcement.[2] Ninety-five major and minor campus structures, or 27 percent of the total campus space, were identified for seismic strengthening. The campus responded with its SAFER program (Seismic Action Plan for Facilities Enhancement and Renewal), a ten-point plan to address seismic safety needs.[3] It was estimated that the required construction would cost in excess of $1 billion, including inflation, and that this amount would have to be raised from a variety of sources.

Seismic retrofit of Barrows Hall, 2000. Photograph by Catherine Dinnean.

This construction, a combination of retrofit and replacement, will take many years to carry out. The physical sciences and engineering departments are particularly heavily hit by the need to repair their buildings in the northeast precinct of the campus, but buildings with "poor" seismic ratings are found throughout the campus. Even Sather Tower (the Campanile), the symbol of the Berkeley campus, needs to be strengthened. Implementation of the

Doe Library with recently created Memorial Glade in foreground. Photograph by the author.

SAFER program will be the focus of campus construction in the first two decades of the twenty-first century, and seismic concerns will strongly influence the campus. The most obvious and direct sort of influence would be the decision to replace rather than repair an unsafe building. The "poor" seismic ratings of Warren Hall and Stanley Hall, for instance, have been addressed by targeting these buildings for demolition as part of the campus's new health sciences initiative. State funding that could be used to repair Stanley Hall is proposed instead to contribute to new construction as an alternative form of seismic safety mitigation. The recent change in the designated site of the proposed East Asian Library building from the area west of Evans Hall to a location north of Memorial Glade facing Doe Library illustrates how seismic concerns can indirectly shape building decisions. A major rationale for the changed site was that the new site would preserve more development options, should Evans eventually be removed. In the past Evans's large size made its demolition seem impractical, despite a widely held view of it as a visual blight. The building's "poor" seismic rating, however, has given hope to those who consider it ugly or poorly sited and seek its eventual removal, and the implications of removal will now be weighed more seriously in campus planning decisions. A final decision on the fate of Evans Hall, however, is unlikely to be made for some time.

A consequence of implementing the SAFER program, unfortunately, will be extensive and continuing disruption as departments are moved to temporary locations during construction, and staff encounter noise, dust, and inconvenience. While "surge" or temporary space options for carrying out projects are extremely limited, the campus has had some very negative experiences when projects have been planned to continue occupancy during construction. The availability of surge space will therefore be a major factor in the scheduling of seismic repair. The campus has reserved several blocks of space for temporary use in campus buildings and is also using temporary facilities north of Wellman Hall and west of Hearst Gymnasium. The "Wellman trailers" have served four successive sets of temporary occupants since 1989; the Hearst Field Annex was completed in 1999. There are few sites

where temporary buildings can be located without the loss of parking lots or playing fields, but these resources are already at a premium on the campus. The use of all existing temporary space as well as leased space, when feasible, is therefore likely to continue. (The pool of space available for lease nearby, however, is very limited, particularly with the added constraint that leased space must meet the university's seismic requirements.) The campus is also using state funding and parking revenue to design a permanent office building with an underground parking garage at the south end of the Oxford Tract, to be completed early in 2003. Under the campus's agreement with the state, this new building (designated Seismic Replacement Building 1) will be used as surge space for a number of years but will eventually replace two other seismically "poor" buildings the campus has accepted responsibility for demolishing—the Warren Hall tower and the former University Extension building at 2223 Fulton Street. The campus is studying alternatives for the new building to see whether it makes more sense to move in permanent occupants immediately and release other campus space for surge use instead. However, the new building will be designed to be flexible,

Seismic retrofit of Wurster Hall, May 2000. Photograph by Steve Lesky.

allowing it to serve a variety of occupants over time.

In addition to disruption, it is anticipated that many seismic repair projects will bring unexpected benefits as campus departments return to renewed as well as safer buildings, providing some compensation for the stress the occupants will have to endure during seismic reconstruction. Buildings like Barker Hall will be substantially upgraded inside to improve laboratories and building systems. Depending on the particular design, the installation of new structural walls may create new space for additional offices or classrooms. This has already happened in Moffitt Library and McCone Hall and is planned for Wurster and Hildebrand halls.

For the most part, it is not yet possible to predict the precise sequence of seismic projects or when particular buildings will be strengthened. Though the size of the population and the level of hazard in a building are the primary determinants for prioritizing projects, other practical issues also need to be considered: the uncertainties of funding, the impact on programs, the availability of staging space, the practical limits of cumulative disruption in a particular geographical area of the campus, and opportunities afforded when dedicated financing becomes available to carry out program improvements concurrent with seismic corrections. The new campus master plan, discussed below, is expected to help establish a scheme to carry out seismic corrections as rapidly, coherently, and economically as possible. Various funding avenues are to be pursued, and the strategy to use multiple fund sources has already borne fruit in the form of a $42 million hazard-mitigation grant from the Federal Emergency Management Administration (FEMA) to correct seismic deficiencies in four campus buildings, matched with additional funding from the state and from campus sources.

Providing the Infrastructure

Academic needs are most often associated with more space or with modernization and upgrading of outdated or inappropriate facilities, and the need to maintain what the institution already has is taken for granted by many. In fact, inadequate funding to maintain infrastructure remains a major problem at Berkeley, and one that is not limited to the campus or even higher education in general. It is widely recognized by financial and physical plant managers as an issue with broad impact throughout the public realm. Berkeley's deferred maintenance backlog is estimated to exceed $500 million. The university's program of ongoing and deferred maintenance has not allowed the campus to catch up with the problem, but after years of varying but generally low levels of deferred maintenance funding, the regents approved a new approach to deferred maintenance and facilities renewal. In 1998-99 the university started to use long-term borrowing, to be repaid from nonresident tuition income, to provide $60 million to $65 million per year for a period of at least five years to address this problem. Berkeley's share for the first two years, including supplemental funding, was over $40 million and included deferred maintenance projects such as roof replacement, elevator repair, electrical and steam line replacement, exterior window restoration, and so on. This program will continue to have significant impact on the campus as substantial funds are spent on facilities in a relatively short time. Recent work on Evans Hall is an example. Water had penetrated to the reinforcing steel and spalled concrete, creating a serious hazard as chunks literally fell off. Scaffolding surrounded the building and wood covered office windows to protect passersby and occupants as work, some of it quite noisy, was carried out to repair loose concrete and waterproof the building's surface. Whenever possible, projects will be scheduled along with other work to combine several disruptions into one. For example, reroofing of Hearst Mining Building as well as building system restoration and interior lab improvements for Barker Hall have been scheduled when each of these buildings is emptied to undergo seismic strengthening.

The campus is crisscrossed with a complex network of underground utilities, and many sections of open space throughout the campus will be torn up, fenced off, and stacked with pipes and sod as underground infrastructure is replaced or improved. Substantial underground utility work has already occurred and will continue as aging water, sewer, and steam lines are replaced or enlarged. A new underground communications infrastructure system, a prototype of which was originally conceived and partially installed in the engineering precinct some years ago, will be extended throughout the campus over the next decade. This "interbuilding campus communications system" (ICCS) is intended to provide an underground system of conduit and fiber-optic cable that will enter and connect all campus buildings. A vertical "riser" system will bring this infrastructure to all the levels in a building, from which it can be extended to individual work stations. The system will include several major underground "hubs," or buried rooms, throughout the campus. The first example is the pale green structure that protrudes from the ground just north of Wheeler Hall.

As this planned construction above and below ground is carried out, attention will also be given to improving the outdoor environment. The west entrance of campus has just been enhanced with a gift from the Class of '53 to create a more formal entry near the southern end of the Crescent, which will eventually be matched by similar improvements at the northern end. Several major open areas are also being studied for redesign, including the upper and lower plazas west of Sproul Hall, the Mining Circle, and the quadrangle surrounded by Hertz, Wurster, and Kroeber halls and the planned Hargrove Music Library. The lower Sproul plaza area, for instance, offers a major opportunity for change, and this underused campus space and its surroundings—particularly Eshleman Hall, which is seismically "poor"—are now being studied. Planned seismic and other improvements at California Memorial Stadium present another opportunity for major landscape improvements in the vicinity of the stadium.

Addressing Program Needs

Two large and largely gift-funded building projects with a total cost of roughly $300 million, to be sited at the east and west ends of the northern part of the campus, are likely to bring the most dramatic physical change of the next decade. These new buildings, which are cornerstones of the recently announced multidisciplinary health sciences initiative, will bring together researchers in biological, physical, engineering, and health sciences from various campus departments to collaborate on the application of modern tools from physical science and engineering to biology and medicine. As in the 1980s when the reorganization of campus biology was effected through a physical plan, the creation of two new buildings to bring the appropriate faculty and students together with specialized laboratories and equipment is expected to have far-reaching impact. Each new building will replace an existing, smaller campus building with outdated laboratories, outstanding deferred maintenance requirements, seismic deficiencies, and no significant historic interest—obvious candidates for replacement. These two projects are the largest new facilities currently planned, although they are not the only ones.

Design is already under way for the first of the two health sciences projects, a "molecular engineering" building that would replace Stanley Hall. This will be a much larger building than Stanley Hall and will house the new Department of Bioengineering, some of the current biologists occupying Stanley Hall, and chemists, physicists, and engineers from elsewhere in the precinct. Just next door, construction is well under way at Hearst Mining Building to carry out seismic repair and partial restoration of what many consider the architectural masterpiece of the campus. Besides restoring interior light wells, finishes, and other features, this project will add two three-story structures ("saddlebags") at the north,

one at each end, to replace usable space that will be lost as a consequence of renovation. This project should be complete in 2002, when demolition of Stanley is expected to begin. Other major construction started in summer 2000 across the Mining Circle from Hearst Mining Building as seismic corrections to Latimer and Hildebrand halls got under way (using the FEMA funds already mentioned). This work will modify the exterior appearance of these buildings to some extent and has caused many moves, both permanent and temporary, within the College of Chemistry. The implementation plan for these projects is an example of how the seismic program can benefit campus programs beyond safety considerations. For example, by combining donor funds with seismic funds that would otherwise be spent on temporary moves, the plan has transformed Gilman Hall to create a permanent new center for

Seismic strengthening of Hearst Mining Building, June 2000.
Photograph by the author.

theoretical chemistry.

Shortly after the work in Latimer and Hildebrand halls is done, seismic corrections to nearby LeConte Hall will begin in 2002, entailing a variety of relocations for the physics department. In addition, a planning committee has been studying the future of Campbell Hall, a building considered high on the list for replacement rather than repair. The committee is hoping to develop an integrated plan that would use a combination of state and gift funds to address seismic safety and at the same time provide more and better space to physics and astronomy.

Planning for the second project in the health sciences initiative, the "biomedical facility" slated for the other end of the campus, is not as far along as the Stanley replacement. The building would occupy the site of Warren Hall, the current home of the School of Public Health, and would provide space for programs in public health, immunology, cancer research, and infectious disease, expanded animal facilities, and possibly a new public health library. The program as initially proposed significantly exceeds the site's capacity as well as the anticipated funding target, so program reductions or alternate locations for some elements—for instance, the library—have to be considered. A long-sought improvement in this neighborhood, removal of the decade-old "Wellman trailers" surrounded by Hilgard, Wellman, and Giannini halls, will probably be delayed by the need to empty Stanley and Warren halls while their replacement buildings are constructed. Four groups of occupants have already made their temporary homes in these trailers: Valley Life Sciences Building, Dwinelle Hall, McCone Hall, and most recently Barker and Wurster halls have been "decanted" to the trailers. It may be hoped this area will be landscaped one day, as occurred at the former parking lot east of South Hall following that building's seismic repair, but there will also be pressure to return the space to auto parking when the trailers finally are removed.

Other projects are expected on the north side of the campus. Roughly midway between the two new life sciences complexes, facing Doe Library and the recently created Memorial Glade, the new East Asian studies center is planned to bring together the East Asian library, the Department of East Asian Languages and Cultures, and the Institute of East Asian Studies, uniting a program that is now fragmented among Durant, Dwinelle, and California halls and 2223 Fulton Street. This new building, previously sited west of Evans Hall and, prior to that, in the Dwinelle parking lot, is now expected to fill in an area between McLaughlin and Haviland halls. The project continues a trend to frame exterior spaces to create "out-

Le Roy Avenue elevation of proposed new Goldman School of Public Policy building. *Courtesy of Architectural Resources Group, Inc., San Francisco, California.*

door rooms," and the strongly sloping site abutting Observatory Hill will be a challenge to the architect's design skills. Not far away, just off the main campus to the northeast, a three-story office and classroom building is planned for the Goldman School of Public Policy. This $5 million, gift-funded building is being designed and will replace the parking lot at Hearst and Le Roy avenues, west of the Goldman School's current home. The new facilities will be closer in character to the school's existing building and to Cloyne Court than to other, more imposing university neighbors like Soda and Cory halls.

Several other gift-funded projects are anticipated to move forward in the next several years. The Jean Gray Hargrove Music Library is to be sited south of Morrison Hall, along the eastern edge of North Field. The building is expected to frame a new space with Hertz, Wurster, and Kroeber halls, creating a more intimate "arts quadrangle." A small but significant renovation already completed at the southwest corner of Moffitt Library provides a new café that celebrates the Free Speech Movement and Mario Savio (who was also recognized in 1997 by the dedication of the steps in front of Sproul Hall). The central location of this café with seating that spreads outdoors onto Moffitt's west balcony is bound to make this one of the most popular places to meet on campus.

Further south, the UC Berkeley Art Museum is the remaining major campus building with a "very poor" seismic rating but without a firmly identified plan or funding stream to address the problem fully. Retrofitting the existing building, replacing it, or constructing a new building on a site closer to downtown have all been examined. The museum favors a plan for an expanded building at another site, but this will require substantial funds to be raised. Meanwhile, the building's population has been reduced by moving the Pacific Film Archive's Gund Theatre across Bancroft Way to temporary building space in the Hearst Field Annex, and a partial correction project to upgrade the building's seismic rating to "poor" is planned in the coming year.

Other major plans are moving ahead quickly on the south side of campus, driven by the need for student housing and dining areas. West of the former Underhill Field where temporary housing, office buildings, and parking spaces are located, a new replacement office and dining complex will be built. (Eventually, a new multilevel parking structure under a playing field is expected to be built on the old Underhill site itself to provide 850 spaces, replacing the former structure at that site that was discovered to be structurally unsafe and demolished in 1993. However, the parking structure is not expected for five or more years and may be built in phases.) The new dining facility will permit closure of the seismically "poor" central dining facilities in the Units 1 and 2 high-rise residence halls, and these areas are expected to be filled in with additional student housing. Two other south campus sites are also planned for student housing: the parking lot at the corner of College and Durant avenues, and the parking lot and temporary office facilities for the parking and transportation department near the intersection of Channing Way and Bowditch Street. Up to 900 additional students could be housed immediately south of the campus in these projects. They are subject to completion of environmental studies and other requirements but are likely to be realized in the next few years. This increase in housing, while very beneficial for the current student population, will be absolutely critical if, as expected, new pressure on the university to increase enrollment alters the course of planning in the 1990s, which, as noted above, was predicated on a 4 percent drop in Berkeley's enrollment from 1988 to 2005.

Increasing Enrollment

Late in 1998 the state's Department of Finance produced new demographic projections with a dramatically increased number of expected public high school graduates in California. These numbers are the so-called "Tidal Wave II," an increased number of college stu-

Perspective drawing of new College-Durant Student Housing project. *Courtesy of Pyatok Associates, Oakland, California.*

dents, many of whom are the children of the post-World War II Baby Boom generation. In response to these figures and strong pressure from Sacramento, the Office of the President prepared new enrollment projections, proposing that the university increase its enrollment by 63,000 full-time equivalent (FTE) students between 1998-99 and 2010-11,[4] including 4,000 additional FTE students for the Berkeley campus. This would increase Berkeley's targeted enrollment from 27,800 to 31,800, a 14 percent increase. Though much lower than the percentage enrollment increase for the university overall during this period (43 percent), this is nevertheless a very dramatic figure for a mature campus like Berkeley. Though the regents have not yet approved specific numbers, it appears inevitable the campus will grow. The campus must participate in meeting the university's obligations under the 1960 Master Plan for Higher Education in California; the political and societal pressures would be hard to resist in any case, and enrollment growth will provide additional revenue to the campus in support of new initiatives and expanded programs.

Along with the additional students, the campus will require more faculty and associated resources to maintain quality, and this larger population will require additional facilities. The campus will need more classrooms and teaching laboratories for scheduled instruction, offices and research labs for faculty and associated staff, support space, and student housing. It is little appreciated that classrooms are a relatively modest part of the physical resources at modern research universities. At Berkeley these comprise only 3 percent of the total space. More specialized teaching laboratories account for another 4.7 percent, so that less than 8 percent of the Berkeley's space is actually used for direct instruction; the remainder includes offices, research labs, shops, storage, sports and recreational facilities, student housing, and other specialized facilities on and off the main campus. More space in most of these categories will be needed to accommodate enrollment growth. However, while the university expects the state to provide an increased operating budget to accompany higher enrollment, dollars for capital construction will be hard to obtain. The current space and utilization standards used by the state suggest there is an even greater need for additional build-

ings at the university's other campuses, and in any event, the state borrows money to provide capital funding and has limited capacity to increase its debt. In fact, the preference in Sacramento for year-round operations stems from a desire to increase enrollment without building new facilities. The assumption that Berkeley campus facilities are largely empty during the summer is incorrect, but this fact can be difficult to communicate to state officials, particularly when there appears to be little or no opportunity to increase capital funding in any event.

Various strategies to accommodate more students are under study, including increasing summer enrollment, using off-campus sites, expanding the traditional hours of instruction, and modifying practices and polices to encourage students to graduate in less time (for example, over 40 percent of the Berkeley undergraduates who complete their degrees currently take more than four years). While expanding the summer program is one way to absorb some of the additional enrollment, facilities are not empty during this period, and scheduling additional classes could displace outreach and other programs that already take place on campus in the summer. One very promising alternative is increased use of the University Extension center on Laguna Street in San Francisco. Formerly the campus of San Francisco State College, the site was acquired by the University of California in the late 1950s for Extension programs. Expanding the facilities at the site was considered in the 1980s but was dropped for other priorities. The site has enormous potential and could be an excellent location for undergraduates to study a special programmatic emphasis for part of their career or for self-contained graduate programs. Extension and summer programs could certainly expand there.

In the longer term, though, more intense use of the central campus seems inevitable. While some additional classrooms might be carved out of existing space, the campus's need for surge space in connection with seismic retrofit work makes this difficult to achieve in the near future. Faculty offices, research laboratories, space for staff support, and student housing pose a more daunting problem. Some of the building projects already planned, such as the new health sciences facilities, will expand faculty and graduate research space and should accommodate some of the need. Consideration will also be given to moving selected activities now on the central campus further away to make room for those programs most necessary to core instruction and research.

Planning the Future

To help the campus address its physical needs, a major new planning effort is being carried out in several phases. Before the question of enrollment growth emerged, the campus was already struggling with the dramatic results from the 1997 seismic reexamination. The SAFER plan presented an overall strategy to address the newly understood vulnerability of the campus to a major earthquake, and implementation began immediately with organizational and policy changes, improvements to emergency preparedness, and the commissioning of a number of individual studies. Planning reports were completed for campus precincts, classrooms, and infrastructure that addressed the implications of the updated seismic information, and reports on research and business operations are pending. Campus priorities were changed in the capital program to incorporate new information,[5] and the campus explored new funding sources for seismic corrections, achieving early success with the large federal matching grant already mentioned. In recognition of the profound impact the seismic program would have on the campus in the next two decades, the SAFER program called for creation of a master plan for facilities renewal that would guide campus planning and lead eventually to a new long-range development plan. With expanded enrollment now also on the table together with building proposals that collectively take the campus beyond

Replacing utilities lines near Valley Life Sciences Building. Photograph by Catherine Dinnean.

the level of building envisioned under the 1990 LRDP, the need for a new master plan and updated LRDP is self-evident.

Early in 1999 the campus began to work with consultants on a new master plan. Originally designated "Strategic Facilities Master Plan," the project has adopted the name "New Century Plan," borrowing language from Berkeley's recent fundraising effort, the "Campaign for the New Century." While this will indeed be the first master plan in the twenty-first century, it is not the first comprehensive planning effort in a century. Comparison has been made to the international competition sponsored by Phoebe Apperson Hearst at the turn of the last century for a master plan for the Berkeley campus. However, the campus had already been influenced by the earlier plans of Frederick Law Olmsted and David Farquharson. Émile Bénard's winning plan, adopted with revisions in 1900, continued to be revised until John Galen Howard "evolved virtually a new plan."[6] Throughout the century the Board of Regents approved various physical plans for the Berkeley campus. The 1956 long range development plan and its successor in 1962 (more an update of the 1956 plan than a new one) grew out of "unprecedented enrollment growth and building space needs."[7] In the later 1970s, during a period of curtailed construction, the campus administration became more sympathetic to concerns about setting limits on acceptable development and promoting the value of historic resources. Today, with a heightened sensitivity to the environment, the view is widely held that key decisions made in the 1950s and 1960s on the siting and design of buildings neither took Berkeley's legacy from the past adequately into account nor looked to the future with sufficient vision. When the last LRDP was prepared in 1990, there was little opportunity to undo the recent (i.e., post-World War II) past, and much of the proposed development involved filled-in spaces, including modest building expansions and underground construction. Today, the extensive need for seismic repair, coupled with the extensive backlog of deferred maintenance and modernization, presents an opportunity to rethink the campus plan, including the removal of buildings in cases where a structure's value to the campus, measured partly but not entirely in dollars, does not support its preservation.

Preparation of the new plan was initially guided by a twenty-seven-member advisory committee with oversight from the Executive Campus Planning Committee, the latter committee chaired by the chancellor. The charge presented to the advisory committee was to "develop a master plan that links the academic mission with a facilities strategy for the future public university, moves toward an integrated campus vision that promotes the academic mission, and inspires Berkeley's continuing success in teaching, research, and public service. The plan should define a compelling vision of the campus that honors its unique environmental setting, historic assets, and social and educational legacies." While the need to correct seismic deficiencies as quickly as possible to protect lives, programs, and property is a central concern of the planning effort, a plan for seismic upgrade must be developed in the context of campus academic, environmental, and institutional goals. The plan, which should be completed in 2001, is intended to provide a "system for strategic action" that will establish improved decision-making processes related to physical planning as well as approaches to asset management and investment that will make the best use of the physical resources on the campus.

As the Berkeley campus enters the new millennium with the current constellation of facilities issues facing it—above all, a physical plant seismically at risk and needing substantial maintenance and modernization, coupled with renewed enrollment growth—the campus would appear to have as great a potential for physical change as it did in the period following World War II. Although today's context is a very different one, it is reassuring that the planning and decision-making processes now in play have the benefit of history and will be informed by the experiences of the past several decades.

ENDNOTES

1 *University of California at Berkeley, Long Range Development Plan 1990-2005* (May 1990), 15-16.

2 *University of California, Berkeley, 1997 Preliminary Seismic Evaluation, Phase 1* (3 volumes, September 1997) and *Phase 2* (2 volumes, January 1998).

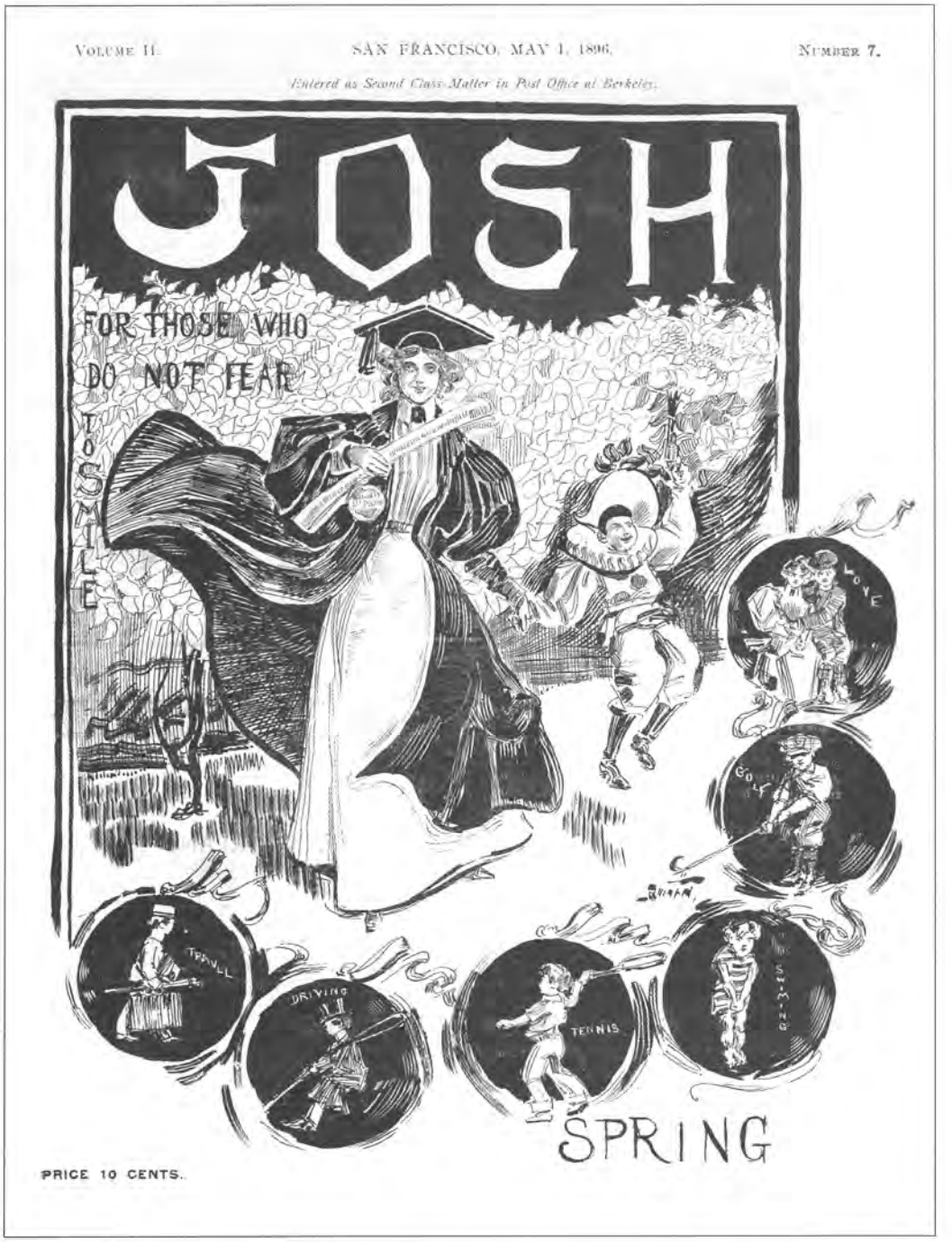
3 *SAFER Program, Seismic Action Plan for Facilities Enhancement and Renewal, University of California, Berkeley* (October 24, 1997) and *SAFER Program Supplement* (April 24, 1998).

4 *University of California, Office of the President, 2000-2001 Budget for Current Operations* (October 1999).

5 *University of California, Office of the President, 2000-2001 Budget for Capital Improvements* (October 1999), 15-33.

6 *University of California, Long Range Development Plan for the Berkeley Campus* (August 1956), 1-3.

7 *University of California, Berkeley, Long Range Development Plan* (June 1962), 3.



Josh was one of the earliest humor magazines to appear at the university. It was actually published in San Francisco and was designed to reach students both at the University of California and at Stanford, with an editor from each school. It was published from September 1895 to February 1897.

ATHLETICS AT BERKELEY AT THE TURN OF BOTH CENTURIES

Roberta J. Park

INTERCOLLEGIATE ATHLETIC PROGRAMS are now so extensive that it might be difficult to realize that scarcely more than a century ago these were only beginning to come to the fore.

As the noted historians of sport John Lucas and Ronald Smith have observed: "The nineteenth century found students creating their own activities to compensate for that part of life which the college administration did not provide."[1] Some of the earliest organizations were literary and debating societies.[2] Interclass physical clashes (often referred to as "rushes" or "scraps"), which emerged in the early 1800s, had become an established tradition by mid-century. At Harvard the great annual event pitted freshmen against sophomores in a kind of frenzied encounter in which as many as hundreds of players battled in a soccer-like game. There were no codified playing rules or "neutral" adjudicators (i.e., referees), so integral to modern-day athletics. By the late 1800s, these "rushes" were being modified into freshman-sophomore intercollegiate contests in various sports.

America's first "intercollegiate" contest took place in 1852 when a four-oared Harvard crew competed against Yale—an event loosely modeled upon the Oxford-Cambridge Boat Race, which had been rowed (not quite annually) since 1829. The 1859 baseball game between Amherst and Williams College is considered to be the first intercollegiate contest in that sport. Ten years later Rutgers met Princeton in the first intercollegiate "football" (i.e., soccer-type) match. Modern track and field owes more to Caledonian Games, introduced to Bostonians by Scottish immigrants in 1853, than to earlier pedestrian contests. It is generally agreed that intercollegiate track began with the two-mile race that was held as part of the 1873 Intercollegiate Crew Regatta at Saratoga, New York. (The challenge cup was donated by the *New York Herald*'s James Gordon Bennett, Jr.)[3]

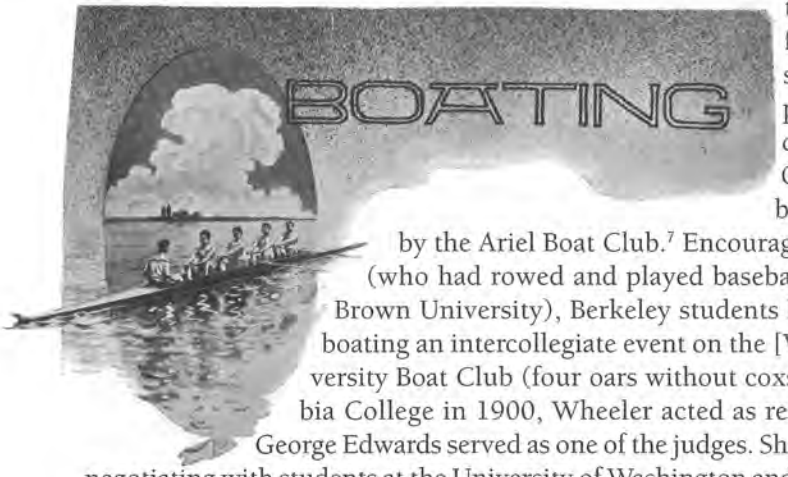
During the 1870s, no uniform football code existed. Harvard played "the Boston game," which allowed a player to run with the ball or to throw it if he was being pursued. Other colleges played some variation of "soccer."[4] When students at Montreal's McGill University challenged Harvard to two matches in 1874—and insisted that the second be played according to rugby rules[5]—the stage was set for the transformation of the English game into "American football." By the 1890s, the "scrummage" (in which the ball is heeled out to the scrum half) had been replaced by the "scrimmage" and a quarterback who received the ball from the hands of the center. Mass plays like the "flying wedge" and "revolving wedge" predominated and were the cause of numerous injuries, both moderate and life-threatening.

The major intercollegiate sports of the late nineteenth and early twentieth centuries were track, baseball, football, and rowing. In some locations, as for example sunny California, sports like tennis also received some attention. Basketball, invented in 1891 by James Naismith (instructor at the International YMCA Training School at Springfield, Massachusetts) as a simple game that could be played indoors in inclement weather, had none of today's spectacular aspects. In fact, in its early years basketball often was thought of as a "woman's sport." With the exception of field hockey (which comparatively few schools played) and a modified version of baseball, it was the only team sport for college women until the 1930s;

a few also played tennis, rowed, or engaged in a limited number of track events as early as the 1890s.[6]

Intercollegiate Athletics at the End of the Nineteenth Century

By 1899-1900, Benjamin Ide Wheeler's first year as president, male students at the University of California were participating in five intercollegiate sports. Since 1875, the University of California Boat Club had rowed occasional races against local clubs like Ariel and the Dolphin. In August 1899, a four-man crew left aboard the steamer *State of California* to participate in Pacific Coast championship races at Astoria, Oregon, taking with them the best "barge" on the Bay, loaned by the Ariel Boat Club.[7] Encouraged by the interest of Wheeler (who had rowed and played baseball while an undergraduate at Brown University), Berkeley students looked forward "to mak[ing] boating an intercollegiate event on the [West] Coast."[8] When the University Boat Club (four oars without coxswain) rowed against Columbia College in 1900, Wheeler acted as referee; mathematics professor George Edwards served as one of the judges. Shortly thereafter, California was negotiating with students at the University of Washington and University of Oregon to form a Pacific Coast Intercollegiate Boating Association.[9]



After losing their first tennis match to Stanford in 1892—and the second by default the following year—Berkeley's men had been victorious five times before succumbing 2-1 on April 22, 1899, on the courts of the California Club in San Francisco.[10] Because students were still collecting subscriptions ($1,200 was needed) to build two asphalt courts on the Berkeley campus, practices had to be held at the Alameda Tennis Club and other local courts.[11] A Ladies' Tennis Club, organized in 1898, soon would have access to a secluded crushed-rock surfaced court in "Co-ed Canyon," an enclosed outdoor basketball court (with seating for several hundred female spectators), and gymnasium facilities in Hearst Hall—all donated by Phoebe Apperson Hearst.[12]

The University of California's first basketball game took place on November 18, 1892, when a team of Berkeley "coeds" defeated Miss Head's School.[13] Contests between classes (e.g., freshman, sophomore, and junior women) also were organized. The first "intercollegiate" basketball game on the West Coast occurred on April 4, 1896, when Cal and Stanford women met at San Francisco's Page Street Armory. (Berkeley's first men's intercollegiate

basketball was not until 1912.)[14] Five hundred girls and women (no man except the referee was admitted) witnessed the contest, which was won by Stanford by a score of 2-1.[15] The event received extensive coverage in the *San Francisco Chronicle* and other local newspapers.[16] By 1900, women students also were playing games (three or four a season) against Mills College, the University of Nevada, and various local secondary schools.[17]

1901 Blue and Gold.

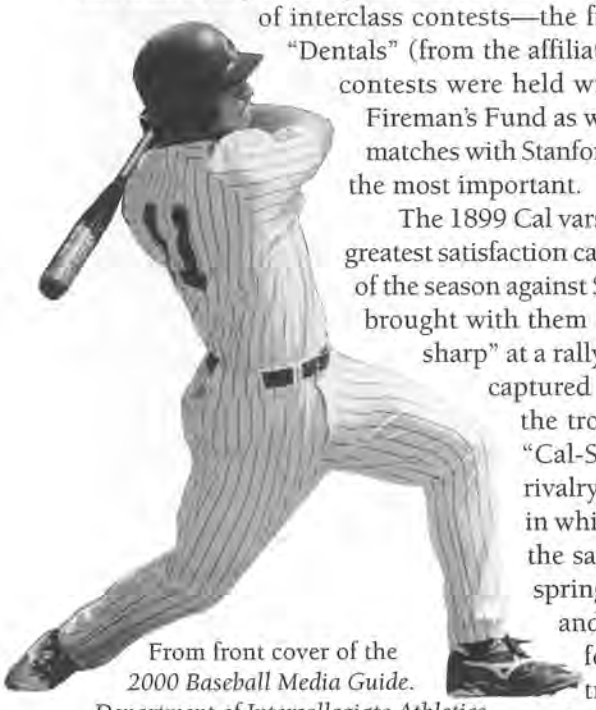
Intercollegiate track and field competitions began in 1893 for men when Berkeley defeated Stanford 91-35. There also was the annual freshman-sophomore encounter and a University Field Day. In 1899, over 800 spectators, including "a large number of the fair sex," were present at the University Field Day to cheer their favorites. Freshman A. W. Plaw bettered the United States intercollegiate record by seven inches by throwing the hammer 150 feet, and immediately was awarded the big "C" emblem.[18] Three weeks later the track teams of Berkeley and Stanford held their seventh encounter at the cinder track on the Berkeley campus. (The University of California had won five times; the 1896 intercollegiate field day ended in a 56-56 tie.) Before what was said to be "the largest crowd of spectators in the history of intercollegiate field days," California again carried the day by a score of 74-43, winning nine first places and seven second places to Stanford's four and five.[19] Although he did not perform well at this meeting, Plaw won both the shot put and hammer throw in 1900 when Cal defeated Stanford at Palo Alto by a score of 84-33.[20]

During the 1890s and early 1900s, West Coast students interested in athletics looked to eastern colleges—especially Harvard and Yale—for inspiration. The success of Berkeley's 1895 twelve-man track squad during its tour of the East and Midwest (see "The First 'Golden Bears': The Transcontinental Tour of Cal's Track Team, 1895," published in this volume) prompted enthusiasts to declare that the University of California now must be recognized as a full partner in the fraternity of the nation's most prestigious institutions. The team sent East in 1900 was not as successful in its meetings with Yale, Princeton, and University of Pennsylvania, the Western In-

1901 Blue and Gold.

tercollegiate Championship at Chicago, or the" great intercollegiate meet at New York." However, those who had participated maintained that they had gained valuable experience about such things as the importance of "a first class trainer" and keeping "in touch with advanced Eastern methods."[21] Receipts were $3,003.87; expenses $2,956.73, most of which was for transportation, hotel accommodations, and "the dining car."[22]

As is the case in 1999 and 2000, more games in 1899 and 1900 were scheduled in baseball than in any other sport. In addition to those played by the varsity, there were a number of interclass contests—the freshmen, sophomores, juniors, seniors, and "Dentals" (from the affiliated dental department) all had teams. Varsity contests were held with the alumni and teams like the Owls and Fireman's Fund as well as local colleges, then few in number. The matches with Stanford, which typically culminated the season, were the most important.



From front cover of the *2000 Baseball Media Guide. Department of Intercollegiate Athletics.*

The 1899 Cal varsity won nine of its twelve baseball games. The greatest satisfaction came on April 15, when Cal won its second game of the season against Stanford by a score of 9–7. Stanford rooters had brought with them "a large battle ax . . . which they had ground sharp" at a rally in Palo Alto. Following the game, the ax was captured by the California men, who secretly brought the trophy to Berkeley. Thus began the saga of the "Cal-Stanford ax"—a feature of the intercollegiate rivalry that exists to this day.[23] Baseball was a game in which older men might participate, even if not on the same level as the young male collegian; and in spring 1900, a game was held between the faculty and Skull and Keys (senior men's honor society founded in 1892) to raise money to help the track team with its second eastern tour. The fraternity won 15-13.[24]

Throughout the nation football unquestionably was the premier sport. By the late 1890s, the annual Harvard-Yale match (played in New York City) attracted upwards of 50,000 spectators.[25] The *Chicago Tribune* in 1896 estimated that 5,000 games involving some 120,000 athletes were played somewhere in the United States on Thanksgiving Day.[26] For quite a number of years, it should be noted, "All American" teams (selected by Yale's football mentor Walter Camp, widely recognized as "the father of American football") rarely included a player who was not a member of the Harvard, Yale, Princeton, or University of Pennsylvania "eleven."

Shortly after the University of California moved to its Berkeley campus in 1873 students had begun to play desultory interclass matches. In 1882 a university "fifteen" (i.e. soccer team) was created; the eleven-man "American" game was first played in 1886. An article in the *Overland Monthly* in 1893, which commented on the rapid rise of football on the Pacific Coast, noted that it was the founding of a rival university (Stanford) and the importation of coaches from eastern colleges that had brought the game to a place of prominence in Northern California.[27]

Before the reforms that followed the creation of the National Collegiate Athletic Association (NCAA) in 1906, the game of American football was markedly different than it would become by the 1920s. According to *Spalding's Official Foot Ball Guide for 1902* (which contained the rules used by most colleges), the length of the game was 70 minutes divided into two equal halves. Rule 26—"Scoring"—specified: "Goal obtained by touchdown, 6 points.

. . . The six points is inclusive of the 5 points for touchdown; kicking the goal adds 1 point." A goal from a field kick was worth 5 points; a safety awarded 2 points to the opponents.[28] Many rules were quite different than are today's: "A player may throw, pass or bat the ball in any direction except toward his opponents' goal" (Rule 19). "There shall be no . . . tackling below the knees." (Rule 27).[29]

Football jackets were made from heavy white duck cloth and laced up the front. Canvas pants were padded; moleskin pants had small strips of cane sewn in to protect the thighs. Canvas or leather shin guards and small felt-lined leather pads were worn to protect shins, shoulders, and elbows. Some players wore a "head harness" (a precursor to the helmet) made from English oak tanned leather or Morrill's nose mask (which was made from rubber); most let their hair grow long during the football season in the hope that this would provide some protection from blows to the head.

Following their first football encounter on March 19, 1892, students at the University of California and Stanford annually called in coaches from Yale (most frequently), Princeton, or Pennsylvania to help them prepare for the annual Big Game.[30] Camp coached Stanford for the second 1892 game and again for the 1894 and 1895 encounters. Yale "All American" guard Thomas "Bum" McClung coached the University of California varsity for its second 1892 game; Cal's 1893 team was coached by Yale "All American" tackle W.W. "Pudge" Heffelfinger. By 1899 there had been eight Big Games. Three contests had ended in a tie; Stanford had won four times. In 1898, coached by former Princeton footballer Garrett Cochran, the Cal Varsity had secured a 22-0 victory.

1901 Blue and Gold.

Early in fall 1899 the *Daily Californian* announced that the football squad, housed in No. 1 of the University cottages, was "settling down to the steady hard training of the season. They eat, drink and sleep by rule, and their evenings are spent in indoor practice of various sorts, and in receiving instruction from the coaches."[31] (Hard training in the late 1890s typically meant an hour in the morning and an hour and a half or so in the afternoon practicing handling the ball, punting, and running.) The freshman squad that year

Football statue, sculpted by Douglas Tilden, on campus, in *University of California* (Brooklyn, NY: The Albertype Co., n.d.).

won four of its eight matches against teams like Oakland and Berkeley high schools but lost to both Lowell High School and the Stanford Freshmen (0-6); two games ended in 0-0 ties. The varsity defeated League of the Cross, University of Nevada, University of Oregon, the State Normal School at San Jose, and Olympic twice (a third game with Olympic ended in a 0-0 tie). Its 30-0 victory over Stanford on Thanksgiving Day before 16,000 spectators in San Francisco—"the largest crowd ever gathered on a Pacific Coast field"—was heralded with full-page accounts in the local newspapers. Berkeley rooters were distinguished by hats trimmed in vivid blue and yellow; Stanford men wore red vests. The weight of the California team averaged 171 pounds; the Stanford team, 172 pounds![32] (Whereas the heaviest man on the eighteen-member 1899 squad was 194 pounds, fifteen of the one hundred and seven players on Cal's 1999 football roster were listed at 275 pounds or heavier.)[33] By winning two consecutive games against its arch rival, the University of California received Douglas Tilden's famous statue "The Football Players," which was awarded by San Francisco mayor James D. Phelan.[34]

The varsity's final 1899 game was played on Christmas Day before 8,000 spectators at the Sixteenth and Folsom Street Grounds in San Francisco[35] against a team from the Carlisle Indian School (which included "All American" left halfback Isaac Seneca). Carlisle already was playing football when Glenn S. "Pop" Warner arrived in 1899; during Warner's tenure (1899-1903 and 1907-1914) it became a football power, defeating many leading college teams.[36] The visitors amassed a total of 717 yards (257 by runs; 460 by kicks) to California's 662 yards (131 by runs; 531 by kicks). The only score occurred when Cal's fullback, pursuing a bad snap that was intended for the punter, was tackled in his own end zone for a safety by Carlisle's 195 pound left tackle.[37]

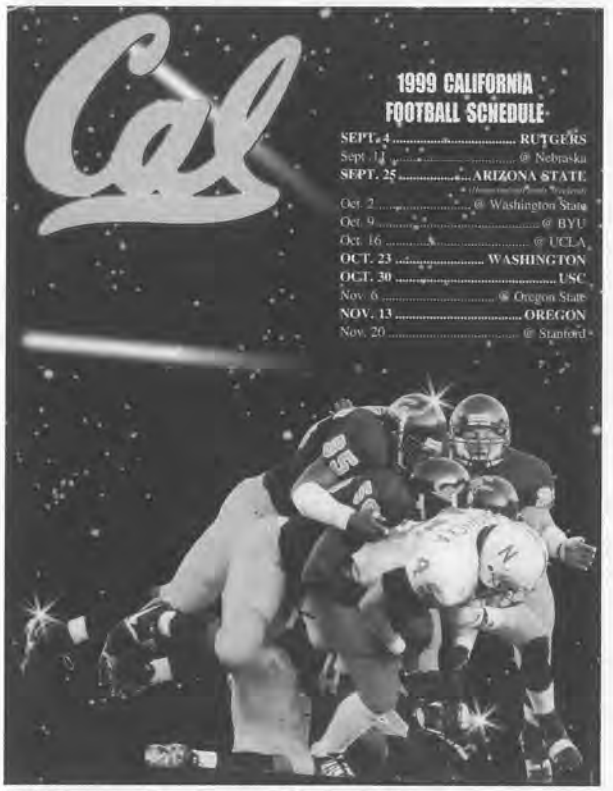
Intercollegiate Athletics at the End of the Twentieth Century

During the last hundred years intercollegiate athletic programs across the United States have undergone remarkable transformations. It is doubtful that anyone in 1900 could have imagined the diversity of the sports that is offered in 2000—or the numbers of young men and young women who now participate. Even more remarkable have been the performances of individual athletes. Whereas in 1899 freshman A. W. Plaw's 150-foot hammer throw was an intercollegiate record, the qualifying standard set for the men's 2000 NCAA championship was 223 feet 1 inch. More telling, perhaps, was the 200 feet 1 inch standard set for women![38]

The tremendous growth of intercollegiate athletics has been accompanied by, and made possible because of, a wide range of innovations and support services. In 1900, "the athletic affairs of the University [were] under the control of a special committee of which the Vice-President of the Associated Students is chairman";[39] football coach Cochran had one assistant and two "sub" coaches.[40] In June 2000, the *Chronicle of Higher Education* reported that there were 15,498 head coaches at National Collegiate Athletic Association institutions.[41]

(This figure does not include the much larger number of assistant coaches—often ten or more per team in football.) To these numbers must be added thousands of coaches who perform their duties in programs that are conducted under the auspices of the National Association of Intercollegiate Athletics, National Junior College Athletic Association, and other governing bodies.) Whereas sports enthusiasts in the early 1900s had gathered at the local telegraph office to learn of their team's fate and waited eagerly for newspaper accounts that detailed the sequence of plays that had occurred during the Big Game and other contests, television now provides instantaneous gratification—or disappointment—although always in ways that are mediated by the producers of the broadcast.[42]

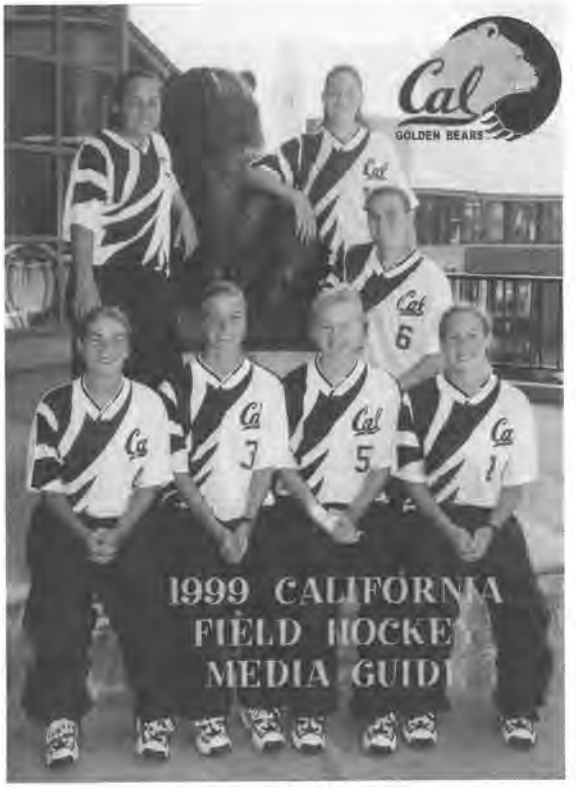
Improvements in equipment, made possible by new technologies and standard-setting organizations like the National Operating Committee on Standards for Athletic Equipment (NOCSAE), have gone a long way to reducing the types of devastating injuries and deaths that precipitated "the football crisis of 1905."[43] While no item of equipment has received more attention than has the football helmet, scores of scientifically designed protective devices now are available to athletes in most sports. Advances in training techniques and regimens have been no less impressive. In the early 1900s, a trainer's services consisted mostly of taping, bandaging, massage, and reducing dislocated joints. A comparison of S. E. Bilik's slim *Athletic Training* (1917) and the 800-page ninth edition of *Principles of Athletic Training* (1997) is illustrative of the massive changes that have occurred.[44] It might come as a surprise to today's athletes to learn that as late as the 1950s many football coaches prohibited their players from engaging in weight training. Intercollegiate programs now employ numerous strength, conditioning, and weight training coaches, physical therapists, nutritionists, podiatrists, orthopedists, and internists—all working under the direction of a head team physician (who usually has training in "sports medicine")—as well as cadres of trainers certified by the National Athletic Trainers Association.



1999 Golden Bear Football Media Guide. Department of Intercollegiate Athletics.

The growth of intercollegiate opportunities for female students has been no less remarkable. In the early 1900s, University of California "coeds" had played three or four "intercollegiate" (the term *was* used at the time) basketball games a year against local high schools, Mills College, and Stanford. By contrast, the *1999-2000 Cal Women's Basketball Media Guide* listed thirty contests against teams from across the United States.

The very limited "extracurricular" activities available to Berkeley's female students in the early 1900s, as for example an infrequent "intercollegiate" fencing bout against Stanford, became even more restricted during the 1920s and 1930s. Following the 1920 Antwerp Olympics a controversy erupted over amateur athletics; the protagonists were the



Department of Intercollegiate Athletics.

NCAA, Amateur Athletic Union, and American Olympic Committee. A National Amateur Athletic Federation (with former Assistant Secretary of War Henry Breckenridge as president) was created in 1922; the following year a Women's Division—NAAF (with Mrs. Herbert Hoover as president) was organized. The NAAF favored broad-based programs that emphasized "sport for all." For the next four decades most colleges and universities gave no, or little, attention to any kind of *intercollegiate* competition for female students. Because adequate programs for the very highly skilled woman were not provided, female collegians like Helen Wills Moody Roark (winner of eight Wimbledon singles titles, thirteen United States, and six French tennis championships in the 1920s and 1930s) and swimmer Ann Curtis Cuneo (gold medalist in women's 400-meter freestyle and 400-meter relay team at the 1948 London Olympics) were obliged to hone their athletic skills elsewhere than at the university.

Social developments—especially the women's movement—brought about modest improvements in the 1960s.[45] Another factor was the 1952 Helsinki Olympics—the first in which the USSR participated. It quickly was recognized that victories by female athletes could improve the United States' medal count; hence, steps were taken to implement and improve athletic opportunities for women. What had been an evolution became a "revolution in women's sports"[46] following the 1972 Education Amendments Act, Title IX of which specified: "No person in the United States shall on the basis of sex, be excluded from participation in . . . any education program or activity receiving federal assistance." At Berkeley, a Coordinator of Women's Intercollegiate Sports was appointed in 1973, and the women's budget was increased from slightly over $3,000 to $42,500;[47] three years later an autonomous Department of Intercollegiate Athletics for Women was formed. The separate men's and the women's programs were merged in 1991.

In 1999, the Department of Intercollegiate Athletics offered eleven men's sports (baseball, basketball, crew, football, golf, gymnastics, rugby, soccer, swimming, tennis, water polo) and twelve women's sports (basketball, crew, field hockey, golf, gymnastics, lacrosse, soccer, softball, swimming, tennis, volleyball, water polo). Three additional sports were organized as "combined programs" (cross country, diving, track). This number gives Cal the distinction of providing for students one of the most comprehensive programs in the United States.

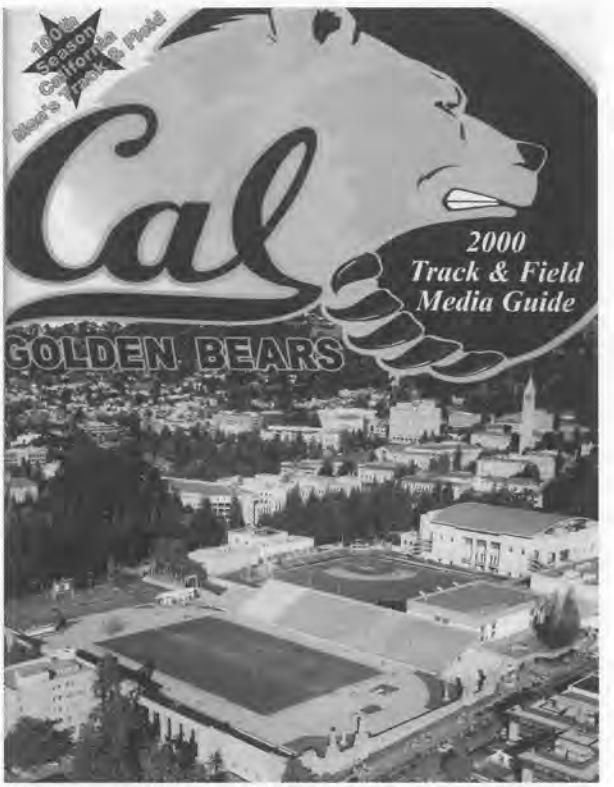
Over the last one hundred years, University of California athletes have won numerous titles and honors. More than one hundred at Berkeley alone have been members of Olympic teams, giving to Cal a record that few other colleges and universities can match. Forty of these individuals have been from track and field. From Stockholm in 1912 to Atlanta in

1996, the only Olympic Games in which one or more Cal track athletes were not included was at Amsterdam in 1928. University of California crews won Olympic gold in 1928, 1932, and 1948.[48] Athletes who competed at Berkeley also have been members of gymnastics, water polo, field hockey, tennis, and other Olympic teams. More than thirty present and former Cal athletes and coaches were in Sydney, Australia for the 2000 Olympics. A total of thirty-four medals were won by current and former students from various University of California campuses.

Whereas in the 1890s and early 1900s Walter Camp had confined his "All American" selections largely to football players at eastern colleges, during the twentieth century "All-American" honors have gone to 1,099 Cal athletes in twenty-one sports ranging from baseball to football, to women's gymnastics, to men's and women's soccer and basketball, and more.[49] This is to say nothing of other University of California students from other campuses, UCLA in particular.

From their first appearance in 1925—when they won the national championship—to 1999, members of the Golden Bears tennis varsity have participated in four quarterfinal and five semifinal NCAA tournaments. Since the inception of NCAA women's championships in 1982, Cal's women have reached the tennis quarterfinal round fourteen times and the semifinal round three times. (Prior to 1982, national championships in women's sports had been organized under the auspices of the Association of Intercollegiate Athletics for Women.)[50] Completing a schedule that included seventy games, the women's softball team tied for third place in the 1999 College World Series.[51]

Men's basketball won the 1999 National Invitation Tournament with a 61-60 victory over Clemson, the Golden Bears' first national postseason basketball crown since their NCAA Championship in 1959. Three-time "All American" Bevan Hart won the 2000 NCAA decathlon title.[52] Cal won the bronze medal at the 1999 NCAA Women's Rowing Championships; for men's rowing, 1999 was an especially satisfying year. After sweeping the Pac-10 eight-oared events for the second consecutive season, the JV crew won the Intercollegiate Rowing Association championship and the freshmen took the silver medal. Finishing with an undefeated season, the men's varsity crew won the national title in 1999—a feat it repeated the following year by vanquishing previously undefeated Brown to win the 2000 Intercollegiate Rowing Association championship.[53]



Department of Intercollegiate Athletics.

We can only speculate about what Benjamin Ide Wheeler, who had rowed at Brown one hundred and twenty-five years earlier, might think about these accomplishments. What, also, might Wheeler think about the tenth consecutive national title that men's rugby won in 2000? It was,

Cal men's varsity crew, IRA Champions, 1999. *Department of Intercollegiate Athletics.*

after all, Wheeler and Stanford's president David Starr Jordan who had initiated actions that led in 1906 to the temporary suspension of football at both institutions and the substitution of rugby for the annual Big Game.[54] One of the most enduring athletic aspects of the years from 1906 to 1914 has been the strong rugby legacy that exists in the Bay Area today, especially at Berkeley.

And what might Wheeler think of the magnificent facilities in which intercollegiate athletes—women and men—now practice and perform their sports? When he arrived the Berkeley campus had only the cinder track, the original wooden Harmon Gymnasium, one tennis court alongside Strawberry Creek, a baseball backstop, and lots and lots of open space! Today athletes have at their disposal outstanding facilities such as the Hellman Tennis Complex, Spieker Aquatics Complex, Goldman Field at Edwards Stadium, and the new 12,000 seat Walter A. Haas Jr. Pavilion, which has been created out of the Harmon Gymnasium.

ENDNOTES

The author thanks members of the Department of Intercollegiate Athletics for their valuable assistance.

1 John A. Lucas and Ronald A. Smith, *Saga of American Sports* (Philadelphia: Lea and Febiger, 1978), 192.

2 On certain similarities with late nineteenth-century intercollegiate athletics see: Roberta J. Park, "Muscle, Mind, and Agon: Intercollegiate Debating and Athletics at Harvard and Yale, 1892-1909," *Journal of Sport History*, 14 (1987), 263-285.

3 Lucas and Smith provide a good overview of these developments.

4 The word soccer (sometimes written as "socker" in the 1800s and early 1900s), the word used in the United States, derives from "Association Football." (Other countries typically call the game "football.") During the first six decades of the nineteenth century various forms of "football" were played at Oxford, Cambridge, and the public schools of England. It was not until 1863, when the Football Association was formed that general agreement was secured about what rules would govern the game. See for example, Eric Dunning, "Industrialization and the incipient modernization of football," *Stadion: Zeitschrift für Geschichte des Sports und der Körperkultur,* 1 (1975), 103-139.

5 The Rugby Football Union was formed in England in 1871.

6 See J. A. Mangan and Roberta J. Park, eds., *From "Fair Sex" to Feminism: Sport and the Socialization of Women in the Industrial and Post-Industrial Eras* (London: Frank Cass, 1987).

7 "Boat Crew for Astoria," *Daily Californian*, August 22, 1899. In these early days, barges not shells were used in many races.

8 "Benjamin Ide Wheeler, Our New Executive," *Daily Californian*, August 21, 1899; "Boating," *1901 Blue and Gold*, 27 (1900), 132.

9 "California Crew is Victorious," *Daily Californian*, April 9, 1900; "New boating association," *Daily Californian*, April 17, 1900.

10 "Tennis," *1901 Blue and Gold*, 27 (1900), 130-131; "Their One Solace: Stanford Wins the Tennis Tournament Saturday," *Daily Californian*, April 24, 1899.

11 "Tennis Court Subscriptions: More Money Needed," *Daily Californian*, October 31, 1899; "Fall Tennis Tournament," *Daily Californian*, November 15, 1899.

12 "Gym to be Made Compulsory for Women Students," *Daily Californian*, August 27, 1900; "Girls' Court Almost Completed," *Daily Californian*, November 13, 1901.

13 "Used Baskets as Goals," *San Francisco Examiner*, November 19, 1892.

14 Verne A. Stadtman, ed., *The Centennial Record of the University of California* (Berkeley: University of California Printing Department, 1967), 32.

15 The game had been introduced by Walter Magee, instructor in physical culture, who had seen it played while he was visiting a number of eastern colleges in 1892. The women's game was first played at Smith College a few months earlier. At the time, the court was divided into nine equal sections, each with a player from opposing teams; players were confined to their respective sections.

16 See for example, "On the Eve of the Battle," *San Francisco Chronicle*, April 4, 1896.

17 See May Dornin, "Basketball at the University of California from its Beginning in 1892 Until its Acceptance as a Major Sport in 1916," University Archives, University of California, Berkeley.

18 "Annual Championship Field-day," *Daily Californian*, April 3, 1899.

19 "Score 74-43," *Daily Californian*, April 24, 1899.

20 "Blue and Gold Defeat the Cardinal by Large Margin," *Daily Californian*, April 23, 1900.

21 "Athletes Talk of the Trip," *Daily Californian*, August 23, 1900.

22 "Track Team Expenditures and Receipts," *Daily Californian*, August 22, 1900.

23 "The Series Won," *Daily Californian*, April 17, 1899; "The Ax Our Own," *Daily Californian*, April 21, 1899.

24 "Faculty Plays Baseball," *Daily Californian*, April 5, 1900.

25 See for example, Michael Oriard, *Reading Football: How the Popular Press Created an American Spectacle* (Chapel Hill, NC: The University of North Carolina Press, 1993).

26 See Lucas and Smith, 238.

27 Phil Weaver, Jr., "Inter-collegiate Football on the Pacific-Coast," *Overland Monthly*, 21 (1893), 113-131.

28 *Spalding's Official Foot Ball Guide for 1902* (New York: American Sports Publishing Co., 1902), 167, 180.

29 Ibid., 159-186.

30 Although the phrase "big game" has been used for end-of-the-year encounters in many parts of the country, it is most closely associated with the annual University of California-Stanford contest. See for example John T. Sullivan, *The Big Game: A Game-by-Game History of One of America's Greatest Football Rivalries* (New York: Leisure Press, 1983).

31 "Names of the Varsity Squad," *Daily Californian*, October 13, 1899. At the time six to eight weeks was deemed ample preparation for the season. Morning practice (passing, kicking, punting) lasted about an hour; an afternoon of an hour and a half focused upon both individual and team work. Weight training, which did not come into vogue until after the 1950s, was not included. See for example, Walter Camp and Lorin F. Deland, *Football* (Boston: Houghton Mifflin, and Co., 1896).

32 "College Elevens Tuned Up for the Big Game Tomorrow," *San Francisco Chronicle*, November 29, 1899; "Triumph of Blue and Gold," *San Francisco Chronicle*, December 1, 1899.

33 *Cal 1999 Golden Bear Football Media Guide*, 54-55.

34 Tilden had used two English football players as his models. The bronze statue, cast in Paris, had been shipped around the Horn and placed on exhibition at the entrance to the Mark Hopkins Institute of Art in San Francisco, which was affiliated with the university. Since 1900 it has been located in the grove of oak trees just south of the Valley Life Sciences Building.

35 The first Cal-Stanford contest to be played on the Berkeley campus took place in 1904 on the newly constructed California Field.

36 See Reet A. Howell and Maxwell L. Howell, "The Myth of 'Pop Warner': Carlisle Revisited," *Quest* 30 (1978), 19-27.

37 "The Carlisle Game," *1901 Blue and Gold*, 28 (1900), 116.

38 *Golden Bears 2000 Track and Field Media Guide*.

39 "Athletic Committee," *1901 Blue and Gold*, 26 (1900), 109.

40 "Football 1899," *1901 Blue and Gold*, 26 (1900), 110-111.

41 "Athletics," *Chronicle of Higher Education*, June 2, 2000, A53.

42 See for example, John Fiske and John Hartley, *Reading Television* (London: Methuen and Co., Ltd., 1978); James E. Larson, "Commercial Imperatives: NBC's Construction of the Seoul Olympic Games Opening Ceremony," in Fernand Landry, Marc Landry, and Magdeleine Yerlès, eds., *Sport: The Third Millennium* (Sainte-Foy, Québec: Les Presses de l'Université Laval, 1991), 73-93.

43 See for example John H. Moore, "Football's Ugly Decades, 1893-1913," *Smithsonian Journal of History*, 2 (Fall 1967), 49-68; Guy M. Lewis, "Theodore Roosevelt's Role in the 1905 Football Controversy," *Research Quarterly*, 40 (1969), 717-724. These injuries and other concerns of the period led to the founding of the NCAA in 1906.

44 S. E. Bilik, *Athletic Training* (n.p., 1917); Daniel D. Arnheim and William E. Prentice, *Principles of Athletic Training*, 9th ed. (Madison, WI: Brown and Benchmark, 1997).

45 See Ellen Gerber, "The Controlled Development of Collegiate Sports for Women, 1923-1936," *Journal of Sport History,* 2 (1975), 1-28; Bonnie J. Hultstrand, "The Growth of Collegiate Women's Sports: The 1960s," *Journal of Physical Education, Recreation, and Dance,* 64 (1993), 41-43, 63.

46 "Revolution in Women's Sports," *WomenSports,* 1 (September 1974), special insert.

47 See Roberta J. Park, "A Gym of Their Own: Women, Sports, and Physical Culture at the Berkeley Campus, 1876-1976," *Chronicle of the University of California,* 1:2 (1998), 21-47.

48 *1999-2000 Men's Swimming Team Media Guide,* 26; *1999-2000 Swimming and Diving Media Guide,* 18.

49 *Cal Golden Bears 1999-2000 Women's Basketball Media Guide,* 109.

50 *Cal Golden Bears 2000 Tennis Media Guide,* 24, 41-42.

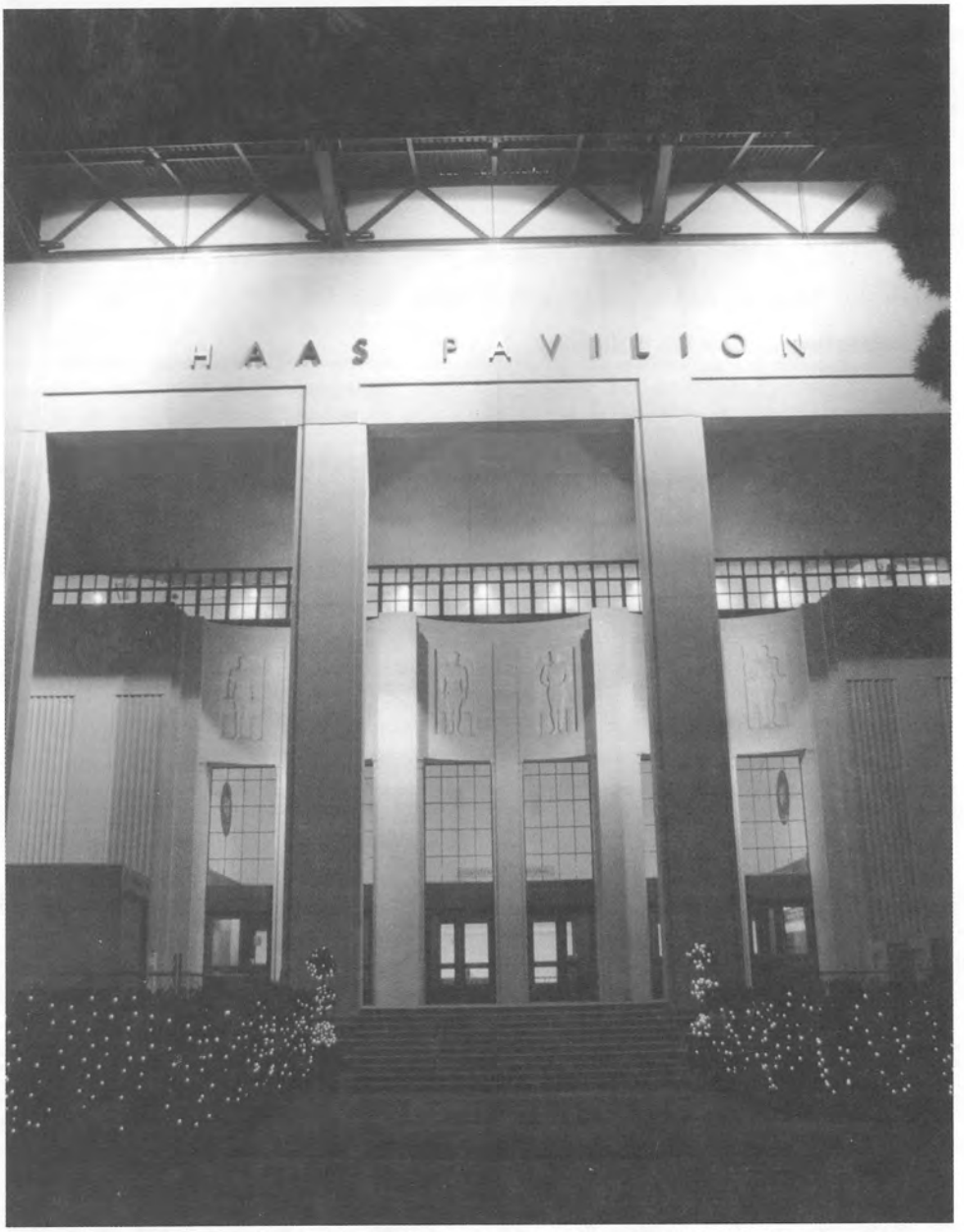
51 "Best-ever Season Leads Bears to College World Series Third-place Finish," *Cal Golden Bears 2000 Softball Media Guide,* 9.

52 "Hart Wins Decathlon Title at NCAAs," *Daily Californian,* June 6, 2000; "Olympians and Olympic Coaches," *Golden Bears 2000 Track and Field Media Guide,* 42-43. Those selected for the 1980 team did not participate because of the boycott.

53 "Athletic highlights," *1999-2000 Cal Women's Basketball Media Guide,* 108; "Bears Stand Atop Elite with Title," *Daily Californian,* June 6, 2000.

54 Berkeley returned to football in 1915 and played its "big" game against the University of Washington. Stanford continued to play rugby, meeting the University of Santa Clara in its final match. These arrangements were not satisfying for students and alumni at either institution. The 1919 football contest marked a return of the Cal-Stanford Big Game.

New basketball court in Haas Pavilion. *Department of Intercollegiate Athletics.*



The new Haas Pavilion, named for Walter A. Haas Jr. '37 and built with the help of a generous gift from the Haas family, opened in 1999. Described as combining "the old graces" of Harmon Gymnasium with "more modern stylings," Haas Pavilion has seating capacity for 12,000 basketball fans and unobstructed views of the court.
Department of Intercollegiate Athletics.

ORAL HISTORY AT THE UNIVERSITY OF CALIFORNIA, 1905–2000

LOS ANGELES, SANTA CRUZ, AND BERKELEY

Ann Lage with Dale E. Treleven and Randall Jarrell

ORAL ACCOUNTS HAVE TRANSMITTED HUMAN HISTORY and cultural traditions since earliest times, but oral history as a formal method of creating archival sources for historical research is a relatively recent development. One of the first modern practitioners of the research technique that has come to be known as oral history was Hubert Howe Bancroft, the nineteenth-century historian of California and the West. After assembling a vast archive of books, journals, maps, and manuscripts to document western North America, Bancroft turned in the 1880s to an unorthodox method of adding to his collection of historical sources:

> Recognizing that much important knowledge resided in the memories of aging Californians who were not of a mind to write it down on paper, Bancroft undertook his boldest collecting stroke by hiring assistants to interview all kinds of westerners so as to create their autobiographies in a series of manuscripts that he called the "Dictations."[1]

When Bancroft sold his entire library to the regents of the University of California in 1905, his "Dictations" became a part of The Bancroft Library, where they continue to be important sources for the study of California history. In the mid-1940s and early 1950s, two active members of the Berkeley Academic Senate's Library Committee, Professors George R. Stewart and James D. Hart, developed the idea of continuing Bancroft's project, with the aid of the newly invented portable tape recorder. A series of interviews in Paris with Alice B. Toklas started the renaissance of Hubert Howe Bancroft's oral history project.[2]

This undertaking was more formally established at Berkeley in 1954 with the support of President Robert Gordon Sproul. Sproul, just recovering from the divisive loyalty oath controversy and looking forward to the upcoming centennial of the university's founding, could well appreciate the value of documenting the unwritten history of the university, as well as the broader arena of state political and cultural life. With these goals in mind, he funded the Regional Cultural History Project, precursor to The Bancroft Library's Regional Oral History Office. Earlier, in 1946 historian Allan Nevins, also recognizing the potential of archival interviews, had established the oral history program at Columbia University. A new methodology for historical research came of age, with strong bases on both coasts.

Soon thereafter, in 1960, the Oral History Program at UCLA was established, and in 1963, two full years before the fledgling campus at Santa Cruz opened its doors, the Regional History Project at the UC Santa Cruz Library was launched to document the history of its campus and community. While other University of California campuses also have engaged in oral history research projects, these remain the three permanently established archival oral history programs within the university's library system. From the beginning, the history of the University of California has been a major collecting area for all three programs.

The directors of the oral history programs at Los Angeles, Santa Cruz, and Berkeley describe below some of the unique primary research resources their oral history programs have produced for the study of University of California history.[3]

AN INTRODUCTION TO UCLA'S ORAL HISTORY COLLECTION

Dale E. Treleven

At the urging of oral historians, librarians, and others in the UCLA community, the regents of the University of California in 1960 formally endorsed the establishment of an oral history project—as it was called forty years ago—which was eventually *a program* within the Library's Department of Special Collections. Today the collection developed by the UCLA Oral History Program holds over 6,000 hours of audiotaped interviews and 200,000 pages of transcript with well over 800 individuals. Interview subjects range from art to athletics, from education to politics, from music to science, and attract scholars from across the country and around the world. The collection is divided into twenty-three categories, with considerable overlap among them: African-American History; Architecture and Landscape Architecture; Art; Books and Printing; Business and Industry; Civil Liberties; Dance; Education; Humanities and Social Sciences; Labor Movement; Law; Libraries and Librarianship; Literature and Journalism; Local History; Medicine and Health; Military History; Motion Pictures and Television; Music; Politics and Government; Science; Sports; Theater; Water Resources.

Half of the collection, especially in the areas of Education, Humanities and Social Sciences, and Libraries and Librarianship, relates to interviews about University of California and UCLA history. For example, there are extensive interviews with such UCLA professors as **Waldemar Westergaard** (history), **Paul Dodd** (letters and science), **William Melnitz** (fine arts) and Chancellor **Franklin D. Murphy**. Nineteen individuals who attended UCLA during the Vermont Avenue campus ("Southern Branch") period and through the first half-decade at the current Westwood location (1929-1934) recount their student activities and leadership roles.

University of California regents **John Canaday**, **William Forbes**, **Allan Grant**, and **DeWitt Higgs** provide plentiful insights about their trusteeship terms, including new campus planning and construction and university unrest in the 1960s and 1970s. UCLA executive vice chancellor, later University of California president **David Saxon**, carries the University of California and UCLA story into the 1980s in his three-volume oral history. In-progress interviews with several other southern California regents and with **Charles E. Young**, UCLA chancellor from the late sixties to late nineties, will richly complement the collection's university-related historical data.

At the heart of the UCLA Oral History Collection are individuals' experiences and activities in campus and Los Angeles communities. Among the topics documented in ongoing campus interview series are psychiatry and the development of the Neuropsychiatric Institute and Hospitals on the Los Angeles campus. Other oral histories record the establishment of the ethnic studies centers and the women's studies program as they emerged in larger local and national contexts: the quest for equal and equitable opportunity. Also associated with that quest is the most significant addition to the UCLA Oral History Collection during the past two decades: ongoing projects documenting the lives and contributions of African Americans in the fine arts, architecture, business, politics, and community leadership. Some of the results are best illustrated in *Central Avenue Sounds: Jazz in Los Angeles*, published by the University of California Press in 1998.

On other topics as well, the UCLA Oral History Collection helps to extend UCLA campus boundaries to the Los Angeles metropolitan area, the southern California region, the nation, and the world. Two interview series focus on water: the Metropolitan Water District and the City of Los Angeles Department of Water and Power. Interviews either completed or in progress for the series *Entrepreneurs of the West* (with the UCLA Anderson Graduate School of Management) document entrepreneurial challenges, disappointments, and achievements. Projects of national and international scope include UCLA's collaboration with the *Frank Lloyd Wright Oral History Program*, the *History of Art History* (with the J. Paul Getty Trust), and the *Pew Scholars in the Biomedical Sciences Oral History and Archives Project* of The Pew Charitable Trusts, the latter project including over thirty Pew Scholar-interviewees located at seven University of California campuses.[4]

SOURCES FOR UC SANTA CRUZ HISTORY AT THE REGIONAL HISTORY PROJECT

Randall Jarrell

The University Library's Regional History Project—an oral history research office—was established at UC Santa Cruz in July 1963, prior to the campus's official opening in 1965. In addition to documenting the history of the central California coastal region and assisting students, townspeople, and faculty in conducting research through oral history interviewing, the project preserves the institutional history of UC Santa Cruz by recording first-hand accounts of faculty and administrators at Santa Cruz.

Among the oral histories with the builders of the campus and its component institutions is an extensive three-volume oral history with founding Chancellor **Dean McHenry**, which documents his youth, education, and career and the planning and building of UC Santa Cruz from 1961 until his retirement in June, 1974. A brief interview with **Clark Kerr**, president of the University of California from 1958 to 1967, reflects on the conception of UC Santa Cruz, including the site selection process, campus architecture, and land-use design; it recalls the origins and assesses the campus as it has come of age. Four volumes document outstanding scholars who headed three of the first colleges of the Santa Cruz campus and the University Library. Oral histories with historian **Page Smith**, biologist **Kenneth V. Thimann**, and social scientist **F. M. Glenn Willson** recall the establishment of Cowell, Crown, and Stevenson Colleges, respectively. **Donald T. Clark** recounts early UC Santa Cruz history and the beginnings of the University Library in his oral history published in 1993.

The UC Santa Cruz faculty series includes interviews, many still in process, with pioneering retiring faculty: **Leo Laporte**, earth sciences (1998); **Burney Le Boeuf**, biology; **Michael Nauenberg**, physics; **Andrew T. Newberry**, biology; **James Pepper**, environmental studies; **Peter Scott**, physics; and **Audrey Stanley**, professor of theater arts and founding director of Shakespeare Santa Cruz.

Oral histories with four former chancellors recall the development of the campus from 1976 to 1996: **Angus E. Taylor**, 1976-1977; **Robert L. Sinsheimer**, 1977-1987; **Robert B. Stevens**, 1987-1991; and **Karl S. Pister**, 1990-1996 (in process). Twenty-four early students at Santa Cruz have their say in two volumes of interviews conducted in 1967 and 1969 with members of the first graduating classes.

The Lick Observatory History Series includes recollections of life and work at the observatory on Mount Hamilton, from 1899 to 1969. Lick Observatory is now a unit of UC Santa Cruz. Interviewees include **Kenneth Campbell**, **Charles Donald Shane**, **Mary Lea Heger Shane**, and **A. E. Whitford**.

The Regional History Project also has oral histories documenting the lives and careers of two biologists/conservationists, both contributors to UC Santa Cruz's outstanding reputation in the environmental sciences. Just published, as an illustrated trade paperback, is *Kenneth S. Norris, Naturalist, Cetologist, Conservationist, 1924-1998: An Oral History Biography* (1999, 361 pp.). This volume of interviews with **Kenneth Norris** and his colleagues and former students documents his tenure at UCLA and UC Santa Cruz, his pioneering research with dolphins, his role in founding the University of California Natural Reserve System and UC Santa Cruz's Long Marine Lab, and his singular natural history field course. In *A Life in International Conservation Biology* (to be published in fall 2000), **Raymond F. Dasmann**, a UC Santa Cruz professor emeritus of environmental studies, discusses ecology and conservation biology and his work at the Conservation Foundation, the IUCN (International Union for the Conservation of Nature), UNESCO, and UC Santa Cruz's environmental studies program.[5]

DOCUMENTING UNIVERSITY HISTORY AT BERKELEY'S REGIONAL ORAL HISTORY OFFICE

Ann Lage

University history, always a major focus of the Regional Oral History Office at The Bancroft Library, represents approximately twenty percent of ROHO's collection of 1700 oral histories conducted over the course of 46 years. A total of 330 interviews in 170 volumes document the lives and multifaceted careers of faculty from every discipline, university administrators, staff, members of the Board of Regents, and alumni. *The University of California, Source of Community Leaders* series, funded by an endowment from the Class of 1931, contains oral histories with prominent alumni discussing their lives at Cal and their subsequent contributions in fields as diverse as journalism, marine biology, law, and international banking.

In keeping with the "turn of the century" theme of this issue of the *Chronicle*, we highlight here a selection of two groups of oral histories from the University History Series. The first group of interviewees are campus figures born in the nineteenth century whose lives and careers span a good part of the twentieth. The second group focuses on the governance of the University of California on the threshold of the twenty-first century.

The first group, in particular, demonstrates how inextricably university history is interwoven with the history, politics, economy, and culture of California and the nation. Prominent faculty members who contributed their expertise to a variety of public arenas have recorded oral histories that discuss their government and community service as well as their teaching and research. **Joel Hildebrand** (1881-1983) was a legendary chemistry professor; he joined the Berkeley faculty in 1913 and continued pursuing productive research in his field for another seventy years. A leader in campus governance for decades, beyond the campus he was president of the Sierra Club in the 1930s, where he was renowned for fostering the sport of ski mountaineering and for his role in the establishment of Kings Canyon National Park. Another Cal centenarian, **Dorothy Nyswander** (1894-1998), professor of public health, was an activist for public health education at home and abroad, from Ecuador to Pakistan to Jamaica. Her colleague, Professor **Jessie Biermen** (1900-1996), came to Berkeley's School of Public Health in 1947 after a full career in state public health agencies in California and Montana and with the U.S. Children's Bureau and the World Health Organization.

Professor of political science **Thomas C. Blaisdell, Jr.** (1895-1988) joined the Berkeley faculty in 1951 after twenty years of government service in the Roosevelt and Truman administrations. Fellow political scientist Professor **Joseph B. Harris** (1896-1985) was also active in Depression and World War II-era Washington. His most famous contribution was his invention of the first automated voting machine, the Votamatic. The oral history with professor of economics **Ewald Grether** (1899-1994) records six decades of contributions to the School of Business, known as the College of Commerce when Grether arrived at Berkeley, and documents a plethora of state and federal assignments from the wartime Office of Price Administration to fair trade legislation of a later era.

Oral histories with non-faculty members of the university community who lived through the turn of the century in 1900 and into at least eight decades of the twentieth century include Dean of Students **Katherine Towle** (1898- 1986), who was not only the first woman to serve as dean of students but also the first woman to become a colonel in the U.S. Marine Corps; "first lady" **Ida Wittschen Sproul** (1891-1981); and **Robert Underhill** (1893-1988), longtime university financial officer and secretary and treasurer to the Board of Regents.

A set of recent oral histories completed or in process at the Regional Oral History Office focuses on university governance in the last decades of the twentieth century. These include lengthy oral histories underway with two Berkeley chancellors in the 1980s and 1990s, **Ira Michael Heyman** and **Chang-Lin Tien**. An oral history with President Emeritus **David P. Gardner** recorded in 1995 and 1996 recalls Gardner's long association with the university on both the Berkeley and Santa Barbara campuses and provides a detailed look at the budgetary, political, programmatic, and personal factors that shaped his presidency of the University of California from 1983 to 1992. Soon to be released is the oral history of **Jack W. Peltason**, president from 1992 to 1995, who brought to the office during these particularly challenging years his wealth of experience in higher education, including chancellorships at the University of Illinois and UC Irvine.

Complementing the Gardner and Peltason oral histories is a four-volume oral history (to be available in 2001) entitled *Leading the University of California, 1983-1995: The Office of the President and Its Constituencies*. The twenty-four interviews with university vice presidents, chancellors, faculty leaders, regents, and government officials including Senior Vice President **Ronald Brady**, UC Davis and Riverside Chancellor **Ted Hullar**, Berkeley Professor **Martin Trow**, Regent **Dean Watkins**, and Governor **George Deukmejian** provide multiple perspectives on issues, leadership, and governance during the Gardner-Peltason presidencies.

Taken together, these oral histories on the University of California produced by the Berkeley, UCLA, and Santa Cruz programs are preserving for twenty-first century scholars a rich and varied historical record. They comprise a body of primary research material which continues the oral documentation of California begun more than a century ago by Hubert Howe Bancroft.[6]

ENDNOTES

1 James D. Hart, "Foreword," *Catalogue of the Regional Oral History Office, 1954-1979*, Suzanne B. Riess and Willa K. Baum, eds. (Berkeley: The Bancroft Library, University of California, 1980), vii-viii.

2 *Ibid.*, vii.

3 Oral histories produced by the UCLA and Berkeley programs are available for reading in The Bancroft Library and at UCLA's Department of Special Collections. UC Santa Cruz oral histories are in the UCSC McHenry Library and The Bancroft Library. All are listed by name of interviewee and key words in the California Digital Library / Melvyl®, the University of California's online catalog, at UCLA on ORION2, and on the OCLC and RLIN computer databases.

4 For further information about the UCLA Oral History Program, or to order a catalog of the collection or an interview, visit the website: http://www.library.ucla.edu/libraries/special/ohp/ohpindex.htm, or contact UCLA Oral History Program, A253 Bunche Hall, Box 951575, Los Angeles, CA 90095-1575; (310) 825-4932; oral-history@library.ucla.edu

5 For further information about the UCSC Regional History Project, visit the website: http://library.ucsc.edu/reg-hist/ or contact Regional History Project, Room 357, McHenry Library, UC Santa Cruz, Santa Cruz, CA 95064; (831) 459-2847; rjarrell@cats.ucsc.edu

6 For more information about the Regional Oral History Office, or to order interviews, search the ROHO catalogs, or read a selection of full-text oral histories online, visit the ROHO website http://www.lib.berkeley.edu/BANC/ROHO/, or contact ROHO at 486 Library, UC Berkeley, Berkeley 94720; (510)642-7395; roho@library.berkeley.edu

REVIEWS

Illustrated History of the University of California
William Carey Jones
San Francisco: Frank H. Dukesmith, 1895. 413 pp.
Revised edition: Berkeley: Students' Coöperative Society, 1901. 430 pp.

In 1895 William Carey Jones's *Illustrated History of the University of California* appeared, the first history of the University of California, and the university not yet thirty years old. Jones was in a good position to write this history; he graduated from the university in 1875, he had been Recorder of the Faculties for some years, and at the time of publication of the history he was associate professor of history and of jurisprudence.

The first two chapters tell the history of higher education in California from the time of statehood and the history of the College of California; the remainder of the volume contains a detailed chronicle of the university and its fortunes in its infancy, with one chapter devoted to the town of Berkeley. Here are detailed treatments of the political action taken to establish the university, the small beginnings and subsequent growth of the university, its academic organization and colleges, the regents and finances, the professional colleges, the students and beginnings of student and alumni groups. There are also chapters devoted to the Lick Observatory and the Mark Hopkins Institute of Art, the latter formed just two years before. The appendix offers a complete list of regents, faculty, and graduates up to that time, the names of all current students, and some statistical tables

One might think that such a history is not the place for an extended biography of Bishop Berkeley or for several pages on the churches of Berkeley, with full lists of their ministers—the chapter on Berkeley clearly reveals the sympathies of the author—but much valuable information is packed into these pages, accompanied by photographs of buildings and scenes long gone.

The revised edition of 1901 was published by the Students' Coöperative Society; in his preface, Jones states: "The development of the University during the past five years, and the important events that have marked its history during this period, have called for many additions." Two new chapters were added to the book, one on the general history of the five years since the first edition and one specifically on the Phoebe Hearst Architectural Competition. Other chapters sustained extensive revisions: the chapter on the town of Berkeley was severely modified, and the chapter on students was brought up to date and covered a wider variety of subjects, even football and track!

Both editions are lavishly illustrated from photographs, including many of O. V. Lange's 1893 series; many portraits of early faculty members are the only ones known. There is a surprising difference in the photographs chosen for the two editions.

These are important histories. Yes, they may suffer the defect of being written by someone perhaps not entirely objective, and, yes, the somewhat florid style falls heavily on our ear. Nevertheless they contain much detail of value and certainly have the advantage of someone writing in large part from his own experience.

—*William Roberts*

The California Idea and American Higher Education: 1850 to the 1960 Master Plan
John Aubrey Douglass
Stanford, CA: Stanford University Press, 2000. 460 pp.

California's leadership in higher education today is undisputed: Berkeley, UCLA, and San Diego consistently appear among the top-ranked universities in the nation; the University of California has six of its campuses as members of the prestigious Association of American Universities (no other state has more than two); the California State University is the largest system of higher education in the United States; and the state's community colleges provide ready access to postsecondary education for all citizens. The California Master Plan for Higher Education of 1960 is often cited as the source of the state's excellence in education, and it certainly deserves part of the credit. But John Douglass shows that not only leadership in developing institutions and systems of higher education, but also debates about the appropriate role and function of the various types of institutions, have a long history within the state. The 1960 Master Plan was the culmination of a series of debates and policy decisions that extend back to the very beginnings of the state's support for higher education in the latter half of the nineteenth century.

Douglass traces the development of the University of California from its first conceptions at the time of statehood through its establishment in 1868. He describes the fundamental schism between those university supporters who saw in the federal Morrill Land-Grant Act (1862) an opportunity to build an institution that would bring practical education to the farmers and laborers of the state, on the one hand, and those who wished to replicate the elite classical universities of the East, on the other. The battle over what kind of institution was appropriate to receive state support, who would control it, and who would benefit from it, continued into the California constitutional convention of 1878-79. Ultimately, the idea of an independent university, almost a fourth branch of state government, under the control of independent trustees, won out — not so much because it promised a superior educational experience for students or even because it had proven itself as a governance mechanism (there had been much distrust and criticism of the regents during the board's brief decade of existence), but more "within the context of a deep distrust of the legislature....[E]nough of the delegates were convinced of the need to protect the university from the seemingly inexhaustible corruption and politicking of lawmakers" (p. 68) to ensure its independent existence.

But autonomy did not necessarily bring immediate prosperity. The "common schools" received the bulk of state financial support for education in the latter decades of the nineteenth century. With the advent of the Progressive Era in state and national politics at the beginning of the twentieth century, however, the "California Idea" in higher education was born. That "idea" was a combination of elements: individuals should be able to participate fully in the economic and political life of the state through development of their talents and skills in postsecondary training; it was a public obligation to provide those opportunities for access; and new types of institutions and programs were needed to serve the rapidly changing needs of the state and its growing numbers of citizens. Higher education began to be viewed as one tool that state and local governments could use to bring about economic and regional development — a proactive role for the state and for higher education.

There followed, in the first two decades of the twentieth century, a remarkable time of institution-building as well as of consolidation of the "idea" of a state-supported system of higher education that would provide widespread access for individuals as well as a basis for social and economic development. California established the first system of community

colleges in the nation; regional colleges for the training of teachers, which had actually begun prior to the founding of the university, continued; and in 1919 the Los Angeles State Normal School became the "Southern Branch" of the University of California, marking the beginnings of a multicampus university system. By 1920 all three segments of what we now know as the tripartite system of higher education in the state were in place, supplemented by a private sector that boasted the best-endowed university in the nation, Leland Stanford Junior University.

Douglass traces the expansion of these elements through depression, war, and into the post-World War II era when the state colleges (the former teachers' colleges, now the California State University system) repeatedly challenged the university's monopoly of advanced training and education. A series of studies by educational experts ensued, some more politically astute than others, recommending numbers and types of institutions the state needed, and where. The influential Strayer Report of 1947 initiated the era of educational planning not only in California but throughout the United States— it was the first "master plan," asserts Douglass. However, skirmishes over functions and rates of expansion continued throughout the 1950s, with legislators from all over the state chiming in with bills to establish regional colleges in their districts, plans that many thought would place impossible financial burdens on the state and ensure widespread mediocrity if all were carried out.

In 1958 the University of California replaced its president of twenty-eight years, Robert Gordon Sproul, with a newcomer, the labor economist and former Berkeley chancellor, Clark Kerr. It seemed an opportune time to try to settle the jurisdictional and governance disputes—or to admit that higher education could not organize itself and let the legislature have its expansive way.

The story of the Master Plan has been often retold; Douglass's account of the work of the Survey Team, and of the political machinations of the participants both inside higher education and in state government, is an excellent version. The result, however unlikely it appeared during the process, was a reiteration of the long-standing tripartite system, only with the functions and clientele of the various segments more clearly established. The outcome, described by Clark Kerr as more of a "treaty" than a "plan," served as the basis for the tremendous expansion of the system in the 1960s and since, providing access as well as excellence in research and public service. While some elements of the plan have been changed or eroded, it remains largely intact today. It was a remarkable achievement, and Douglass's account places it in its proper historical, social, and political context as the culmination of a century of educational development in California.

But what of the future? In an "Epilogue" on the legacy of the Master Plan, Douglass does not repeat the old saw that those who ignore history are condemned to repeat it. He does, however, point out that what we have now resulted from debates and innovations in the past that may be instructive as we look at the changes necessary to make the system serve the future, with a quite different population and different state needs. He concludes, "Thoughtful innovation comes from an understanding of the past and thinking about how the future might be different" (p. 325). His book provides a landmark basis for that understanding.

—Marian L. Gade

William Carey Jones
First dean of the School of Jurisprudence, Jones taught from 1882 to 1923

Irving Stringham
Professor of Mathematics from 1882 to 1909

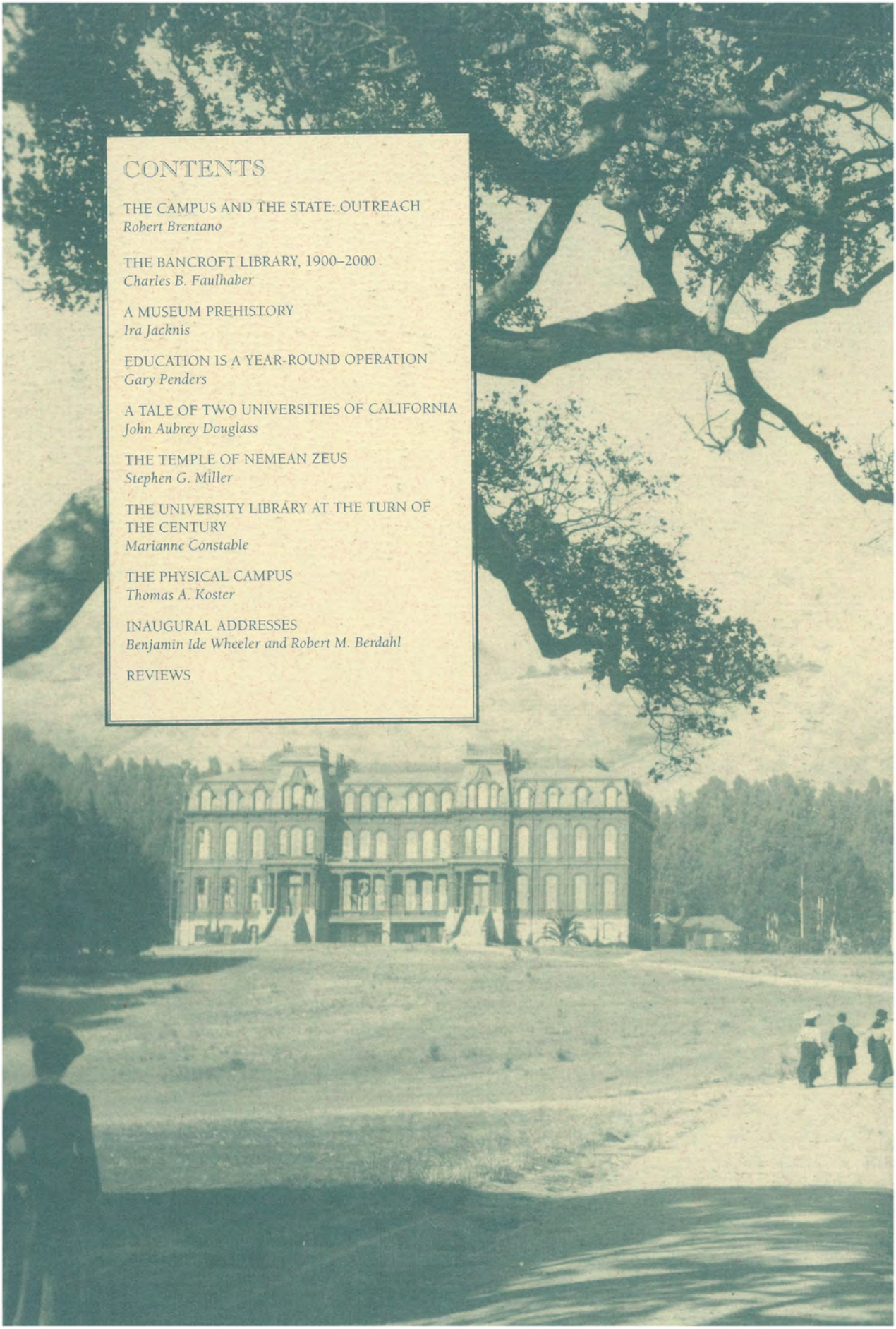
Willard Rising
Professor of Chemistry from 1871 to 1909

Bernard Moses
Professor of History and Political Science from 1875 to 1911

Albin Putzker
Professor of German from 1874 to 1910

Edward Bull Clapp
Professor of Greek Language and Literature from 1894 to 1917

Answers to question on page 12.



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