ARTICLE

"Making the Peaks Higher": Foundations of Stanford University's Growth, 1910–1960

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This article breaks new ground in its portrayal of the process through which a private research university obtained foundation funding. Stanford University's growth spurts after World War I and World War II were significantly enabled by financial support from the foundations of Carnegie, Rockefeller, and Ford. The process leading to Stanford's receiving major grants primarily involved interactions among a small group of individuals and reflected the confidence of foundation presidents and other top administrators in the capacity of the university's presidents and other leaders. The significance of such high-level interaction persisted even while major foundations professionalized, shifting responsibilities from trustees to staff. In the rendezvous between Stanford University and philanthropic foundations, these relationships mattered so much that at crucial junctures, funding to the university preceded expertise in the relevant field of study.

Keywords: US 20th; Higher Education; Foundations

In his September 1919 annual report to the board of trustees, Stanford University's president Ray Lyman Wilbur warned that the university had "reached a crisis in its development."¹ The cause was an insufficient flow of income. Stanford faced three problems related to what Wilbur called "the life blood of the university."² First was Stanford's tuition-free policy (except for students in professional programs), which excluded a major source of funds available to Stanford's private university peers. Second was the challenge faced by a *new* university in raising money. Typically, it takes decades for a university to establish a viable network of established alumni with significant disposable income. This had not yet happened for Stanford, an institution less than thirty years old. Third was the nature of Stanford's endowment. Stanford had had one of the largest university endowments at its creation (\$24 million as of 1910—greater than those of Harvard and Yale and just behind Columbia's), but by 1916, it had dropped to twentieth. The endowment, constrained by trust limitations, California law, and

1. Stanford University, Annual Reports of the President, 1919, 23.

2. Stanford University, Annual Reports of the President, 1921, 29.

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cautious trustees, was mainly composed of illiquid assets (largely railroad bonds) that produced modest income.³ A burst of inflation beginning in 1915 presented an additional challenge.⁴

Since Wilbur became president in 1916, the university had made concerted efforts to increase the flow of "life blood." During his first year as president, Wilbur created a Board of Athletic Control, turning perennially bankrupt student-managed athletics into an accountable, and profitable, intercollegiate athletics program.⁵ During the 1918–1919 year, the university sold its holdings in lands throughout the state for approximately \$3.5 million. That provided a huge windfall—the equivalent of nearly three times the university's annual income from all sources.⁶ Selling assets, however, was not a sustainable way to fund a university. With Wilbur's strong support, in January 1920, the university began charging tuition to all undergraduates.

Growth was central to President Wilbur's plans. One of the primary points he made to the board was to remind them that Stanford provided a valuable public service and that continuing to do so would require expansion rather than accepting a steady state or contraction. "Not to grow," Wilbur wrote, "is in part to die."⁷ Indeed, on just one page of his 1920 report to the board, Wilbur mentioned "grow" or "growth" eight times.⁸ In his 1919 report, Wilbur's list of "the most important present needs" of the university would require between \$10 million and \$25 million to fund.⁹

Stanford needed another source of funds to sustain its growth as what Wilbur called a "center for new thought and facts." That source was at hand. In September 1921, Wilbur wrote about the implications of a relatively new type of institution: "such great foundations as those of Carnegie [and] the various Rockefeller foundations."¹⁰ Indeed, the foundations of Andrew Carnegie and John D. Rockefeller had, as Hammack and Anheier note, "more wealth than all the nation's college endowments put together."¹¹ Warren Weaver, a longtime administrator with the Rockefeller Foundation, later estimated that during the formative years of the foundation/university relationship, annual grants from the Carnegie Corporation and Rockefeller's General Education Board represented about one-fifth of the total annual income of America's colleges and universities.¹² This was the beginning of a symbiotic relationship between foundations and universities that Steven Wheatley summarizes as "one of the tighter institutional pairings in American public life."¹³

- 3. Hammack and Anheier, A Versatile American Institution, 46.
- 4. Nilan and Kirk, Stanford's Wallace Sterling, 174–175.
- 5. Nilan and Kirk, Stanford's Wallace Sterling, 175, 177; Mitchell, Stanford University, 123–135.
- 6. Stanford University, Annual Reports of the President, 1919, 24.
- 7. Stanford University, Annual Reports of the President, 1919, 24.

8. Stanford University, *Annual Reports of the President*, 1920, 27. As Steven Wheatley notes, "The demands of the new competition were well understood by all players." Evidence of this is the nearly identical quotation from 1921 by Columbia's president Nicholas Murray Butler: "We have arrived at the point where [capital resources] must be increased unless we *are* going to stand still—and we cannot stand still because to stand still in this particular endeavor means to fall back." Wheatley, "The Partnerships of Foundations and Research Universities," 77.

- 9. Stanford University, Annual Reports of the President, 1919, 26–29.
- 10. Stanford University, Annual Reports of the President, 1921, 27-28.
- 11. Hammack and Anheier, A Versatile American Institution, 47.
- 12. Weaver, U.S. Philanthropic Foundations, 153–154.
- 13. Wheatley, "The Partnerships of Foundations and Research Universities," 74.

Thanks to foundation funding, Stanford University was able to chart the path of growth Wilbur envisioned. During the 1920s alone, Stanford's growth was enabled by resources from the Carnegie Corporation, the Rockefeller foundations (Rockefeller Foundation, General Education Board, Laura Spelman Rockefeller Memorial), and the Guggenheim Fund for the Promotion of Aviation. A university that had earned a total of \$1.2 million in income from all sources in the 1918–1919 academic year would garner grant appropriations of more than \$3 million in the 1920s.¹⁴ Thanks to the efforts of Wilbur and his Stanford classmate and close friend, Herbert Hoover, in 1921 alone the university received grants totaling more than \$1 million and launched a capital campaign to raise another million.¹⁵ Growth and reorganization accompanied increased funding. To accompany its existing School of Medicine and School of Education, Stanford established a School of Engineering (1922), a Graduate School of Business (1923), a School of Letters (1923), a School of Physical Sciences (1925), and a School of Hygiene and Physical Education (1928).¹⁶ In 1929, the number of undergraduate degrees conferred by Stanford doubled the 1920 figure, and the number of graduate degrees tripled.¹⁷

Grants to Stanford and its research university peers was part of a foundation perspective traceable to the suppliers of foundation capital. Andrew Carnegie and John D. Rockefeller, founders of America's largest early twentieth-century foundations, saw a benefit to society from attrition of the weak. Indeed, Carnegie was a friend of the Social Darwinist Herbert Spencer.¹⁸ Carnegie and Rockefeller viewed grants more as long-term investments than as short-term charity. Philosophically, this represented a shift from dealing with symptoms of problems to addressing root causes, a task tailor-made for the research university.¹⁹

The ideology of each foundation was sustained by its executives. Indeed, to the Carnegie Corporation's second president, Frederick Keppel (1923–1941), an advantage of investing in universities was that they represented "the greatest assurance of permanence."²⁰ Along the same lines, "Make the peaks higher" was the mantra of the General Education Board's president Wycliffe Rose (1923–1928).²¹ A similar "institutional approach" at the Ford Foundation during the 1950s was behind grants that helped Stanford, under president Wallace Sterling, experience another growth spurt.²²

Scholars of American higher education and foundations, including authors of individual foundation histories, have emphasized historical foundation/university relationships.²³

14. Stanford University, Annual Reports of the President, 1919, 24.

15. Stanford University, Annual Reports of the President, 1920, 97.

16. Wilbur, Memoirs, 297; Mitchell, Stanford University, 77–94; Nilan and Kirk, Stanford's Wallace Sterling, 251–252.

17. Stanford University, Annual Reports of the President, 1929, 3-7.

18. Ris, Other People's Colleges, 74.

19. Karl and Katz, "The American Private Foundation," 243–244; Sealander, "'Curing Evils at Their Source," 217–240.

20. Keppel, The Foundation, 11.

21. Fosdick, Adventure in Giving, 230.

22. McPeak to Heald, November 1, 1956. FA 622, Series 1, Box 10, Folder 127, FF.

23. Keppel, The Foundation; Fosdick, The Story of the Rockefeller Foundation; Fosdick, Adventure in Giving; Curti and Nash, Philanthropy in the Shaping of American Higher Education; Lagemann, Private Power for the Public Good; Lagemann, The Politics of Knowledge; Abrahamson, Beyond Charity.

They have shown the amounts of funds directed by foundations to certain universities at particular times.²⁴ They have noted the significant overall impact these investments have had on the development of American higher education.²⁵ They have also noted parallels in ideology between leaders of these two sets of institutions regarding the future of American higher education.²⁶ Foundation strategies in service of these ideologies have received considerable attention.²⁷ Less attention has been paid, however, to process and relationships.²⁸ How did the granting process work during the formative years of research university/foundation relationships?

This article breaks new ground in its portrayal of the process through which a particular private research university, Stanford, obtained foundation funding. Stanford's first half century of experience with foundations (1910–1960) significantly overlaps with what David Hammack calls the "institution-building era for American foundations."²⁹ Fine-grained exploration of the Stanford case demonstrates how institution building worked. During this period, the process leading to major grants primarily involved interactions among a small group of high-level individuals. In Stanford's dealings with the foundation of Carnegie, Rockefeller, and Ford, the crucial relationships involved foundation presidents and other high-level administrators dealing with the university's presidents or other leaders. This persisted even while major foundations professionalized, shifting responsibilities from trustees to staff.

During Stanford's major growth spurts in the 1920s and 1950s, a grant often preceded the university's demonstration of excellence in the relevant field. This meant that, more than anything, these grants were based on foundation executives' confidence in the leadership of Stanford's top officials. The enduring significance of the relationships between high-level foundation administrators and the university president's office makes Stanford's case more what Ellen Lagemann calls "high history" (i.e., top down) than the widely recognized organizational transformation of large foundations would lead us to expect.³⁰

This article will also show how Stanford's location related to the granting process. During the period before 1940, location in California was a disadvantage, given the preponderance of northeastern trustees on the boards of major foundations and the challenges of coast-to-coast travel in a field driven by face-to-face meetings. The university highlighted its western location during its early years of grant seeking, with—at best—mixed results. By the 1940s, however, Rockefeller Foundation officials demonstrated a consciousness of regional inequities. So did Ford Foundation leaders. During the 1950s, the Ford Foundation sought board members and grantees from all regions of the country. By 1960, no university had benefited more from these efforts than Stanford University.

24. Geiger, To Advance Knowledge; Geiger, Research and Relevant Knowledge.

25. Anheier and Hammack, American Foundations; Hammack and Anheier, A Versatile American Institution.

26. Wheatley, "The Partnerships of Foundations and Research Universities"; Frumkin and Kaplan, "Foundations and Higher Education"; Zunz, *Philanthropy in America*; Ris, *Other People's Colleges.*

27. Wheatley, *The Politics of Philanthropy*; Karl and Katz, "The American Private Foundation and the Public Sphere."

28. One exception is Weaver, U.S. Foundations, 104–138.

29. Anheier and Hammack, American Foundations, 14; Hammack and Anheier, A Versatile American Institution, 43–74.

30. Lagemann, The Politics of Knowledge, 11.

Supporting Stanford's Faculty

Stanford University's initial contact with philanthropic foundations involved a longstanding concern: the financial well-being of its faculty. Indeed, the issue of faculty salaries preceded the 1891 opening of Stanford's doors. Higher salaries were President David Starr Jordan's initial bait when trying to attract the fifteen or so best and brightest faculty members (Woodrow Wilson and William James turned him down) to his West Coast startup. When "the risen men of the time" did not respond to Jordan's offers of higher salaries, he populated Stanford's initial faculty with up-and-comers.³¹ Faculty salaries remained a potential source of competitive advantage (or disadvantage) for private universities. By contrast, faculty pensions became a systemic concern.

When the Carnegie Foundation for the Advancement of Teaching (CFAT) was founded in November 1905, its initial mission was to establish pensions for college professors. Stanford's Jordan was one of the twenty-five men (mainly college presidents) present at the creation. As with much of the early higher education granting by large foundations, the focus was on the needs of private colleges because of the widely held assumption that the states would adequately meet the needs of public higher education. Not all states did so with respect to pension needs of professors. This raised the possibility in some states of an exodus of professors from public colleges to privates. Therefore, CFAT added funds for public colleges thanks to an additional subsidy from Andrew Carnegie in 1908.³²

With the pension issue addressed, Stanford revisited salaries. More than twenty years after the university's founding, President Jordan still recognized the potential value (or harm) of salary structure to the institution's competitiveness. He wrote Stanford trustee Herbert Hoover in December 1912 that "the general standing of the University is falling behind." Referring to Stanford's "veteran" professors, Jordan suggested that "not one of these could be replaced at the salaries we pay."³³ Jordan's letter had the desired effect. Hoover (class of 1895) was Stanford's most illustrious alumnus. His success and wealth from mining investments and his ongoing interest in the university attracted an invitation to join Stanford's Board of Trustees. Jordan wrote to Hoover only five days after Hoover joined the board. Writing to his peers on the board a month later, Hoover complained that several junior faculty at Stanford were paid less than "mechanics in San Francisco." Low salaries combined with an increasing cost of living meant, Hoover wrote, that most of the faculty could not afford to hire a servant. Therefore, some faculty wives did all the household "domestic work."³⁴ If this situation continued, faculty members might take better offers at other universities.

After extensive correspondence among Hoover, Jordan, and board president Timothy Hopkins, Stanford submitted a funding request (over Hopkins's name) to the General Education Board in February 1913. Reflecting Stanford's inexperience in the new world of foundation/university relationships, the proposal lacked specificity. Missing was a key element: how

34. Nash, Herbert Hoover and Stanford University, 32–33.

^{31.} Jordan to Hoover, December 3, 1912. Subseries 1.4, Box 653, Folder 6806, GEB.

^{32.} Flexner, *Henry S. Pritchett*, 98. This effort was the roots of the Teachers Insurance and Annuity Association of America (TIAA), created in 1918 to provide pensions for educators. Keppel, *The Foundation*, 78.

^{33.} Jordan to Hoover, December 3, 1912. FA 058, Subseries 1.4, Box 653, Folder 6806, GEB.

much money the organization sought. Instead, the ask was for "such financial assistance as may be possible in enabling the University to increase its plans for undergraduate education."³⁵ Not surprisingly, in May 1913, the GEB turned down Stanford's request.³⁶ Stanford would make a stronger case for faculty funding as a more experienced grant seeker in a few years, a story we will pick up later.

Medical Education at Stanford

The other issue on which Stanford initially dealt with foundations was medical education. The Carnegie Foundation for the Advancement of Teaching was involved here as well as with pensions. CFAT's second charter, from March 1906, mentioned its mission to "do and perform all things necessary to encourage, uphold, and dignify the profession of teacher and the cause of higher education" in the United States and Canada.³⁷ This led CFAT to sponsor independent assessments of professional schools, the first category of which was medical.

In 1908, CFAT president Henry Pritchett asked Abraham Flexner to conduct a study of medical education in the United States and Canada.³⁸ Flexner was a graduate of Johns Hopkins and a professional educator but had no medical training. He visited 155 medical schools in the two countries. The *Flexner Report on Medical Education in the United States and Canada*, published in 1910, concluded that all but thirty-one of the medical schools should be abolished—including Stanford's newly acquired Cooper Medical School.³⁹

Medical education had been prescribed in Stanford University's 1885 founding grant. Instead of building a medical school from scratch, Stanford followed the path of many other universities by acquiring an existing institution. President Jordan had a series of discussions with Levi Cooper Lane, president of San Francisco's Cooper Medical College, the first medical college on the West Coast, about a possible relationship between the two institutions.⁴⁰ After Lane's death, Cooper's directors offered to sell the struggling College's fifty-year-old property to Stanford. Jordan and Stanford's trustees agreed to buy it in 1907.⁴¹ Stanford took over all of Cooper's assets by the spring of 1909—just in time for a visit from Abraham Flexner.⁴²

In his report, Flexner's comments about individual institutions, including the description of Stanford Medical School, pulled no punches.⁴³ Flexner was especially critical of Stanford's clinical work, which was conducted at the Lane Hospital in San Francisco. He found it "seriously defective" for teaching purposes. Flexner concluded that the "catalog statement that the hospital is a teaching hospital is hardly sustained by the facts."⁴⁴ His overall assessment

^{35.} Hopkins to Buttrick, February 13, 1913. FA 058, Subseries 1.4, Box 653, Folder 6806, GEB.

^{36.} Sage to Hopkins, May 23, 1913. FA 058, Subseries 1.4, Box 653, Folder 6806, GEB.

^{37.} Lagemann, Private Power for the Public Good, 60.

^{38.} Fosdick, Adventure in Giving, 151.

^{39.} Flexner, Medical Education in the United States and Canada.

^{40.} Jordan, The Days of a Man, vol. 1, 147; Wilbur, Memoirs, 158-159.

^{41.} Wilbur, Memoirs, 159.

^{42.} Jordan, The Days of a Man, vol. 2, 282; Mitchell, Stanford University, 87-88.

^{43.} Flexner, *Medical Education in the United States and Canada*, 194.

^{44.} Flexner, Medical Education in the United States and Canada, 193–194.

essentially took issue with Stanford's entire medical enterprise. "With one university medical school [the University of California's] already on the ground" in San Francisco, he wrote, "a second—and a divided one at that [first-year Stanford medical students took courses both in San Francisco and, more than thirty miles south, in Palo Alto] is therefore a decidedly questionable undertaking. There is no need of it from the standpoint of the public."⁴⁵

Flexner's impression of Stanford Medical School would have remained largely confined to one publication (albeit an influential one), except that in fall 1913 he joined the General Education Board (GEB) as assistant secretary and in January 1914 became a trustee. This was important because the GEB became the primary funder of American medical education, and Flexner had veto power over such grants. Dealing with Flexner on behalf of Stanford was Ray Lyman Wilbur. Wilbur (A.B. 1896, M.A. 1897 from Stanford, with an M.D. degree from Cooper Medical School) already had practiced medicine in both hospital and private practice; he also had served as an assistant professor of physiology at Stanford, as university physician, and as a clinical professor before becoming professor of medicine and head of the transitioning Stanford Medical Department, in 1909. (He was the new school's first dean, 1913–1916.)⁴⁶

In May 1913, Stanford's Board of Trustees encouraged President Jordan to step down and to take the largely ceremonial position of chancellor. The new president, geologist John Branner, one of the university's original faculty members, had been a college classmate of Jordan's at Cornell and was a faculty member at Indiana University during Jordan's presidency there.⁴⁷ Branner fretted about the university's finances. During 1913 and 1914, Branner clashed with the trustees (including Hoover) about the future of Stanford Medical School. Branner saw it as a drain on scarce resources ("by far the most expensive part of the university"). He concluded that the biggest step he could take toward a balanced budget would be to eliminate the medical school.⁴⁸ Chancellor Jordan, medical school dean Wilbur, and key trustees (including Hoover) disagreed. In May 1914, Stanford's Board of Trustees voted to keep the medical school.⁴⁹

Branner's final gambit against the medical school was inviting Victor Vaughan, longtime dean of the University of Michigan's Medical School, to assess Stanford's medical program. Although Vaughan's visit came after the Board's decision to retain the school, the report he wrote was sufficiently positive to embolden Stanford officials to seek foundation funding.⁵⁰ Vaughan suggested that rather than have the Stanford Medical School fold up its tent, "I strongly urge that the medical school should be not only continued but be developed."⁵¹ With Vaughan's endorsement in hand, Wilbur reported to Jordan that he had learned "that the General Education board had decided to devote a large portion of its income to the development of medical education."⁵²

Having acknowledged the financial challenges Branner identified, Dean Wilbur took the lead in obtaining funds for the Stanford Medical School. Wilbur led with a regional argument

- 45. Flexner, Medical Education in the United States and Canada, 196.
- 46. Wilbur, Memoirs, 73, 88-89, 91-92, 103-104, 158 n. 1.
- 47. Elliott, Stanford University, 54–55.
- 48. Nash, Herbert Hoover and Stanford University, 41-42.
- 49. Nash, Herbert Hoover and Stanford University, 44; Elliott, Stanford University, 543-556.
- 50. Wilbur to Jordan, July 2, 1914. Box 9, Folder 24, RLWa.
- 51. Wilbur, Memoirs, 173.
- 52. Wilbur to Jordan, July 10, 1914. Box 9, Folder 24, RLWa; Elliott, Stanford University, 543–556.

regarding Stanford's distinctive position in medicine on the Pacific Coast.⁵³ He emphasized that "[the GEB had] done nothing on the Pacific Coast [regarding medical education]. Here is their chance and ours."⁵⁴ Wilbur submitted a proposal to the General Education Board in September 1914 indicating how additional funds could improve the Medical School.⁵⁵

Two days after the GEB's October 22 board meeting, Flexner notified Wilbur that the GEB had declined Stanford's request.⁵⁶ In November, Wilbur involved Jordan, who convinced Flexner and Wallace Buttrick (General Education Board Secretary) to have the Board review a modified proposal from Stanford at its January meeting. Jordan informed Wilbur that in a November 16 meeting with Flexner and Buttrick, he had also played the geography card: "I have tried to show them that in the half of this country which lies west of St. Louis there is no adequate [private] Medical School excepting our own."⁵⁷

In December 1914, Stanford submitted a proposal for \$750,000 to fund its medical school. The next month, Wilbur met with Flexner and Buttrick in New York. Wilbur took advantage of this opportunity to, as he wrote Jordan, correct "some misconceptions based upon [Flexner's 1909 visit to the Medical School] which I think I was able to clear up."⁵⁸ In any case, all the Stanford people recognized that, as Jordan wrote, "Flexner will lay down the conditions."⁵⁹ Flexner did, and the Stanford proposal was turned down.⁶⁰

Abraham Flexner never granted Stanford Medical School the legitimacy Wilbur felt it deserved. Despite submitting multiple proposals, Stanford received no medical-related grants from the General Education Board before 1928, when Flexner resigned and ceased to be the GEB's medical expert. Unfortunately for Stanford, from 1928 until closing its doors in 1960, the General Education Board provided no medical education grants to universities that had not previously received them—a major barrier for universities from the West. Decades later, however, Stanford University officials would use geography to their advantage.

Herbert Hoover and Reputational Access

In the early 1920s, when resuming its efforts to obtain foundation funding, Stanford University did so with a stronger hand. Two individuals led the way with various foundations: Herbert Hoover with Carnegie and Ray Lyman Wilbur with Rockefeller. Each had been affiliated with the university when Stanford failed to attract foundation funding in 1913–1915: Hoover as a trustee, and Wilbur as dean of the Medical School. By 1920, the world viewed both men differently. Each had occupied a new position in the interim and, as a result, became known for greater administrative expertise. That expertise earned both greater access and influence

53. Wilbur to Branner, May 22, 1914 and July 20, 1914. Box 13, Folder 7, RLWa.

54. Wilbur to Jordan, July 22, 1914. Box 13, Folder 7, RLWa.

55. Wilbur to Bartlett, September 10, 1914. Box 13, Folder 7, RLWa.

56. Flexner to Wilbur, October 24, 1914. Box 13, Folder 7, RLWa.

57. Wilbur to Flexner, November 2, 1914; Jordan to Wilbur, November 16, 1914. Both in Box 13, Folder 7, RLWa.

- 58. Wilbur to Jordan, January 11, 1915. Box 9, Folder 24, RLWa.
- 59. Jordan to Branner, December 7, 1914. Box 13, Folder 7, RLWa.

60. Sage to Branner, February 8, 1915. Box 8, Folder 3, RLWa.

than they had in 1914, enhanced their legitimacy with foundations, and brought much-needed money to Stanford University.

Stanford's external funding success was accelerated by its most prominent alumnus. Herbert Hoover became an international hero thanks to his humanitarian efforts during World War I. In 1914, he established the Commission for Relief of Belgium, an operation he ran to feed civilians, with the help of an extensive network of Stanford alumni and faculty, until 1917. Soon after the April 1917 entry of the United States into the war, armed with the expertise he gained in Europe, Hoover became head of the U.S. Food Administration, aimed at increasing food production, stabilizing food prices, and decreasing food waste. Hoover had at his side Stanford president Ray Lyman Wilbur, and Wilbur's medical colleague and friend, Dr. Alonzo E. Taylor.⁶¹ Hoover also coordinated postwar relief efforts in Europe through the American Relief Administration. Hoover's wartime experiences led him to create, in 1919, the Hoover War Library in the Stanford University library. They also led him, a year later, to propose the establishment of a Food Research Institute at Stanford. ⁶²

Hoover identified a patron with deep pockets: the Carnegie Corporation of New York, established in 1911 "to promote the advancement and diffusion of knowledge and understanding among the people of the United States," endowed with \$125 million, making it the largest foundation.⁶³ Chemistry professor Alonzo Taylor from the University of Pennsylvania, who had briefly served on the University of California's medical faculty and had been Hoover's primary advisor on food matters during the war, outlined the proposed institute in a memorandum that Hoover forwarded to Carnegie Corporation president James Angell in June 1920.⁶⁴ In early July, Angell wrote to Hoover that "I have been greatly interested in" the project. He promised to share the details with the Corporation Board in the fall.

Hoover's timing was good. As Ellen Lagemann notes, the Carnegie Corporation had shifted from a broad scope of grant making (which had characterized the Corporation since its inception) to "large institution-building grants." Fewer but larger grants characterized the Corporation's giving from 1919 to 1923.⁶⁵

For Hoover, who had been a candidate for the 1920 Republican nomination for the presidency, this was the right organization to approach for another reason. Lagemann emphasizes that for those wishing to shape public policy, the extent of their "access to knowledgeproducing elites" could derive from "personal acquaintance" and to "political views."⁶⁶ Not only were most of the Carnegie Corporation trustees Republicans, but "most admired Herbert Hoover."⁶⁷ Indeed, the trustees of the Corporation had wanted Hoover to join their board.⁶⁸ Responding to Hoover's June 1920 inquiry, Corporation President Angell conveyed that he was interested not just in the message about the project but also in the messenger: "May I add that I

61. Nash, Herbert Hoover and Stanford University, 55; Wilbur, Memoirs, 253, 255-257.

62. Nash, Herbert Hoover and Stanford University, 47; Wilbur, Memoirs, 254.

- 63. Lagemann, The Politics of Knowledge, 3.
- 64. Hoover to Angell, June 17, 1920. Box 49, Folder 8, RLWa.
- 65. Lagemann, The Politics of Knowledge, 6–7.
- 66. Lagemann, The Politics of Knowledge, 5.
- 67. Lagemann, *The Politics of Knowledge*, 29–30.
- 68. Lagemann, The Politics of Knowledge, 276 n. 50.

was one of the many thousand who regret that you are not likely to be in the White House after March $4^{\rm th}$ next." 69

Later in July, another form of access came into play: Northern California's Bohemian Grove, which has been called a site of "ruling-class cohesiveness" based on the "social, economic, and political connections" of attendees.⁷⁰ CFAT President Henry Pritchett, a Carnegie Corporation trustee, was a regular attendee.⁷¹ Stanford's geographic disadvantage compared to eastern universities was slightly ameliorated in the case of the Carnegie Corporation. Pritchett's health required him to spend summers in Santa Barbara—within striking distance of Stanford University and the Bohemian Grove.⁷² Both Hoover and Wilbur were members of the Bohemian Club. Acting on behalf of the Stanford Board of Trustees, Hoover used the connection at the July 1920 Bohemian encampment to pitch the Food Research Institute to Pritchett.⁷³

Hoover followed up with additional information in November, and Angell continued to provide support ("Trusting the project may come to full fruition").⁷⁴ In January 1921, Angell asked for a meeting to consider "a possible line of march." The main point he made was "if it can be arranged, I should be glad to start the machinery moving in order that the program may be launched not later than the beginning of the coming academic year."⁷⁵

On January 27, the Carnegie Board approved a \$704,000 grant (\$11.87 million in 2023 dollars) to Stanford for the Food Research Institute.⁷⁶ With Alonzo Taylor as director, the institute opened its doors on July 1.⁷⁷ Nobody was happier with the outcome than President Wilbur, who wrote that the Food Research Institute "constitutes one of the most notable opportunities for research of a wider scope that has come to any university within recent years."⁷⁸ Ultimately, the Institute would receive more than \$1.5 million from the Carnegie Corporation.⁷⁹

The process through which Stanford received its first major foundation grant is revealing. The initiative came from an influential Stanford board member, Herbert Hoover, whose expertise was in administration rather than research. Academic leadership of the Food Research Institute came from Alonzo Taylor, who was recruited away from the University of Pennsylvania. Stanford had little prior track record in this area to build on. In sending hundreds of thousands of dollars to Stanford University, the Carnegie Corporation was investing in the proven administrative capabilities of Herbert Hoover.

69. Angell to Hoover, July 2, 1920. Box 49, Folder 8, RLWa. In the second week of June, the Republicans had nominated Warren Harding for president.

70. Domhoff, The Bohemian Grove and Other Retreats, xiv.

71. Flexner, *Henry S. Pritchett*, 185.

72. Wilbur to Pritchett, March 13, 1916. Box 28, Folder 5, RLWa.

73. Nash, Herbert Hoover and Stanford University, 68.

74. Angell to Hoover, November 26, 1920. Box 49, Folder 8, RLWa.

75. Angell to Hoover, January 8, 1921. Box 49, Folder 8, RLWa.

76. Angell to Hoover, January 28, 1921. Box 49, Folder 6, RLWa; Nash, *Herbert Hoover and Stanford University*, 69.

77. Wilbur to Pritchett, April 18, 1921. Box 46, Folder 11, RLWa.

78. Stanford University, Annual Report of the President, 1921; Nash, Herbert Hoover and Stanford University, 70.

79. Curti and Nash, Philanthropy in the Shaping of American Higher Education, 223–224.

Ray Lyman Wilbur's Positive Impression

When Herbert Hoover returned from Europe in September 1919, the issue of faculty salaries at Stanford remained unresolved. Hoover did not mince words, announcing that the laborers building his home made more money than 150 assistant professors and instructors at Stanford. Because of competition from both within and outside of academia, Stanford was in danger of losing its most valuable professors.⁸⁰ Stanford was not alone. Recognizing a widespread problem, in December 1919, John D. Rockefeller provided \$50 million to the General Education Board (GEB) for faculty salaries.⁸¹

Stanford's point man with the GEB in the 1920s and 1930s was Ray Lyman Wilbur. When Stanford University first submitted proposals to the GEB in 1913 and 1914, Wilbur was dean of the Medical School. By 1921, he had served as Stanford's president for five years. Wilbur was an astute administrator who already had national recognition in both higher education circles and regarding public health issues. When it came to fundraising, however, in political parlance, Wilbur was good at retail but not so good at wholesale. Although an articulate and prolific author, he was not known as a spell-binding orator yet was gifted in dealing with individuals or small groups. That was precisely what was needed to effectively deal with leaders of foundations. The university benefitted from his ability to transform acquaintance into friendship with four successive presidents of GEB, as well as with John D. Rockefeller Jr., the family's primary representative on the Board. Indeed, upon Rockefeller's 1940 retirement from the Rockefeller Foundation Board, President Raymond Fosdick invited Wilbur to "prepare a resolution to express the sentiment of the trustees... [Y]ou are perhaps closer to Mr. Rockefeller's affections than any of the other trustees."

In April 1921, as part of the due diligence regarding the university's proposal for a grant to increase faculty salaries, GEB president Wallace Buttrick and secretary Trevor Arnett visited the Stanford campus. Arnett's impression of Stanford's president was very positive: "Dr Wilbur shows a grasp of the situation of the institution, and a determination to conduct it efficiently which impressed Dr. Buttrick and me most favorably." Wilbur also succeeded in the task at hand, making the case, as Arnett noted, that "assistance from the General Education Board now would be of great benefit to the University in helping it to raise the first million of endowment and showing to the public that it needs financial assistance."⁸³

Five days after the visit from Buttrick and Arnett, Wilbur submitted a proposal for a \$300,000 grant (\$5.06 million today). Stanford's proposal sustained a theme that was present in its 1914 medical school proposal and would recur in subsequent dealings with the General Education Board: geography. Salaries of professors in Letters and Sciences, the proposal read, "have not reached a point where we have been able, for members of our staff, to overcome the handicap of distance from intellectual centers."⁸⁴

^{80.} Nash, Herbert Hoover and Stanford University, 62.

^{81.} Fosdick, Adventure in Giving, 327.

^{82.} Fosdick to Wilbur, March 15, 1940. Box 63, Folder "Rockefeller Foundation," RLWb.

^{83.} Arnett, Memorandum, May 18, 1921. Subseries 1.4, Box 653, Folder 6806, GEB.

^{84.} Wilbur to GEB, April 30, 1921. Subseries 1.4, Box 653, Folder 6806, GEB.

The next month, GEB appropriated the \$300,000 to increase faculty salaries in the arts and sciences at Stanford. The GEB grant was conditional: the university needed to raise an additional \$700,000 from other sources by October 1, 1926.⁸⁵

Instead of immediately sending an enthusiastic acceptance, Stanford officials hesitated.⁸⁶ Both Wilbur and Hoover thought that, for a university only thirty years old, raising money from alumni would be difficult.⁸⁷ In 1921, the notion of "mobilizing alumni in a highly organized campaign" was relatively new. The first such campaign, at the University of Michigan, began in 1914.⁸⁸ With the GEB's blessing, Stanford took four months to determine if they could raise \$700,000.⁸⁹ After discussions among board members and administrators, Stanford accepted the gift and GEB's terms in October 1921.⁹⁰

The 1921 GEB grant's matching requirement catalyzed "The First Million for Stanford," the university's initial campaign to solicit funds from alumni. Accepting a grant from a relatively new type of institution led Stanford to enlist the assistance of an even newer one. As part of its 1918 capital campaign, Harvard had become the first university to engage a professional fund raiser (alumnus John Price Jones).⁹¹ Stanford had the same idea.

Rather than being guided by New York-based consultants, Stanford preferred known California men. Wilbur chose San Francisco financier Lyman L. Pierce, a Hoover associate who had had notable success raising money for the American Red Cross and YMCA during World War I and who had worked with Hoover and Wilbur on Food Administration efforts. (Pierce lived in Palo Alto, and his daughters were currently Stanford students.)⁹²

In late 1921, Wilbur thanked Buttrick and Arnett for GEB's "great service to the University" in catalyzing Stanford's first capital campaign. He also acknowledged the degree of difficulty in doing so "since the past history of Stanford has not been conducive to financial support by its former members [alumni]."⁹³

Indeed, concerns Hoover and Wilbur had harbored about a capital campaign based on alumni donations proved justified. As predicted, it became a grueling march, with multiple delays and extensions. The First Million finally met the grant's conditions with a final hail-Mary from football related funding in 1929—after the GEB granted requests from Wilbur to extend the deadline beginning in 1926.⁹⁴ Pierce, distracted by his leadership of the national campaign for Relief in Ireland, had lasted only two years, failing to collect on pledges after a stirring start. He was replaced by French instructor John Sellards (who also ran the university's

85. Arnett to Wilbur, May 28, 1921. Box 48, Folder 5, RLWa; Stanford University, *Annual Report of the President*, 1921, 27.

86. Wilbur to Arnett, June 8, 1921. Box 48, Folder 5, RLWa.

87. Karl and Katz, "The American Private Foundation and the Public Sphere," 260; Nash, *Herbert Hoover* and Stanford University, 63; Stanford University, Annual Report of the President, 1921, 20.

88. Curti and Nash, Philanthropy in the Shaping of American Higher Education, 202–203.

89. Arnett to Wilbur, June 16, 1921. Box 48, Folder 5, RLWa.

90. Wilbur to Arnett, October 5, 1921. Box 48, Folder 5, RLWa.

91. Curti and Nash, *Philanthropy in the Shaping of American Higher Education*, 203; Nilan and Kirk, *Stanford's Wallace Sterling*, 175–176.

92. Pierce to Wilbur, June 29, 1921. Box 48, Folder 11, RLWa; Pierce to Wilbur, September 8, 1921. Box 48, Folder 11, RLWa.

93. Wilbur to Buttrick and Arnett, December 14, 1921. Box 48, Folder 6, RLWa.

94. Nash, Herbert Hoover and Stanford University, 72; Stanford University, Annual Report of the President, 1929, 7–8.

summer quarter) who had no fundraising experience and made little headway. Wilbur intervened more than once and was finally rescued, in 1929 by his Board of Athletic Control, whose donation from football stadium receipts helped Stanford reach its \$700,000 goal. Fortunately for Stanford University, Ray Lyman Wilbur was well enough known by then to key people in Rockefeller's foundations that they were willing to bet that his institution would eventually meet the commitment.

Influence and Expertise

Nearly a year after the 1921 visit by Wallace Buttrick and Trevor Arnett, Ray Lyman Wilbur's stature at the General Education Board had grown. GEB president Buttrick wrote a fellow board member:

I believe that Wilbur is the biggest thing educationally in the West and one of the really great university presidents in our country. Arnett and I were tremendously impressed with his thorough-going management of the financial affairs of the University, and the more I see of Wilbur the more I am convinced that he has sound educational ideals and the courage to carry them out. Such men are rare, and it behooves us to cooperate with them when we can consistently do so.⁹⁵

Word about Wilbur's capabilities spread elsewhere in Rockefeller circles. This is not surprising, given that the Rockefeller foundations had overlapping directorates. Therefore, what Buttrick said about Wilbur at the General Education Board became common knowledge to officials at the Rockefeller Foundation. As of 1922, five individuals served simultaneously on boards of the Rockefeller Foundation and the General Education Board.⁹⁶ One such individual was Raymond Fosdick, who later served simultaneously as president of both the Rockefeller Foundation and the General Education Board from 1936 to 1948. In December 1922, Fosdick invited Wilbur to join the Rockefeller Foundation board. At the time, the Rockefeller Foundation's board included businessmen, attorneys, and ministers. Yet there was no better way to demonstrate a foundation's commitment to the advancement of knowledge than through the imprimatur of a university professor—and the board had five. There were two university presidents on the board: the president of the University of Chicago (historian Henry Pratt Judson) and the president of the University of Minnesota (sociologist George E. Vincent, whose previous academic career had also been at the University of Chicago, reflecting the ongoing special relationship between the Foundation and the university cofounded by John D. Rockefeller).

For a foundation with an interest in funding medical research, adding Ray Lyman Wilbur to its board would be a coup. Wilbur was the only medical doctor among the presidents of the American Association of Universities, and he had just been elected head of the American

^{95.} Buttrick to Flexner, March 15, 1922. Subseries 1.5, Box 704, Folder 7239, GEB.

^{96.} Fosdick, The Story of the Rockefeller Foundation, 309–310; Fosdick, Adventure in Giving, 336–337.

Medical Association.⁹⁷ This was significant because the Rockefeller Foundation and GEB became responsible for more than half of all foundation support to medical education.⁹⁸

Wilbur agreed to accept Fosdick's invitation under one condition: that doing so would not "stop me from presenting to the other Trustees on behalf of certain institutions and organizations in which I am most interested."⁹⁹ After receiving assurances that he could advocate on behalf of his institution, Wilbur joined the Rockefeller Foundation Board in February 1923. Four months later, Stanford Medical School received a grant from the Rockefeller Foundation involving the dissemination of insulin. One of the two investigators was Dr. Albion Hewlett, whose son William would cofound Hewlett-Packard. Wilbur was able "as a physician" to thank John D. Rockefeller Jr. for the grant.¹⁰⁰

Wilbur served on the Board of Trustees of the Rockefeller Foundation from 1922 to 1940 and of the General Education Board from 1930 to 1940.¹⁰¹ In his *Memoirs*, he recalled, "I can think of nothing that has given me more satisfaction than the association with the Rockefeller foundations."¹⁰² Wilbur demonstrated this through the invitations he made to certain individuals to join him in fishing, his favorite form of relaxation. Here his lighter side was evident, as is seen in a 1916 letter to longtime Stanford trustee Timothy Hopkins:

I hope that you will not become so impressed by your past successes that you will hesitate to go off with us next summer and engage in our usual shooting exercise at tin cans, bottles, squirrels, porcupines, etc.¹⁰³

In the early 1920s, Wilbur, his sons, and a few friends found an ideal fishing spot in the Siskiyou Mountains and purchased a ranch nearby. Visitors in the 1920s included Wickliffe Rose (three summers during his term as General Education Board president, 1923–1928), and Raymond Fosdick (prior to his service as GEB and Rockefeller Foundation president).¹⁰⁴ Wilbur and Rose, who had been the first director of the International Health Board of the Rockefeller Foundation, shared a keen interest in public health. Known for the expression "make the peaks higher," as GEB president Rose preferred funding organizations that would last, especially those with leaders he trusted.

Wilbur's relationship with Rose mattered to a particular Stanford initiative in support of biology, chemistry, and physics. H. J. Thorkelson, the General Education Board's director of college and university education, visited Stanford on this matter in October 1926. Three months later, Wilbur requested \$750,000 (excluding buildings) for budgetary assistance.¹⁰⁵ After making another visit to Stanford in March 1927, Thorkelson recommended a "first step"

^{97.} Wilbur, Memoirs, 302-303.

^{98.} Wheatley, The Politics of Philanthropy, 99.

^{99.} Wilbur to Fosdick, December 19, 1922. Box 65, Folder 9, RLWa.

^{100.} Vincent to Wilbur, February 6, 1923. Box 65, Folder 9, RLWa; Wilbur to Rockefeller, June 13, 1923. Box 65, Folder 9, RLWa.

^{101.} Wilbur, Memoirs, 300.

^{102.} Wilbur, *Memoirs*, 652.

^{103.} Wilbur to Hopkins, December 28, 1916. Box 9, Folder 7, RLWa.

^{104.} Wilbur, Memoirs, 596.

^{105.} Wilbur to Thorkelson, January 14, 1927. Box 653, Folder 6809, GEB.

of \$125,000 grant to Stanford—a fraction of Wilbur's request.¹⁰⁶ Wilbur was bitterly disappointed. His April 28 response reflected not just a perceived slight to his institution but also to his region:

As I understand it, one of the functions of the General Education Board is to assist in the development of changes that may lead to educational progress. Here is one of the most important things going on in the country and yet, since it is out on the Coast and apparently far away, it is difficult for it to obtain assistance.¹⁰⁷

Wilbur not only elevated the stakes but also played his highest card. He copied his friend Rose, who was Thorkelson's boss, on the April 28 letter and followed up with him on June 27 with a more extensive proposal, which totaled \$750,000 (\$13 million today). The gambit worked: In November, the GEB board approved the higher amount, conditioned on Stanford raising an equal amount.¹⁰⁸

GEB's approval capped a successful period for Stanford grant seeking across various disciplines. In March 1927, the university received a \$250,000 matching grant (\$4.34 million today) for the social sciences from the Laura Spelman Memorial.¹⁰⁹ The previous year, the university had received an outright gift of nearly \$200,000 from the Guggenheim Fund for the Promotion of Aviation.

1927 proved to be the high-water mark for Stanford foundation grants until the 1950s. In March 1929, Ray Lyman Wilbur became secretary of the interior under President Hoover, diminishing Stanford's relationship-building capabilities. Upon Wilbur's return to campus in 1933, funding possibilities had dried up. The Great Depression further harmed the university's capacity to match grants, which cost millions.¹¹⁰ In anticipation of retirement, Wilbur stepped off the boards of the Rockefeller Foundation and the General Education Board in 1940. Stanford continued to receive funding from the Rockefeller Foundations, but the university's postwar growth was enabled by, more than any other institution, the Ford Foundation.

The Geography of Granting

During the first few decades of relationships between major foundations and research universities, travel constraints hindered geographic equity. Transcontinental travel required a week's commitment, which limited foundations' governance primarily to administrators and board members in or near the Northeast. The requirement of face-to-face meetings for most major grants harmed the prospects of distant grant applicants.

In 1909, Abraham Flexner visited 155 medical schools as part of his research for the Carnegie Foundation for the Advancement of Teaching. He was an independent contractor at the time, however, and a motivated one. Once he had a staff position with the General

110. Stanford University, Annual Report of the President, 1933, 4.

^{106.} Thorkelson, Memorandum, March 29, 1927. Box 653, Folder 6809, GEB.

^{107.} Wilbur to Thorkelson, April 28, 1927. Box 653, Folder 6809, GEB.

^{108.} Thorkelson to Wilbur, November 18, 1927. Box 653, Folder 6809, GEB.

^{109.} Stubbs to Wilbur, March 31, 1927. Box 94, Folder 13, RLWa.

Education Board, where any initial grant in medical education required his approval, Flexner was less willing to travel such great distances.¹¹¹ Not coincidentally, during GEB's entire existence it granted a total of less than \$1 million (out of more than \$94 million distributed nationwide) to medical schools in the Great Plains, the Rockies, and the Pacific Coast combined—and to none in California.¹¹²

When Raymond Fosdick invited Wilbur to join the Rockefeller Foundation in 1922, he acknowledged the geographic challenges confronting someone from the West Coast serving on the board of an East Coast foundation:

We realize, of course, that Palo Alto is a long way from New York, and because of the distance involved the task may seem to you to be something of an onerous responsibility. However, there are but three regular meetings every year—December, February, and May—and it is possible that you could combine attendance at these meetings, which last only for a day each, with other business that you might have in the East.¹¹³

Even though Wilbur agreed to join, the Board remained geographically insular.

In 1935, Rockefeller Foundation president Raymond Fosdick wrote to journalist William Allen White, who was stepping down from the Foundation's board. Fosdick was concerned that the departure of White, who was from Kansas, would exacerbate an ongoing Foundation problem. "Here in the East," he wrote, "I get the impression that we are rather out of touch with the country as a whole, and we need some elements on our Board of Trustees who will help interpret to us the United States that lies west of the Allegheny Mountains."¹¹⁴ Five years later, Ray Lyman Wilbur announced that he was stepping down, a further threat to the board's geographic scope.¹¹⁵

In September 1940, newspaperman Douglas Southall Freeman, as head of the nominating committee, solicited nominations to replace Wilbur, John D. Rockefeller Jr., and A. N. Richards on the Rockefeller Foundation's board.

In considering possible candidates, the Nominating Committee calls your attention to the fact that the geographical distribution of the membership (not including the three retiring members) is as follows: nine live in New York City; seven live in the East (Hanover, New Hampshire; Cambridge, Massachusetts; Rochester, New York; Newark, New Jersey; Princeton, New Jersey; Gladstone, New Jersey; Richmond, Virginia); one lives in Chicago; one lives in California."¹¹⁶

Wilbur's departure did not change the board's already limited geographic balance because in 1940, Robert Gordon Sproul, president of the University of California, joined the board.¹¹⁷

- 111. Flexner to Wilbur, September 30, 1922. Box 61, Folder 10, RLWa.
- 112. Fosdick, Adventure in Giving, 328.
- 113. Fosdick to Wilbur, December 13, 1922. Box 63, Folder "Rockefeller Foundation," RLWb.
- 114. Abrahamson, Beyond Charity, 114.
- 115. Abrahamson, Beyond Charity, 115.
- 116. Freeman to Wilbur, September 26, 1940. Box 63, Folder "Rockefeller Foundation," RLWb.
- 117. Fosdick, The Story of the Rockefeller Foundation, 310.

The fact that officials of the Rockefeller Foundation were thinking about geography by 1940 is significant, not only for the Foundation's future but for that of what became an even larger foundation. In December 1946, William P. Fiske, representing the Ford Foundation, visited with the Rockefeller Foundation's director of the Division of Natural Sciences, Warren Weaver. "Over the next several months," notes Eric Abrahamson, "Fiske frequently returned to the Rockefeller Foundation to pick the brains of its top officers."¹¹⁸ In these discussions and others, the Rockefeller Foundation's geographic concerns registered with the Ford Foundation.

Such concerns were reflected in the 1949 *Report of the Study for the Ford Foundation of Policy and Program*, which outlined five program areas to develop. The *Report* recommended seeking "to avoid too great a concentration of grants in any institution or in any region."¹¹⁹ A means to that end would be to get out from headquarters "by travel and personal contacts, to get firsthand impression of the validity of proposals made to the Foundation." If they did not do so and focused entirely on written submissions, warned the report, "the Foundation will be making grants not on their merits but on the literary salesmanship of applicants." Just three years after Winston Churchill's Iron Curtain speech in Missouri, the report concluded that "the remedy here is to get behind the paper curtain—to look beyond written applications into the merits of each case."¹²⁰ Ultimately, this perspective worked to the advantage of Stanford University.

From Regional Disadvantage to Regional Advantage

Stanford's first major grant from a philanthropic foundation (Carnegie Corporation) followed a 1920 meeting with leading officials of the university at the Bohemian Grove, California's foremost retreat for movers and shakers, with a leavening of influential California academic figures. Three decades later, a meeting at the Bohemian Grove preceded Stanford's first major grant from the Ford Foundation. In January 1950, Stanford president J. E. Wallace Sterling met privately with H. Rowan Gaither, Jr., head of the team that produced the Ford Foundation *Report of the Study*, to discuss the Ford Foundation's priorities.¹²¹ By the following year, Gaither had become an associate director of the Ford Foundation.¹²² As such, he became a leading advocate for Program Area Five, the behavioral sciences, and took charge of its administration.¹²³

The son of a San Francisco banker, Gaither was born in Mississippi but grew up on the West Coast. He earned his bachelor's and law degrees at UC Berkeley and then became a partner of a

118. Abrahamson, Beyond Charity, 212-213.

119. Ford Foundation, Report of the Study for the Ford Foundation on Policy and Program, 126.

120. Ford Foundation, Report of the Study for the Ford Foundation on Policy and Program, 126.

121. Rebecca Lowen provides a lengthy discussion of the Stanford/Ford Foundation relationship, including associated tension between the administration and the faculty. Lowen, *Creating the Cold War University*, 201–203.

122. Macdonald, The Ford Foundation, 11.

123. "Minutes," January 5, 1951; Gaither to Hoffman et al., December 13, 1951. Both in Behavioral Sciences, Office Files B, Berelson, OF 1, Box 1, Folder 5, FF. Behavioral psychologist Donald Marquis had been part of the Study Committee for Gaither's 1949 report. Lowen, *Creating the Cold War University*, 198-201; Ford Foundation, *Report of the Study for the Ford Foundation on Policy and Program*, 5.

San Francisco law firm. During World War II, Gaither served as assistant director of the Massachusetts Institute of Technology's Radiation Laboratory. (Stanford's soon-to-be engineering dean Frederick Terman was next door as director of Harvard's Radio Research Lab.) After the war, thanks to Ford Foundation funding, Gaither helped establish the RAND Corporation as a think tank for the Air Force. Ford Foundation board member Karl Compton, who had been Gaither's boss at MIT, suggested having him assess the Ford Foundation.¹²⁴ The 1949 Study Report became a blueprint for the Foundation's future.¹²⁵

Three of the eight members of the study committee for Gaither's 1949 report were from California.¹²⁶ This mattered in terms of dissemination of information, as indicated by a February 1949 meeting at the Bohemian Club in San Francisco. The subject was "the general place of legal research and education in the over-all plans of the Ford Foundation." Present at the meeting were individuals exclusively from the San Francisco Bay Area: committee member Peter Odegard (political science professor from UC Berkeley), William Prosser (dean of UC Berkeley's Law School), Carl Spaeth (dean of Stanford's Law School), Roger Traynor (justice of the California Supreme Court), committee member Dyke Brown, and Rowan Gaither.¹²⁷

Spaeth's inclusion in such discussions presented the sort of opportunity that Stanford's new president, Wallace Sterling, ran with. Born in Ontario, Canada, Sterling earned undergraduate and master's degrees from the University of Toronto and the University of Alberta, respectively. He began the doctoral program in history at Stanford at the age of 26 and spent the rest of his academic career in California. After earning his Ph.D. in 1938, he taught at the California Institute of Technology and then briefly headed the Huntington Library before returning to Stanford as its fifth president in April 1949. Sterling was a gifted fundraiser. Like Ray Lyman Wilbur, Sterling would also take advantage of networking opportunities at the Bohemian Grove. But where Wilbur's preferred mode of cultivating friendship was while hunting and fishing, Sterling was an outgoing personality who interacted easily with others, whether at a faculty get-together, a trustee board room, or a national conference.¹²⁸

On September 6, five months into his Stanford presidency, Sterling convened a meeting (including Spaeth) at his home "to discuss what Stanford might do to attract any possible support that would be forthcoming from the Ford Foundation."¹²⁹ Clearly, the best thing would be to have Sterling meet with Gaither, who had general ideas about what the foundation should do for higher education but was not an academic himself. Hence, their January meeting at the Bohemian Grove, where Gaither sought Sterling's advice. Sterling provided detailed comments about how to approach the five programs specified in the 1949 *Study Report*.¹³⁰

Decades later, it was said in Silicon Valley that if individuals sought money, they might receive advice. If they sought advice, they might receive money. In the 1950s, if the Ford Foundation sought Sterling's advice, Stanford often received money.

- 127. Odegard to Spaeth, February 2, 1949. Box 49, Folder 2, JWS.
- 128. Nilan and Kirk, *Stanford's Wallace Sterling*, 3-6, 171–172.
- 129. Sterling memo, September 12, 1949. Box 49, Folder 2, JWS.
- 130. Sterling to Gaither, January 16, 1950. Box 49, Folder 1, JWS.

^{124.} Sutton, "The Ford Foundation," 46, 58-59.

^{125.} Macdonald, The Ford Foundation, 10–11; Lowen, Creating the Cold War University, 194–212.

^{126.} Ford Foundation, Report of the Study for the Ford Foundation on Policy and Program, 138.

In June 1950, the Ford Foundation Board approved an appropriation of \$3 million for the behavioral sciences at thirteen universities (including Stanford) and the Social Sciences Research Council.¹³¹ In late July, the foundation alerted leaders of the universities (who had been chosen rather than having applied for the grants) about what was "contemplated."¹³²

The Foundation's goal with the initial grant was explained in an eight-page program description sent to these select thirteen universities: "The purpose of the grant is not the support of research projects as such," but instead "development of the resources" to do so. In short, "machine tooling' for research."¹³³

The beginning of Stanford's relationship with the Ford Foundation took place in rarified air. In this initial grant sequence, the foundation intentionally vested "final authority for the approval or disapproval of all particular applications of funds to reside in the Office of the University President."¹³⁴ In late September 1950, Sterling had received a formal offer of \$100,000 "subject only to your agreement."¹³⁵ By the end of October, Stanford had the cash in hand.¹³⁶

The foundation made clear that having secured the funds, "the university president is expected to allocate the funds ..."¹³⁷ The foundation recommended that recipient universities establish an "advisory committee" including individuals who sought a portion of the pie and others who did not.¹³⁸ In Stanford's case, Sterling, who would become known for drawing on faculty advisory committees, created a Committee for Research in the Social Sciences, in spring 1951, that included a dozen faculty members representing twelve fields of study.¹³⁹ A subsequent self-study of departmental needs in the behavioral sciences was led by Stanford's first provost, biologist Douglas M. Whitaker.

In essence, nearly a year and a half elapsed from the Bohemian Grove meeting of Gaither and Sterling in January 1950 to late spring 1951 before the Stanford faculty committee was involved. That is the way the Ford Foundation wanted it. In August 1950, foundation associate director William McPeak explained to Sterling how Stanford came to be included among the initial thirteen grantees:

Wallace, you may be pleased to hear that our advisers gave Stanford a much higher rating in the behavioral sciences because of you and their expectations of you and not alone because of the university's previous accomplishments.¹⁴⁰

131. Gaither to the Officers, December 19, 1951. Behavioral Sciences Office Files, Series 1, Box 1, Folder 5, FF.

132. Craig to Sterling, July 28, 1950. Grant 50-276, FF.

133. "Individual Behavior and Human Relations," August 2, 1950. Office of President, Asst. to President, Office files of Waldemar Nielsen, Series 1, Box 1, Folder 9, FF.

134. "Notes on Previous Foundation Experience with Fluid Grants," August 2, 1950. Office of President, Asst. to President (Nelson), Series 1, Box 1, Folder 9, FF.

135. Craig to Sterling, September 28, 1950. Grant 50-276, FF.

136. Craig to Sterling, October 25, 1950. Grant 50-276, FF; McFadden to Craig, March 1, 1951. Grant 50-276, FF.

137. "Individual Behavior and Human Relations," August 2, 1950. Office of President, Asst. to President (Nelson), Series 1, Box 1, Folder 9, FF.

138. "Notes on Previous Foundation Experience with Fluid Grants," August 2, 1950. Office of President, Asst. to President (Nelson), Series 1, Box 1, Folder 9, FF.

139. Sterling to Hoffman, January 4, 1952. Grant 50-276, FF.

140. McPeak to Sterling, n.d. Box 49, Folder 1, JWS; Sprague to Craig, August 8, 1950. Grant 50-276, FF.

Stanford's faculty, at least in the behavioral sciences, did not complain about their initial exclusion from the process. This is because they agreed with McPeak's assessment. A September 1951 report by the faculty committee acknowledged:

Of the several fields of social science at Stanford, only psychology (and related activities in education) is in a relatively good position as regards current research, grants and contracts, personnel, and availability of monies to finance competent graduate students.¹⁴¹

In short, the behavioral sciences did not yet represent a "steeple of excellence" for Stanford. 142

The Behavioral Sciences grant represented a breakthrough for Stanford, given the Ford Foundation's recent history. In its early years of ambitious funding, the Foundation favored Harvard University, and to a lesser extent MIT. Two key academics on the board were MIT's president Karl Compton and Donald David, dean of the Harvard Business School.¹⁴³ Compton, who joined the Ford Foundation board in 1946, had been on the Rockefeller Foundation Board since 1941. David joined Ford's board in 1948, and Harvard made effective use of his insider status.¹⁴⁴ Stanford Business School dean J. Hugh Jackson, who had been a classmate of David's at the Harvard Business School, was recommended as a Ford Foundation board member by a prominent businessman. As Jackson told Sterling, "Mr. Ford apparently did not see fit to include anyone from academic institutions on his board except Harvard and M.I.T."¹⁴⁵ Having Jackson on the board might have proven useful to Stanford. From 1950 to 1955, David's Harvard received \$5.5 million (about 17 percent of the Foundation's total higher education grants), about twice what second-place Columbia University received; Compton's MIT was third.¹⁴⁶ Although Jackson was not appointed, Stanford at least had a foot in the door through Sterling.

A change in leadership at the Ford Foundation helped the prospects of Stanford University and the entire western region. Westerner Gaither became the Foundation's president in 1953.¹⁴⁷ As president, Gaither wanted the Ford Foundation to concentrate most of its funding on only a few targets—including higher education. From 1950 to 1954, the Foundation provided a total of \$32 million in grants to colleges and universities. More than half of that total went to ten well-established research universities. Yet while Gaither may have been comfortable with the American higher education oligopoly, he did not like the idea of a player as dominant as Harvard. Therefore, he expressed a desire to avoid appointing new trustees "with a Harvard connection."¹⁴⁸

- 145. Jackson to Sterling, October 19, 1950. Box 49, Folder 2, JWS.
- 146. McDaniel to Gaither, April 27, 1955. Series 6, Box 8, Folder 91, FF.
- 147. Macdonald, The Ford Foundation, 10–11.
- 148. Gaither to Nielsen, January 27, 1954. Series 6, Box 8, Folder 99, FF.

^{141. &}quot;Report of the Planning Committee for the Ford Foundation Grant," September 8, 1951. Box A12, Folder 41, JWS.

^{142.} Gillmor, Fred Terman at Stanford, 400-419; Lowen, Creating the Cold War University, 204; Adams, "Follow the Money," 381.

^{143.} Ford Trustees, Meeting Minutes, April 11, 1949. Series 6, Box 8, Folder 99, FF.

^{144.} Sutton, "The Ford Foundation," 44-45; Macdonald, The Ford Foundation, 137.

Although Rowan Gaither's connection to Stanford was as an alumnus of its long-standing rival in Berkeley, his commitment to the West Coast proved as valuable to Stanford as if he had earned his degrees there. In March 1953, less than a month after Gaither replaced Paul Hoffman as Ford Foundation president, the announcement of a "Self-Study Program" in the behavioral sciences (the area Gaither had headed as foundation vice president) emphasized that grants would be awarded "upon consideration of such factors as the quality of the plan for self-study and proper geographical distribution."¹⁴⁹ Geographic distribution in the Behavioral Sciences was enhanced in 1954, when the Ford Foundation established a Center for Advanced Study in the Behavioral Sciences in the foothills above the Stanford campus.¹⁵⁰

During his first year as Ford Foundation president, Gaither suggested that a change in board composition could lead to increased geographic diversity in the Foundation's higher education grants. His discussions with trustees arrived at a unanimous conclusion that "it would be desirable to have at least one [board member] from the South and one from the Far West."¹⁵¹ Aligned with this change in emphasis, Wallace Sterling highlighted Stanford's geographic position at key times in the coming years.

Stanford Medical School Revisited

When Wallace Sterling took over as Stanford's president in 1949, the university had been led by presidents with medical degrees for fifty-four of its first fifty-eight years. Of the three, only Ray Lyman Wilbur had practiced and taught medicine. Two of Sterling's predecessors, Wilbur and Donald Tresidder, had considered moving the Stanford Medical School from San Francisco to the university's main campus. It was the historian Sterling, however, who finally did so. His primary focus was on the research environment and curriculum, which meant upgrading the faculty and facilities, and to enhance interdepartmental activity—which had previously been a geographic challenge.¹⁵²

Demographics worked in Sterling's favor. A teaching hospital affiliated with a medical school requires a critical mass of the local population to serve. That is why in the early twentieth century, prior to the takeoff of suburbanization in the United States, most major medical schools were in big cities. That was not a problem for universities with urban sites for their main campus. For Stanford, located more than 30 miles south of San Francisco, this posed a problem. In 1909, when Stanford's newly acquired Medical School (the aging Cooper Medical College, founded in 1858), was not one of the thirty-one medical schools Abraham Flexner thought deserved to survive, one of the main reasons was the multi-locational feature.¹⁵³ In 1927, Stanford Medical School dean William Ophuls wrote

151. Gaither to Nielsen, January 27, 1954. Series 6, Box 8, Folder 99, FF.

^{149. &}quot;Self-Study Program," Behavioral Sciences Division, March 1953. Office of President, Asst. to President, Office Files, Waldemar Nielsen, Series 1, Box 1, Folder 9, FF.

^{150.} Nilan and Kirk, Stanford's Wallace Sterling, 139.

^{152.} Nilan and Kirk, Stanford's Wallace Sterling, 75-88.

^{153.} Flexner, Medical Education in the United States and Canada, 196.

Santa Clara County, in which Stanford is located, is not populous enough to provide a county hospital adequate for teaching purposes, nor is there any likelihood that such a hospital can be developed on or near campus for a period of at least 50 years or more.¹⁵⁴

Thanks to the attractiveness of the San Francisco Bay Area and a post-war economic boom, however, population of the suburbs on the Peninsula grew rapidly. As of 1920, San Francisco's population was 507,000, served by hospitals affiliated with Stanford University and the University of California. San Mateo County and Santa Clara County, which each abutted Stanford University, had a combined population of less than 150,000. By 1950, however, the population of San Mateo and Santa Clara Counties exceeded San Francisco's 1920 population. An area without another university-affiliated hospital beckoned. The viability of a teaching hospital at Stanford, as part of a revitalized Medical School, had come much sooner than Dean Ophuls had anticipated. That left an opening that Wallace Sterling exploited.

After an intense internal review of the Medical School, and a survey Sterling personally made of medical faculty, the Stanford Board of Trustees, in 1953, approved the president's proposal to move the Medical School from San Francisco to the university's main campus, 30 miles south. Doing so would provide convenience for students and faculty and promised to enhance the Medical School's reputation. The biggest drawback was cost. The move would be the most ambitious university project since reconstruction of the campus following the 1906 earthquake. This led to a major fundraising campaign, raising \$22 million for new facilities and a major improvement of its endowment.¹⁵⁵ The campaign included money from foundations, large and small. How Stanford's administrators achieved their goals demonstrated skill in aligning the needs and wants of the university with the agendas, both formal and informal, of their funders.

In May 1955, for instance, President Sterling received an invitation from Henry Ford II (president of the Ford Motor Company and chairman of the Ford Foundation¹⁵⁶) to send faculty members to the 1955 Ford Educational Forum. Educational gatherings organized by captains of industry are seldom big attractions to academics. In this case, however, Frederick Glover, Stanford's assistant to the president, had sent a note to Business School dean Hugh Jackson:

In confidence, may I tell you that we are in touch with Mr. Ford in an effort to secure funds for our Medical School. So, if we can be represented at this Forum or at least be in a position to let Mr. Ford know that we took the invitation seriously, we shall appreciate it very much.¹⁵⁷

Jackson sent a professor of accounting to the 1955 Ford Educational Forum. Of the forty-five private universities with medical schools under consideration for funding, only one other

154. W. Ophuls and A. Bloomfield to A. Flexner, April 2, 1927. FA 058, Subseries 1.5, Box 704, Folder 7240, GEB. Despite the multilocational challenge, President Wilbur had considerable success in fundraising for a new hospital (1917) separate from the teaching hospital, a new building for nursing curriculum and students (1922), and a research building (1939).

155. Gillmor, *Fred Terman at Stanford*, 350–352; Nilan and Kirk, *Stanford's Wallace Sterling*, 78–82, 188–190. 156. MacDonald, *The Ford Foundation*, 14.

157. Glover to Jackson, May 6, 1955. Box A12, Folder 41, JWS.

besides Stanford (the University of Pittsburgh) sent a representative to the Forum.¹⁵⁸ Stanford clearly took the desires of its potential funder seriously.

In July 1956, Sterling sent a letter to Ford Foundation vice president William McPeak in response to an inquiry about medical school grants made by the Commonwealth Fund. The previous month, Foundation president Gaither had announced the makeup of a committee that would determine how to distribute \$90 million that the Foundation had appropriated in December 1955 for American privately supported medical schools.¹⁵⁹ The Ford Foundation was now seeking guidance on how to proceed with its new program.

Sterling reported to McPeak that in 1954, the Commonwealth Fund had provided Stanford a grant of \$220,000 to fund studies of how best to transfer the medical school from San Francisco, and a subsequent unrestricted grant of \$1 million. "I suppose it is always difficult for the recipient of a grant to explain precisely to a third party the reasons which the donor had for making the grant," Sterling answered. He felt "reasonably certain" of three reasons. First, Stanford was a private institution. Second, the advantage of putting the medical school faculty into community with faculty from Stanford's other schools-including enhanced curriculum (thereby solving the problem Abraham Flexner had identified). Third, a combination of historical accomplishment, "worthy" plans, and genuine need for financial support.¹⁶⁰ Sterling added another compelling reason that he "had a strong suspicion" figured in the Commonwealth Fund's decision, one he clearly wanted the Ford Foundation to consider: geography. Stanford was "the only privately supported Medical School rated among the top medical schools in the country which is located west of the Mississippi" except for Washington University of St. Louis "which is virtually on the banks of the river." Sterling concluded: "I believe that this combination of quality and location made the Stanford case seem especially deserving and meritorious."161

Although the Ford Foundation had a program of support for medical education that required universities to submit no applications, Wallace Sterling had found a way to submit a version of one to a receptive audience. McPeak responded, "we are very grateful for your going to the trouble" of providing the information. "It is very helpful."¹⁶² And it certainly helped Stanford's case for a sizeable grant.

Eight days later, Sterling spoke with San Francisco attorney A. Crawford Greene, a member of the Ford Foundation committee that would determine distribution of the \$90 million for medical schools. Greene indicated that most of the money would "be distributed with an eye to the geographic location, the past record, the present strength, and not least of all the future promise of the schools," concluding that such a distribution pattern would benefit Stanford.¹⁶³

Greene proved to be correct. Stanford received \$3.1 million (out of the \$90 million), an important kickstart to its upcoming Medical School fundraising campaign. Out of a total of forty-five recipients, only Johns Hopkins, Harvard, the University of Chicago, Yale, Columbia,

^{158. &}quot;Ford Educational Forum, 1955 Fellow," n.d. Box A12, Folder 41, JWS; "News from the Ford Foundation, March 29, 1957." Box 49, Folder 28, JWS.

^{159.} Press release, June 2, 1956. Box 49, Folder 28, JWS.

^{160.} Sterling to McPeak, July 12, 1956. Box A12, Folder 41, JWS.

^{161.} Sterling to McPeak, July 12, 1956. Box A12, Folder 41, JWS.

^{162.} McPeak to Sterling, August 17, 1956. Box A12, Folder 41, JWS.

^{163.} Sterling to Dinkelspiel, July 20, 1956. Box 49, Folder 28, JWS.

and Cornell received larger grants. For Stanford, this was a far cry from being completely shut out by Abraham Flexner from the General Education Board's medical school grants.

An increasing sensitivity to regional parity at the Ford Foundation represented an opening for Stanford as the only private university from the West among the original members of the American Association of Universities. From 1955 to 1959, the Ford Foundation increased its giving to Stanford. Ford gifts to specific programs at Stanford totaled more than \$13 million during the 1950s, including substantial grants (at least a half million in each field) for the behavioral sciences, medical school, education, legal studies, business school, and engineering. In addition, Stanford received \$3.6 million for faculty salaries from Ford in 1956.¹⁶⁴ Stanford became the number three recipient among universities of Ford Foundation grants.¹⁶⁵

In the 1950s, Stanford received as much funding from foundations as from industry gifts and government grants (including from the National Institutes of Health and the National Science Foundation) combined.¹⁶⁶

The Special Program in Education

In May 1949, a month after he assumed the duties as Stanford's president, Wallace Sterling wrote, "the joy in Heaven over the conversion of one black sheep is as nothing to the joy of a college president over an unrestricted dollar."¹⁶⁷ Since 1950, Stanford had been successfully experimenting with commercial development of non-academic land near the campus, among other strategies, to bolster its unrestricted funds, but near the end of the decade it would benefit mightily from the Special Program in Education, a pet project of the Ford Foundation's new president, Henry Heald.¹⁶⁸

Heald, president of New York University (NYU, a private research university), succeeded Rowan Gaither at the Foundation in 1956. He was the first university president to head the Ford Foundation. While he had been NYU president, the university had become a recipient of Ford Foundation grants.

During his first year as Ford president, Heald discussed general foundation activity at a meeting of what he termed "important university presidents." One of the issues mentioned was an "increasing tendency for faculty members and foundation representatives to deal [work] on projects before they are presented to administrative officers [and some presidents believed] that they were losing control of their institutions."¹⁶⁹ Heald's staff, in turn, suggested that this was not the case at the Ford Foundation. One responded, "We have a rule … that we will not discuss a project with a professor until it has been approved by the administration of

- 165. Non-Statistical Profile, 1, 113-115. Grant 60-462, FF; Lowen, *Creating the Cold War University*, 191–212.
 - 166. Stanford Statistical Profile, Grant 60-462, FF; Lowen, Creating the Cold War University, 194.
 - 167. Sterling to Miller, May 28, 1949. Box 47, Folder 1, JWS.
 - 168. Adams, "Stanford and Silicon Valley," 38-39.

169. "Criticisms," memo, October 31, 1956. Office of Pres. Papers of Henry Heald, FA 622, Series 1, Box 10, Folder 127, FF.

^{164.} G. Hardy to J. Armsey, August 22, 1960. Grant 60-460, FF.

the institution."¹⁷⁰ Another wrote to Heald, "In our staff work inside and outside the office we have supported an institutional approach rather than departmental and disciplinary project approaches."¹⁷¹

Heald's most famous higher education program at the Ford Foundation reflected this institutional approach. In 1959, he proposed a Special Program in Education designed to provide between \$30 million and \$50 million annually (between \$300 million and \$500 million during a ten-year period) to a maximum of twenty universities. The Program focused on a narrow but geographically diverse band of targets, in keeping with the priorities expressed by Rowan Gaither five years earlier. One of the intended results, as stated in the Program proposal, was:

while there may be only a few national or international leaders, each major region of the country should have at least one institution marked by the excellence necessary for leader-ship among its neighboring institutions or among institutions of its kind.¹⁷²

Although the program had ambitious goals to make universities better, it was not designed as a disruptive force. New universities need not apply because "regional excellence can be produced faster and sustained longer by building on existing institutions than by creating new ones." Not all leading universities would qualify for the Special Program. Private universities were the focus, but not all of them.¹⁷³ Harvard, Columbia, and the University of Chicago, which had been "generously supported in the Foundation's regular programs, and will no doubt continue to be" were excluded.¹⁷⁴ The Ford Foundation trustees approved the Special Program in Education in September 1959. The program involved no requests for proposals. Instead, the Foundation chose its targets. Stanford University was one of them.

For Stanford, the timing could not have been better. One thing granting organizations like to see is a clear idea of what their potential grantees would do with the funds they receive. In 1958, Sterling had asked his assistant for financial affairs Kenneth Cuthbertson (soon to be named vice president for finance), to oversee a unique, year-long campus wide study of current conditions, projected needs, and opportunities. Robert Moulton, Cuthbertson's Stanford classmate and friend who in 1957 had moved from the Ford Foundation to become Sterling's assistant for long-range planning, began a statistical comparison of Stanford's projected long-term needs to its existing funds. Moulton's ten-year forecasts, the first at any major university and using campus-wide data marshalled by Cuthbertson, highlighted the need to double Stanford's gift support. The resulting report, Stanford's "Minimum Financial Need in the Years Ahead," written principally by Cuthbertson and Moulton, included a compelling introduction by university provost Frederick Terman. (The study was later dubbed the Red Book because, for convenience, it was bound in a Stanford-red buckram binding.) The study identified \$346 million in potential improvements (particularly faculty, graduate student, and

^{170.} Brown memo, November 1, 1956. Office of Pres. Papers of Henry Heald, FA 622, Series 1, Box 10, Folder 127, FF.

^{171.} McPeak to Heald, November 1, 1956. Office of Pres. Papers of Henry Heald, FA 622, Series 1, Box 10, Folder 127, FF.

^{172.} Heald to Trustees, September 6, 1959. Grant 60-462, FF.

^{173.} Heald to Trustees, September 6, 1959. Grant 60-462, FF.

^{174.} Heald to Trustees, September 6, 1959. Grant 60-462, FF.

research facilities) over the next ten years, Stanford would need an additional \$150 million (doubling the rate of giving as of 1960, and some ten times the university's total expenditures in 1950) to become the university the president, the trustees, the faculty, and key alumni leaders, hoped it would become by 1970.¹⁷⁵ Sterling, accompanied by the provost, deans, and key staff, presented these findings to Stanford's Board of Trustees in October and early November 1959. Although initially stunned by its ramifications, the trustees agreed that the university should undertake the necessary fundraising.¹⁷⁶

Less than a month later, Ford Foundation secretary Joseph McDaniel and Heald's righthand man, James Armsey, arrived at Stanford for an unexplained, last-minute informal visit with Sterling, Cuthbertson, and several deans at the president's campus home. When asked if Stanford had considered its future needs, President Sterling reached for the Red Book, sharing the set of plans approved by Stanford's trustees earlier that month. Although the Red Book had not been created for this singular meeting, it made the desired impression. "It happened, fortunately, I believe, for their program and ours," wrote Armsey, "that Stanford had recently presented to its trustees a 10-year projection of plans and needs, had received trustee approval, and was now embarked on the task."¹⁷⁷

Taking a cue from the Special Program's explicit goal of geographic diversity, Stanford officials emphasized its western location—as they had done in previous correspondence with foundations. Stanford's formal response to the Ford visit specifically mentioned "faith in the future destiny of this newest part of the United States." Helping to assure the Ford Foundation of a sound investment, the university's response noted that "Stanford has heretofore mirrored the growth of California and the West; it will continue to do so."¹⁷⁸

By the 1950s, the Ford Foundation had a large staff and encouraged interaction between staff members and professors involved with work related to grant proposals. Yet the Special Program on Education, just like the 1950 Behavioral Studies program and the 1956 Medical School program, primarily involved contact between university presidents, selected other administrators, and Ford Foundation high-level administrators. The schedule for Armsey and McDaniel during their Stanford visit reflected that emphasis. Only one faculty member was present. Otherwise, aside from President Sterling and Provost Terman, only deans, vice presidents, the vice provost, assistants to the president, and the assistant controller attended.¹⁷⁹

At a meeting in September 1960, the Ford Foundation Board decided to make a \$25 million three-for-one matching grant totaling \$100 million to Stanford. Stanford was one of five recipients of money as part of the Ford Foundation's regional initiative regarding higher education. Johns Hopkins and Notre Dame each received \$6 million, the University of Denver \$5 million, and Vanderbilt University \$4 million.¹⁸⁰ Stanford's \$25 million was more than all the others combined. This was the largest unrestricted higher education grant in history to that point.

175. Gillmor, Fred Terman at Stanford, 358; Stanford Statistical Profile, Grant 60-462, FF.

176. Nilan and Kirk, Stanford's Wallace Sterling, 191–192.

177. Armsey, Letter to File, December 3, 1959. Grant 60-462, FF; Gillmor, *Fred Terman at Stanford*, 358-359; Nilan and Kirk, *Stanford's Wallace Sterling*, 192, 591 n. 70.

178. Non-Statistical Profile, 111. Grant 60-462, FF.

179. Armsey, "Stanford University visit—November 30, December 1 and 2 1959," memo, December 3, 1959. Grant 60-462, FF.

180. Ford Foundation, Press Release, September 25, 1960. Grant 60-46, FF.

Stanford made its \$25 million Ford grant the keystone of a subsequent \$100 million PACE (Plan of Action for a Challenging Era) campaign, 1961–1964, a watershed in Stanford's fundraising history. The PACE campaign, the largest university-wide fundraising campaign of its time in the United States, closed its books in less than three years after bringing in \$114 million (about \$1.1 billion in 2023 dollars).¹⁸¹

By several measures, Stanford proved an excellent choice for Ford Foundation money. The university made dramatic strides, based on growth (from a \$15.3 million enterprise in 1950 to more than \$60 million by the mid-1960s)¹⁸² and an increase in endowment (from \$41 million in 1949 to \$268 million in 1968). Fundraising during Sterling's administration (1949–1968) brought in ten times more than it had between 1905 and 1949. The professoriate nearly tripled in size, while per capita salaries had more than doubled. And despite increasingly selective admissions now drawn from across the country, the student body grew by 40 percent, mostly graduate students.¹⁸³

Perhaps most telling was Stanford's rise in the academic rankings (from around fifteenth in the mid-1950s to third overall, by some measures, in the mid-1960s).¹⁸⁴ A 1973 Carnegie Commission study considered it among the best half-dozen American universities.¹⁸⁵ This not only suggested that the Ford Foundation's investment in Stanford paid off. Ford's willingness to invest substantial amounts across many fields in a university whose position in the rankings in the 1950s fell short of the top ten in most of these disciplines, suggests an institutional model in action. Rather than simply cherry pick the top five departments in each field, the Ford Foundation's administrators instead demonstrated confidence in the ability of President Wallace Sterling and his staff to use the funds to *develop* and hone excellence, just as the General Education Board had expressed confidence in the leadership ability of his predecessor, Ray Lyman Wilbur.

Conclusion

Stanford's growth spurts after World War I and World War II were significantly enabled by financial support from philanthropic foundations. This article has focused on the related process, showing how the relationships between representatives of foundations and Stanford University's top administrators and trustees developed and how influential funding followed.

When the Carnegie Corporation invested in Stanford's Food Research Institute in 1921, support from the Corporation's president, James Angell, was based more on his confidence in the ability of the Institute's organizer, Stanford trustee Herbert Hoover, than on any history of achievement or expertise the university had in this field. (Indeed, this field was a novel one in American academe.) Although he was not an academic, Hoover and his personal connection

- 181. Nilan and Kirk, Stanford's Wallace Sterling, 193–196.
- 182. Stanford Statistical Profile, 1. Grant 60-462, FF.
- 183. Nilan and Kirk, Stanford's Wallace Sterling, 564–565.
- 184. Gillmor, Fred Terman, 513.
- 185. Nilan and Kirk, Stanford's Wallace Sterling, 567 n. 7.

to President Ray Lyman Wilbur would ensure that the appropriate individuals were put in place to execute the research.

When the General Education Board provided a grant to Stanford for faculty salaries in the arts and sciences in 1921, the recommendation to do so by GEB's president Wallace Buttrick and secretary Trevor Arnett came after sizing up Wilbur face-to-face. Their ebullience afterward had more to do with Wilbur's administrative capabilities than with Stanford's laboratories or faculty members. In 1927, after a GEB staff member (who *had* visited Stanford's laboratories and met with its scientists) recommended providing only a fraction of the grant Wilbur had requested for the natural sciences, Wickliffe Rose (Wilbur's friend and the GEB president) successfully advised the Board to provide Stanford with the entire amount requested.

Stanford had similar experiences with the Ford Foundation. Its initial Ford grant, for the behavioral sciences, came in 1951. This invitation-only effort, limited to thirteen universities, was preceded by an interaction with President J. E. Wallace Sterling, soliciting his advice. Stanford's subsequent inclusion reflected more about the foundation's perception of Sterling's leadership and Stanford's capacity than about its current expertise in the fields represented.

The Ford Foundation's grant for Stanford Medical School in 1956 followed the same pattern. Ford again aimed at an invitation-only program. Sterling's experience and leadership in planning for a major upgrade and move of Stanford's Medical School and his success in attracting a Commonwealth Fund grant for the effort resulted in an important Ford grant, which kicked off Stanford's subsequent Medical School Fund campaign.

Stanford's grant as part of Ford's Special Program in Higher Education, leading to the largest unrestricted grant in higher education to that point, shared similarities with the previous two. Again, it was by invitation only and limited to only five universities. Each of the five represented a different geographic section of the United States, a deliberate attempt by the foundation to advance higher education in all regions. In any case, Stanford won an important acknowledgment for its novel campuswide study and projection of needs for the ensuing ten years. The unusual size of Stanford's grant, compared to the other four, reflected not only Stanford's ambitions but also the Ford Foundation's perception of the planning and organizational skills of President Sterling.

Even with increased professionalization and bureaucratization in foundation management, the case of Stanford shows foundations' investment in key individuals in positions of leadership, not just in those who would conduct field-specific research. This required foundation leadership and staff to do more than rely on proposals and applications; they had to evaluate and develop confidence in a target organization's capacity to analyze needs, to gather resources, and to organize, coordinate, and plan solutions. Essentially, this was investment in higher education's version of the "visible hand," Alfred D. Chandler's term for the role of management.¹⁸⁶

In the second half of the twentieth century, higher education began to employ a system of peer-reviewed publication. One promise of scholarly peer review was to encourage new ways of thinking by individuals without senior positions or established reputations. Stanford

186. Chandler, The Visible Hand.

University's relationships with foundations also involved peer review but of a different sort: Administrators reviewed administrators. Such institutional peer review had different goals: organizational stability, growth, and endurance. Foundation investments in Stanford between 1920 and 1960 achieved precisely that.

Stanford began the 1910–1960 period with one of the largest university endowments, albeit one conservatively invested and rapidly dropping in market value. During the next fifty years, the university experienced financial ups (the 1920s and 1950s) to make up for significant downs (the 1910s and 1930s). These ups were largely a result of foundation funding. With Stanford, the foundation/university relationship achieved the stated goal of General Education Board president Wickliffe Rose to "make the peaks higher." These foundations—the General Education Board, the Carnegie Foundation, and the Ford Foundation, among others —chose to invest in recipients they considered most likely to show a handsome return in the near future, building on established relationships with proven leaders. In the rendezvous between Stanford University and philanthropic foundations, these relationships mattered so much that at crucial junctures, funding to the university preceded expertise in the relevant field of study. In an industry that involved the production of knowledge, at times know-who and access made all the difference.

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