From the Berkeley Hills to Bishop Peak:
Acquisition and Use of Land at Cal Poly and UC Berkeley

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by

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From the initial 15 acres granted for what originally was supposed to be a normal school in San Luis Obispo\(^1\) to the now roughly 10,000 acres comprising vast agricultural and natural resources, the history of the land at Cal Poly San Luis Obispo is as unique as the students who inhabit it.\(^2\) When high school students first begin to research which university to attend, they may come across a statistic that mentions the acreage of the university and that Cal Poly is “the second largest land-holding university in California, second only to UC Berkeley.”\(^3\) A logical progression of thought might lead one to question the differences between these two imposing institutions of California higher education and how that translates into their use of land and their respective histories.

Both universities have very different pasts but with similar initial intentions. Apart from the obvious – one being part of the University of California and one being a California State University campus – the disparity between the two schools is fundamental. UC Berkeley was founded in 1868 after the merging of the private College of California and the state Agricultural, Mining and Mechanical Arts College, the latter a product of the federal Morrill Land-Grant Act,\(^4\) while Cal Poly was founded in 1901 after passage of the California Polytechnic School Bill by the state of California.\(^5\) UC Berkeley’s original mission as a land grant institution, to be an agent of the “vulgarization of higher education,”\(^6\) has now more or less been supplanted by a school

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that is now “well known for its dynamic research environment.” What’s more, UC Berkeley's $4.045 billion endowment simply dwarfs Cal Poly's $194.7 million endowment. This paper will examine the growth of the universities relative to each other and similar universities. For two schools that battle for the best and brightest students – Cal Poly's incoming freshman for Fall 2015 averaged a 4.00 grade-point average and 1332 on their Scholastic Aptitude Tests while UC Berkeley's posted means of 4.19 GPA and 1402 on their SATs – how does their use of land differ? Does the fact that one is an elite research university rooted in the land-grant tradition and the other a leading polytechnic formed at the turn of the 20th century create any difference in how their land is used? Cal Poly effectively continued from where UC Berkeley left off in regards to agriculture and engineering – the two stalwart disciplines that flourish even today at land-grant universities such as Cornell and Texas A&M.

There is much in the way of historiographical context on this topic, both in respect to UC Berkeley and Cal Poly, but also other universities throughout the country. In IUPUI: The Making of an Urban University, Ralph D. Gray discusses the concern that a university, in this case Indiana University-Purdue University Indianapolis, must have as to the effects of its expansion on a surrounding community. In the 1950s, IUPUI sought to turn the land adjacent to their Medical Center into an expanded campus. This involved “purchase of any and all property in the desired locale as soon as it came on the market.” The “fear of the supposedly heartless, land-
“grabbing” university for nearby residents can be rather palpable, and is definitely not limited to Indiana University-Purdue University Indianapolis. Other sources on this topic consist of mostly land surveys, previous writings about land history from both UC Berkeley and Cal Poly, news articles and master plans. In one example, as part of the centennial celebration of Cal Poly’s existence in 2001, 19 faculty members teamed up to form the Cal Poly Land Project – an interdisciplinary venture that sought to chronicle what makes Cal Poly’s holdings so unique, both as a consequence of its location and in its status as belonging to a polytechnic. One faculty member involved in this project published a book, *Cal Poly Land: A Field Guide*, that expanded on the use of Cal Poly’s 10,000 acres. Steven Marx, a former professor of English at the university, helped to illustrate Cal Poly’s “Learn By Doing” motto in its most physical and raw form. However, there has not been a comparative look at Cal Poly and other universities, especially those founded as a result of the Morrill Land-Grant – namely UC Berkeley. This paper will compare and contrast these schools, their land use and growth in respect to their changing and continuing missions, and ultimately what the future could hold.

Cal Poly's history of land use and acquisition is unique when compared to other American universities, primarily UC Berkeley. The story of Cal Poly's founding as chronicled by Myron Angel, from initial inception as a normal school until final approval as the west coast's first polytechnic, differs greatly from land-grant schools like UC Berkeley. Indeed, for Cal Poly’s very founding, UC Berkeley has always served as a referent for that which Cal Poly would not become. This difference continues through how the vast expanses of land are used by each school. Ultimately, this paper will draw attention to Cal Poly’s forward-thinking, “Learn By Doing” philosophy infused within the fabric of the university. Instead of acting as an extension

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of state and federal government much in the way Berkeley has in creating land reserves with the bulk of its land such as the 7,660 acre site at Angelo Coast Range. Cal Poly instead uses most of its land as a polytechnic would – with roughly 6,000 acres dedicated solely to grazing land for its cattle and sheep.

‘Democracy’s Colleges’: The Morrill Land-Grant University

Earle Ross, a leading personality in the historiography of the land-grant universities, explained in his book Democracy’s College that “[The agricultural and mechanical] colleges reached a stratum of students for whom higher or even intermediate training would not otherwise have been available.” With the signing of the Morrill Land-Grant Act by President Abraham Lincoln on July 2, 1862, a new era of higher education dawned in the United States. Using federal land previously set aside for railroads, each state was given land to build one university – collectively, institutions that would “teach agriculture, military tactics, and the mechanic arts” to a section of society that previously had no access to such training. Such notable schools as the University of Wisconsin-Madison, Clemson University, the University of Connecticut and the University of Florida all belong to the roster of land-grant institutions.

So then, what are the advantages of being an original land-grant university? The short answer to this has to do with land and finances. Each state in the Congressional delegation at the time of President Lincoln’s signing the bill into law received 30,000 acres of federal land. Many states then sold off some of this land to fund the construction of a new college “for the Benefit of

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Agriculture and the Mechanic Arts.” Ultimately, 69 institutions of higher education were built as a direct result of the first Morrill Land-Grant Act. Most universities given benefits under the original legislation signed by Lincoln were either founded previously and then apportioned land-grant status or were established between 1863 and 1890, when the second Act was created for historically black colleges.

Perhaps most prominent of all of the Morrill Land-Grant schools is the University of California, Berkeley. The push to establish a University of California began a full two decades before such an institution was created. What would become the University of California, Berkeley began with considerable resources at its disposal – the state of California’s share of the Morrill Land-Grant Act was 150,000 acres. Seeking to create one united “seminary of learning,” the California legislature married the College of California, founded in 1853 as the Contra Costa Academy, with the new land-grant institution, forming the University of California in 1868.

The agricultural and mechanical education meant for the common person persisted until World War II when UC Berkeley took on a more specialized research role. The University War Training Program focused student attention to war technology and scientific research, going as far as operating the Los Alamos Scientific Laboratory in New Mexico. This shift in curriculum would steer UC Berkeley towards becoming one of the most elite research universities in the country – receiving $730.7 million in federal research funding alone in 2012. As of 2013, UC

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21 Stadtman, “President Sproul,” The Centennial Record of the University of California.
Berkeley’s last agricultural space was a diminutive swath of land in urban East Bay, a garden run by the Student Organic Gardening Association.²³

Just before the turn of the 20th century, there was a push led by journalist and historian Myron Angel and local state legislators to establish a normal school in San Luis Obispo. Over time, Angel’s vision would change. A polytechnic school – styled after some of the most prestigious technical institutions in the world – would be unique to the west coast. “What Freiberg and Heidelberg are to Germany or Cornell to New York, the Polytechnic School of San Luis Obispo is designed to be to the Pacific Coast,” Angel wrote.²⁴ The California Polytechnic School, much in the way UC Berkeley was originally intended, albeit without land-grant status, sought to educate the layman in wares useful to the blue collar worker. Mechanical and agricultural training and homemaking were the primary focuses of the California Polytechnic School at San Luis Obispo. The school’s initial land holdings were modest. A commission comprised of California Governor Henry Gage and other state legislators chose a tract of roughly 280 acres on which to construct Cal Poly. The school had been appropriated $50,000 previously by the state government to establish an institution of higher learning in the San Luis Obispo area. The first director of Cal Poly, Leroy Anderson, was an alum of Cornell University’s agriculture program, and received a Master of Science degree in Agriculture in 1896 and later became a doctor of agriculture. It was Anderson who created the dairy program at UC Berkeley, acting as an instructor before leaving for Cal Poly in 1902, where he was responsible for courses in dairying, horticulture and entomology.²⁵ The humble state secondary school beginnings of the California Polytechnic School contrast dramatically with UC Berkeley, an institution that from

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²⁴ Angel, History of the California Polytechnic School at San Luis Obispo, California.
²⁵ Angel, History of the California Polytechnic School at San Luis Obispo, California.
the start had federal support via the Morrill Land-Grant Act. The differences between the schools do not stop there.

**‘Land-Grabbing’: Real Estate Acquisition by Educational Institutions**

Colleges and universities in the United States have acquired their land through a myriad of ways – federal grants, purchase, donation and use of eminent domain – in order to deliver an enriching education to the public. The sheer power a university can hold over its surrounding community can be staggering. A very real instance of the ivory tower “elephant in the room” happened not only at Indiana University-Purdue University Indianapolis in the 1950s, but also more recently at Ball State University in Muncie, Indiana. In 2012, the school sought to use eminent domain to seize private property against the will of the property’s owner in order to build more student housing and amenities. Residents of the city of Muncie were understandably perturbed by this. Chris Hiatt, owner of a business located on the land that was to be seized, stood in opposition to Ball State’s project: “[Eminent domain] is not a convenient vehicle for pseudo-government entities such as Ball State to use to seize private property for their own ‘capitalistic wish-lists’ for which there are many alternatives.”

Cal Poly and UC Berkeley have acquired their massive land holdings with use of various methods. For the most part, Cal Poly’s land, of which there are four parcels – two in San Luis Obispo County and two in Santa Cruz County – have been either purchased with federal or state grant monies or donated by private party. Most of Cal Poly’s main campus sits on land bought from Dawson Lowe and the Johnson family at different points in the school’s history. The initial land purchase of 281.04 acres from Lowe for $7,709 in March 1902 was immediately

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adjacent to the Southern Pacific Railroad along Foothill Boulevard. Subsequent purchases of land where the main campus now sits include the purchase of 30 acres from Charles Johnson for $10 gold coin and 628 acres from Rodney Johnson for $50,910, paid for by a state grant so that the school may “ensure adequate water supply.” Some of Cal Poly’s most prominent land holdings were acquired during the 1950s and 1960s. Cheda Ranch, the site of the Cal Poly Farm, was acquired from the family of the same name for $53,000 in 1951. Cal Poly’s western San Luis Obispo County properties – the Chorro Creek and Escuela ranches – were secured via federal grant for a total of 2,357.76 acres in 1968.

Cal Poly has also been a recipient of generous private land donations. Al Smith, a Cal Poly alum and co-founder of Orchard Supply Hardware, donated his 3,200-acre Swanton Pacific Ranch north of Santa Cruz to the university in 1993. Swanton was to be “maintained as a working ranch and used exclusively for agriculture, recreational, [and] educational purposes.” In 2015, Stuart and Jan Bartleson of Santa Maria donated their 450-acre avocado and lemon orchard, located three miles south of Arroyo Grande, to Cal Poly. Stuart Bartleson’s hope is that “the ranch will help prepare today’s students to become tomorrow’s ag industry leaders.” The total acreage of Cal Poly now stands at more than 10,000 acres.

The University of California, Berkeley has acquired some of its land in ways similar to Cal Poly San Luis Obispo, but with the added dimension of using eminent domain from time to

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time. The initial 160 acres of land that comprised UC Berkeley in 1868 has steadily risen to the current main campus acreage of 6,679.\footnote{“Campus Facts in Brief,” *University of California Annual Financial Report*, November 9, 2012, accessed February 26, 2016, http://regents.universityofcalifornia.edu/regmeet/nov12/f8attach1.pdf.} While that number may seem relatively modest, UC Berkeley alone oversees 39,237 acres through its cooperative University of California Natural Reserve System (UCNRS) headquartered in Oakland. This network is the “largest university-administered reserve system in the world,” comprising more than 756,000 acres of land protected by an educational institution.\footnote{“Specifications,” *University of California Natural Reserve System*, 2016, accessed February 19, 2016, http://www.ucnrs.org/by-specifications.html.} Much of this land has been deeded to the UCNRS by land conservancy organizations, as in the case of Sedgwick Ranch, a parcel of 5,896 acres in Santa Ynez Valley\footnote{William Etling, “Land Trust Saves Endangered Species: Farmers & Ranchers,” *Sideways in Neverland: Life in the Santa Ynez Valley* (iUniverse, Inc.: Bloomington, IN, 2005), 116.}, the 3,100-acre Pit River parcel in Shasta County and 1,484-acre Lake Spaulding parcel in Nevada County. J. Keith Gilless, professor and dean of UC Berkeley’s College of Natural Resources described these sites as “a tremendous laboratory for [UC Berkeley]”\footnote{Rick Rojas, “University of California Gets 4,584-Acre Forestland Donation,” *Los Angeles Times*, November 18, 2011.} though they are used sparingly as such.

In 2010, UC Berkeley began construction on a residence hall on land that the school “took” via eminent domain in 1955. The 424-bed building, situated in a suburban region of Berkeley, could threaten the historic Anna Head School that is located adjacent to the new residence hall on UC Berkeley’s property.\footnote{Frances Dinkelspiel, “New Student Housing in Berkeley’s Southside,” *Berkeleyside*, December 10, 2010, accessed February 10, 2016, http://www.berkeleyside.com/2010/12/10/new-student-housing-in-berkeleys-southside/.} The school, now known as Head-Royce, was put in a difficult situation after receiving notification of the university’s use of eminent domain. The owners of Anna Head, Mr. and Mrs. Daniel Dewey, could not afford to move the school and had no choice but to hand over ownership to a newly-formed corporation that assumed the mission to raise funds to purchase property for a new location. Head-Royce credits “trustees and friends of
the school” for supplying enough capital for the construction in 1964 of a new campus in the Oakland hills. UC Berkeley flexed its government-empowered muscles, and the surrounding community endured inconvenience and the loss of a landmark as a result.

The relationship between a university and its neighbors has real potential to turn sour when the university seeks to expand. There is a precarious balance between the two entities – UC Berkeley and Cal Poly have both had experience straddling the fine line between what the governments and people of Berkeley and San Luis Obispo will and will not allow. Over the last few years, protests have erupted over UC Berkeley’s plans for the Gill Tract, 20 acres of greenspace in Albany, California, that was formerly the site of a research station and farmland. Many students and local residents have sought to restore UC Berkeley’s long-gone agricultural mandate, while the university has begun to prepare the land for private development. The considerable pushback from the local community to save land from rising educational corporate interests has even spawned a movie – “Occupy the Farm,” released in 2014, follows the “story of a community’s fight to save public land for urban farming.”

Cal Poly has recently been in the news for its University Union referendum and plans to develop 10 to 15 acres for faculty housing at the intersection of Grand Avenue and Slack Street – now pastureland for the school’s trademark livestock. Cal Poly political science senior Liana Riley points out in a Mustang News editorial that “Anytime there is even the slightest whisper of expansion, a whole [San Luis Obispo] city council meeting is dedicated to protest the university’s agenda without question,” and goes on to underscore the threat that the university

41 Elena Wasserman, “Cal Poly Trying to Build Faculty and Staff Housing on Grand Avenue,” Mustang News, January 21, 2016.
ultimately mounts to San Luis Obispo’s “small town atmosphere” that “residents...have tirelessly fought to maintain for decades.”

‘Learn by Doing’: Contrasts in Land Use

Fundamental differences between UC Berkeley and Cal Poly extend to how their expanses of land are used. While both have agricultural roots, only one remains a champion of hands-on education for future “ag industry leaders,” as Stuart Bartleson put it when he donated his land to Cal Poly last year. The withering of Berkeley’s focus on agricultural and mechanical training, largely a victim of the school’s role furthering scientific research during World War II, has essentially split UC Berkeley’s mission into two eras – first as a bastion of blue collar job training and then as a place where the nation’s future middle management and executives receive their education. According to the California Organic Act of 1867-68, UC Berkeley’s goal was to provide “practical education in agriculture, landscape gardening, the health of the students.”

Some Berkeley students bemoan the shift in curriculum. Senior staff writer for the school’s Daily Californian newspaper and College of Natural Resources student Carli Baker wrote in 2013: “Doesn’t that sound nice? An opportunity to learn about agriculture, empower ourselves as Millennials to learn about our food system and see first-hand the journey from farm to fork.”

Cal Poly, meanwhile, has been the epitome of agricultural and technical education since its resurgence following the initial onslaught of the Great Depression and resulting budget cuts and closures of the school’s junior college and high school in the mid-1930s. This era, coined by student body president Harry Wineroth as “Poly Progress” as it signified a rebirth from the ashes of what had been a rough few years, was vital to what Cal Poly is now – a university

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44 “Newspaper to Assist in School’s Advancement,” El Mustang (Cal Poly San Luis Obispo), November 4, 1938.
boasting nationally top-ranked agriculture, engineering and architecture programs.\textsuperscript{45} UC Berkeley, on the other hand, has consistently been one of the best scientific research and liberal arts universities in the world.\textsuperscript{46} The philosophical difference between the competing schools is evident not only in how they were founded or how they acquired their land, but also in how they use their land.

Cal Poly’s “Learn by Doing” mantra, introduced by Director Leroy Anderson in Cal Poly’s formative years, transcends education. The Cal Poly Corporation, which helps to oversee Cal Poly’s 10,000-plus acres, announces on its website that “all land holdings actively support student education.”\textsuperscript{47} This is the main difference between land use at Cal Poly and most other universities, especially UC Berkeley. Of Cal Poly’s total 10,000-plus acres, approximately 6,000 acres are used as rangeland for beef cattle, sheep, goats and horses – all used in “livestock enterprising” by the university. Approximately 3,000 acres of this rangeland lies adjacent to the Cal Poly campus at Escuela, Chorro Creek, Cheda, Serrano and Peterson ranches as well as on the main campus parcel; the remainder is at the Swanton Pacific and Valencia ranches in Santa Cruz County.\textsuperscript{48} Cal Poly’s land also includes approximately 150 acres of wine grapes at the Gallo\textsuperscript{49} and Wildhorse vineyards,\textsuperscript{50} about 300 acres of fruit tree orchards,\textsuperscript{51} several hundred acres of irrigated and dryland crops, and roughly 700 acres of wasteland – areas unsuitable for

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\textsuperscript{48} “Rangeland Resources and Grazing Animal Management,” \textit{Cal Poly Agriculture, Food and Environmental Sciences Center for Sustainability}.
\textsuperscript{51} Jay Thompson, “Cal Poly Receives One of the Largest Land Donations in its 114-Year History,” \textit{Cal Poly University News and Information}.
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agricultural use including roads, reservoirs and terrain too steep or rocky. Other land is, according to former Cal Poly professor and Cal Poly Land author Steven Marx, used for “instructional purposes in various departments.”

UC Berkeley’s land, apart from the main campus, and like most other major land-holding universities, is used as nature reserves for research use. These protected areas, under the care of the University of California Natural Reserve System, “enable researchers to conduct experiments without fear of the land or their equipment being disturbed.” The 39,237 acres that Berkeley controls in the UCNRS are protected for the “long term,” and would not be subject to the active support of student education that Cal Poly employs on its land. The result is students fighting tooth-and-nail for the 20-acre Gill Tract in the urban trappings of the San Francisco East Bay in effort to maintain some semblance of the university’s status as a land-grant school. UC Berkeley’s natural preserves are located across the state: Mendocino, Santa Clara, Placer, Monterey and Nevada counties are all home to several hundreds, if not several thousands, of acres protected by UC Berkeley. Authors have described these preserves as “classroom[s] without walls” and “librar[ies] of ecosystems.” The UCNRS benefits the public through the education of students of all levels, elementary through graduate, about the importance of protecting the environment. Cal Poly’s land, on the other hand, benefits the public through the educating of students at the university level of how to practice responsible husbandry and agricultural techniques.

Conclusion

53 Steven Marx, e-mail message to Paul Michaels, February 25, 2016.
Cal Poly and UC Berkeley both started similarly enough: the former as a school focused on “mental and manual training in the arts and sciences, including agriculture, mechanics, engineering, business methods, domestic economy,”\textsuperscript{56} the latter as a Morrill Land-Grant college specializing in “agriculture, mining and mechanics.”\textsuperscript{57} The departure of UC Berkeley from its original purpose to provide a vocational education could be a consequence of its prominent location in a major population center and the expansion of the University of California system in addition to war and the need for scientific research. Cal Poly was affected by war too – the college was a Naval Flight Preparatory School during World War II\textsuperscript{58} – but managed to keep its original mission intact. UC Berkeley’s access to federal funds and an endowment in the several billions of dollars has indeed helped it to expand – something Cal Poly struggles with as a California State University pulling in under a couple hundred million dollars annually.

The shift of UC Berkeley from a technical college to a research university has had a lasting effect on how it has since acquired and used its land, diverging significantly from the common thread it once shared with Cal Poly – a school it now competes with for attracting the brightest students in the country. The unprecedented status and financial latitude that Berkeley enjoys, according to Ohio University professor of economics emeritus Dr. Richard Vedder, “embodies both the best and worst in American higher education.” The university and its sister schools operate at a budget exceeding $24 billion annually – exceeding many states in the country.\textsuperscript{59} Cal Poly, on the other hand, relies heavily on fee-based and state tax revenues to cover

\textsuperscript{56} Myron Angel, “Polytechnic School Bill,” \textit{History of the California Polytechnic School at San Luis Obispo, California.}
\textsuperscript{57} Verne A. Stadtman, “Land and a Charter,” \textit{The Centennial Record of the University of California, 1868-1968.}
its annual $250 million operating cost – and just breaks even.\(^{60}\) UC Berkeley’s revenues amount to $2.35 billion with expenses totaling $2.14 billion.\(^{61}\) These differences are apparent in land use. It is doubtful Cal Poly could afford to let their land sit as a research preserve for students and other interested parties when studies specific to their major coursework requires the use of said land. In terms of land acquisition and use, it is this financial discrepancy and ultimate divergence in philosophy and mission that is the heart of what separates the research institution in Berkeley from the state polytechnic university in San Luis Obispo that lives and breathes “Learn By Doing.”

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