Silicon Valley as the New Hollywood: What Part Has Stanford Played?

Henry Lowood

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As you all know, my prompt today is “How Stanford Spawned Silicon Valley.” Holly Brady asked me to speak to the Historical Society about the relationship between Stanford and Silicon Valley, specifically, as she put it, “how the latter grew out of the former.” This topic presents a quandary for me. It is clearly an important matter, and I have written and talked about it in the past. However, in recent years my interest in Silicon Valley history has taken me in a different direction, to the development of media, entertainment, and related software industries in the region, mostly in the last 15 years or so. I have just begun to think about how this new phase in the Valley’s history, if it is a new phase at all, might lead to a different relationship with the University, and I confess right now that I still have not quite got my head around this question in a way that satisfies me. So, let’s begin with full disclosure. This talk will be divided into two quiet different takes on Stanford’s connections to Silicon Valley: the first offers some closure, but the second will conclude with an emphatic question-mark. If we have time for discussion at the end, perhaps you can help me think about the latter.

Allow me to start by spending a few minutes on this notion that Stanford’s relationship to the Valley began with a birth event, with the University in some
sense as the proud parent. For as we know from the Oxford English Dictionary, to “spawn” means “to cast spawn” (from fish), or “to increase or develop after the manner of spawn; to become reproductive.” If we move down to the less literal sixth meaning of the word given in this dictionary, we find something more relevant, “to engender, produce, bring forth, give rise to.”¹ A spawn, the noun form, is “a product, result or effect of something,” or alternatively, “the source or origin of something.”² Put another way, the notion here is that Stanford brought forth, produced, or gave rise to Silicon Valley, that Stanford was the cause and Silicon Valley the effect. (Here, a short digression: There is one occurrence of “Silicon Valley” in the venerable OED, found under “Silicon” and then under combined phrases with “silicon chip” and the like. And the definition is:

“Silicon Valley orig. U.S. [from the use made of silicon chips], the Santa Clara valley, S.E. of San Francisco, where many leading U.S. microelectronic firms are located.”³)

Some of you have chatted with me, or perhaps read what I have written about the history of the Industrial Park as a moment in this familial relationship; you know already that I am a bit skeptical about this view of Stanford as the proud Papa. Before I get to the skepticism and alternative paternal claims, it is important that we have some evidence that I am not simply putting together a straw man. The first careful studies of the historical origins of what came to be called Silicon Valley were Jane Morgan’s Electronics in the West: The First Fifty Years, published in 1967, and Arthur Norberg’s “The
Origins of the Electronics Industry on the Pacific Coast,” published in the *Proceedings of the IEEE* in 1976. These treatments were as different as two publications could possibly be in terms of intended readership, sources, and style of argumentation, but they agreed in taking a long view of the history of the electronics industry in the region, providing much evidence for the existence of a sustainable concentration of skilled technical personnel and businesses before World War II.

During the 1970s, however, the magnitude of the phenomenon under investigation seemed to grow dramatically. In 1971, Don Hoefler coined the term “Silicon Valley” (more precisely, as “Silicon Valley, U.S.A.”) in his weekly trade newsletter called *Electronics News*, known as the “industry’s tabloid,” to describe the regional concentration of electronics and semiconductor firms centered then in the Santa Clara Valley. By the mid-1980s, as the line-up of solid companies (Hewlett-Packard, Varian Associates, Intel) and star startups (Atari, Apple) produced an economic motor of international significance, more effort was made to explain what happened and translate this explanation into terms that were of more than local interest. The number of books devoted to the new regional geography of high-technology concentration, generally, and to Silicon Valley in particular, increased. Finding more precise explanations was tied to various government efforts (federal, state, and foreign) to find a formula for replication that might yield new Silicon Valleys and Industrial Parks elsewhere.

These studies tended to agree on a particular version of Stanford’s historical relationship to Silicon Valley, namely, that the father, or “godfather,” of
the Valley was none other than the University’s eminent Professor of Electrical Engineering, Dean of the School of Engineering, and Provost, Frederick E. Terman. We find this version of the story in a variety of texts, popular and academic, published during the mid-1980s. Perhaps the most succinct statement appeared in the *San Francisco Chronicle* when Terman died in 1982: “Stanford’s Terman dies – He Launched Silicon Valley.”

Everett Rogers and Judy Larsen wrote in *Silicon Valley Fever: The Growth of High-Technology Culture*, published in 1984, that, “thus, but for the fickle fact of being struck with a serious illness, Fred Terman would probably have become the godfather of Boston’s Route 128, instead of its counterpart in Santa Clara County. And without Fred Terman, Silicon Valley might never have happened.”

Michael Malone’s *The Big Score: The Billion Dollar Story of Silicon Valley* came out a year later. Malone was more restrained in his appreciation of Terman and Stanford’s role. His book suggested a creative tension between the two poles of Hewlett and Packard’s influential “H-P Way” and the breakneck, spin-off and start-up culture associated with Fairchild, Intel and the “canonization of Bob Noyce.” Even so, Terman figured as a grey eminence in Malone’s book; as he put it, “the loyalty of Hewlett and Packard to Terman is one of the most moving episodes in the Silicon Valley Story. . . . When he died in 1982, wire services carried obituaries around the world describing him as the father of the electronics revolution.”

These eulogies continued in the literature about Silicon Valley, ranging from Carolyn Tajnai’s often-cited essay, “Fred Terman, the Father of Silicon Valley” (1985) to possibly the most energetic proponent of the Terman-as-father
view, the influential regional geographer, Peter Hall. Hall has written often about Silicon Valley, notably in *Silicon Landscapes*, published in 1985 and drawing on research from the late 1970s, and leading to his most important work, *Cities in Civilization*, published in 1998. In the earlier work, Hall reasoned that Silicon Valley “sits next door to Stanford University, and that is no accident; it was the brainchild of Frederick Terman, a Stanford professor.” In the later work, he settles the paternal issue. After approvingly citing Rogers and Larsen, he concludes that Terman’s role “as godfather of the incipient industry was crucial, and without it the rest of the story would probably never have taken place.” In this magisterial work on creativity and urban development, Hall focuses on the particular moment of the founding of the Stanford Industrial Park. He credits Terman with calling it “Stanford’s secret weapon” and insists, “originally the scheme was just a means of making money, but soon the idea developed of technology transfer from the university to industry.”

Thus far, we are getting a clear picture of Stanford’s parental relationship to Silicon Valley. The metaphors of Stanford spawning Silicon Valley and Frederick Terman as its father—or godfather, though I have to admit that this variation on the theme baffles me; does it mean that Terman merely witnessed the birth and vouched for the right upbringing of the child?—anyway, these metaphors underline two aspects of the relationship. First, that Stanford was there at the beginning and, second, that Stanford/Terman indeed brought forth the Valley.
I have found it difficult to agree with either notion of Stanford’s role as birth parent. This is not because I dismiss Stanford’s role, but because in my view this picture overly simplifies a dynamic and multi-dimensional relationship. Not to pick on Hall, but to illustrate the conclusion to which the Terman-as-father reasoning leads, I quote again from *Silicon Landscapes*, “thus, as a deliberate set of policies was Silicon Valley born;” moreover, “this was a private piece of planning, by one visionary man, at a private university.” Of course, we have already seen that other writers besides Hall point to Terman. I think what they generally have in mind as his “plan” is Terman’s notion of a “community of technical scholars,” that is, a region “composed of industries using highly sophisticated technologies, together with a strong university that is sensitive to the creative activities of the surrounding industry.” Terman himself suggested that “this pattern appears to be the wave of the future.” It is not difficult to follow Hall in taking the opening of the Stanford Industrial Park to controlled industrial development in 1953 as triggering a process of expansion from Stanford and university-industry symbiosis that served as the intellectual hub of Silicon Valley.

I do not believe that this is quite the way it happened.

My first point is to suggest a different characterization of Frederick Terman’s contribution. Allow me to repeat what I wrote nearly twenty years ago in an essay about the early history of the Stanford Industrial Park, “The Industrial Park really owed its existence not to visionary planning but to a mix of genial opportunism and informal personal contacts that grew out of pre-war work in the Stanford Physics Department.” Terman returned to Stanford in 1946.
from his war work as head of the Harvard Radio Research Laboratory. This assignment provided a multitude of ideas and experiences about the future organization of research in the postwar period. As Dean of Engineering, he applied his realization of the significance of federal support, in particular, to the task that drove him for the remainder of his career: the conversion of Stanford into a top-tier research university. As Provost from 1955 until his retirement in 1965, he worked with J. E. Wallace Sterling, the university’s president, to reshape departments and laboratories and to define, as well as exploit, their roles in a growing complex of relationships with federal agencies and industry.

The moniker "Father of Silicon Valley" merely expresses one aspect of this monumental task. In a report called “Inventing the Entrepreneurial University,” Tim Lenoir, Nate Rosenberg and a team of co-authors, put this relationship between building the University and creating a climate of cooperation with industry as follows, “Terman’s recipe for distinction was simple: focus on attracting and retaining the scientific and engineering talent most capable of winning federally funded research grants and contracts—steeples of excellence—and use those funds to support cutting-edge research that stimulates industrially relevant technology, which in turn reinforces the capability to do more and better research.” Historical attention to Terman has indeed focused more intensively in the last decade or so on his shaping of the strategy and mechanisms of federally-funded university research and his management of a university built on this foundation. I refer you to C. Stewart Gillmor’s biography of Terman, Fred Terman at Stanford: Building a Discipline, a University, and Silicon Valley, for
details of not just the strategy, but also the tactics of Terman’s single-minded dedication to this project. 15

The point is that Terman had no “master plan” for Silicon Valley in the sense of a “deliberate set of policies” that gave birth to Silicon Valley. Rather, it was a plan for the creation of a certain kind of university, built on a central relationship between Stanford and the federal government that would provide the bulk of funding for research, graduate students, and even for faculty through the practice of “salary splitting,” particularly in the sciences and engineering fields. We must remind ourselves here that the goal was not simply to wash the campus in federal dollars; rather, guided by his notion of “steeples of excellence,” Terman’s eye was on the prize of distinctive research programs. These programs were to be led by first-class faculty, of course, but it was just as important to Terman that they generate talented pools of well-trained graduate students. Lenoir, et al. have succinctly described Terman’s mission in this regard: “Rather than simply bringing in contract dollars Terman’s goal was to get funding as a way to hire the best talent.” 16

Terman was also a master of tactics. An example is provided by his role in revising Stanford’s Master Plan of 1953. Let’s begin with the situation of the University ca. 1950. The largest problem facing Stanford at that time was financial; the endowment was paltry and could not reliably ensure adequate operating budgets and capital funds for growth. Stanford’s finances lagged behind its peers and fell short of the aspirations Terman and others would set for the University. Moreover, the Founding Grant bound the Trustees not to sell off 8
pieces of the Stanford estate to raise funds; the University was land rich and cash poor. In 1945, the University had established a Planning Office under the leadership of Eldridge T. Spencer. Under its direction, administrators considered several schemes for generating income from land: agricultural development, housing projects, and a regional shopping center, for example. In 1950, reserves for non-campus use of the land had been put aside, but the overall thrust of these projects remained only vaguely connected to the University’s core programs. In 1951, the University established a Faculty Advisory Committee on Land and Building Development; then, in 1953, the San Francisco architectural firm of Skidmore, Owings & Merrill submitted a formal Master Plan that focused almost exclusively on the ideas I just mentioned. Reserving land for light industrial use was only briefly mentioned in this report.

Time does not permit me to dwell on the details of the Industrial Park’s emergence from this initiative, but allow me to make two quick points. The first is that the initiative for specifying the use of a portion of Stanford’s lands for industrial use--beginning with about 40 acres off El Camino Real around what is today known as Hansen Way—came from an improvised collaboration with Varian Associates, a company founded in 1948 to commercialize inventions and research from with the Physics Department: the klystron tube and nuclear induction. Indeed, during the 1950s Varian specialized in developing Stanford research, and the company hired faculty, research associates, and students from the University. It was Stanford 2.0 long before Google, and more important, it typified the kind of relationship with local industry that Terman saw as mutually
beneficial. Varian’s “million dollar plant,” built with assistance from the Federal Government’s Reconstruction Finance Corporation, was first announced to the press in May 1952, and it began the process of highlighting industrial development on the University’s lands.

Just as important, the Varian project mobilized Terman to reverse the prevailing tendencies in the Master Plan by reducing housing development and setting aside more land for an Industrial Park. He argued forcefully that the University should use its land to benefit expanding University programs by easing routine contacts with sympathetic companies and recruiters; hence, laboratories should occupy the Industrial Park, not warehouses and production facilities unconnected to the research mission. Terman joined the Advisory Committee by 1953 and chaired the subcommittee on “campus size and boundaries.” In 1954, the Committee as a whole prepared a report critical of the Master Plan that formally raised the issue of expanding the Industrial Park. Terman drafted the sections critical of the allocation for light industry. Terman’s involvement set the stage for the University’s increased commitment to the growth of the Industrial Park during the 1950s and 1960s. In short, the success of the Industrial Park as a cornerstone of the University’s relationship with local industry flowed from a mix of administrative flexibility, pragmatism, informal contacts, and initiatives launched both inside and outside the University. Instead of representing a single-minded vision for regional development, Terman’s approach to the Industrial Park stressed the priorities of the University and collaboration in a small circle of companies benefiting from relevant research.
It is important to stress here that this revisionist view of Terman as father of Silicon Valley does not in my mind diminish Terman's importance. I suppose this verdict comes down to a question of whether we value visionaries over master tacticians and planners over leaders. Of course, I have said nothing thus far that questions the seminal role played by the Industrial Park in the genesis of Silicon Valley. The question is: Did the pattern of university-industry interactions by exemplified by Varian Associates and Hewlett-Packard provide a model that other companies emulated? Let me make two quick points in response to this question before moving on. First, I would argue that Terman's contribution of the informal community of technical scholars linking local industrial firms and Stanford research programs was only one factor among many in the development of Silicon Valley through the 1960s. The most important material factor, both for industry and the University, was the unprecedented influx of government grants and contracts into the region, defense and aerospace being the primary beneficiaries. Government dollars contributed more directly to the expansion of Silicon Valley than Terman's program for vitalizing Stanford University.

Second, it must be noted that there were a number of independent developments that, at least initially, bore less direct connections to Stanford, notably the chain of early semiconductor companies leading from the Shockley Transistor Laboratory to Intel and its many spinouts, as well as the early personal computer industry. As William Miller, former Stanford provost, has noted, mixtures of inter-related factors create environments for regionally concentrated
industrial growth, including a wide palette of quality-of-life, spiritual, community and material factors. He calls this mixture of elements the “habitat” for entrepreneurship. Allow me to quote at length, “One such region—Silicon Valley—has become a hotbed of innovation and entrepreneurship by virtue of its unique business environment, or habitat. In the business habitat of a high tech entrepreneurial community like Silicon Valley, as in the natural habitat for flora and fauna, there is a complex interrelationship between the various elements that contribute to its success. Locally, venture businesses grow robust by working with specialized business service firms, and these business service firms are strengthened by their work with venture businesses. On a larger scale, the business habitat also includes the national system of regulation, security laws, accounting principles, research and education support, and, significantly, the business philosophy of the nation itself.”

It is a corollary expectation of such a complex set of relationships that as Stanford has undeniably played a role as one of the engines that “keeps Silicon Valley running,” it is also to be expected that, following Lenoir et al., “Silicon Valley firms and inventors have been just as important in shaping research directions at Stanford.” For the remainder of this talk, then, I would like to tentatively explore a few ideas about where this two-way relationship might lead.

Lenoir, et al. argue that “the rise of the solid state electronics program at Stanford was inextricably linked with the growth of Silicon Valley.” Their report documents the various ways in which industry support was crucial for the development of the University’s programs from the late 1950s through the
founding of the Center for Integrated Systems, the Stanford Integrated Manufacturing Association (SIMA) and the engineering venture fund in the mid-1980s. In contrast to Hewlett-Packard or Varian, the University had relatively little to do with the origins of solid state electronics in the Valley, playing at best a minor role in William Shockley’s decision to create a transistor laboratory in the town of his childhood or his recruitment to the Bay Area of the group that would spin off companies like Fairchild and Intel.

Today, Stanford is clearly a fixture in the “habitat” for Silicon Valley entrepreneurship across a broad spectrum of fields, from biotechnology to computer and chip companies, and in recent years, the growth of the web and associated technologies, enterprises, and modes of use. This does not just mean that Stanford as an institution plays a role in creating and circulating relevant research results. It also refers to such things as the flow of personnel, services and venture funding. Stanford students, staff, and faculty have founded well over 1,000 companies in the Valley, companies that account by various measures for roughly 30 to 60 percent of employment in its high-tech firms. In 2005, the Office of Technology Licensing alone held equity in roughly 80 companies, in addition to managing more than 1,500 active licenses. Stanford graduates—undergraduate, graduate, and professional—also work in law firms, venture capital houses, marketing firms, and many other parts of the vast support network that makes up the Silicon Valley habitat. Even before we consider equally important flows back into the University of resources, personnel and
ideas from the surrounding region, it is clear that Stanford is today an
inextricable part of the Silicon Valley habitat.

These are hardly original or particularly revealing insights. So allow me
another banal observation. The two-way relationship between Stanford and
Silicon Valley has been extended, multiplied, deepened, and is today far more
significant than perhaps even Fred Terman could have imagined in the early
1950s. Since the 1970s, the economy of the region has diversified beyond
electronics, with biotechnology, biomedical instrumentation, laser physics,
artificial intelligence, microcomputer and computer technology, and the web
adding new technologies and business models to the mix. The transfer of
knowledge from university research, tested earlier in electronics and microwave
physics, has been repeated and varied in each of these cases.

So far, I have been talking principally about the structure of a relationship
between one institution, Stanford University, and the far more amorphous,
complicated and shifting set of institutions that together make up Silicon Valley
as an industrial region. Silicon Valley means many things to many people. A
particular depiction of Silicon Valley has caught my attention, and I will indulge
in a closer, if rougher look at this notion. In particular, I am interested in
whether Silicon Valley has changed in a meaningful way, and if so, whether
Stanford’s multivalent connections to the Valley will dictate that Stanford
changes along with it. Let’s start with the cover of *Time Magazine* for September
27, 1999, with the title “Get Rich.com: Secrets of the New Silicon Valley.” One of
the cover stories inside succinctly summarized what was “new” about the Valley:
“There was something oddly charming about the geeks who made up the first wave of Internet entrepreneurs. Social misfits pounding out code in their computer-science labs—these people deserved professional success. But after the Wright Brothers, you get Frank Lorenzo. And so this summer Silicon Valley was flooded by the Second Wave: fast-talking business-school grads whose interest in technology is limited to how it will make them money. This is Silicon Valley in the IPO age. Geeks are history; they're all capitalists now.”

A series of articles and sidebars caricatured this new Silicon Valley, including a photograph from the Stanford campus with the caption, “Stanford M.B.A.s may look relaxed, but they're talking shop all BBQ long.”

I first came across this issue of *Time* not because of the focus on the changing nature of Silicon Valley, but because I was tracking down an article on a game developer as part of an ongoing research project on the history of computer game design. The article was about Blizzard North, the northern California division of an important game development studio then based in Menlo Park. I found it in a section of the magazine called “Silicon Valley: The Second Wave.”

The author described Erich and Max Schaefer's business success as the creators of the best-selling game, *Diablo*, “Erich and Max metaphorically stayed in front of that Apple II as Moore's law morphed it into a faster, better computer. Then came the Net. And after nearly a decade of wandering the techie wilderness, dabbling in desktop publishing and then gradually shifting into game design, the Schaefers struck gold with Diablo, ... Then, in typical Silly Valley fashion, their company
was bought out by a bigger company, which was bought by an even larger company. You know the rest.”

Does this new Silicon Valley exist? We have had euphoric bubbles before, and as Miller’s notion of the Habitat reminds us, Silicon Valley has always been built on a complex business and service infrastructure that provides an abundance of opportunities for business school graduates. Perceptive academic writers on the Valley from Lenoir to Miller have suggested that its history has passed through several phases or stages, so the notion of a shift or inflection point is not by itself terribly surprising. Lenoir, in a contribution to Charles Kruger’s *Research Universities 101: Stanford a Case History* lecture series, talked about waves of innovation, from the first microwave electronics wave during the 1950s through chips and desktop computing to the fourth Internet and dot.com wave of the 1990s. Miller takes a complementary approach that emphasizes stages in the structural development of the Valley’s business structure, from the formation of “icon” companies from the 1920s through 1960 (e.g., H-P and Varian), the period of dynamic growth and infrastructure development from 1960 to 1985 (not just Fairchild and Intel, but also venture capital, accounting, marketing, legal, and other infrastructural services), followed by “stagnation, decline, and renewal” through civic entrepreneurship from 1985 to 1993 (e.g., Smart Valley), and on to the period from 1993 to the present, characterized by Miller as “new dynamism and new business models.” Clearly, this last period may have something to do with the *Time* magazine version of Silicon Valley’s transformation.
Despite familiar tones in the Blizzard success story, the *Time* writers argued that in the new Silicon Valley, something was really different. This may be true, but I think that *Time* missed the real story. It isn’t the replacement of cultural misfits and tech geeks by capitalist success stories and model MBAs. Rather, it is a more fundamental transformation, not just a change in the business climate or the vanguard technologies, but the breakthrough of Silicon Valley as a culture economy, as the new Hollywood. “Culture economy” is not meant here in the sense of cultural economy, as in cultural studies, nor does it refer to emerging markets for operas or bacterial cultures. Rather, it is a clumsy way to characterize the breakthrough of companies and business models that focus on transforming cultural production and dissemination. At the same time, the comparison to Hollywood is not merely a way of describing the impact of Silicon Valley companies, from Electronic Arts and LucasArts to Pixar, Yahoo and YouTube, on the entertainment industry, although that is certainly a significant development. Silicon Valley as the New Hollywood is not just about entertainment, it branches into technologies and entrepreneurship for knowledge production, information access, social interaction, consumer-created content, game development, security and digital rights, advertising, and expressive media.

My topic today is Stanford University’s relationship to Silicon Valley. So it may not be necessary today to measure the precise scope of this “culture economy,” or to determine exactly whether it amounts to a total transformation of the regional economy or simply a significant shift of emphasis. Another reason to refrain from characterizing the “culture economy” too specifically is that
there are so many versions of its “newness.” Is it Web 2.0? Content over technology? The 3-D web (e.g., Second Life—or would that be the second Silicon Valley)? The “transformation from a manufacturing to an information economy?” Is it “all about media technologies?” or perhaps “convergence culture,” or the consumer as creator?

Well, time does not permit a thorough critical discussion of these various notions, but I do want to make one quick historical point before turning back to Stanford’s place in all this and asking my question. Namely, Silicon Valley as a “culture economy,” whatever we may think about his impact today, is not an entirely new phenomenon. Indeed, visions of new entertainment forms and information processing potential have been a part of the research and entrepreneurial climate for decades, woven into the historical development of Silicon Valley in many significant ways. We need to bring out this pattern in the weave more prominently. It is not difficult to find significant, but under-appreciated moments in the history of Silicon Valley’s engagement with media and information technologies. Bill Miller’s instructive model of “stages of development” in the history of Silicon Valley provides a starting point. For example, Miller’s identification of the period from the 1920s through 1960 with “icon” companies” brings about an immediate association with H-P, Varian or the Shockley Lab; the under-appreciated media and entertainment technology company from this period is Ampex, founded by Alexander Poniatoff in 1944. The 7th largest company in Silicon Valley in 1982 (HP was 1st, Intel 3d, Varian 5th), it delivered audio and video recording, helical scanning recording,
magnetic theater sound systems, slow-motion, instant replay and may other innovations that transformed broadcast and home media production; its employees spun out important new companies (Atari, Apple, Dolby Labs), and it was closely connected to the entertainment industry (Bing Crosby Enterprises, Les Paul, ABC Radio, “Wide World of Sports”). During the growth period of Silicon Valley in the 1970s and 1980s, companies like Atari, Activision, Electronic Arts and LucasArts established specialized business practices and infrastructure (such as new marketing techniques, or studios). There was much cross-fertilization between technology companies such as Apple, Silicon Graphics, and MIPS and applications in the entertainment industry, to name only one area of the culture economy, during this period. Since the early 1990s, companies and projects such as Netscape, Yahoo, Google, YouTube, Wikipedia, and Linden Lab exemplify Miller’s characterization of this period as one of “new dynamism and new business models.”

This new dynamism is flowing into highly contentious waters. In mid-2002, Larry Lessig of the Stanford Law School began a widely circulated column titled “Hollywood v. Silicon Valley: Make Code, Not War,” with the statement that, “There's a civil war brewing in my state of California. It is again a war between the Silicon Valley-based IT industry in the North and Hollywood content and entertainment producers in the South.” Lessig addressed the tension between these two regions, a smoldering conflict between old media industries and new consumer-empowering media technologies. As an example, he pointed to congressional testimony by Les Vadasz, an Intel veteran, that Congress should
be “listening to the consumer” rather than bowing to the old media industries with respect to content control. Andrew Keen, writing for *The Daily Standard* earlier this year, described the utopian drive behind Web 2.0 proponents in Silicon Valley as a blend of 1960s counter-culture and “techno-economic utopianism” of the 1990s. He quoted a Silicon Valley entrepreneur as touting the historic significance of “enabling Internet users to author their own content.” This source voiced the hubris of Silicon Valley as the New Hollywood: “We can help smash the elitism of the Hollywood studios and the big record labels. Our technology platform will radically democratize culture, build authentic community, create citizen media.”

So here, at last, is the question: What are the implications for Stanford’s relationship to Silicon Valley stemming from the latter’s aspirations as the New Hollywood, or perhaps, the Anti-Hollywood? As we have seen, the motor powering Stanford’s relationship with surrounding industrial concerns has for decades been the flow of federal research dollars to the University, fit to Terman’s flexible notion of the Community of Technical Scholars. As technologies and business ventures generated here begin to compete more frequently (and virulently) with Hollywood and New York than Route 128, can this notion be extended to a Silicon Valley economy that is perhaps less clearly focused on technological innovation as its driving force?


9 Verify

10 P. 427 (check).

11 p. 429 (check)

12 Verify

13 From Steeples of Excellence to Silicon Valley, p. [2].


18 “Inventing the Entrepreneurial University” op. cit.


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29 Junfu Zhang, “High-Tech Start-Ups and Industry Dynamics in Silicon Valley.” Public Policy Institute of Califorina report (2003),
http://www.ppic.org/content/pubs/report/R_703JZR.pdf#search=%22amp%e2%80%99spinoff%20valley%22. Based on Dun & Bradstreet business rankings data (sales).

30 Lawrence Lessig, “Hollywood v. Silicon Valley: Make Code, Not War,” CIO Insight, http://www.lessig.org/content/columns/cio1.pdf. This opinion piece has been widely circulated on the web; Lessig’s c.v. page links to this version.