**Californian Genius: Lewis Terman’s Gifted Child in Regional Perspective**

This article focuses on the regionality of early giftedness research. I am interested in the relations between what I shall for now call the Progressive-Era California ‘imaginary’, and the development, in the works of Lewis Madison Terman and his peers at Stanford University between the 1910s and the 1930s, of giftedness as a scientific and educational object.

I suggest here that California in general and Stanford in particular did not just provide a locale for the ‘Termanites’ to conduct their research, but more significantly offered a conceptual, ideological, and even aesthetic framework for that research. [[1]](#footnote-1) Terman’s work can be read against what might be called the *giftedness thinking* of Progressive-Era California: the notion, central to the symbolism and history of that state, that nature is packed with hidden ‘gifts’; and the associated claim that their identification and extraction is of capital economic, political and even moral importance for the future.

The Termanites’ ontology of giftedness reflected and adapted that regional ‘dream’ in several of its iterations. Before arriving at Stanford, Terman had already developed an interest in precocity and high intelligence; but in California he found a rich vocabulary and imaginary through which to sculpt that interest into a specific understanding of high intelligence, namely giftedness: the vision of a native, mostly inherited, fixed, and exceptional intellectual endowment, requiring identification through I.Q. testing, and calling for special educational provision. As Leslie Margolin has well shown, that conception is inseparable from an economically and racially divisive sociopolitical project;[[2]](#footnote-2) in this respect, the Termanites’ conceptualisation of giftedness espoused the intense eugenicist leanings of Progressive-Era California, where the notion of highly intelligent people as natural-born leaders and breeders of future leaders was particularly resonant.

After a brief overview of the ties of Terman’s research on intelligence to the California and Stanford contexts, this article is divided into three main parts, each recounting an aspect of the shared history of California with giftedness research. I look first at the placedness of the metaphorical thinking that animated the Termanites’ work on giftedness. I then explore that work with reference to the state’s eugenicist thinking. Finally, I show how the historiographical efforts of the Termanites inscribed California and Stanford into a reconstructed chronology of genius.

In this study I do not wish to present California as a master key to the history of giftedness, nor to ‘demystify’, ‘debunk’ or ‘denounce’ giftedness as a ‘Californian product’; my intentions are not polemical.[[3]](#footnote-3) Following a broadly Latourian methodology, I will not be attempting to disentangle the ‘facts’ from the ‘fairies’ in the hybrid and complex object of giftedness, always-already scientific *and* political *and* philosophical *and* educational (etc.); it is the cross-pollination between a research group and its place of study that interests me here.[[4]](#footnote-4) The relationship went both ways: California wrote itself into giftedness, but Terman and his peers’ scientific practice also placed California ‘on the map’, so to speak, of high intelligence. Prominently, it turned Stanford into a major *brand* for giftedness. By paying attention to the interlocking histories of California and giftedness, we enrich our understanding of California’s unique involvement, still today, with a distinctive theory, practice and economics of high intelligence.

**More Stanford than Binet: Terman’s local test**

In the early 1900s, Lewis Madison Terman was ill with tuberculosis, had contracted no small amount of debt to pursue his studies, looked after a young son, and was unemployed. For health reasons, he had to move to a sunny state; but despite being a promising scholar who had studied under Stanley Hall at Clark University, Terman did not have good career prospects in academia.[[5]](#footnote-5) When two school management opportunities finally arose – one in Florida and one in California – he chose the latter.

Ten years later, Terman’s situation had radically changed. Through a combination of perseverance and luck, Terman had hopped from school management to, in 1910, an associate professorship at the School of Education at Stanford University. There, supported by the powerful Dean, Ellwood P. Cubberley,[[6]](#footnote-6) Terman developed and popularized what would become the most-used intelligence scale of the early 20th century, the Stanford-Binet. Projects led by Terman, his students and his research assistants turned California into a leading state for the implementation of IQ testing in schools. [[7]](#footnote-7) By 1921, Terman was nationally-renowned and a best-selling author; soon he was charged with creating the Stanford Department of Psychology, and was elected President of the APA in 1923. He was free to delve into a subject that had preoccupied him for quite some time: high intelligence, especially in its iteration he called giftedness.[[8]](#footnote-8) From the 1920s, he launched the longest-running longitudinal study in the history of psychology worldwide: the Stanford studies of giftedness, which have been following a group of gifted individuals since the early 1920s. The gifted group in question was Californian, and the study led by Stanford researchers.

The Termanites’ studies on giftedness constituted the ultimate stage in the Stanford ‘branding’ of intelligence in the Progressive Era, which had started with the success of the Stanford-Binet test. As is evident (though surprisingly infrequently discussed), the test was named not after its author, but after its author’s institution.[[9]](#footnote-9) Alfred Binet’s name testified to Terman’s lifelong intellectual and emotional attachment to the Frenchman, whom he called his ‘favorite of all psychologists’.[[10]](#footnote-10) Yet the moniker of Stanford, pushing Binet’s aside, indicates how strongly Terman’s university affiliation had made that test a *sui generis* academic project, institutionally and geographically delineated. Terman neither simply imported nor invented, but adapted, calibrated, and advertised intelligence *in situ,* evolving in constant and tight interaction with the institutional possibilities and academic ambitions of Stanford. The test was always much more ‘Stanford’ than it was ‘Binet’.

The Stanford-Binet test was entirely home-grown; the scale was calibrated with a sample of about a thousand children, picked from schools located around the Stanford campus.[[11]](#footnote-11) Terman makes no mystery of the difficulties encountered in calibrating the scale, giving throughout his early work painstaking accounts of the trial-and-error empirical and theoretical process. After three revisions, he achieved norms for ‘a median intelligence quotient closely approximating 100 for our non-selected children of each age’,[[12]](#footnote-12) in an uncommonly homogeneous sample: the children were close in age, in schools ‘such as almost any one would classify as middle-class’ [[13]](#footnote-13), with no foreign-born children, and few of non-Western-European ancestry. This homogeneity ensured, for Terman, the representativeness of his scales. Even after the tests gained national recognition, Terman persisted in perfecting them only with local children.[[14]](#footnote-14) The standard Stanford-Binet intelligence was a very specific California intelligence: middle-class, and excluding foreign ancestry. That rather exclusive sample aligned with the common class- and race-based exclusionary prejudices of Progressive-Era California, propounded notably by David Starr Jordan, the Vice-Chancellor of Stanford; of which more later.

Terman’s interest in intelligence testing aligned with a particularly intense local need with tremendous national relevance. Intelligence testing in the Progressive Era, as Paul Chapman has shown, owed much of its power to the fact that it offered a way of dividing students scientifically into different ability groups.[[15]](#footnote-15) In California, a state which had grown tenfold due to immigration in the previous fifty years, the need to rationalise school administration was pressing; that needy educational system was also unusually proactive in its desire for change, manned by ambitious and obstinate school administrators.[[16]](#footnote-16)

Stanford and its School of Education were well positioned to respond to those needs.[[17]](#footnote-17) The emphasis on (what we would now call) ‘impact’ was at the core of Cubberley’s vision; a passionate advocate for the scientific review of school administration and educational policies, he provided Terman’s work on intelligence with the academic legitimacy and the practical support it needed.[[18]](#footnote-18) Because the needs of California schools were not essentiallydifferent, only more intense, than those of other states nationally, there was always in those experiments potential for a general uptake of intelligence tests for purposes of school administration. That potential was realised, and the Stanford research team acquired national recognition. Where Stanford had supported Terman’s research, Terman returned the favour by contributing to Stanford’s academic reputation.[[19]](#footnote-19) In just a few years, Stanford had become the recognizable ‘research lab’ of intelligence testing, and California the Petri dish for experimental encounters between schools and intelligence testing.

Terman’s translation, adaptation, revision and additions to the Binet-Simon scale of 1908 signalled an ontological shift for the ability it was claiming to measure. While Binet was unwilling to declare intelligence either inherited or fixed, Terman strongly foregrounded these two attributes. His scale also inflected the political and educational vision associated to the use of IQ in school and social administration. While Binet had been mandated by the French government to explore possible pedagogical adaptations for children of low intelligence, Terman had always had a personal and professional interest in the highest-scoring children.[[20]](#footnote-20) Terman judged individuals of low intelligence as a social and economic burden, which disproportionately benefited from public money; he frequently criminalised them. [[21]](#footnote-21) With the Stanford Studies of Giftedness, he made it his mission to support individuals who scored highly on the scale. That focus on the identification and selection of high intelligence, as I now discuss, cannot be severed from the regional history of California, with which it shared some of its metaphorical thinking, and much of its philosophy and political ideology.[[22]](#footnote-22)

**All that glitters: Terman’s gilded children**

‘The Stanford-Binet scale, a method of assaying intelligence’: thus begins the first chapter of Terman’s 1919 handbook *The Intelligence of Schoolchildren*. In case the assaying metaphor isn’t explicit enough, he expands:

In order to find out how much gold is contained in a given vein of quartz it is not necessary to uncover all the ore and extract and weigh every particle of the precious metal. It is sufficient merely to ascertain by boring the linear extent of the lode and to take a small amount of the ore to the laboratory of an assayer.[[23]](#footnote-23)

Mentions of gold, mining, and extraction in Terman’s works are only occasional, but they are not incidental; in a state whose identity had been shaped by the discovery and extraction of gold, they show how much Terman’s thought was undergirded by faith in a bountiful nature packed with hidden gifts, ready to be seized by enterprising minds. Margolin has noted the extent to which giftedness research ‘has been incredibly successful at creating the perception that these children are a “national resource”’.[[24]](#footnote-24) This rhetoric – and the corresponding vision of unidentified giftedness as ‘waste’ – seems so intuitive today that it is easy to overlook its connections to a contextual imaginary. Yet that vision was mostly developed and popularized by Terman, in California, in the 1910s and 1920s. [[25]](#footnote-25) The pioneer of giftedness research, Victorian scholar Francis Galton, did not need semantics of resource and waste to talk about genius, because for Galton, genius always rose to the surface; measuring it was virtually equivalent to measuring achievement or social recognition. [[26]](#footnote-26) Terman, however, did not believe that high intelligence guaranteed success; indeed, he was extremely anxious about the undiscovered gifted, whom he assumed existed in large numbers. The oscillation between awe at the hidden gifts of nature, and fear of failing to seize them, is omnipresent in Termanites’ writings:

There is incomparably greater wealth of potential genius in the general population than the statistical incidence of eminent persons would suggest. Society has no greater problem than to discover and make the most of these little-known resources.[[27]](#footnote-27)

Kevin Starr, in his famous multi-volume history of California, highlights a similar mixture between optimistic reliance on the generosity of nature and a related fear of missing out:

Nature, that awesome setting for the California dream! Heroic, eternal, overwhelming, it proved a glory, and a problem. It promised a profusion of gifts: beauty, life, health, abundance, and, perhaps most important of all, a challenging correlative to inner aspiration. But it could also intimidate: the challenge could become a mocking measurement of failure.[[28]](#footnote-28)

It is important here to understand that in the California of Terman’s time, there was nothing fanciful to the notion that the land was literally stuffed with natural gifts, and that their discovery and exploitation was in some ways a moral command. As Barron *et al.* put it, ‘The whole California economy, it seems, was instantly and insistently… “digging up, grinding down, and spitting out the gifts of the earth”’[[29]](#footnote-29). Frequently defined as an El Dorado, an Eden or a Land of Cockaigne, California had been shaped and narrated, for over sixty years by the time Terman arrived at Stanford, by that command. Undiscovered treasure in California was as much a part of folklore as it was an item on the news.[[30]](#footnote-30) After the 1848 Gold Rush, which had led to the Minerva birth of the state, more rushes – towards oil along the Pacific Rim in the 1920s, towards fruit groves, even towards sunlight – had continued to justify the status of California as a land of plenty.

The moral and spiritual aspects of those rushes were secured by the notion that California had realised Manifest Destiny – the divine order to conquer the land westwards. This feeling was very much alive in the 1910s and 20s; Cubberley, in one of his history manuals, identified California as the ultimate ‘push into the ocean’ of the American frontier in the grand national narrative.[[31]](#footnote-31) That natural superiority called for a particular mentality: California was a land of fervent optimism. Any failure to find natural resources in its soil was, as Rosenberg notes, evacuated from collective memory.[[32]](#footnote-32) Materialistic and impatient, the California psyche in the Progressive Era relied for its self-definitions on plural networks of associations, from intense Social Darwinism to ancient epic, foregrounding quest and conquest: enterprising individuals, daredevils and rogues had had to discover the gifts of the California soil – sometimes by luck, sometimes by strategy. All this made California not just a land of plenty but an *exceptionally* plentiful land. Factually as well as symbolically, the regional identity was imbued with what I earlier called *giftedness thinking*, namely, the notion that some places simply *are* more naturally gifted than others.

Terman’s writings betrayed fascination for the scientific exploitation of natural resources. For instance:

The use we have made of exceptional ability reminds of the primitive methods of surface mining. It is necessary to explore the nation’s hidden resources of intelligence.[[33]](#footnote-33)

This reference to the psychologist’s tool (the Stanford-Binet test) as a progressive method of extraction locates Terman’s endeavour as a node, or an encounter, of two strands in the history of mineral extraction in California: that of the Gold Rush, as described earlier, and that of the turn-of-the-century industrial and then oil rushes. In the 1900s, California was no longer a place of wild, haphazard gold-sluicing; the construction of railroads and aqueducts, and in the 1920s the discovery of oil turned the state into a world leader for its technical and architectural achievements. [[34]](#footnote-34) By the time Terman arrived in California,

views of neatly planted orange groves adjacent to cozy bungalows… fostered a distinctly domestic conception of the state. This vision sharply contrasted with the the nineteenth-century image of an uncivilized frontier associated with the Gold Rush.[[35]](#footnote-35)

When Terman began to write, dreams of undiscovered mother lodes were thus mingling with a strong narrative of industrial progress in California, and with a newfound desire for social order and cultural radiance. Henry Knight Lozano has shown the extent to which California’s self-advertisement to the rest of the nation at that time emphasised its ‘conversion of waste land into fruitful productivity’;[[36]](#footnote-36) California was ‘a garden redeemed from the desert’. Once considered a wild, ‘classless’ land,[[37]](#footnote-37) the state after 1900 strove to rationalize and moralize its society and politics.[[38]](#footnote-38) Muckrackers denounced railroad monopolies, landscaping efforts were deployed on a large scale; the public demanded a better justice system.

By making giftedness an undiscovered treasure, and the psychologist’s scale a method derived from industry or engineering, Terman and his peers were thus activating two Californian dreams at the same time. The first strengthened their claims about the existence of those children – nature, everybody knew, *was* generous – and about their intrinsic superiority; they were symbolically, if not literally, golden. The second, meanwhile, legitimised the psychologists’ tools: like engineers on California shores, psychologists were the professional body now in charge of identifying and extracting natural resources to humanity’s advantage. [[39]](#footnote-39)

The IQ test, in that rhetoric, operated crucial symbolic conversions between past and present dreams, and between the fantastical and factual aspects of giftedness. As scientific method, the test allowed for precise measurement of exact intellectual endowment: it was a modern method, a tool for classifying, rationalising and civilising. But when the test was used to discover giftedness, the discovered treasure – the gold nugget of exceptional intelligence – was often described in lyrical terms, tempering assertions of measurability with assertions of incommensurability:

How impatiently one waits to see the fruit of such a budding genius! … Their high IQ is only an index of their extraordinary cerebral endowment. This endowment is for life. There is not the remotest probability that any of these children will deteriorate to the average level of intelligence with the onset of maturity.[[40]](#footnote-40)

While Terman insisted on the reality of giftedness, he also made that deviation, like gold, be *its own thing*, at once its own standard and that of everything else. With the help of mediaeval imagery, Terman theorised the impossibility to ‘upgrade’ from normal to supernormal intellectual ability, firmly fencing off giftedness as a distinct category:

There is no psychological or pedagogical alchemy by which intellectual commonplaceness can be transmuted into the gold of genius.[[41]](#footnote-41)

That rhetorical operation echoed the statistical segregation of giftedness from the rest on the Stanford-Binet scale, and the increasing streaming of gifted children into special classes and schools.[[42]](#footnote-42) Terman’s conception of giftedness was exclusive and exclusionary, based on the identification and isolation of gifted child. But that divisive enterprise and rhetoric took place in a context where the existence of gold in ordinary soil, and the evident necessity of its extraction, *made sense* – it was aesthetically resonant, it was scientifically ‘correct’, it was the hegemonic narrative of both past and present identity formation for Californians. That embeddedness helps us understand how giftedness acquired what I would call a ‘dreamlike reality’ in the writings of early giftedness scholars; an existence both actual and potential, always in tension between description and prophecy. Like gold, giftedness was a real but hidden treasure, entirely natural but also somewhat supernaturally precious, discoverable through scientific means yet also incommensurable. The gifted child was a *fact*, yet always already much more than that: a dream, a hope, an investment for the future.

**The *kalos kagathos* in eugenicist California**

The association of giftedness with a precious resource and the fascination for its extraction and exploitation chimes with the clear, albeit rather superficial, Platonic reading of democracy and leadership in the Termanites’ philosophy of giftedness. Plato is not a hidden reference in the founding texts of the field; the ancient philosopher, one of 12 European ‘educators’ selected by Cubberley to be chiselled on the front of the Stanford School of Education,[[43]](#footnote-43) is frequently buttonholed by giftedness researchers, especially at the beginning of books.[[44]](#footnote-44) To be more specific, one text – *The Republic* – is evoked; to be even more precise, it is mostly the so-called ‘noble lie’ that is implied, namely the fable of a natural distribution of talents; some children having had gold mixed with their blood, they should be brought up to become the leaders of the city-state. Stephen Jay Gould, whose notorious critique of scientific approaches to intelligence, *The Mismeasure of Man*, begins with Plato’s *Republic*, rightly notes that researchers on intelligence never engaged with the fact that Socrates’ story was a lie; indeed, we find many declensions of the noble-lie-turned-noble-truth in Termanites’ texts, and Terman’s ever more detailed subdivisions of intelligence in effect realised the Socratic premise.[[45]](#footnote-45)

That resort to ancient texts chimed with a regional fascination for mythical heroism which, in the early twentieth-century, was being made to espouse the new upper-middle-class aesthetic of California. As Margolin has shown, the gifted child of early giftedness research was seen as *completely* gifted, intellectually but also morally and even physically superior.[[46]](#footnote-46) Certainly the stories told by Terman and his peers are often omni-laudatory, praising the gifted child’s body, mind, morals and family ancestry:

It is well known that, in general, a high correlation obtains between favorable mental traits of all kinds; that, for example, children superior in intelligence also tend to be superior in moral qualities.[[47]](#footnote-47)

Such characterisation inscribed the gifted child within the Ancient Greek vision of the *kalos kagathos*, the beautiful and good man at the heart of educational ideals. While Francis Galton had marvelled at the ‘massive, vigorous, capable-looking animals’ that some geniuses were,[[48]](#footnote-48) Terman and his peers toned down the animal metaphors and upped the references to precious metals, delicate beauty, grace and poise.[[49]](#footnote-49) Theirs was a gifted child who must belong physically, mentally and morally to a higher caste, refined in taste as in spirit. The promotion of that vision by the intellectual classes of Stanford and other California universities mirrored the *zeitgeist* of the Progressive-Era Californian elite, which, eager to ward off accusations of coarseness or lawlessness, was looking for new artistic and moral models, developing a moral grammar of its own, beautifying its streets, and self-promoting its increasingly refined way of life. Terman’s gifted child, impeccable in body and mind, condensed those dreams of sophisticated leadership, often expressing them in terms loosely playing on European cultural references: ‘The child is father of the man: the gifted youth will be the leader of the future.’[[50]](#footnote-50)

The intellectual climate around Terman, both at Stanford and in California more generally, was highly amicable to such notions, which it energetically blended with the Social Darwinist outlook common in the Progressive Era. As Cubberley wrote in one of his handbooks for teachers:

Instead of being born free and equal, we are born free and unequal, and unequal we shall ever remain. The school, we now see, cannot make intelligence; it can only train and develop and make useful the intelligence which the child brings with him to school. This is a matter of his racial and family inheritance, and nothing within the gift of the schools or our democratic form of government.[[51]](#footnote-51)

The explicitly Platonic intellectual heritage and the Social Darwinist insistence on the natural leadership of high intelligence framed the Termanites’s conception of giftedness within a potent project in contemporaneous California: eugenics. David Palter stresses the interconnectedness of Stanford University, psychometric testing and race-based eugenicism in California;[[52]](#footnote-52) Terman, Palter reminds us (focusing specifically on intelligence testing of Asian-American people) was a member of several eugenicist associations, was funded by some, and wrote and taught extensively about eugenics. In California, he was in friendly territory; several of his colleagues, including Stanford Chancellor David Starr Jordan, supported eugenics. The Human Betterment Foundation, says Joseph Sokolik, was peopled with ‘professors, deans, and presidents of most major California Universities’.[[53]](#footnote-53) California led the national eugenicist trend: sterilization programmes made up one third of all forced sterilizations in the US between 1909 and 1979, namely 20,000 our of 60,000. Contrary to other states, Sokolik demonstrates, in California that trend did not cease, but augmented, as the Nazi Party grew in Europe.

The history of giftedness research is just as implicated as that of intelligence testing with the California eugenicist movement. There are two different kinds of eugenicist thinking: ‘positive’ eugenics advocates a higher or more strategic reproduction of the better ‘stock’, while ‘negative’ eugenics advocates measures such as forced sterilization.[[54]](#footnote-54) Negative eugenics were common in Progressive-Era dreams of social engineering, and in Terman’s research on intelligence.[[55]](#footnote-55) The Termanites’ work on giftedness, however, gave particular credence to positive eugenics as a scientific project rather than just a dream. Firstly, it established with certainty the correlation between economically and socially successful parents and giftedness in the children; a correlation understood by Terman to be due to the heredity of high intelligence, [[56]](#footnote-56) and leading to remarks about the low fertility rate of the gifted group.[[57]](#footnote-57) Secondly, it offered evidence of the precious contributions of gifted individuals to society, both through historical and contemporary examples. Finally, it advocated for special educational provision for gifted children, giving plenty of evidence for the benefits of such arrangements both for the individual children and for future political and economic improvements. Cubberley again:

We are now able to sort out, for special attention, a new class of what are known as superior, or gifted children. …The future of democratic governments hinges largely upon the proper education and utilization of those superior children.[[58]](#footnote-58)

Education, or utilization? What did that ‘special attention’ consist of? The Stanford team was careful to make it clear that the tests were crucial for the identification and therefore proper educational treatment of such children: ‘the extraordinary genius who achieves the highest eminence is also the gifted individual whom intelligence tests may discover in childhood’.[[59]](#footnote-59) The Stanford-Binet was positioned as *the* instrument for optimising the opportunities of gifted children. Interestingly, while agriculture was an important natural resource for California, Terman and his peers’ used few ‘botanical’ metaphors to refer to the *process of* *education* of gifted children. They emphasised the scientific process of *identification*, *selection* and *extraction*, to the clear detriment of the educational processes that should follow it. In other words, giftedness acquired an identity first and foremost as a ‘discoverable’, measurable and manageable resource, and therefore as the preserve of the discoverers – psychologists. Botanical metaphors, when they occur, are mostly expressed in terms of fulfilled or unfulfilled potential; working on the basis that all abilities are already ‘there’ in the individual, education becomes a technical matter of ensuring their realisation. For instance:

Whether, on the other hand, these capacities which we find in the gifted children about us are destined to flower and fruit will probably depend upon a host of circumstances, many of which, let us hope, are under the control of school and home and other institutions of society.[[60]](#footnote-60)

That kind of thinking makes particular sense when read against the agricultural attempts in California to ‘fashion the perfect fruit’ by mapping the heritability of desirable characteristics. Douglas Sackman’s study of ‘the fruits of natural advantage’ in Progressive-Era California shows to what extent perceptions of the state as an optimal, even Edenic environment for fruit to grow, made horticultural success a matter of natural endowment, to be improved by genetic tweaking.[[61]](#footnote-61) Those notions, aided by metaphorical thinking, circulated fluidly from plants to humans, yielding lessons less agricultural than philosophical:

The land had been reclaimed and its fertility magnified through factory production; the people were of a better, more intelligent, and rooted class and, of course, were racially superior; the plants had been imported and acclimated and their very genetic nature improved.[[62]](#footnote-62)

The kind of eugenicist thinking present in the giftedness research of the Termanites – namely, the notion that high intelligence is mostly hereditary, should lead to the formation of a natural aristocracy, and cannot be emerge from training – bloomed in the sympathetic ideological climate of Progressive-Era California, to which it refers both metaphorically and practically.

**Writing giftedness into California**

Terman and his peers were not straightforwardly conditioned by their place of research; they also implicitly and explicitly worked to inscribe that place within the history of giftedness research, and indeed within the history of giftedness itself. Some of the Termanites’ work on giftedness can be fruitfully read against what scholars have identified as California’s distinctive interest in its own history. The state had hired historians from the 1850s to write its chronicles; as Starr notes, that effort was identitary as much as it was scholarly, and stretched into the future as well as the mythical past.[[63]](#footnote-63) That historical impulse was prominent in the research on giftedness; Terman and his peers at Stanford constantly anchored both their own research and their gifted children within a tradition both ancient and modern, indeed an intellectual genealogy of sorts. Stanford was the birthplace of giftedness studies, and California of the first gifted children studied by Stanford; not just *de facto*, but also because Terman and his peers constantly reinforced the strategic position of Stanford and California on the historical frieze of giftedness.

A non-negligible part of the Terman research team’s work was historiographical. Terman’s own postgraduate work had tackled the history of precocity; [[64]](#footnote-64) many of his texts, and those of other Termanites, started with general considerations on the timelessness of high intelligence. But it is Catherine Cox Miles’ study, in Terman’s edited collection, that constitutes the pinnacle of that historical work, pulling together biographies, juvenilia and estimates of achievement and IQ for three hundred eminent historical figures.[[65]](#footnote-65) *The Early Mental Traits of Three Hundred Geniuses* reads like a veritable cosmogony of gifted individuals, giving accounts of ancestry, infancy, and early achievements, mental and physical. This somewhat incongruous volume, which fits uneasily within the *Genetic Studies of Genius* series – the rest of which is concerned to the longitudinal study of Terman’s gifted group – is crucial in the Termanites’s process of tradition-building. First, it inscribed the gifted children of Terman’s studies within a long family tree – if not literal, at least symbolic – of comparable geniuses. In other books of the series, the gifted group would be narrated in similar ways, with strong insistence on genealogy and early life.[[66]](#footnote-66) Present gifted children would be compared with past geniuses: Burks *et al.*, for instance, analysed with a ‘scale of literary merit’ their California group’s juvenilia in comparison with that of famous authors, and argued that the former show as much ‘literary promise’ as the latter.[[67]](#footnote-67) Terman himself said in another article that he suspected some of his California group may achieve the eminence of Napoleon, and be comparable in intellect to George Washington.[[68]](#footnote-68) Secondly, the book established the nascent discipline of giftedness research as part of a historical tradition of its own, legitimating Terman and his peers’ intellectual ancestry by stretching it from Plato to Binet and Galton.

Francis Galton constituted for Terman and his peers a unique node between giftedness itself and giftedness research. Terman reclaimed Galton as a gifted child, devoting an entire, quasi-hagiographical article to him, and exhuming his estimated IQ (of 200) from ‘documentary evidence’[[69]](#footnote-69) (mostly writings from his childhood). But he also repeatedly identified Galton as the first giftedness *researcher* in history, thus giving giftedness research itself a gifted ancestry – and hinting at the giftedness of current scholars, too. Not coincidentally, Terman selected his research assistants on the basis of IQ,[[70]](#footnote-70) and later scholars also reclaimed Terman’s childhood as gifted.[[71]](#footnote-71) The historicising and mythicizing of giftedness research and its researchers was to roll on for a long time.

The Stanford team was thus heavily involved in constructing not just a field of study, but the history of that field of study. Importantly for our purposes, by doing so, Terman and his peers made it impossible to bypass the Stanford studies and the Stanford-Binet test in the conjoint histories of giftedness and giftedness research. This is visible, for instance, in Terman’s Galton article – which introduced, at the very end, the Stanford University studies:

Studies are now in progress at Stanford University on exceptionally intelligent children, and we should especially like to receive information about children who test much above 150 by the Stanford-Binet scale. … We need accurate case descriptions and follow-up work on cases testing 150 to 200.[[72]](#footnote-72)

This advertisement (rather uncommon for an academic article) placed at the very end of Terman’s study and after the claim that Galton himself had an IQ of 200, served to link together past, present and future gifted individuals, and past, present and future giftedness research. The Stanford-Binet scale, the Stanford team and Terman’s gifted group, in that reconstituted history, bridged that past and that future.

That future was incarnated by the gifted group studies, which became the flagship enterprise of Terman and his assistants and students. The legendary research project quickly established itself not just as a case study, but as *the* study, of giftedness in action.[[73]](#footnote-73) The conclusions of the study have been almost entirely positive, with the gifted group at various stages of life being consistently more successful in professional and personal domains as their unselected equivalents. Less than the findings, though, what captures the imagination in the study is its relentlessly optimistic future-boundedness and the degree to which it was presented as permanently in-progress. ‘Promise’ and ‘potential’ are keywords in the books, which constantly speculated as to whether the children would ‘fulfil’ in adulthood the ‘promise of youth’, and become tomorrow’s leaders in all domains. From book to book, the promise was pushed ever further: ‘The peak of achievement for this group is not yet reached’, said Terman and Oden in 1959.[[74]](#footnote-74)

The studies did not just prophesize the durability and success of those gifted individuals; they also drew attention to the study *itself* as an exceptional scholarly endeavour, meant to last, and full of potential. In a striking introduction to the first volume to be published after the death of Terman, Robert Sears compares the studies to a kind of scholarly endeavour whose objects exist on geological or astronomical timescales:

Science is cumulative by its very nature, but only among the chroniclers of the stars and the waters have such prolonged studies of individual objects been made heretofore. … Certainly there will be other replacements in the list of our research personnel before the final volume of this series can be written. On actuarial grounds, there is considerable likelihood that the last of Terman’s Gifted Children will not have yielded his last report to the files before the year 2010![[75]](#footnote-75)

Sears also notes Terman’s arrangements for his studies to be managed by the next generation – and mentions Terman’s own son, Frederick, who was by then Provost of Stanford University.

Thus, while studies on giftedness were, by then, happening everywhere in America and beyond, Stanford retained a symbolic intellectual monopoly on high intelligence; a lasting, ever progressing one, inscribed in direct continuity with previous prestigious work that the Termanites had imported and transformed. Stanford had realised the promise of giftedness and giftedness studies. Unsurprisingly, Terman and the Stanford group have become unavoidable references in any contemporary research on giftedness. More widely, California became increasingly convoked in texts of the time on giftedness. In 1933, it was images of Pasadena special classes that illustrated the segment on giftedness in Elise H. Martens’ Office of Education report.[[76]](#footnote-76) Reviews of Terman’s work began to call the gifted group the ‘California group’, the ‘California gifted children’, or the ‘California studies of genius’.[[77]](#footnote-77) The rootedness of the concept, and the imprinting of the place, in return, by that concept, had been ensured.

**Universalising the gifted child?**

If the Californian anchorage of giftedness was so strong, how did the concept so rapidly become ‘universal’, or at least appear so placeless in both common and scientific understandings? My hypothesis is that there was always in the California context a ready potential for national identification – with many of its objects, not just giftedness. As theorists of California have argued, the state in that time had already acquired a unique kind of cultural resonance for the rest of America: it was perceived as a *hyperbolic* America, ‘America only more so’.[[78]](#footnote-78) Terman was writing in and through a state which distilled with exceptional intensity a national optimism, frontier-pushing spirit, brashness and interest for the forceful exploitation of nature. California-grown concepts, ideas and values had a tendency to spread, their Californianness becoming a kind of invisible reality.

This was helped because the Californian imprinting of giftedness often occurred through an interesting process of erasure, whereby California was first explicitly written into, and then subsequently rubbed out of, giftedness. This appears particular clear in Terman’s own work when we look at it chronologically, draft after draft. In Terman’s early revisions of the Stanford-Binet test, the California-ness of intelligence testing emerges through almost naively place-specific changes to the original Binet-Simon tasks. In early attempts at a sentence construction task (where a participant is asked to form a sentence from three given words), Terman used the prompts ‘Palo Alto, river and money’.[[79]](#footnote-79) In another task, the following riddle was asked: ‘There was a little boy who had never been to the city. When he was six years old his father took him to San Francisco. As soon as the boy saw the electric street cars for the first time, he said… What do you think he said?’.[[80]](#footnote-80)

Terman’s later revisions did not comprise those two questions; most of the tasks reflected wider ‘American’ values, using objects with little local specificity; in the ‘similarities’ task, participants had to state commonalities between wood and coal, iron and silver, ships and automobiles. However, there were traces left; discreet details painted an impressionistic California as backdrop of the tasks; the use of ‘Orange’ as the first word in vocabulary tests; the three words ‘lakes, rivers, desert’ in the sentence construction task; or the strange riddle ‘What the man was riding on’, an invention of Terman, which presents the participant with the following situation: an Indian man exclaims that White men walk sitting down – what has he seen? The correct answer is a man on a bicycle.[[81]](#footnote-81) California, in the ‘bike craze’ of the late nineteenth-century, was the state in which the love for bicycles took off most strikingly; the Pasadena Cycle Way, built in 1900 (and dismantled not long after) was at the time the biggest cycling infrastructure internationally.[[82]](#footnote-82) Those early attempts by Terman, as well as the entirely local calibration of the scale, testify to how easy it was, even to a non-Californian like Terman himself, to forget, or eclipse, Californian specificities in the formation of the scientific object of intelligence. California’s presence within giftedness may be understood as similarly phantomatic.

But of course the wider resonance of California-born ideas does not mean that those ideas necessarily expanded to the nation through some natural capillarity. Individual researchers external to the Californian network contributed to the national expansion, none more than Leta S. Hollingworth. Hollingworth, from Teachers College, Columbia, was arguably the only major giftedness researcher of the time not to have been based in California.[[83]](#footnote-83) Hollingworth saw her work as strongly inspired by Terman’s research; but she took it in her own direction, tirelessly seeking independent funding, forcing institutional change, and advocating the cause of giftedness. Equally eugenicist as Terman, she intensified his focus on gifted children as resources for humanity, and condemned even more severely than him what she saw as the disproportionate allocation of public funding to intellectually deficient individuals. Hollingworth also developed a new line of argument in favour of gifted education, namely, that gifted children were a bullied group with unique needs. A better writer than any of the Termanites, she insisted on the problems and needs of gifted children, and the consequences of neglecting them.[[84]](#footnote-84) Her work and her voice, inspired by the California experiments but also very personal, resonated through the twentieth century and, notwithstanding her questionable political orientation, she is still routinely quoted in contemporary research on giftedness.[[85]](#footnote-85)

 Political conjuncture, later in the century, further contributed to the national appropriation of the concept of giftedness. In 1957, the launch of the first Sputnik by the USSR suddenly turned the cause of gifted education into a challenge with geopolitical implications; giftedness, particularly scientific, firmly became a national resource, to be tapped into through federally-implemented policies.[[86]](#footnote-86) Those Cold War pressures continued to normalise, and thus to erase the contextual ties, of the moral command that gifted children should be identified and extracted for the benefit of all. Despite a spate of critiques in the 1960s and 1970s, the notion that giftedness is a tangible, precious *thing* warranting special extraction has significantly influenced 20th-century educational practices and scientific research.[[87]](#footnote-87)

 The further exportation of Termanite conceptions of giftedness beyond the US would warrant its own study; I would say that it was in no way straightforward. There exist striking differences between treatments of high intellectual ability even across ‘Western’ countries.[[88]](#footnote-88) However, advocates of gifted education, whether in countries hostile or sympathetic to their cause, share a similar discourse: gifted children are exceptional, naturally so, precious, needy, and victimised. While national policies and ‘person on the street’ conceptions may differ, giftedness as understood by gifted education supporters worldwide has coherent, and still traceably Termanite, attributes.[[89]](#footnote-89)

**Conclusion: From gold to silicon**

California’s associations to giftedness persist today. If anything, with the rise of Hollywood from the 1930s onwards, the politics and economics of talent, intellectual, artistic and other, have only gained in importance. *Giftedness thinking* – the notion that there is always more talent out there, to be discovered and nurtured; and that it will contribute to the world in incommensurable ways – still finds a privileged expression in California.

Stanford University continues to build on a rich history of the theory and practice of high intelligence, specifically in its privileged links to Silicon Valley – one of whose founders, in a twist of fate almost too amusing to be true, turns out to be Lewis Terman’s son, Frederick Terman.[[90]](#footnote-90) Silicon, of course, is not a natural resource exclusively to be found in California; the word stands as a metonymy for the spectacular innovations in high technology that have taken place in that area. Brands argues that the worldwide brain drain towards California cannot be severed from the wider history of ‘rushes’ in the region: to put it simply, it happened there as it had happened before.[[91]](#footnote-91) Today, the ‘natural resources’ in California don’t need to be excavated from the ground: they flock there on their own, in the form of ‘highly intelligent’ people, with forcefully innovative mentalities and entrepreneurial spirit.

High intelligence research remains lucrative, too, for Stanford University, which owns numerous websites – including the URL giftedandtalented.com – devoted to the cultivation, in the form of private tuition and residential programmes, of giftedness in children, advertised, for instance, as ‘Where Kids Become Extraordinary’. [[92]](#footnote-92) ‘Our personalized learning technology benefits from trillions of data points resulting from decades of Stanford University research,’ one website states.[[93]](#footnote-93) Interestingly, it is not Terman’s research that is credited, but research ‘of the past 25 years’; the problematic heritage of the eugenicist Termanites is thus somewhat evacuated.[[94]](#footnote-94) For some time now, Terman’s rigidly hereditarian ontology of high intelligence has been replaced by a more progressive approach, highlighting the importance of environmental influences and advocating that most people can succeed given the right stimuli. However, Stanford’s silence on Terman’s contributions to the university’s international reputation in the field of high intelligence is disingenuous; that history is there, and it still speaks. In the past century, the education, metaphysics and politics of high intelligence may have mutated, but its glorification certainly has not, nor have the dreams associated to it and its ‘natural home’. That ‘natural home’ of giftedness is still California.

1. I am using ‘Termanite’ to refer to what may be loosely understood as a research team (from PhD students to research assistants) and school of thought gravitating around Terman from the 1910s to his death, and engaged in research on intelligence and individual differences. The core of that team as regards giftedness research was comprised of Maud Merrill, Florence Fuller, Helen Marshall, Dorothy Hazelton Yates, Florence Goodenough and Catharine Morris Cox Miles; also important are Arthur S. Otis, Kimball Young and Virgil E. Dickson, as well as, more distantly, Lulu Stedman. The term ‘Termanite’ should not be confused with the sometimes-used word ‘Termites’ to refer to the gifted group of the Stanford studies of genius. I am aware that by using an all-encompassing term, I am implicitly contributing to a long tradition of eclipsing the individual contributions of the (mostly female) researchers in this group; but there is simply no space here to do justice to those individuals. See Karen B. Rogers, “The Lifelong Productivity of the Female Researchers in Terman's Genetic Studies of Genius Longitudinal Study.” *Gifted Child Quarterly* 43, no. 3 (1999): 150-169; Jennifer L. Jolly, “Florence L. Goodenough: Portrait of a psychologist.” (2010): 98-105. It is also important to note that other researchers were working on IQ testing: see for an excellent overview Leila Zenderland, *Measuring minds: Henry Herbert Goddard and the origins of American intelligence testing*. Cambridge: Cambridge University Press, 2001; for a briefer history, Paula S. Fass, “The IQ: A cultural and historical framework.” *American Journal of Education* 88, no.4 (1980): 431-458. [↑](#footnote-ref-1)
2. Leslie Margolin, *Goodness personified: The emergence of gifted children*. New York: Aldine De Gruyter, 1994. [↑](#footnote-ref-2)
3. There is a long tradition of deconstructive, social constructionist or semantic approaches to the history of intelligence testing; see Leon J. Kamin, *The science and politics of IQ*. Potomac, Maryland: Lawrence Erlbaum, 1974; Stephen Jay Gould, *The Mismeasure of Man*. London: Penguin, 1981; Michael Sokal, (Ed.) *Psychological Testing and American Society, 1890-1930*. London: Rutgers, 1987; JoAnne Brown, *The definition of a profession: The authority of metaphor in the history of intelligence testing, 1890-1930*. Princeton, NJ.: Princeton University Press, 1992; Theresa Richardson and Erwin V. Johanningmeier. “Intelligence testing: the legitimation of a meritocratic educational science.” *International Journal of Educational Research* 27, no. 8 (1998): 699-714. Similar approaches to giftedness are not as numerous; Margolin’s study (1994) remains seminal. [↑](#footnote-ref-3)
4. Giftedness is what Latour would define as a ‘factish’, a constructed and constructive object of science, ‘that [does] not fall into the comminatory choice between fact and belief.’ (Bruno Latour, *Pandora's hope: essays on the reality of science studies*. Cambridge, Mass.: Harvard University Press, 1999, 306). My outlook here is less critical than investigative. See Bruno Latour, “Why has critique run out of steam? From matters of fact to matters of concern.” *Critical inquiry* 30, no. 2 (2004): 225-248; Bruno Latour, *We have never been modern*. Translated by Catherine Porter. Cambridge, Mass.: Harvard University Press, 2012. [↑](#footnote-ref-4)
5. His interest in applied psychology, notably, isolated him from the relatively newly-formed academic body of university professors concerned with scientific legitimacy, who tended towards ‘pure’ psychology. For accounts of Terman’s life, see Lewis M. Terman, “Autobiography of Lewis M. Terman.” *History of psychology in autobiography* 2 (1930): 297-331; Edwin G. Boring, *Lewis Madison Terman, 1877-1956. A Biographical Memoir*. Washington, D.C.: National Academy of Sciences, 1959; May V. Seagoe, *Terman and the gifted*. William Kaufman, 1975. [↑](#footnote-ref-5)
6. This article can refer only fleetingly to the importance of Cubberley in Terman’s Stanford. For a deeper appraisal of Cubberley’s importance and relevance to this question, see George E. Arnstein, “Cubberley: The Wizard of Stanford.” *History of Education Journal* (1954): 73-81; Jesse Brundage Sears and Adin D. Henderson. *Cubberley of Stanford and his contribution to American education*. Stanford, CA: Stanford University Press, 1957; Richardson and Johanningmeier, “The legitimation”; Raymond E. Callahan, *Education and the Cult of Efficiency*. Chicago: University of Chicago Press, 1962; Robert L. Church, “Educational Psychology and Social Reform in the Progressive Era”. *History of Education Quarterly* 11, no.4 (1971): 390-405; John Aubrey Douglass, *The California Idea and American Higher Education. 1850 to the 1960 Master Plan*. Stanford, CA: Stanford University Press, 2000. [↑](#footnote-ref-6)
7. For historical research explicitly linking the California context to the rise of IQ testing, see Paul Davis Chapman, “Schools as sorters: Testing and tracking in California, 1910-1925.” *Journal of Social History* 14, no. 4 (1981): 701-717; Joseph W. Sokolik, *Leading the Race: Eugenics in California, 1896-1945*. Master of Arts Thesis, Texas State University, 2013; David Palter, *Testing for Race: Stanford University, Asian Americans, and Psychometric Testing in California, 1920-1935*. PhD Dissertation, University of California: Santa Cruz, 2014. [↑](#footnote-ref-7)
8. The terms ‘supernormal’ and ‘genius’ were also routinely used at the time. [↑](#footnote-ref-8)
9. Terman created other scales named after himself and others (the Terman-Miles test, for instance). [↑](#footnote-ref-9)
10. Terman, “Autobiography”, 331. [↑](#footnote-ref-10)
11. Terman explains at length his methodology in several of his writings: he started in 1911 with Katherine Kip and Edith Bushnell, by *binetting* children from ‘a district school on the Stanford University campus, attended almost equally by the children of college professors and of laborers’ (Lewis M. Terman and H. G. Childs, “A tentative revision and extension of the Binet-Simon measuring scale of Intelligence.” *Journal of Educational Psychology* 3, no. 2 (1912): 61-74, 64); then in Mayfield, California; in Palo Alto schools; in ‘a rural school near Stanford University’ (id.), and in kindergartens in Long Beach. Some of these studies failed. In 1913, Terman, two of his graduate students, one former student and two professors from the University of Nevada studied a thousand public school children, 54 kindergarteners from San Jose, 40 high school students in San Jose and Campbell, businessmen and unemployed adults in Palo Alto, 150 juvenile delinquents in Whittier State School; see Lewis M. Terman, Grace Lyman, George Ordahl, Louise Ellison Ordahl, Neva Galbreath and Wilford Talbert, *The Stanford Revision and Extension of the Binet-Simon Measuring Scale of Intelligence*. Baltimore: Warwick and York, 1917. [↑](#footnote-ref-11)
12. Terman *et al*., *Stanford Revision*, 13. [↑](#footnote-ref-12)
13. Id., 29. [↑](#footnote-ref-13)
14. In a 1921 article, he describes an experiment supported by Superintendent A.C. Barker in Vallejo, California, of which the ‘primary purpose’ was ‘to secure data for tentative age norms’. Lewis M. Terman and Ethel D. Whitmire. “Age and grade norms for the National intelligence tests, Scales A and B.” *The Journal of Educational Research* 3, no. 2 (1921): 124-132, 126. [↑](#footnote-ref-14)
15. Paul Davis Chapman, *Schools as sorters: Lewis M. Terman, applied psychology, and the intelligence testing movement, 1890–1930*. New York: New York University Press, 1988. Chapman’ analysis of several contributing factors for the rise of intelligence testing in the 1910s, among which the birth and professionalization of university psychology, the support of philanthropic and national foundations, the Progressive-Era emphasis on the rationalization of all institutional structures, and the need for school administrators and superintendents to deal with increasingly diverse and numerous student populations, due to rural exodus and mass immigration. [↑](#footnote-ref-15)
16. Such as Fred Hunter, superintendent of the Oakland system. On Oakland specifically, Marta Gutman, in a fascinating recent study, highlights the degree to which the city, down to its architecture, expressed an interest for the health and education of children (*A City for Children. Women, Architecture, and the Charitable Landscapes of Oakland, 1850-1950*. Chicago: University of Chicago Press, 2014.) [↑](#footnote-ref-16)
17. On the especially idealistic streak, and the unique status of, Stanford within the higher education landscape in Progressive-Era California, see Douglass, *The California Idea and American Higher Education*:‘By 1900, Stanford, not the University of California, emerged as a symbol of California’s cultural aspirations’ (98). [↑](#footnote-ref-17)
18. Terman remembers that Cubberley ‘gave [him] every opportunity and encouragement’ (“Autobiography”, 324), an uncommonly slight teaching load, and autonomy in his choice of modules. [↑](#footnote-ref-18)
19. Terman’s communication skills helped. His two textbooks on intelligence testing are remarkable examples of engaging, clear and passionate scientific writing, and he was a keen promoter of his tests. (Lewis M. Terman, *The measurement of intelligence: An explanation of and a complete guide for the use of the Stanford revision and extension of the Binet-Simon intelligence scale*. Cambridge, Mass.: Houghton Mifflin, 1916; Lewis M. Terman, *The intelligence of school children: How children differ in ability, the use of mental tests in school grading and the proper education of exceptional children*. Cambridge, Mass.: Houghton Mifflin, 1919.) [↑](#footnote-ref-19)
20. This difference between Binet and Terman was so enduring that, in Leta Hollingowrth’s Speyer School Experiments of 1936-1941, the lower ability groups were named ‘Binet class’ and the higher ones ‘Terman class’ (see Ann G. Klein, “Fitting the school to the child: The mission of Leta Stetter Hollingworth, founder of gifted education.” *Roeper Review* 23, no. 2 (2000): 97-103.) It is also one of the main differences between Terman and the other great intelligence-testing researcher of the time, Herbert Henry Goddard, who was fascinated by (often morbid examples of) ‘low intelligence’. [↑](#footnote-ref-20)
21. ‘Just as many a man has been hanged on the evidence of his fingers prints, so many an individual might safely be committed to an institution for the feeble-minded on the evidence of ten or a dozen intelligence tests which have been standardized according to age norms’ (Terman, *Schoolchildren*, 5). [↑](#footnote-ref-21)
22. The most influential history of California remains Kevin Starr’s five-volume study; of most relevance here are *Americans and the California Dream, 1850-1915*. New York: Oxford University Press, 1973, and *Inventing the Dream: California Through the Progressive Era*. New York: Oxford University Press, 1985. For other overviews, see Andrew F. Rolle, *California: A History*. New York: Thomas Y. Crowell, 1963; Stephen Schwartz, *From West to East: California and the Making of the American Mind*. New York: Free Press, 1998; William Deverell and David Igler (Eds.) *A Companion to California History*. Oxford: Blackwell, 2008.Mosthistorical overviews insist on the importance of the metaphorical imagination in talking about that state, and frequently adopt a lyrical and highly imagery-heavy language in their own efforts. [↑](#footnote-ref-22)
23. Terman, *Schoolchildren*, 1. [↑](#footnote-ref-23)
24. Margolin, *Goodness Personified*, 57. [↑](#footnote-ref-24)
25. The shift from an ‘obvious’ to a ‘hidden’ model of high intelligence may be said to have occurred at the turn of the 20th century. William Stern, a German psychologist, spoke in 1911 of the ‘duty not to allow such worth to deteriorate’ (“The supernormal child.” *Journal of Educational Psychology*2, no. 3 (1911): 143-148, 144.) [↑](#footnote-ref-25)
26. ‘If a man is gifted with vast intellectual ability, eagerness to work, and power of working, I cannot comprehend how such a man should be repressed’ (Francis Galton, *Hereditary genius: An inquiry into its laws and consequences*. London: Macmillan, 1869, 35). [↑](#footnote-ref-26)
27. Barbara Stoddard Burks, Dortha Williams Jensen, and Lewis Madison Terman. *Genetic studies of genius. Vol. 3, The promise of youth: follow-up studies of a thousand gifted children*. Stanford, CA: Stanford University Press, 1926, 12. [↑](#footnote-ref-27)
28. Starr, *Americans*, 418. [↑](#footnote-ref-28)
29. Stephanie Barron, Sheri Bernstein, and Ilene Susan Fort. *Made in California: art, image, and identity, 1900-2000*. Berkeley, CA: University of California Press, 2000, 52. They are here quoting Richard Walker. [↑](#footnote-ref-29)
30. On Gold Rush folklore, see Wayland D. Hand, “California Miners' Folklore: Above Ground.” *California Folklore Quarterly* 1, no. 1 (1942): 24-46. Bruce A. Rosenberg, “The Folklore of the Gold Rush.” *The Huntington Library Quarterly* (1981): 293-308.In the 1850s, Rosenberg says, newspapers ran hyperbolic stories about lucky strikes; those stories were considered absolutely ‘true’, mingling in the collective imagination reality and utopia in the search for gold. [↑](#footnote-ref-30)
31. ‘Our development as a nation has been wonderful. The frontier has been pushed farther and farther to the West, and finally pushed off into the ocean’ (Ellwood P. Cubberley, 1909. *Changing Conceptions of Education*. Boston: Houghton Mifflin, 1909, 8). [↑](#footnote-ref-31)
32. ‘We usually hear only about the successes and seldom about the failures, though many more miners failed than struck it rich’ (Rosenberg, “The Folklore”, 294.) [↑](#footnote-ref-32)
33. Terman, *Measurement*, 13. [↑](#footnote-ref-33)
34. Between 1905 and 1927, the number of manufacture employees grew tenfold in Los Angeles. See Mike Davis, “Sunshine and the open shop: Ford and Darwin in 1920s Los Angeles.” *Antipode* 29, no. 4 (1997): 356-382. [↑](#footnote-ref-34)
35. Barron, Bernstein and Fort, *Made in California*, 81. [↑](#footnote-ref-35)
36. Henry Knight Lozano, “Savage Desert, American Garden: citrus labels and the selling of California, 1877-1929.” *US Studies Online: The BAAS Postgraduate Journal* 12, no. 1 (2008), n.p. [↑](#footnote-ref-36)
37. Schwartz, *From West to East*, 78. [↑](#footnote-ref-37)
38. Rolle, *California: A History*, 442. [↑](#footnote-ref-38)
39. The rhetorical alignment with science was not, of course, unique to the Termanites. JoAnne Brown, in a landmark study on the semantics of intelligence testing in the Progressive Era, identifies the use of engineering and medical metaphors as the central operation by which intelligence testing proponents asserted their professional legitimacy and the value of their object of study. The reification of intelligence into a fixed, native and measurable property of an individual was part of the aspiration and ethos of Progressive-Era approaches to mental processes. (JoAnne Brown. *The definition of a profession: The authority of metaphor in the history of intelligence testing, 1890-1930*. Princeton, NJ: Princeton University Press, 1992.) [↑](#footnote-ref-39)
40. Terman, *Measurement*, 102-3. [↑](#footnote-ref-40)
41. Lewis M. Terman, *Suggestions for the Education and Training of Gifted Children*. Palo Alto, CA: Stanford University Press, 1921, 8. [↑](#footnote-ref-41)
42. See for instance Lulu Stedman’s report on the use of special classes for gifted children, (*Education of Gifted Children*. London: George G. Harrap & Co, 1924.) In another, non-Californian, study by a teacher-researcher, the ‘supernormal’ children’s class is called Terman (Julia F. Keaney, “Teaching and Following-Up Supernormal Children in a Small Public School.” *The Journal of Educational Research* 7, no. 2 (1923): 145-148.) [↑](#footnote-ref-42)
43. As reported by Arnstein, “ The Wizard of Stanford”. [↑](#footnote-ref-43)
44. E.g. in the introductions of Catharine Morris Cox, Lela O. Gillan, Ruth Haines Livesay, Lewis M. Terman. *The Early Mental Traits of Three Hundred Geniuses*. Stanford: Stanford University Press, 1926; Stoddard *et al.*, *The Promise of Youth*; Lewis M. Terman and Melita H. Oden. *Genetic studies of genius. Vol. 5, The gifted group at mid-life: thirty-five years' follow-up of the superior child*. Stanford: Stanford University Press, 1959; also in Leta S. Hollingworth (1926) *Gifted Children: Their Nature and Nurture*. New York: Macmillan, 1926, 23. [↑](#footnote-ref-44)
45. See the use of ‘A,B,C’ groups in Terman, Lewis M. “Psychological approaches to the biography of genius.” *Science* 92, no 2388(1940), 293-301. [↑](#footnote-ref-45)
46. Margolin, *Goodness Personified*, xix. [↑](#footnote-ref-46)
47. Lewis M. Terman, “The Intelligence Quotient of Francis Galton in Childhood”. *American Journal of Psychology* 28 no.2 (1917), 209-215, 213. One of Terman’s most significant additions to the Binet-Simon test was an ‘Interpretation of Fables’ task, designed to test moral sense; he explicitly connected intellect and ethics. [↑](#footnote-ref-47)
48. Galton, *Hereditary Genius*, 321. [↑](#footnote-ref-48)
49. E.g. ‘E.B. was selected by the teachers of a small California city as the brightest school child in that city (school population about 500)… The test was made as a demonstration test in the presence of about 150 teachers, all of whom were charmed by her delightful personality and keen responses. No trace of vanity or queerness of any kind. Health excellent.’ (Terman, *Measurement*, 98) [↑](#footnote-ref-49)
50. Morris Cox *et al.*, *Early Mental Traits*, 219. [↑](#footnote-ref-50)
51. Ellwood P. Cubberley, *Public Education in the United States: A Study and Interpretation of American Educational History*. Boston: Houghton Mifflin, 1919, 451. [↑](#footnote-ref-51)
52. Palter, *Testing for Race*. [↑](#footnote-ref-52)
53. Sokolik, *Leading the Race*, 87. [↑](#footnote-ref-53)
54. For specific links to education, see Steven Selden, “Eugenics and the social construction of merit, race and disability.” *Journal of Curriculum Studies* 32 no.2 (2000): 235-252. [↑](#footnote-ref-54)
55. ‘It is safe to predict that in the near future intelligence tests will bring tens of thousands of these high-grade defectives under the surveillance and protection of society. This will ultimately result in curtailing the reproduction of feeble-mindedness and in the elimination of an enormous amount of crime, pauperism, and industrial inefficiency.’ (Terman, *Measurement*, 7) [↑](#footnote-ref-55)
56. See for instance Terman *et al.*, *The Stanford Revision*, 92. [↑](#footnote-ref-56)
57. ‘Whether the present birth rate of 2.4 children per mother will increase sufficiently to equal the 2.8 children per mother required to maintain the stock remains to be seen’. Terman and Oden, *The Gifted Group at Mid-Life*, 140. See also Raymond Franzen, who in 1922 moved to California to take up an assistant professorship at the University of California, Berkeley: ‘Our eugenic needs demand it, since we are not conserving this, our chiefest asset, genius. Unless we conserve better these rare products, the standard deviation of the intelligence of humanity will keep shrinking as we select against imbeciles and against genius as well. The waste of a genius who becomes an intellectual dilettante, as many now in fact do, is double. We lose what he might do for society; he does not marry and we lose the potentiality of his highly endowed germ-plasm.’ (Raymond Franzen, *The Accomplishment Ratio: A Treatment of the Inherited Determinants of Disparity in School Product*. New York City: Teachers College, Columbia University, 1922, 44). [↑](#footnote-ref-57)
58. Ellwood P. Cubberley, *A Brief History of Education. A History of the Practice and Progress and Organization of Education*. Boston: Houghton Mifflin, 1922, 451 [↑](#footnote-ref-58)
59. Morris Cox *et al.*, *Early Mental Traits*, 218. [↑](#footnote-ref-59)
60. Morris Cox *et al.*, *Early Mental Traits*, ix. [↑](#footnote-ref-60)
61. Douglas Cazaux Sackman, *Orange Empire: California and the Fruits of Eden*. Berkeley and Los Angeles: University of California Press, 2005. [↑](#footnote-ref-61)
62. Id., 52. [↑](#footnote-ref-62)
63. ‘Californians were to seek out a usable past and to construct a present self-image, which, they hoped would also be the pattern for the state’s future.’ Starr, *Americans*, 110. [↑](#footnote-ref-63)
64. E.g. Lewis M. Terman, “A Study in Precocity and Prematuration”. *American Journal of Psychology* 16 no 2 (1905):145-183. [↑](#footnote-ref-64)
65. A process which Gould derogatorily referred to as establishing ‘fossil IQs’ (*Mismeasure*, 183) [↑](#footnote-ref-65)
66. Margaret: ‘Age 8-10; mental age 11-1; IQ 130. Father only a skilled laborer (house painter) but a man of unusual intelligence and character for his social class… Social and moral traits of the very best. Is obedient, conscientious, and unusually reliable for her age. Quiet and confident bearing, but no touch of vanity. M.P. is known to be related on her father’s side to John Wesley, and her maternal grandfather was a highly skilled mechanic and the inventor of an important train-coupling device used on all railroads’ (97) [↑](#footnote-ref-66)
67. Burks *et al.*, *Promise of Youth*, 453. [↑](#footnote-ref-67)
68. Terman, “Psychological Approaches”. [↑](#footnote-ref-68)
69. Terman, “The Intelligence Quotient of Francis Galton”, 209. [↑](#footnote-ref-69)
70. Rogers, “The Lifelong Productivity”, 4. [↑](#footnote-ref-70)
71. E.g. Boring, *Lewis Madison Terman*, 420. [↑](#footnote-ref-71)
72. Terman, “The Intelligence Quotient of Francis Galton”, 215. [↑](#footnote-ref-72)
73. See Jennifer Jolly’s as always instructive, erudite and clear article, “L. Lewis Terman: Genetic Studies of Genius - Elementary School Students”. *Gifted Child Today* 31 no.1 (2008): 27-33. [↑](#footnote-ref-73)
74. Terman and Oden, *The Gifted Group at Mid-Life*, 149. [↑](#footnote-ref-74)
75. Id., ix. [↑](#footnote-ref-75)
76. Elise H. Martens, *Teachers’ Problems with Exceptional Children*. Department of the Interior, Pamphlet n.41. Washington: United States Government Printing Office, 1933. [↑](#footnote-ref-76)
77. Keith Sward, “Review of *The Gifted Child Grows up* by Lewis M. Terman, Melita H. Oden.” *The American Journal of Psychology* 61 no. 3 (1948): 443-446. [↑](#footnote-ref-77)
78. James Quay, ‘Beyond Dreams and Disappointments: Defining California Through Culture’, in *A Companion to California History*, ed. William Deverell and David Igler. 3-21. Oxford: Blackwell, 2008. [↑](#footnote-ref-78)
79. Terman and Childs, “Tentative Revision”, 67. [↑](#footnote-ref-79)
80. Id., 67. Uncharacteristically, Terman does not provide the answer to this question, which remains to the author of this article an unsolved puzzle. [↑](#footnote-ref-80)
81. Terman, *Measurement*, 318. ‘Horse’ was a fail. ‘Bizarre’ answers, according to Terman, include a man in a wheelchair. [↑](#footnote-ref-81)
82. Charles P. Hobbs, *Hidden History of Transportation in Los Angeles*. Charleston, SC: The History Press, 2014. [↑](#footnote-ref-82)
83. Guy Whipple may be cited as another, though far less keen than Hollingworth as an advocate of gifted education. On Hollingworth, see Ludy T Benjamin, Jr., “The Pioneering Work of Leta Hollingworth in the Psychology of Women,” Nebraska History 56 (1975): 493-505; James H. Borland, “Leta Hollingworth's contributions to the psychology and education of the gifted.” *Roeper Review* 12, no. 3 (1990): 162-166; Linda Kreger Silverman, “Social and emotional education of the gifted: The discoveries of Leta Hollingworth.” *Roeper Review* 12, no. 3 (1990): 171-178; Klein, “Fitting the School to the Child”; Jennifer L. Jolly, “Pioneering Definitions and Theoretical Positions in the Field of Gifted Education.” *Gifted Child Today* 28, no.3 (2005): 38-44. [↑](#footnote-ref-83)
84. Her main works in the field: *Gifted Children, Their Nature and Nurture*; Leta S. Hollingworth, *Children above 180 IQ: Origin and Development*. London: George G. Harrap, 1942. [↑](#footnote-ref-84)
85. Selden cites her as an ‘example of mainstream academic knowledge as a source for an ethnic and racially stratified society’ (“Eugenics and the social construction of merit, race and disability”, 245). [↑](#footnote-ref-85)
86. The stratospheric rise of interest for gifted education following Sputnik is well documented. See Scott Barry Kaufman and Robert Sternberg, “Giftedness in the Euro-American Culture”. In *Conceptions of Giftedness: Sociocultural Perspectives*, ed. Shane N. Phillipson and Maria McCann. Mahwah, NJ: Lawrence Elbaum, 2007, 377-411. For a fascinating parallel account of what was happening in the USSR at the same time – where giftedness was thought of and cultivated in a different way – see Jim Riordan (Ed.) *Soviet Education: The Gifted and the Handicapped*. London: Routledge, 1988. [↑](#footnote-ref-86)
87. Jeannie Oakes identifies it as a core idea within tracking (streaming) (*Keeping Track: How Schools Structure Inequality*. Second Edition. New Haven: Yale University Press, 2005). Termanite conceptions of giftedness are also indirectly critiqued by opponents to ‘bell curve’ thinking, namely the notion that intelligence is normally distributed and that this fact should have institutional or economic implications. See Claude S. Fisher, Michael Hout, Martin Sanchez Jankowski, Samuel R. Lucas, Ann Swidler and Kim Voss, *Inequality by Design: Cracking the Bell Curve Myth*. Princeton, NJ: Princeton University Press, 1996. [↑](#footnote-ref-87)
88. See *Conceptions of Giftedness*. The conceptualisation of giftedness as natural resource worthy of special treatment is particularly controversial in Scandinavian countries, for instance, or in my own country of France, where sociological and historical work has been intensely suspicious of the practice, especially since Bourdieu. For a sample of various European perspectives, see Wilfried Lignier, *La petite noblesse de l'intelligence: une sociologie des enfants surdoués*. Paris : La Découverte, 2012; Roland S. Persson, “Experiences of intellectually gifted students in an egalitarian and inclusive educational system: A survey study.” *Journal for the Education of the Gifted* 33, no. 4 (2010): 536-569; Andrés J.Muñoz-Mohedano, and Miguel A. Martin-Sanchez. “Reality and Criticism of Giftedness in the Spanish Education System.” *The Nea Educational Review*, no.43(1) (2016): 137-146. [↑](#footnote-ref-88)
89. Margolin’s review of the ideological similarities between academic journals specialising in gifted education is a fair and thorough (if polemical) account. [↑](#footnote-ref-89)
90. Martin Kenney (Ed.). *Understanding Silicon Valley: the anatomy of an entrepreneurial region*. Stanford: Stanford University Press, 2000. [↑](#footnote-ref-90)
91. H.W. Brands, *The Age of Gold: The Story of an Obsession that Shook the World*. London: William Heinemann, 2002. [↑](#footnote-ref-91)
92. https://epgy.stanford.edu/about-us [↑](#footnote-ref-92)
93. https://giftedandtalented.com/how-it-works/research-results [↑](#footnote-ref-93)
94. Leslie, Mitchell. “The vexing legacy of Lewis Terman.” 2007. Retrieved June 2016 from https://alumni.stanford.edu/get/page/magazine/article/?article\_id=40678. See also Jolly, Jennifer L. “Historical Perspectives: A Paradoxical Point of View: Lewis M. Terman.” *Gifted Child Today* 31, no. 2 (2008): 36-37. [↑](#footnote-ref-94)