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# The Sociological Roots of Eugenics

## Demographic, Ethnographic and Educational Solutions to the Racial Crises in Progressive America

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### Abstract

This paper explores the directors, popularizers and educators of the sociological aspects of the American eugenics movement in the Progressive Era. Human geography (especially the fledgling discipline of demography), sociobiology (human fertility and social hygiene) and ethnology (pedigree studies and racial characteristics) were considered important "roots" of the "tree" of the applied science of eugenics (see Figure 1). This essay concentrates on a few primary theorists of the American eugenics movement during the progressive-era—especially for their influence in the areas of demography, fertility and immigration policies, as well as related educational initiatives—before the excesses of Nazi race hygiene indelibly branded eugenics as a racist pseudoscience. I conclude with a brief look at recent eugenic revivals and recapitulations.

### Introduction

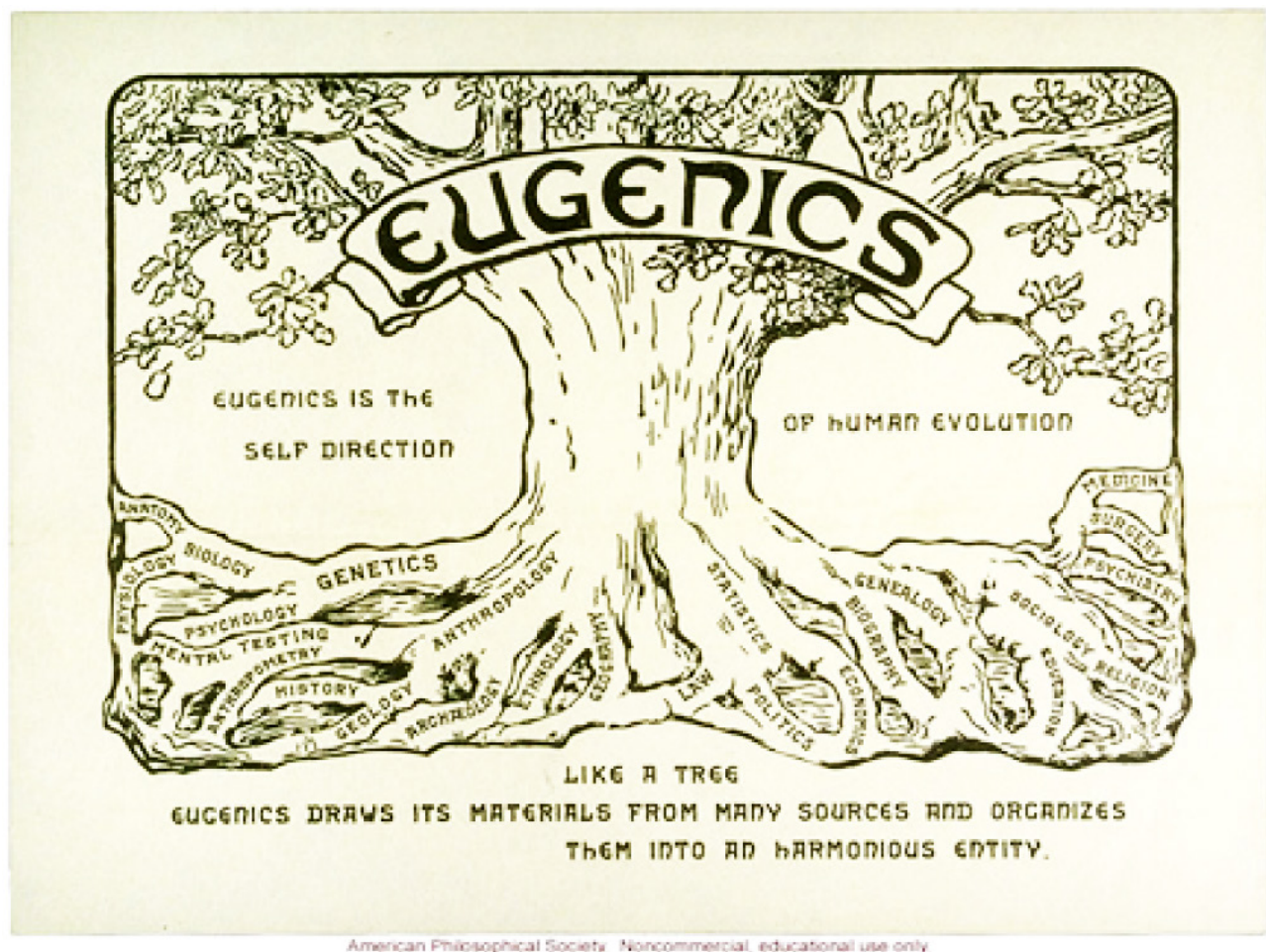
My current research primarily explores the educational programs and impacts of the eugenics movement in North America from its Progressive Era ascent through its purported rapid decline after World War II. Eugenics education was a top priority for the disciples of Sir Francis Galton, the celebrated founder of the "science of race-betterment." In America, the seminal ideas of Galton and other pioneers combined with pre-existing Nativist or Nordic biases and prior strains of scientific racism, such as Samuel Morton and the American School of Anthropology. In the first half of the "American Century," public eugenics education for the burgeoning middle classes and professional groups, and formal courses for future generations who would inherit the onus of "racial civic duty" were both seen as vital to the success of the movement.

Popular eugenics education progressively pervaded America, becoming prominent in fairs, museum exhibits, public lectures and even "eugenic" church sermons (Rosen 2004). Formal education was also a crucial resource in the evangelization and politicization of this widespread social movement. During the interwar period, hundreds of colleges, universities and normal schools offered eugenics courses (Cravens 1978, 53). High schools often embedded eugenics

units within “civic biology,” home economics or social hygiene courses (Kohlman 2012). In Alberta, racial eugenics was also prevalent, once the immigration pattern switched away from primarily Nordic regions to Eastern and Southern Europe, just before World War I (Grant 1933). Alberta went on to launch an ambitious eugenic sterilization program, pioneered by the United Farmers of Alberta and expanded by the Social Credit government in the 1930s (Grekul 2002, 2008). In British Columbia, the main threat to Anglo-Saxon homogeneity and hegemony was seen to be immigration from the Orient (McLaren 1990).

After the Nuremberg Trials revealed the racial bias of American-style eugenics, organized eugenics went underground or was rebranded as social biology, family planning, genetic counselling and so forth, to avoid the links with the euthanasia and sterilization

campaigns of Nazi race-hygiene programs that culminated in the Holocaust (Cravens 1978; Kevles 1995; Kline 2001). However, the transmission of “liberal” or “progressive” neo-eugenic memes continued, with historical associations to eugenics being sanitized (Kevles 1995). Many of the leaders in the eugenics movement were influential social scientists, as well as educators, administrators and public health professionals. From the natural sciences, such as evolutionary biology and genetics; to social sciences such as anthropology, psychology and sociology; to curriculum and educational policy, eugenics was based on the melding of a broad range of fields, whose harmonious combination (see Figure 1) was foreseen as leading to scientifically-based societal efficiency and progress, and the evolution of “the Overman” (Bobbitt 1909).



**Figure 1:** *The Eugenics Tree, from a poster for the Second International Congress of Eugenics, held at the American Museum of Natural History, New York, September 22–28, 1921.*

*This image was very popular and often reproduced to illustrate the truly interdisciplinary nature of the applied science of eugenics.*

## Eugenics: A New Science— A New Religion

The abridged creation story of eugenics begins with the acknowledged founder of eugenics, Francis Galton (celebrated polymath and cousin of Charles Darwin), and his influential protégé, Karl Pearson (pioneering statistician of biometrics). Galton revealed the “definition, scope and aims” of eugenics to a distinguished audience of his British peers at the first meeting of the Royal Sociological Society at London University in May 1904. It was duly noted that Professor Karl Pearson, FRS, occupied the chair. Influential clergy, scientists, business magnates and several ladies of high birth were in attendance. “Eugenics,” Galton pronounced “is the science which deals with all influences that improve the inborn qualities of a race, also with those that develop them to the utmost advantage” (Galton 1904, 1). Galton ended his address with an agenda for the future and an appeal to “make eugenics a familiar academic question, a subject for serious study,” one that

must be introduced into the national conscience, like a new religion. It has strong claims to become an orthodox religious tenet of the future, for eugenics cooperate with the workings of nature by securing that humanity shall be represented by the fittest races. What nature does blindly, slowly, and ruthlessly, man may do providently, quickly, and kindly. (Galton 1904, 5)

Galton and his protégés created the new science of biometry as their divining rod, and were the leaders of the British eugenics movement for decades (Bowler 2003, 259). The Galton School initially engaged in a feud of sorts with Mendel’s British and American acolytes, at least until the experimental evidence for Mendel’s laws operating in human heredity became too great to ignore (Ludmerer 1972, 45). The biometricians primarily studied continuous traits, such as intelligence, and preferred quantitative statistical analysis of large populations rather than the qualitative experimental study of discontinuous traits in individuals favoured by the Mendelians. Galton and Pearson founded a journal, *Biometrika*, in 1902. Galton lived to see eugenics and Galton societies form throughout the Empire, in America and around the world. He was knighted in 1909 and upon his death, in 1911, University College at London founded a Galton Eugenics Professorship and the Galton Biometric Laboratory, with Karl Pearson as its head (Kevles 1995, 35–38). Although they have largely expunged explicit references to eugenics in their titles

and publications, if not their agendas, the institutions they created survive to this day (Kevles 1995, 251–52). But nowhere else (with the eventual exception of Nazi Germany) would Galton’s orthodox religion of eugenics bear such prodigious followers as that scion of Puritanism that had colonized the new shores of British North America more than a century earlier. This transplantation across the Atlantic occurred quickly and with great vigour.

Unlike the primarily class-based eugenics of Galton and his British cohorts, the seminal ideas took on a much more race-based tone in America, synergistically combining with pre-existing Nativist and Nordicist sentiments, a proud history of scientific racism and racial segregation in the South<sup>1</sup> and powerful social-efficiency and social-hygiene movements in a country on the verge of Great Power status. Only a generation or two removed from a largely rural, agrarian society, America was transformed into the world’s greatest industrial power by World War I, and reaped a rich harvest in new academic, scientific, social and technical fields (Bland 1977). Many hardline eugenicists were deeply suspicious of laissez-faire industrial capitalism, and its demographic and sociological effects on the nation, especially for “native-Americans.”<sup>2</sup>

## Scientific Authority for American Eugenics

Some of the most influential leaders of American eugenics were academic researchers and educators who lent their considerable reputations and credentials to the movement and to related educational initiatives. American apostles of Galton’s biometrics and Mendel’s genetics joined with professors of evolutionary biology, anthropology, psychology and sociology. Collectively, these academics lent scientific authority to the protoeugenical seedlings from the Clean Living Movement, following on the heels of the brutality and social dislocation of the American Civil War. These reputedly precise and empirical sciences validated and legitimized eugenics as a rational and progressive social movement, just as Charles Darwin’s scientific theories validated the pre-existing social Darwinism of Thomas Malthus and Herbert Spencer (Bowler 2003).

Capturing the imaginations of a new wave of American doctoral students graduated from newly established research universities, such as Harvard and Columbia, genetics, biometrics and demographics seemed to offer the same sort of mathematical certainty and predictive power to transform social science



and American society in the Progressive Era as Newton and his “clock-work universe” had done for physics and philosophy in European society during the Enlightenment (Bowler 2003). For this new generation of American academics and professionals, proud descendants of Anglo-Saxon Protestant pioneer stock, the new fields of genetics, evolutionary biology and sociology seemed to offer the same sort of fertile land for professional colonization as their ancestors had found in the New World. These new sciences gave direction and legitimized the social agenda of the eugenics movement. The socially conservative WASP defenders of the *status quo* could not be summarily dismissed as cranks as long as their agenda remained girded by the mantle of scientific authority and empirical evidence (Zenderland 1998; Spiro 2009).

Backed by the authority and promise of these new scientific disciplines, the disciples of the eugenics movement quickly adopted the new hereditarian, social and statistical science concepts and research methods to rationalize the study of human betterment and “race-hygiene.” Newton’s calculus and cosmology had dazzled the glitterati and educated public of his day, enabling scientific, industrial and social revolutions that fundamentally changed Europe. The modern sciences that girded eugenics, it was hoped, could be deployed to battle a host of social evils that were causing “racial degeneracy” in America and threatening to derail societal progress. As the first decades of the new century transitioned from the Progressive Era into an “Age of Anxiety,”<sup>73</sup> American eugenicists knew they needed to recruit a coterie of medical professionals and business, educational and social leaders, as well as the politicians and wealthy philanthropists who held the purse strings. More problematically, they needed to educate the public and the successive generations of young people who would populate their brave new world.

To this end, the American Eugenics Society (AES) formed over a dozen subcommittees, some specializing in tackling the social problems most pressing to the leadership; others tasked with evangelizing eugenics among different sectors of American society. Among these were the Popular Education Committee, tasked with education of the public, and the Formal Education Committee, charged with the “incorporation of eugenics as an integral part of various appropriate courses throughout the school system, in the elementary grades through high school, as well as the encouragement of special courses in colleges and universities” (Evans 1931, x).

Educator J F Bobbitt wrote an early American eugenics article with profound educational implications.

In “Practical Eugenics” (1909), an article featured in G Stanley Hall’s journal *Pedagogical Seminary*,<sup>4</sup> Bobbitt implored the American public and their leaders to curb the “rampant immigration” of non-Anglo-Saxon Europeans, and argued that “little could be done for the child of worm eaten stock” (Bobbitt 1909, 386). Bobbitt dramatically warned that two sinister processes were at work in America. The first was the “drying up of the highest, purest tributaries to the stream of heredity,” referring to the decreasing birthrate of the native Anglo-Saxon stock. The second was the “rising flood in the muddy, undesirable streams,” referring to the large influx and differential in birthrates of the more recent wave of non-Anglo-Saxon immigrants from southern and eastern Europe, as well as the slaves brought to America before the Civil War (Bobbitt 1909, 388). Bobbitt also lamented the dysgenic effect of charities and social services for working against the laws of evolution and nature:

Where ‘survival of the fittest’ had previously ensured that society’s best would continue, we are now faced with civilization’s retrogressive policies. Our schools and our charities supply crutches to the weak in mind and morals [and thus] corrupt the streams of heredity which all admit are sufficiently turbid. (Bobbitt 1909, 387)

David Starr Jordan nurtured Leland Stanford Junior College into one of America’s largest and most prestigious private universities. He was also a prolific writer in the eugenics field, decrying the dysgenic effects of war, venereal diseases and alcohol and championing eugenic segregation and sterilization of the feeble-minded, as well as immigration and marriage restriction laws (Engs 2005). His books included *The Blood of the Nation* (1902) and *The Heredity of Richard Roe* (1911). Another of G Stanley Hall’s influential students was Henry H Goddard, director of the Research Laboratory of the Training School at Vineland, New Jersey, for Feeble-Minded Girls and Boys. Goddard translated and modified Alfred Binet’s test<sup>5</sup> to more reliably measure the mental age (IQ) of the residents at Vineland. Goddard also introduced the world to the Kallikaks (a composite of the Greek roots *kallos*, meaning good, and *kakos*, or bad) in 1912—supposedly a real extended family from New Jersey with both a “worthy side” and a “degenerate side” (see Figure 3). The Kallikak family became a staple model of eugenic pedigree studies for decades. A later version of the *Die Familie Kallikak* study was published in Nazi Germany in 1934, in which the facial features of the “degenerate line” were altered to make them appear Jewish (Smith 1985, 161–63).

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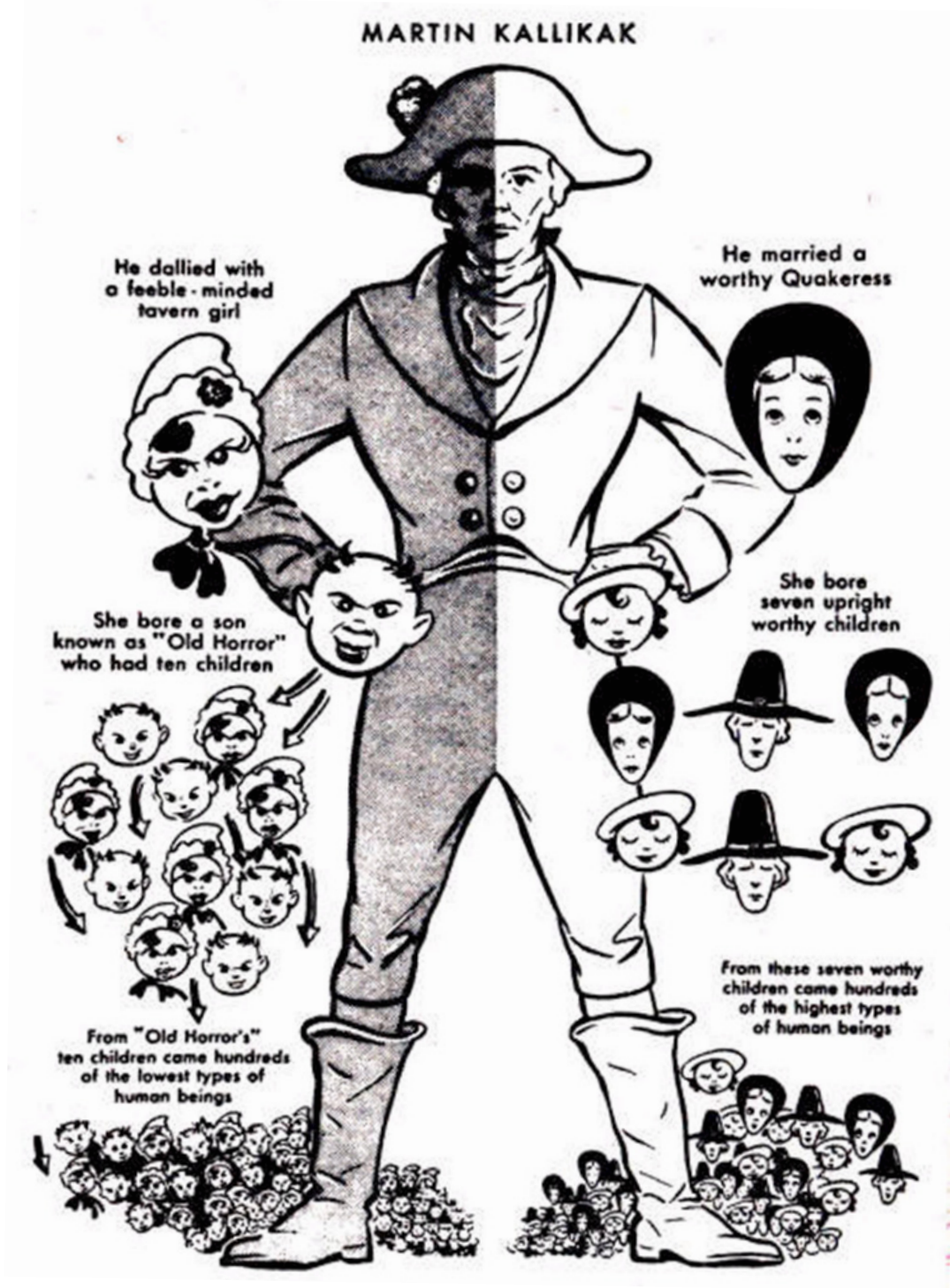
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*Figure 2: The directors and advisory council of the American Eugenics Society in 1935, from the AES book Tomorrow's Children: The Goals of Eugenics, intended as a catechism for eugenics.*





**Figure 3:** A cartoonish depiction of the “good and bad heredity” of Goddard’s Kallikak Family. Notice the “devilish” features of the “unfit” brood, versus the “angelic” features of the “fit” lineage. Stephen J Gould had the *Smithsonian’s* photographic expert analyze a first edition of the Kallikaks. He determined that the mouths and eyes in the family photos of the “degenerate side” had been crudely altered to make them look “more sinister” (Gould 1981). (After Smith 1985, 171)

## E A Ross and Immigration Restriction

Of all the professional sociologists who contributed to the American eugenics movement, and particularly to the immigration issue, the most prestigious and prodigious was Edward Alsworth Ross (1866–1951), professor of sociology at Stanford and later the University of Wisconsin. Ross had already published many scholarly works by the time Galton announced the dawn of the science of eugenics, including *Social Control* (1902), *The Foundations of Sociology* (1905), *Sin and Society* (1907) and *Social Psychology* (1908).

Ross's early work established his credentials as one of the most prominent American social scientists of his era, but it contained little trace of the racial undertones that his later works evidenced. Shortly after the turn of the 20th century, the tone and content of his works changed, becoming characteristic of the Nativist faction of the eugenics movement in America. He opposed immigration from non-Nordic countries, reflecting well the views of the eugenic movement's primary racial theorists, Madison Grant and anthropologist Henry Fairfield Osborn.<sup>6</sup> Ross was also a trusted advisor of Theodore Roosevelt and coined the term "race suicide" (Ross 1901) that T R would tirelessly campaign against (Dyer 1980; Spiro 2009). Beginning with *The Old World in the New* (1914), Ross began to advocate tirelessly for immigration restrictions against the "hordes of human refuse who swarm in upon us in this last decade or so." In describing, for instance, the "bulk of South-Italian immigrants to America," he writes

As grinding rusty-iron reveals the bright metal, so American competition brings to light the race-stuff in poverty-crushed immigrants. But not all this stuff is of value in a democracy like ours. Only a people endowed with a steady attention, a slow-fuse temper, and a persistent will can organize itself for success in the international rivalries to come. So far as the American people consents to incorporate with itself great numbers of wavering, impulsive, excitable persons, it must in the end resign itself to lower efficiency, to less democracy, or to both. (Ross 1914, 119)

Ross joined with many eugenics groups and supporters, as well as the Immigration Restriction League, to lobby Congress and act as expert witnesses in committees. Their efforts were successful by 1921, when a quota system was established, based on country of origin and limiting immigration from each

country to 3 per cent of its American population in the 1910 census (Engs 2005, 126). In 1924, the *Johnson-Reed Immigration Restriction Act* was passed, which moved the base year of the quota to 1890, greatly favouring the earlier immigration pattern dominated by the Anglo-Saxon and Nordic regions of northwestern Europe (left side of the table above), and curtailing immigrants from southern and eastern Europe (right side of the table). This law did not go into effect until 1929, but then remained in force until 1965, although it was later relaxed somewhat, during the European refugee exodus following World War II.

In addition to immigration restrictions, Ross argued for prudence in bestowing charity upon the poor and downtrodden masses, advocating for discrimination between "God's poor" and "the devil's poor" in *The Principles of Sociology* (1920). Echoing a common eugenic meme that indiscriminate charity allows the unfit to survive and outbreed the fit, Ross informs the reader that

What we have learned as to the part played by indiscriminate charity in perpetuating degenerate stocks makes us afraid to give money with our eyes shut. In the valley of Aosta in Northern Italy, and in other Alpine regions, once was rife the form of idiocy known as cretinism, which is associated with goitre. Thanks to a mistaken charity this type was aided to mate and propagate until a horrible special variety of human beings had come into existence. Happily in recent years these unfortunate types are no longer permitted to marry and breed, so that the type has nearly vanished ... It follows that as we succeed in ridding society of misery, disease and vice we should install filters to intercept degenerate types. Such filters are: The segregation of the feeble-minded; relief of the chronic-pauper only on terms which exclude their further increase; social pressure to deter persons with transmissible bodily defects from propagation; and the forcing of minimal standards of cleanliness, decency, child-care and schooling upon those congenital incompetents who are able to maintain themselves just above the line of self-support. (Ross 1920, 388–89)

Perhaps the most interesting of Ross's eugenic-themed works is *New-Age Sociology* (1940), written at a time when hardline eugenics was losing support in America as a result of the Great Depression as well as adverse publicity of Nazi Germany's notorious racial-hygiene laws, its aggressive compulsory-sterilization campaign and its role in the latest European war. Despite these changes, Ross continued to advocate for "practical eugenic measures," such as



the “sterilization of mental defectives” and “propagation of sounder ideas of marriage”:

Among the “Ten Commandments for the choice of a spouse” issued by the highest health authorities of Germany and the racial-population department of the Nationalist-Socialist “Nazi” Party are such maxims as:

Thou shalt not remain single if thou art by inheritance healthy.

In thy choice of a spouse ask about his or her ancestors.

Health is the condition for external beauty.

Marry only for love.

Seek no playmate, but a companion for marriage.

The meaning of marriage lies in a healthy posterity.

These excellent maxims ought to be diffused among young people everywhere. In the nobler, the eugenic ideal kindles that enthusiasm and readiness to dedicate one’s self which in the past has been inspired by religion ... However, sound eugenic proposals meet such ravings of ignorance that we should not look for them to be put into effect much before the last third of our century. (Ross 1940, 50)

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**Figure 4:** Contents pages from E A Ross’s *Old World in the New* (1914). On the left side of the table are the “eugenically desirable races” (with the oft-cited exception of the “Celtic Irish,” as opposed to the “Scotch Irish,” from which both Ross and Madison Grant descended). On the right side of the table are the “eugenic undesirables,” from eastern and southern Europe, that were the targets of post-World War I immigration restriction policies and eventual legislation.



The last section of this chapter praises Nazi Germany's direct economic "encouragement of births among the superior," reflecting another eugenic meme: encouraging more reproduction among the "fitter classes" of women, especially the "Mothers of Tomorrow."

It is to this gendered approach to eugenics education and the new focus on the family as a sociological unit of society that this article turns next, as the mainstream eugenics movement of the 1930s turned away from strict hereditarianism and biological determinism to a softer social-science approach, with explicit attention to social and environmental interactions with heredity.

## Encouraging the "Mother of Tomorrow"

Although the leadership of American eugenics organizations was largely professional, middle-class, WASP males, eugenics had its fair share of support from women, mostly in the form of loose alliances with various social movements. The birth-control and temperance movements, as well as other contemporary "feminist" social-hygiene organizations tentatively supported eugenics, and vice versa, in a somewhat tenuous symbiotic mutualism. One of the fundamental goals of eugenics was to re-establish the primacy of prolific motherhood among the "fitter classes" of women, especially female college graduates, while negating the problematic modern diversions of extensive career and educational ambitions. The Janus face of this situation was to suppress the reproduction of the feeble-minded "moron-girls" whose alleged precocity was equalled only by their legendary fecundity, and to combat the so-called racial poisons of alcohol, gambling, venereal diseases and other social vices that afflicted "less desirable" groups of American women. As Kline asserts in her introduction to *Building a Better Race* (2001),

Eugenicists promoted two opposing models of womanhood that suggested the importance of gender to eugenics ideology: the "mother of tomorrow" and the "moron". The mother of tomorrow represented the procreative potential of white middle-class women, while the moron symbolized the [dysgenic] danger of female sexuality unleashed. Together these models, which carried great symbolic weight in the eugenics movement, demonstrated that the eugenic definition of womanhood was double-edged: it portrayed women as responsible not only for racial progress but also for racial destruction (p 15).

Teddy Roosevelt placed the blame for "race-suicide" on white womanhood. Women of "good stock" who chose not to have children were "race criminals" and jeopardized the continuance of the American empire, since "no race has any chance to win a great place unless it consists of good breeders as well as good fighters" (Kline 2001, 15). No segment of American femininity seemed to offer as much promise of being "good breeders" as those who comprised the population of women's colleges and those few universities that equally accepted women as students, outside of the traditionally female schools and faculties (such as nursing and teaching). This dysgenic problem of the differential birth rate between the "fit" and "unfit" members of the white race was to preoccupy eugenic think tanks for decades, from the time of Teddy Roosevelt's warning of race-suicide in the first decade of the 1900s through to the last hurrah of organized American eugenics in the early baby-boom years.

In "Education and Race Suicide," Robert Sprague charged that women's colleges were "drawing off the best blood of the American stock and sinking it in a dry desert of sterile intellectuality" (Sprague 1915, 160). Professor Roswell Johnson (coauthor of *Applied Eugenics*, 1918) warned that the "extraordinary inadequacy of the reproductivity of these [women] college graduates can hardly be taken too seriously" (Vigue 1987, 52). Johnson's coauthor, Paul Popenoe, sermonized in 1926 that it is "little less than a crime to advise girls to wait until they are 30 or more to marry, in order to get a better preparation for a career rather than marriage."<sup>7</sup>

According to Popenoe, there was "probably not one such case in a hundred where the advice is really justified; but the girl, misled by the vanity of her parents and the praise of incompetent teachers who want a pupil ... spends great amounts of time and money in training only to find later that there is no career for her, or, if there is, that she would have preferred a family." Eugenicists insisted that parents should help their daughters fulfill their biological destiny and become good wives and mothers; anything less would be a tragic waste of time and effort. (Rembis 2006, 103)

Sprague argued that eugenicists had a patriotic duty to mobilize "public opinion ... by our leaders of literature and thought both without and within the educational institutions, and it is high time that this line of action is pushed to results, before the best blood of the American people becomes dried out of the race" (Sprague 1915, 162). At the Race Betterment exhibit at the 1915 San Francisco Exhibition,

and continuing with the popular Better Baby and Fitter Family contests in the 1920s and 1930s, eugenicists tried to promote the image of the “mother of tomorrow,” while countering the combined threats of the extreme fertility of the “moron-girl,” the individuality and unbridled female sexuality of the “woman adrift” (perhaps best portrayed by the “flapper-girl”) and the equally dysgenic barren-spinster destiny of the denizens of Bryn Mawr, Vassar and Wellesley colleges (Kline 2001).

The growth of the practices of “eugenic segregation” and compulsory sterilization enacted after World War I were beginning to have the desired effect of limiting the reproduction of those “better off never to have been born,” to paraphrase Supreme Court justice Oliver Wendell Holmes’ judgment in the *Buck v Bell* case.<sup>8</sup> However, positive eugenics goals proved elusive and depended heavily on reorienting the educational goals of women more interested in Greek classics, French poetry and Freudian psychology. Roswell Johnson lamented that the “stubborn resistance of these colleges to the introduction of education for domestic efficiency,” the separation of the sexes and their failure to produce “girls trained to be efficient wives and mothers is one of the causes of the low marriage rate and late time of marriage” ... all of which were “contrary to the interests of society and the race” (Vigue 1987, 53).

Eugenicists began to see some hopeful progress on this front when women’s colleges and coeducational institutions began to offer eugenics courses aimed at young women as part of their offerings in biology, home economics and sociology programs, as well as high school courses that groomed potential “mothers of tomorrow.” The peak of eugenic education for women did not occur until the 1930s, when the impacts and social dislocations of the Great Depression fostered a new focus on the family, traditional morality and gender roles (Kline 2001). A host of new eugenic texts aimed to redress the perceived problems. In a chapter from *Popular Eugenics* (2006) entitled “Explaining Sexual Life to Your Daughter” (named after the chapter title of a popular Depression-era book, *Eugenics and Sex Harmony*, written by H H Rubin and first published in 1933), Michael Rembis outlines the growth of eugenic literature and education programs aimed at young women. This topic was also boldly highlighted in the “eugenic catechism” *Tomorrow’s Children*, written by Yale’s Ellsworth Huntington (1935), then president of the AES. Like the well-known *Baltimore Catechism*, it is written in question-and-answer format. Perhaps echoing the democratic socialism of Roosevelt’s New

Deal economic policies, Huntington recommends a sliding scale of economic incentives, such as direct subsidies and tax credits, for eugenically desirable parents to have larger families. (See also Kline’s contribution to *Popular Eugenics* [Currell and Cogdill 2006]: “A New Deal for the Child: Ann Cooper-Hewitt and Sterilization in the 1930s.”)

One of the first sociologists to respond to this dire need for women’s eugenic education was North Carolina professor Earnest Groves. His pioneering course and popular book, *Preparation for Marriage*, introduced in 1936, linked the sociology of eugenics to mate selection and marriage. These new initiatives, as noted by Kline (2001, 2006) and Rembis (2006), signaled a newfound emphasis on family, environment and upbringing (while retaining hereditarian causalities), along with a desire to distance American eugenics from the overtly racist tone of the Nazi race-hygiene program that was alienating many liberals and moderates at home. These courses became extremely popular with the “mothers of tomorrow.” As Rembis asserts,

Proponents of eugenic education focused their campaign largely on young women, particularly those attending college ... [agreeing] with Paul Popenoe’s assertion that sex “played a somewhat larger part in the life of woman than of man” and that “if there is to be any difference in emphasis, women should have a more thorough preparation for family life than do men.” The result, at least in part, was the creation during the 1930s of college-level courses that were aimed primarily at women and specifically dealt with marriage, family and eugenics, as well as concerted efforts to inculcate eugenic ideals in young women and girls, in their homes, grammar schools, and high schools (Rembis 2006, 103).

## Latter-Day Revivals and Futuristic Directions

Although the horror of Nazi race-hygiene programs served as a brake on eugenics in most democratic countries, it by no means ended all entrenched programs or support from scientists and other academics, despite some official histories that assert this as the end of the era. It may have marked the beginning of the end for *widespread* support by professionals and professors for hardline eugenics programs. There were still significant holdouts that continued such eugenic practices as forced sterilization of the “feeble-minded” for over three decades:





"HER SON"  
\$4000 prize Statue by Miss Nellie Walker  
Courtesy Chicago Art Institute

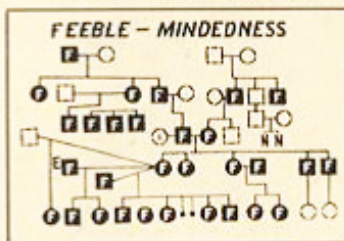
## Who will be the Mothers of Coming America?

*The American Woman  
is Rapidly Becoming Ugly*

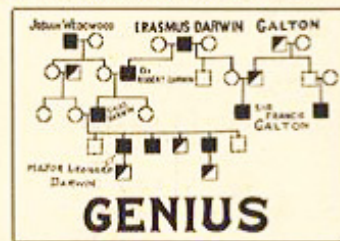
Prof. Ross has proved it. When the low immigrant is giving us *three babes* while the Daughter of the Revolution is giving us *one* it means the Gibson and Harrison Fisher Girl is vanishing. Her place is being taken by the low-browed, broad-faced, flat-chested woman of lower Europe. If this continues it means a progressive loss of racial excellence, intelligence and power.

### Imbecility and Genius are both Inherited.

Only opportunity will bring out inborn genius, but imbecility **always** shows.



Pedigree collected by Dr. H. H. Goddard.  
The black ones are all feeble-minded.



Means Fellow of Royal Society,  
Means Eminent in Science. Pedigree collected by Mr. and  
Mrs. Whetham of England.

**Imbecility is increasing. Great men are decreasing**

COIT BUREAU  
Cleveland

MUTUAL BUREAU  
Chicago

WHITE BUREAU  
Boston

**Figure 5:** A 1922 advertisement from the Human Betterment Foundation in Collier's Magazine. The "Prof. Ross" is E A Ross. Note the source (Dr H H Goddard) of the "dysgenic pedigree" at bottom left, and the "Genius" pedigree on the right (the Darwin, Galton and Wedgwood families).

the practice ended in 1971 in Alberta, 1972 in Virginia, 1979 in California and 1981 in Oregon (Engs 2005, 54–57).

One of the reactions of American eugenics (and its British equivalents) was to rebrand itself and incorporate elements of an environmental program (euthenics) into the movement. This had already begun as the Great Depression wore on, but was accelerated during and after World War II. This can be seen in the efforts and works of later American eugenic leaders, such as Yale's Ellsworth Huntington (president of the AES during the 1930s—see Huntington 1920, 1935, 1945) and Frederick Henry Osborn (Henry Fairfield Osborn's nephew), who was president of the AES during the early postwar years (see Osborn 1968, 1974; Lorimer and Osborn 1934). Both could best be described as pioneers of human geography, demographics and social biology. Both were prolific authors and influential leaders. (See Engs 2005, for short biographies of both.) Frederick Osborn succeeded his uncle as president of the American Natural History museum, was commissioned as a general in the US Army to head the "Moral Branch" in World War II and later served as a deputy to the United Nations Atomic Energy Commission. He was appointed president of the Population Council in 1954 by John Rockefeller III, serving until 1959. Osborn predicted that in the future, "Eugenic goals are most likely to be attained under another name than eugenics" (Osborn 1968, 104). Sir Frederick was correct, but also underestimated the staying power of hardline eugenics.

This trend of relabelling organizations and retooling the agenda continued after World War II. Thus Paul Popenoe's Human Betterment Foundation, a pioneer in eugenic sterilization, was rolled into Planned Parenthood, and he became a popular marriage counsellor and a founder of genetic counselling (Engs 2005, 181–82). The American Eugenics Society became the Society for the Study of Social Biology in 1973, and its journal *Eugenics Quarterly* became *Social Biology* in 1969 (Engs 2005, 7–8). It is now *Biodemography and Social Biology*. Sir Frederick H Osborn even wrote a short history of the AES in *Social Biology*, in 1974. In London, the Galton Chair of Eugenics, once occupied by Karl Pearson, became the Galton Chair of Human Genetics in 1954, and its journals and publications were similarly renamed (Engs 2005, 84–85). The venerable old British Eugenics Education Society changed its name to the Galton Institute, and renamed its journal *The Eugenics Review* to the *Journal of Biosocial Science*, in 1968.

However, some academics, even prominent respected scientists, remained ardent supporters of hardline eugenics, even when the tide had turned against them. One of the most interesting and bizarre cases is that of American physicist and Nobel laureate William Shockley. Best known for his contribution to the development of the first transistor, in 1947, he was serving as an engineering chair at Stanford University when he embarked on a late crusade for hardline eugenics. Shockley addressed a Nobel conference in 1965 with a presentation on "Genetics and the Future of Man" (Tucker 1994, 183). After acknowledging his lack of formal training in the area, he expressed his long-held concerns with both the quantity and quality of human beings. Shockley explained

One of the greatest threats to the future was the 'genetic deterioration' of the human race ... that improvements in medical technology, together with the abundance in American society were assuring to all the privilege of reproducing their kind, even those suffering from genetic defects that would not have allowed them to survive to the age of reproduction in a more primitive environment. (Tucker 1994, 184)

Although most of the mass media ignored him, *U.S. News and World Report* interviewed him, and published a lengthy feature article. It included themes reminiscent of old-time hardline eugenics, such as the "increasing reproduction of the inferior strains," wherein "especially in Blacks, the genetically least capable were producing the largest number of offspring" (Tucker 1994, 185). The angry reaction from Shockley's Stanford colleagues in the genetics department was spurred by the fact that the article was reprinted in the *Stanford M.D.*, the medical school's alumni magazine. The Stanford geneticists' response was unequivocal. In an open letter signed by all seven members of Stanford's genetics department, including Joshua Lederberg, a Nobel laureate himself, they repudiated Shockley's statements as

the kind of pseudo-scientific justification for class and race prejudice [that] that we would not ordinarily have cared to react to. However, Professor Shockley's standing as a Nobel laureate and as a colleague at Stanford, and now the appearance of his article with a label of Stanford medicine, creates a situation where our silence could leave the false impression that we share or acquiesce in this outlook, which we certainly do not ... [we] deplore the tone of his entire discussion about 'bad heredity.' (Tucker 1994, 185)



Shockley's critics mockingly asked why he had not used Goddard's old Kallikak study as part of his "scientific documentation." Not to disappoint, Shockley later did just that. Shockley also appealed to the National Academy of Sciences, making annual urgent "pleas for the study of racial aspects of the heredity-poverty-crime nexus" (Tucker 1994, 186). He proposed a system of tax credits for "eugenic desirables", similar to previous incarnations of eugenicists going back to Francis Galton. Shockley attacked his critics as being "undemocratic" and "totalitarian" in nature, and even proffered that "the lesson to be learned from Nazi history, was the value of free speech, not that eugenics is intolerable." Shockley's eugenic crusade continued for decades. He received significant funding from the Pioneer Fund, which had been established in 1937, founded by philanthropist Wickliffe Preston Draper and eugenicists Harry Laughlin and Frederick Osborn; its main objective was to "provide grants for research into the study of human nature, heredity and eugenics (Engs 2005, 179; Tucker 1994, 2002). The Pioneer Fund largely replaced previous financial support from the Rockefeller Foundation and the Carnegie Institute of Washington. Shockley was also a popular speaker for white-supremacist groups, segregationists or other reactionary groups and was even praised by right-wing mass media, including the *Wall Street Journal* (Tucker 1990, 183–95).

If this attempted eugenic revival was limited to one embittered scientist, the nails could perhaps be driven into the coffin of hardline eugenics. The list goes on, however, notably with Arthur Jensen (Berkeley psychologist), his protégés Hans Eysenck and R B Cattell, or other members of the International Association for the Advancement of Ethnology and Eugenics,

with continued financial support from the Pioneer Fund (Tucker 1990, 194). The eugenics movement continues to this day, with such notables as Herrnstein and Murray, authors of *The Bell Curve* (1994), whose best-seller status prompted Stephen J Gould to expand and update his *Mismeasure of Man* (1996). The list also includes the notorious J Philippe Rushton, professor of psychology at the University of Western Ontario, another Pioneer Fund beneficiary and its former chairman (Tucker 2002, 195–291). While mainstream academia may view them as pariahs, they continue to publish and attract a great deal of publicity and support from the right-wing fringes of society. Mainstream scientists who should know better, like Nobel laureate and DNA guru James D Watson of Cold Spring Harbor Laboratory, get even more media attention with ill-advised spontaneous comments on eugenic themes.<sup>9</sup>

With the public re-emergence of various forms of neo-Nazis, the Klan, and other white-supremacist groups, the end of racial eugenics is nowhere in sight. Under pseudonyms it is a key component of the export of Western science and technologies to the developing world (from abortion, birth control and sterilization to theories, models and statistical techniques dating back to Galton and Karl Pearson). This is not even to mention the neo-eugenic elements of modern biotechnology that are embedded in such ventures as the Human Genome Project (HGP) and similar initiatives, corporate spin-offs, and societal memes (Kevles 1992, 1995). Since the HGP first began to attract major interest in academia, and driven by vast amounts of government funding and corporate financing, the spectre of a genetically-engineered, biotechnological neo-eugenics has been evoked by detractors and rival research projects, as well as a renascent religious right.



**Figure 6:** Ricardo Montalban as Khan in the original Star Trek series (1967), and then in the 1982 feature film *The Wrath of Khan*. Note that both are signed—very valuable eugenics relics.

Then there is the Internet. A quick search of *modern eugenics* or *future eugenics* reveals a truly mind-boggling plethora of sites, articles, books, images and organizations. By another gauge, the future of eugenics (by whatever name) is rosy, extrapolating from the ubiquitous prevalence of eugenic memes in science-fiction storylines (from the original *Star Trek* series through all its sequels to *Star Wars*, *Dr. Who* and many other franchises). Eugenics may just survive as a popular meme longer than any current human race or its sequels.<sup>10</sup>

Eugenics receives little curricular attention today, outside of faculties of social science and the humanities, where it is still being actively studied and researched, including its transition to modern academic disciplines and research programs. It was formerly included in high school biology as a brief blurb of a cautionary tale, in a sort of postmodern attempt at “civic biology.” However, with the recent interest and enthusiasm in genetic engineering, genetic medicine, the Human Genome Project and other analogues, eugenics has been banished as an explicit curricular concept, despite (or perhaps because of) its pedagogical value as an exemplar for the history and nature of science, and the ongoing interaction of science, technology and society.

While social studies teachers who know something of its history may use eugenics as an exemplar of social movements, social injustice, and the dangers of pseudoscience in the hands of elites or by the state, it is also missing from the curriculum, even in Alberta, where it has a notorious history and intricate political complications (Grekul 2002). My question to secondary teachers, curriculum leaders, or social activists is: Should this painful episode in social and political history simply be discarded or dropped from consideration based on potentially embarrassing political involvements, outdated science, and outmoded racial attitudes and social thought? Or should it be “rediscovered” and reintroduced? But this time, not as the panacea for social problems from the previous century, but as an invaluable opportunity to learn from the past in order to ensure that this new millennium might actually live up to the hype in which it was ushered in, before the “War on Terror” changed everything and reset the agenda. At the very least, if we are going to trumpet the arrival of a brave new world of biotechnology and medical-technological solutions to mankind’s biological limitations, we should at least teach students that there was a prior iteration to this utopic dream and highlight its ultimate results and costs.

## Notes

1. The case of Samuel G Morton (1799–1851), a prominent Philadelphia physician, amateur anthropologist and collector of skulls, is among the most notorious episodes in the history of American science. Morton amassed a personal collection of almost 1,000 human skulls, from various races and parts of the world. His empirical measures of the cranial capacity of those skulls, and the attempted correlation with racial intelligence, brought Morton and this area of research to international fame. They are remembered most for their assertion that the various human races are different species, with separate creation episodes (polygeny). Morton was the most respected of the group of amateur scientists and academics who became known as the American School of Anthropology. Although the science and racial biases they held as irrefutable truths have long been discredited, the underlying perception that there is a scientific basis for the inequality of racial groups remains. (See the chapter on Morton in Stephen J Gould [1981, 1996] and Stanton [1966] for details of this earlier brand of scientific racism in America.)

2. The term *native-Americans* or *Old-stock Americans* refers to the native Anglo-Saxons who could trace their American heritage back to Puritans of the *Mayflower*, or to one of the original British colonies. The term was *not* applied to American Indians or mixed descendants of the original French or Spanish settlers from colonial times.

3. The Age of Anxiety refers to the post-World War I social malaise in Europe, the result of the Great War’s horrific cost in human lives, family fortunes and national or imperial economies. While America escaped much of this social dislocation (indeed, it profited greatly from the war economically and industrially), it did lead to strident xenophobia and isolationism, culminating in the ‘Red Scare’ of 1918–22, and the *Immigration Restriction Act* of 1924.

4. *The Pedagogical Seminary* (which became *The Pedagogical Seminary and Journal of Genetic Psychology* from 1928–53) was edited for many years by G Stanley Hall, then president of Clark University, and a professor of both psychology and education. Hall is probably best known for being the founder of Child Study, then a new strand of curriculum studies. Several of his doctoral students became very involved in the eugenics movement.

5. *Editor’s note*: an early tool for measuring intelligence, developed by Alfred Binet, a French psychologist, in the first years of the 20th century.

6. Madison Grant (1865–1937, Yale law degree 1890) was a stalwart of American eugenics, a wealthy lawyer and close friend of Teddy Roosevelt. He gained early fame as a conservationist, leading the charge to establish several national parks and wilderness preserves. His most influential work, *The Passing of the Great Race* (1916), argued for the preservation of America as a sort of “civilization preserve” for the Nordic race. Grant endorsed strict immigration controls—to be only from Anglo-Saxon or Nordic regions of Europe. He insisted that “the Laws of Nature require the obliteration of the unfit.” Not surprisingly, Grant’s book attracted the notice of Adolf Hitler, while he was in prison writing *Mein Kampf*. Hitler later wrote to Grant, thanking him for his momentous book, stating it was “his Bible.” (Black 2003) At the Nuremberg Trials, Grant’s *Passing of the Great Race* was entered into evidence by Dr Karl Brandt, Hitler’s personal doctor and head of the Nazi euthanasia program, in order to justify that the population policies of the Third Reich were not ideologically



unique, or even original to Nazi Germany. (See Engs 2005, 102–03 for a short biography of Grant, and Spiro 2009, for the full story.)

7. Paul Popenoe (1888–1979), born into a family of old-stock Huguenots, was editor of the *Journal of Heredity* until World War I, when he served on the Surgeon General's staff as director of the venereal diseases control section. He became executive director of the American Social Hygiene Association and later the Human Betterment Foundation, which was merged into Planned Parenthood after World War II. His book *Modern Marriage* (1925) went through multiple editions for decades (Engs 2005, 181).

8. *Buck vs Bell* was the infamous 1927 test case for mandatory eugenic sterilization that established its national constitutionality, when the prior decisions of lower courts in Virginia were upheld by the US Supreme Court. The lone dissenting justice, a Catholic, did not submit a minority report (Kevles 1995, 110–12). The eugenic sterilization laws upon which the Virginia statute was based were later copied by many other states including, in 1933, the new Nationalist-Socialist state of Adolf Hitler, among the most ardent supporters of racial eugenics (Engs 2005, 26, 158–60).

9. Cold Spring Harbor Laboratory on Long Island, New York, was the site of the Eugenics Record Office, established in 1910 by Charles B Davenport and generously funded for three decades by the Carnegie Institute of Washington and the Rockefeller Foundation, as well as numerous private donations from wealthy “native Americans.” It is now a major genetics and evolutionary biology research institute, but also boasts a eugenics museum and educational website on the history of eugenics and human genetics.

10. My first exposure to the idea of eugenics was compliments of the original *Star Trek* series. In the “Space Seed” episode, a young Ricardo Montalban starred as Khan, the leader of a band of genetically-enhanced “Supermen,” rescued from a century-old derelict spaceship (the *Botany Bay*) by the *Enterprise* crew. In short order, Khan and his supermen attempted to commandeer the ship for their own sinister purposes, betraying their contempt for ordinary humans. Captain Kirk and the crew saved the day and dropped off the mutineers on the nearest habitable planet. Twenty years later the embittered survivors of this group of eugenic *übertmenschen* again played the antagonists for Admiral Kirk and the *Enterprise* crew in *Star Trek: The Wrath of Khan*—featuring an older, but remarkably fit Ricardo Montalban. I did not really appreciate the eugenic angle until after formal study of the subject. The subject of future eugenics programs and trans/posthumans in the age of advanced biotechnologies became recurring motifs in later *Star Trek* franchises. Most other long-running science fiction franchises (including *Star Wars*) have continued to flog the eugenics theme. Although they have been explicitly intended as cautionary tales (almost always), each new version has excited new generations of fan-boys and girls to the possibilities of modern eugenics and biotechnology. Actress Jerri Ryan’s “Borg-Babe” Seven-of-Nine is the quintessential example, inspiring more fan-worship than any previous *Star Trek* character, Captain Kirk included. The longevity and continued popularity of the theme in science fiction and popular culture is a virtual guarantee of the continued relevance of eugenics as a meme in future societies. Whether or not Francis Galton or his Progressive Era followers would approve, new mass media have publicized eugenic memes more effectively than Galton and all his societies could even have dreamt.

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