

# The History of the Twentieth Century

## Episode 248

### “Darwin’s Dilemma”

#### Transcript

[music: Fanfare]

Charles Darwin revolutionized the science of biology. But outside that field, much of the discussion of his theory focused on human origins.

But a few people began to wonder what his theory meant for human destiny.

Welcome to *The History of the Twentieth Century*.

[music: Opening Theme]

Episode 248 Darwin’s Dilemma.

Charles Darwin published his landmark treatise *On the Origin of Species* in 1859. In that work, he mostly avoided discussing the implications of his theory of evolution by natural selection for understanding the origins of human beings, except for a brief bit at the end.

But the implications were clear enough, and one of the first people to pick up on them was Francis Galton, a scientist and thinker, fellow Englishman, and in fact Darwin’s cousin. Galton studied phenomena in many different fields, but of interest to us today is how *On the Origin of Species* inspired him to investigate the inheritance of physical and mental abilities among human beings. To study this question, Galton looked for ways to tease apart the effects of ancestry versus the effects of upbringing in the abilities of a human being. He was in fact the first person to use the phrase “nature versus nurture” to describe this distinction. He took particular interest in twins and in adopted children as ways of testing the effects of nature versus nurture, which researchers still do in our day.

There was only so much Galton could do, given the research tools of the time, but he concluded from his evidence that physical and mental traits in humans did indeed seem to be passed on from parents to children. When his cousin, Charles Darwin, tackled the subject of human evolution in his 1871 follow-up, *The Descent of Man*, he drew on Galton’s work. Darwin also argued in that book that the advent of civilization meant that in some sense, human evolution had “stopped,” because humans born with inherent competitive disadvantages, such as physical or

mental disabilities, but not only those, were cared for by society, rather than left to fend for themselves, as would be the case in nature.

Not that there was anything wrong with that, in Darwin's view. He argued this was part of the price we paid for civilization. To abandon the weaker members of our human family to their fates might pay us a small evolutionary dividend many generations later, but at the price of giving up the very thing that separated us humans from animals in the first place: civilization. You might call this conundrum "Darwin's Dilemma." Either the human race gives up the benefits of natural selection, or it gives up the benefits of civilization. But keep in mind that Darwin himself was wholeheartedly in favor of keeping the civilization.

Charles Darwin died in 1882. The following year, his cousin Francis Galton, published a book on what he called eugenics. The word comes from Greek roots and means good origins or good ancestry.

Eugenics is a tainted word in our time, for reasons firmly rooted in the history of the twentieth century, and we will be discussing that later in this episode, but for now, as is our custom in this podcast, I invite you to put that history out of your mind and think about these questions from the point of view of the thinkers of the time. Also, eugenics is a very broad term. It can mean different things to different people. For example, in the noble Commonwealth of Pennsylvania, where I live, the state does not permit marriages between first cousins. Is that a eugenics law? In a broad sense it is, but it is not the sort of state action people usually think of when they hear the word eugenics.

The attraction of eugenics to its proponents is that it offers a way out of Darwin's Dilemma. A civilized human society could turn to what we might call "artificial selection" as a humane alternative to natural selection. Instead of the evolution of our species guided by the blind forces of nature, it would be managed by human intellect. We ourselves could direct the way in which our species evolves.

There are two basic methods we as a species could employ to control the path of our own evolution. One method would be to enact policies that encourage those with desirable genetic traits to marry and have children with other people who carry the same traits, to reinforce and perpetuate those traits. You can call this positive eugenics. The converse method would be to enact policies that discourage people with undesirable genetic traits from marrying and having children with each other, or indeed, at all. This would be negative eugenics. And in that category, we could also add the law against first cousins marrying that I cited a minute ago.

Galton pointed to a few basic facts about life in Victorian Britain. Educated and prosperous people, generally speaking, tended to marry later and have fewer children, which might be regarded as having an adverse effect on the human gene pool. Galton suggested that young people might be evaluated and scored for their genetic potential, and people with high scores

could be offered financial or other incentives to marry each other, sooner, and have more children.

This was about as far as Francis Galton's thinking went on the subject of eugenics. He received a knighthood in 1909 and passed away in 1911, at the age of 88. By that time, the cause of eugenics had been taken up by his student and biographer, Karl Pearson. Pearson took Galton's airy theories and infused them with some good old-fashioned imperialism.

At the dawn of the twentieth century, Britain was the undisputed superpower of the world, and the British Empire was the largest and richest political entity on the planet. It was widely taken for granted that this was because the Anglo-Saxon "race"—as they would have said back then—was smarter and more capable than other Europeans, who were in turn smarter and more capable than Asians or Africans. But even in 1900, there were worrisome signs of incipient British decline—signs that eugenicists like Pearson attributed to the degradation of the British gene pool. One sign was the poor physical quality of those who volunteered to fight in the Boer War, a problem I discussed in episode 11. Today, most historians would attribute that to poverty and poor nutrition among the British working classes, but eugenicists of the time saw it as a genetic problem.

It's a truism in most societies that the well off have fewer children than the poor. A study in the United States showed that the graduating classes of Harvard University in the late 19<sup>th</sup> century over the course of their lifetimes fathered a number of male children that only amounted to about 60% of their own number. Theodore Roosevelt, an early supporter of eugenics in the US, lamented that the upper classes were committing "race suicide."

Pearson cited a Danish study that claimed that a mere 25% of today's population in a given community will become the parents of 50% of the next generation. And looking into demographics in Britain, who in Britain had the highest birth rates? The Irish Catholic working classes in cities like Liverpool. The Jewish immigrants from the Russian Empire, living in London's East End.

Hmm.

So, who were the right people to be reproducing, if these were the wrong people? Eugenicists of this time placed a lot of stock in educational and professional achievement as markers of superior genes. They concluded that class was a strong marker of the value of a person's ancestry. This was very British, of course, although American eugenics supporters, like Theodore Roosevelt, tended to agree. Francis Galton had in his time suggested that desirable genes might be found as far down the social ladder as the more motivated and accomplished members of the working classes. Galton even went so far as to suggest that a proper program of eugenics must include making full educational opportunity available to the working class, in order to identify those among them with potential and give them the chance to blossom.

But though Galton was in some sense the father of eugenics, this was one idea his followers were reluctant to accept. Rather than advocating for programs that would identify the gifted members of the lower classes, eugenicists of the twentieth century were far more likely to argue that extending educational and self-improvement opportunities to the lower classes was a waste of money. You can't teach intelligence, you know?

On the other hand, eugenicists weren't too keen on the upper classes, either. British eugenicists seldom pointed to the aristocracy as exemplars of genetic superiority—gee, I wonder why? Similarly, you don't find American eugenicists elevating the titans of US industry and finance—your Rockefellers or your Mellons or your Carnegies—as representing the type of human being we should be breeding more of.

No, eugenicists in both countries typically exalted the abilities of the upper middle class professionals as the sort of people we want more of. People like physicians, writers, journalists, lawyers, scientists, intellectuals, and academics. These were the right sort of people; the people whose genetic superiority was self-evident. The people—well, the people very much like the eugenicists themselves, who tended to be exactly this sort of person.

And here you have the problem of eugenics in a nutshell. In theory, the idea of encouraging the reproduction of humans with objectively desirable genetic traits sounds good. But the word *objectively* is carrying a lot of weight here. How do you determine which traits are most desirable and who is carrying them? More to the point, who makes that determination?

You also have to suspect that people in the life sciences were suffering from a certain amount of envy. Physical scientists and engineers had changed the world. Maxwell's equations, formulated at about the same time as Darwin published *The Origin of Species*, had revolutionized the physical sciences, leading to such wonders as electrification, the telephone, and radio. Perhaps now the biologists and students of the life sciences would have their turn to lead a revolution in the social sciences that would also change the world.

It would be very nice to think that “scientists” are people trained in putting aside their personal biases, who could be trusted to improve society through a series of policies based on purely objective, empirically derived criteria. What a lovely idea! Only—

Have you ever actually *met* a scientist?

The First International Eugenics Congress was held in London in 1912, and counted among its attendees such notables as First Lord of the Admiralty Winston Churchill and former Conservative Party Leader and future Foreign Secretary Arthur Balfour. A second Congress was planned for New York City in 1915, but because of the Great War, it would be postponed until 1921. When it did finally meet, it included delegates from every continent around the world. The eugenics movement was growing. But despite the Second Congress's broad base of attendees, 41 out of the 53 scientific papers presented at the Congress were authored by Americans. This partly

reflects the Great War interrupting scientific work in Europe, but it also reflects that the center of gravity of the eugenics movement had shifted to North America.

For the eugenics movement had taken off in the United States, and would reach its peak of respectability in that country in the 1920s. I already told you about the development of what we know today as IQ tests, beginning with French psychologist Alfred Binet in 1904. That was in episode 67. In 1908, an American psychologist named Henry Goddard brought Binet's test to his workplace, the Vineland Training School for Feeble-Minded Girls and Boys, in Vineland, New Jersey.

Let me quickly remind you that "intelligence quotient" or "IQ" numbers as we know them today wouldn't be developed until 1912. Binet's original test scored a student's "mental age." Goddard administered the test to students at the school, which, despite its name, was mostly populated by mentally disabled adults. Goddard categorized them by mental age, and popularized the terminology of *idiot*, meaning an adult with a mental age of two years or less, *imbecile*, for a mental age of three to seven, and *moron*, for those with a mental age of eight to twelve.

Goddard's research led him to the conviction that feeble-mindedness, which is what they called it back then, ran in families and was therefore an inherited trait. In 1912, Goddard published a highly influential book titled, *The Kallikak Family: A Study in the Heredity of Feeble-mindedness*. In this book, Goddard reported research he claimed to have done on the ancestry of a young woman at the Vineland Training School, to whom he gave the pseudonym Deborah Kallikak. He derived the name Kallikak from the Greek words *kallos* and *kakos*, meaning good and bad, respectively.

According to Goddard, Deborah's great-great-great grandfather had been a Revolutionary War hero. After the war ended and he was on his way back home to his native New England, this otherwise respectable young man made one serious error in judgment: during a stopover at an inn in New Jersey, he slept with a feeble-minded woman who worked there as a barmaid. Our hero then returned to New England and afterward became an upright and respected member of the community. He and his wife had seven children, and the descendants of those seven children ultimately amounted to hundreds of equally upright and respectable people, law-abiding, hard-working citizens who contributed immeasurably to their communities and their country.

But, the encounter with the feeble-minded barmaid in New Jersey had left her pregnant. She gave birth to a son, who grew up to be a criminal and ne'er-do-well. This son fathered ten children, and they and their offspring amounted to hundreds of feeble-minded: criminals, prostitutes, mentally disabled, and disturbers of the peace who burdened the criminal justice system and social services in the State of New Jersey for the next century.

In Goddard's telling, the Kallikak family represented a natural experiment in how even a model citizen might carry recessive genes that could, if given the chance, perpetuate themselves at great cost to society. As he saw it, the feeble-minded were mentally limited and had impaired self

control. They would inevitably do poorly in school as children, leading them to drop out, disdain authority, become promiscuous, and engage in crime and other anti-social behaviors that would multiply over generations to come.

For Goddard, the conclusion was equally obvious. Feeble-minded people, like the ones he oversaw at the Vineland School, must not be allowed to reproduce. He proposed carefully segregating the feeble-minded into places like the school where he worked and not allowing them to marry, for his research demonstrated that one little mistake could lead to generations of woe.

It was a compelling argument. This was just at the time that Gregor Mendel's work in genetics was being rediscovered, and Goddard had skillfully woven discussion of dominant and recessive genes into his study, so it had the look and feel of cutting-edge science. It was also utter hogwash. Later investigation would show that the ancestry of Deborah Kallikak, whose real name was Emma Wolverton, was nothing like what Goddard had claimed. In fact, Emma's extended family included prosperous farmers, school teachers, a banker, and one young man who had served as a fighter pilot in the US Army Air Corps during the Great War.

But no one knew about Goddard's dishonesty in 1912. They took him at his word, and his book opened the floodgates. Other psychologists and social service workers in the United States and the United Kingdom began studying the genealogies of those under their care and reported similar findings. They seemed to make a strong case for some kind of policy to reduce the numbers of the "feeble-minded." Segregation was all well and good, but a consensus was already emerging by this time that the optimal solution was sterilization, and the United States had already become the first country in the world to enact laws for compulsory sterilization.

As early as 1889, the Pennsylvania Training School for Feeble-minded Children at Elwyn had offered a program of castration for their male clients, with the consent of their families. In 1899, Dr. Harry Sharp, the doctor at the Indiana State Reformatory in Jeffersonville, Indiana, began a program of vasectomies of inmates. By 1907, he had performed the procedure 465 times—with the inmate's consent in only about a third of those cases. That was the year he spearheaded a campaign that led to the enactment of compulsory sterilization of certain categories of prison inmates into Indiana state law. By 1917, the year the United States entered the Great War, fourteen other states had followed Indiana's lead.

Eugenics advocates in the United Kingdom, by contrast, could only look upon the Americans with awe and envy. There was considerably less support in Britain for compulsory sterilization, and a strong legal argument that any attempt to implement it would constitute battery under British common law, meaning any British physician who tried to follow Dr. Sharp's example risked a prison term. Of course, passage of appropriate legislation in Parliament could have changed that. When this was attempted, in what became the Mental Deficiency Act of 1913, a controversial provision on compulsory sterilization had to be removed from the bill before it would pass. The law in its final form relied on the segregation of the feeble-minded into

institutions, as the American Dr. Goddard had proposed, but forced sterilization remained unlawful in the UK.

In 1916, New York attorney Madison Grant published a book titled *The Passing of the Great Race*. Grant was founder and chairman of the New York Zoological Society, which established the Bronx Zoo in 1899. You may recall from episode 16 how Congolese refugee Ota Benga—who, just for the sake of clarity, was a human being—was put on exhibition at the Bronx Zoo in 1906, and yes, Madison Grant played a role in that.

Grant was a member of a class of American self-styled anthropologists, whose work on anthropology was limited to reading about people in other parts of the world and then writing books in which they spun theories about the relative natures and abilities of human beings of different races (spoiler alert: white people are the best at everything). This was an American tradition that went as far back as Thomas Jefferson. In the early twentieth century, real scientific anthropology was emerging, a field in which anthropologists were expected to travel to distant lands, learn about other peoples firsthand, and report back with their observations before drawing conclusions. The leading light in this new anthropology was the German-born and educated Franz Boas, who created the first American Ph.D. program in anthropology at Columbia University in New York City and singlehandedly dragged American anthropology kicking and screaming into the twentieth century.

Even so, Madison Grant's book, *The Passing of the Great Race*, was generally well received. Theodore Roosevelt, who was friends with Grant, endorsed its thesis. In it, Grant laid out the conventional division of humanity into European, African, and Asian races, but he also subdivided Europeans into three groups, which he called Mediterranean, Alpine, and Nordic. This last category, Nordic, embraced the people of the British Isles, the Netherlands, northern Germany, and Scandinavia. I doubt you will be very surprised when I tell you that Grant thought this group, to which he belonged, was the highest and most advanced race of humans. They were, to him, the wellspring of all great human achievements. When the achievements of other people, say ancient Greece or Rome, became impossible to dismiss, Grant simply argued that these were evidence of Nordic influence in those cultures, because of course it was.

I presume my listeners are savvy enough to spot a circular argument when they see one.

Grant argued that the United States had been settled and built by Nordics, but their supremacy was now being challenged by immigrants from lesser European races and by African Americans. These other groups were reproducing faster than the Nordics, hence *The Passing of the Great Race*.

In 1920, American historian and writer—and Ku Klux Klan member—Lothrop Stoddard published *The Rising Tide of Color: The Threat against White World Supremacy*, a book that made a similar argument on a global scale; namely, that economic growth and industrialization in Asia were making China and Japan into rising powers and high rates of population growth and

rising nationalism among peoples of Asia and Africa were drawing our world into a nightmarish future where the majority white nations of Europe and North America no longer would rule the planet. US President Warren Harding cited the book approvingly in his speeches, though W.E.B. Du Bois aptly described Stoddard as “the high priest of racial baloney.” In 1929, Du Bois debated Stoddard in front of an audience of 5,000 in Chicago. Stoddard was virtually laughed off the stage.

Even so, both of these books continued to be read and well received throughout the 1920s. In Germany, the NSDAP welcomed these books. Party Leader Adolf Hitler took time off from his busy schedule to pen Madison Grant a personal letter, thanking him for writing *The Passing of the Great Race*.

[music:

In the years leading up to the Great War, IQ tests in the United States were most often administered in schools, to help identify what we today would call students with special needs. They were not popular. Parents tended to take umbrage at the news their child’s IQ was being evaluated. They often interpreted this as an insult.

The situation changed during the war. The United States Army gave IQ tests to many of its soldiers, 1.7 million to be exact. There was a test for those literate in English and a pictorial test for those who were not. The test was meant to measure native intelligence, not educational attainment or socioeconomic status, although it’s quite debatable whether it achieved this goal. One of the questions asked soldiers to identify which make of automobile used the Knight engine. And even the pictorial test was administered by other soldiers, whose instructions may not always have been crystal clear or easy to understand. So there are good reasons to question the value of these test results.

During the war, the results were classified, but afterward summaries were published, and they quickly became more grist for the eugenics mill. The reports said that 400,000 of those tested, about a quarter of the total, were unable to read a newspaper or write a letter. The average white draftee tested at the level of a 13-year old, just barely above the level Henry Goddard had defined as feeble-minded. As for African Americans, they averaged at the level of a 10-year-old.

These test results seemed to confirm the eugenicists’ arguments, and help to explain why the 1920s were the high point of the eugenics movement. The eugenicists used this data to press their program. Unless society accepted the principles of eugenics, it was doomed to a rising tide of crime, ever higher taxes to support the ever-growing population of the feeble-minded, and national decline, as the qualities that had made the US great—or made the UK great, take your pick—were bred out of the national stock.

Perhaps the first and highest goal of the movement was restriction on immigration. In 1924, the United States passed the Immigration Act that sharply curtailed immigration from Eastern and

Southern Europe and banned it altogether from Asia. The eugenics movement had vocally supported this legislation, although how large a role eugenics played in the passage of this law is a question in dispute. I'm old enough to remember a time when it was taken as a given that the 1924 law was driven by eugenics, but in recent years, that view has drawn debate. There's not a lot of evidence in the legislative record that the Members of Congress who supported the bill did so out of eugenics concerns. But there is no question that the eugenics movement enthusiastically supported the bill, and indeed wanted to see even greater restrictions on immigration.

The American eugenics movement was also staunchly opposed to mixed-race marriage and the birth of mixed-race children. In 1924, the year the Immigration Act was passed, marriages between white and African Americans were already outlawed in a majority of the states, but the Commonwealth of Virginia took it to a whole new level with the Racial Integrity Act of 1924. Interracial marriage had been unlawful in Virginia since 1691, but the new law not only banned marriages between white Virginians and Virginians of color, but defined white to mean a person "who has no trace whatsoever of any blood other than Caucasian." If a person had even one non-white ancestor, no matter how far removed, they were classified as colored. The Act also required birth certificates to begin recording the racial classification of newborns.

This was the first instance of a law that specifically defined what being "white" meant, and it took the strictest possible position, codifying what has come to be known as the "one drop" rule, which has ever since been a favorite of the most discriminating white supremacists, and remains so in our time.

The Virginia legislature also passed a compulsory sterilization act that same year, 1924. Virginia was the sixteenth state to enact such a law. In many of these states, the law was on the books but seldom applied. Not so with Virginia, which applied the law energetically. Virginia would perform more compulsory sterilizations than any other state except California, the one other state that was aggressive in enforcing the law.

In 1927, one of these compulsory sterilizations, ordered by a Virginia court, was appealed to the US Supreme Court under the caption *Buck v. Bell*. According to state officials, Carrie Buck was an 18-year-old woman who had a mental age of nine and was institutionalized at the Virginia State Colony for Epileptics and Feebleminded. Her mother, Emma, had a record of prostitution and promiscuity and had had three children by three different men. Carrie had been placed with an adoptive family as a child, but had become incorrigible and later pregnant herself, forcing her adoptive parents to have her committed. Carrie's child, a girl named Vivian, still an infant at this time, was examined and determined also to be feebleminded.

The Supreme Court, in an 8-1 decision, upheld the sterilization order. The sole dissenting vote came from Pierce Butler, generally regarded as a conservative justice. Butler did not issue a dissenting opinion, so the reason for his vote is uncertain. He was Catholic, so that may explain it. The majority opinion was written by Oliver Wendell Holmes, which is surprising. Holmes

was often on the civil liberties side of a constitutional issue, but not in this case. He followed eugenics logic down the line, arguing that if the state could enforce compulsory vaccination, it could enforce compulsory sterilization, and ended his opinion with this oft-quoted declaration: “Three generations of imbeciles are enough.”

Holmes was a product of his time, a Progressive, and Progressives embraced with enthusiasm the idea that government officials should consult with scientific and technical experts in developing public policy. Well, I think so too, but you better be able to distinguish between actual science and people who are skilled in taking their personal biases and dressing them up in scientific language. Oh, well.

Eugenicists generally held to the view that feebleminded men became criminals, while feebleminded women became promiscuous and had lots of children. You can see this in the *Buck* case. In these circumstances, you might wonder why the movement didn’t support increased access to birth control. In fact, it was generally opposed to birth control. Eugenicists argued on the one hand that middle and upper class women were not having enough children as it was; allowing them to use birth control would only aggravate that problem. To the contrary, eugenicists argued these women should be discouraged from seeking advanced education or employment, on the grounds that their first duty to society was to bear lots of children.

But what about those promiscuous lower-class, feebleminded women? Eugenicists opposed birth control for them as well, on the grounds that it would free them to become even more promiscuous. Not sure how that presents a eugenics problem so long as they aren’t having children, but here we are.

When you talk about birth control in this era, you can’t avoid the name Margaret Sanger, America’s principal advocate for greater access to birth control. By the Roaring Twenties, Sanger had already founded the organization that would eventually become Planned Parenthood. Understand that at this time, not only was birth control outlawed most places in the US, but there were laws that barred even the publication of information on how birth control works.

The birth control movement is a topic that deserves its own episode, and maybe I’ll come back to it sometime down the road. For now, I’ll just mention that Sanger was arrested in 1916 for providing birth control to women in Brooklyn. At her trial, the judge declared that women had no right to engage in intimate relations separate from the risk of becoming pregnant, which gives you an idea of the attitudes of the time.

In the 1920’s Sanger continued her campaign for birth control access, including smuggling diaphragms into the US from Japan. She wrote books and gave lectures. She also embraced some aspects of the eugenics movement, including forced sterilization. But she also argued to the eugenicists that their goals could be more easily met if they simply allowed poor women access to birth control.

In our time, Sanger and her admirers come under a lot of criticism for her dalliance with eugenics. Even Planned Parenthood won't defend her anymore, but I will note that in her time eugenics was a much more popular and respectable idea than was increasing access to birth control. Hence, her efforts to persuade the eugenics movement to take up birth control as part of their program. And I don't see why modern admirers of Margaret Sanger get called out for her support of eugenics when modern admirers of, say, Winston Churchill or Theodore Roosevelt never are. It seems more closely related to today's debates over reproductive rights than it does to any principled opposition to eugenics.

But the 1920s and *Buck v. Bell* would be the high-water mark of the eugenics movement in the United States, the country in which it was most successful. But I should note that even before the Nazis in Germany provided the world with an object lesson on the abuses of eugenics, the movement was already losing credibility in the US. As early as 1922, journalist Walter Lippmann was writing a series of articles on eugenics, published in *The New Republic*, that struck at the core of the movement's argument, the IQ test. Lippmann pointed out that intelligence is not a simple concept, like a person's height or weight, that can easily be measured objectively and reduced to a simple number. What IQ tests actually measured was the ability to take an IQ test. Facility with words or numbers was all well and good, but it said nothing about a person's ability to solve real-world problems in cooperation with other people, which is what success in human society generally means, doesn't it?

Lewis Terman, who developed the Stanford-Binet IQ test in 1936, revisions of which are still in use today, criticized Lippmann's articles as being emotional and unscientific. Lippmann shot back that yes, he was indeed being emotional, but for good reason. "I hate the impudence of a claim that in fifty minutes you can judge a human being's predestined fitness in life...I hate the abuse of scientific method which it involves. I hate the sense of superiority which it creates, and the sense of inferiority which it imposes."

And then there was the case of Carl Brigham, one of the psychologists who tested soldiers for the Army during the Great War. Afterward, he became a professor at Princeton University. In 1923, he published a study of those recently declassified Army IQ tests that purported to show the inherent intellectual inferiority of immigrants and African-Americans and he became a major figure in the eugenics movement. In 1926, Brigham developed the Scholastic Aptitude Test or SAT, still well-known to American high school students in our time.

In 1930 though, Brigham published a paper titled "Intelligence Tests in Immigrant Groups" in which he repudiated his own 1923 study. Subsequent research on intelligence testing had convinced him that native-born white Americans came out ahead on these tests simply because of their greater familiarity with the English language and American culture. He declared that his 1923 study "with its entire hypothetical superstructure of racial differences collapses entirely" and that to say that IQ tests measured some abstract quality called intelligence was "psychophrenology," that is, the modern reincarnation of a discredited pseudoscience.

Other researchers pointed out that the seemingly greater number of mentally disabled found among poor families reflected not genetics, but poverty. Middle- and upper-class families of this time typically cared for their disabled relatives themselves, at home. Only the poor needed to turn to the state for help, and thus only the disabled family members of the poor made it into the government statistics.

And at Columbia University, a 23-year-old graduate student named Margaret Mead was doing her master's research on children of Italian-American immigrant families, including their IQ scores. Mead found correlations between the children's test scores and such factors as the socioeconomic status of the family, how long the parents had lived in the United States, and whether or not English was spoken in the home. Pretty solid evidence of a cultural influence over IQ scores.

The trajectory of the eugenics movement is remarkable, for what it says about human nature as much as anything else. What began as a rather tame and academic discussion about whether society should consider some mild incentives, like cash payments, to encourage certain people to have more children, developed in half a century into a movement that embraced categorizing citizens by race, limiting the rights of people of certain races and ethnicities, and forced sterilization.

I don't think I'm giving away too much of a spoiler if I let you know that by the 1930s, even as support for the eugenics movement was fading in the United States, many of the principles of this movement would be embraced by the Nazi Party in Germany. Germany would displace the United States as the center of the movement, but the Nazi embrace would further discredit eugenics everywhere else, and the movement would dwindle away to almost nothing by the end of the century.

Perhaps the moral of the story is there are truly are some areas of science that the human race is simply not yet wise enough or mature enough to dabble in.

We'll have to stop there for today. I thank you for listening, and I'd especially like to thank Colin for his kind donation, and thank you to Steven for becoming a patron of the podcast. Donors and patrons like Colin and Steven help cover the costs of making this show, which in turn keeps the podcast available free for everyone, so my thanks to them and to all of you who have pitched in and helped out. If you'd like to become a patron or make a donation, just visit the website, [historyofthetwentiethcentury.com](http://historyofthetwentiethcentury.com) and click on the PayPal or Patreon buttons.

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And I hope you'll join me next week, on *The History of the Twentieth Century*, as we turn from anthropology as pseudoscience to real, scientific anthropology. I mentioned Franz Boas already; he's regarded as the father of American anthropology. I also mentioned a young woman named Margaret Mead, whose master's research cast doubt on the objectivity of IQ tests. Well, you know what happened next? Funny thing, but Margaret Mead did her Ph.D. research in anthropology under the supervision of Franz Boas, and when her results came out, they would produce one of the most influential books of the twentieth century. *Coming of Age in Samoa*, next week, here, on *The History of the Twentieth Century*.

Oh, and one more thing. *Buck v. Bell* is one of the low points of American jurisprudence, but I should point out that although the decision has been roundly criticized in the near-century since it was handed down, it has never been explicitly overruled and it remains binding case law in our time.

Historical investigation into the case of Carrie Bell has led many to conclude that Carrie's pregnancy was the result of rape by a member of her adopted family and that the family institutionalized Carrie in order to cover up the crime. Her daughter Vivian, who was declared feeble-minded in infancy—and how, exactly do you determine the intellectual ability of an infant?—anyway, Vivian died at the age of eight from complications of a case of measles, but her academic record from the two years she attended school shows no evidence of a mental disability. She appears to have done just fine. Carrie Buck was released from the Virginia State Colony for Epileptics and Feeble-minded following her sterilization. Historians and journalists who interviewed Carrie in her later years reported that she seemed to be a person of normal intelligence. She died in 1983 at the age of 76.

The Virginia Racial Integrity Act was declared unconstitutional by the US Supreme Court in 1967 in a landmark civil rights case aptly titled *Loving v. Virginia*. The Lovings had three children. Plaintiff Richard Loving died in 1975 at the age of 41, in an automobile accident caused by a drunk driver. Co-plaintiff Mildred Loving died in 2008, at the age of 68. Of her famous court case, Mildred told a reporter shortly before her death, "It wasn't my doing. It was God's work."

[music: Closing Theme]