

Testing the Intelligence Quotient: A Tool for the Eugenicist

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The horror resulting from World War II and Hitler's Nazi regime shined a global spotlight on the product of an overzealous attempt at purifying the human race. One of the Germans' reasons behind the genocide they committed was eugenics, the science of improving the quality of the human race through controlled breeding. Though the Germans' acceptance of eugenics is well-known and widely condemned, the role of eugenics in the United States is much less recognized. In fact, eugenics found some of its greatest acceptance in the United States, and its renown brought about many laws with the purpose of improving America. One tool used to evaluate the quality of Americans was intelligence testing, or IQ tests. These tests were widely used on immigrants and World War I soldiers during the twentieth century as a tool to determine their quality or mental competence. The prevalence of intelligence testing comes from its background in eugenics, but, for that very reason, the tests are inaccurate and their use served only to support racial misconceptions of Americans, which were already developed due to the increasing number of non-Anglo-Saxon immigrants.

The concept of eugenics was derived with some thought from Charles Darwin's *On the Origin of Species*, a work, published in 1859, considered to be the foundation of the theory of evolution. The evolution of a species over time is guided by natural selection, which determines which members of that species survive to reproduce and pass off their genetic information. Those individuals more adapted or suited to an environment have an advantage: a higher chance of survival leading to a higher chance of reproduction, eventually allowing an entire species to improve its rate of survival. The application of this idea to humans is called "Social Darwinism," a concept popularized by British thinker Herbert Spencer, along with many now more commonly-used terms such as the "struggle for existence" and "survival of the fittest." I

Germany, a biologist named Ernst Haeckel came to a different conclusion about what social Darwinism meant for mankind. In *The Riddle of the Universe*, Haeckel divided humans into different races and ranked them, with the Aryans at the top, and the Africans and Jews at the bottom. Often supported by similar racist impressions, the competitive side of social Darwinism fit well with capitalism in the United States, where many social Darwinists discouraged aid for the poor or inferior in order to let “the strong” come out through competition.

Those who strove to be “the strong” in America grew concerned approaching the turn of the twentieth century by the floods of immigrants to the United States, which were changing their countries of origin. Immigrants composed a considerable portion of the American population: in 1903, 10 percent of the U.S. was foreign-born. In 1882, 87 percent of immigrants came from Northwestern Europe, but by 1907, 81 percent hailed from the South and East. Prior to the first World War, worldwide travel did not need a passport or visa, but the native-born Americans were far from welcoming to the new immigrants. These new immigrants were “young, ambitious, and accustomed to hard work,” eagerly looking for jobs to become economically independent and gain control over their lives (Diner), but this motivation was unappreciated by many Americans. The working class saw these immigrants as competitors for jobs, housing, and public services, while the upper class grew concerned for the overcrowding of cities and the social problems that came with them. Francis Sargent, the commissioner general of immigration, expressed his worry about the dangers of the immigrants in a *New York Times* article titled “Are We Facing an Immigration Peril?” He pointed out that nearly half of the immigrants who pass through Ellis Island never leave the New York City area, and stated that “it is my fear and belief that within five years the alien population of the country will constitute a

downright peril.” He blamed the “enormous alien population in our larger cities” for “breeding crime and disease,” and noted a concerning increase in the number of criminal immigrants, “some of them being the worst criminals in Europe.” The Commissioner even believed that inmates of European hospitals and almshouses (houses for the poor) were being given tickets and sent to Ellis Island so that Europe could “shed” some of its problems. (“Are We Facing an Immigration Peril?”) While not everyone blamed Europe for sending over its problems, the majority of Americans felt threatened by the influx of unfamiliar races.

Part of the negative impact these new immigrants could have on the U.S. was a large proportion of the “feeble-minded” entering among the immigrants. The term “feeble-minded” was never explicitly defined by the caretakers who had invented it in mental institutions, but it generally referred to individuals who were both “hereditarily deficient in mental capacity” and a burden to society. By 1900, the term had instead begun to refer to those who were a threat, or potentially a threat, to society. In the early 1900s, people began considering that the feeble-minded, along with the severely mentally retarded, should be separated from society and denied certain rights (146-147). In 1907, Congress prohibited the feeble-minded from entering the U.S., but it was difficult to identify who was feeble-minded. For a while, facial appearance was used to single out individuals with a mental disease, but this was a subjective approach depending solely on the immigration officers.

The first potential for standardizing an identification process came when Henry Goddard, a director of a laboratory for the study of mental deficiency in New Jersey, came across the test that would later be used to determine the competence of immigrants. On a trip to France, Goddard took a test created by Alfred Binet, the director of a psychology laboratory in Paris, in

1905, used to identify struggling children in elementary school. The original test, the Binet-Simon scale, consisted of several different everyday tasks intended to test reasoning, as opposed to testing learned skills like reading. Binet associated each task with an age, and the age associated with the hardest task a child could do was his “mental age.” When the difference between a child’s true and mental ages was great enough, that child would be given a special education to catch up. Later, when other psychologists applied Binet’s test, they divided the mental age from the true age to determine the relative magnitude of disparity, giving birth to the “intelligence quotient,” or IQ. (The quotient was multiplied by 100 to remove the decimal point for simplicity.) While others chose to apply his test to assign a number to intelligence, Binet himself argued against doing so:

Not only did Binet decline to label IQ as inborn intelligence; he also refused to regard it as a general device for ranking all pupils according to mental worth. He devised his scale only for the limited purpose of his commission by the ministry of education: as a practical guide for identifying children whose poor performance indicated a need for special education—those who we would today call learning disabled or mildly retarded (Gould 182).

Binet had created his test solely for the limited, practical purpose of identifying students struggling in school. Binet acknowledged that, unlike physical characteristics like height, intelligence is too complex to be described by a single number, and emphasized that low scores were not innate, but could be improved through special education. In fact, Binet was worried that instead of using IQ as a way of identifying children who needed help, teachers might see it was “an excellent opportunity for getting rid of all the children who trouble [them]” (qtd. in Gould 181).

The impact of the IQ test, however, spread far beyond the classroom, as Goddard brought it back to the U.S. to test for the “unfit” members of society. Goddard translated the test into

English with the intention of applying it to determine the feeble-minded, ignoring Binet's disclaimers. Unlike Binet, Goddard saw the scale as an adequate way of measuring intelligence, which, because it was assumed to be hereditary, would determine the competence of that lineage. He labeled those who scored below 25 points "idiots," those between 25 and 55 "imbeciles," and scores between 55 and 75 "morons." He then sent two field workers to Ellis Island in the spring of 1913, and told them to select "average immigrants" to test. Even before receiving the results of the test, Goddard had expected certain races to be less intelligent than others, but his results did not completely align with this suspicion. As a result, he adjusted the results and proceeded to publish the flawed information ("Forgotten Ellis Island"). He claimed to find 83 percent of Jews, 80 percent of Hungarians, 79 percent of Italians, and 87 percent of Russians "feeble-minded." He summarized his findings, asserting that "One can hardly escape the conviction that the intelligence of the average 'third class' immigrant is low, perhaps of moron grade" (qtd. in "Race and Membership in American History: The Eugenics Movement" 152-153). Though unrealistic, his analysis of the results of the Goddard-Binet test on immigrants was unsurprising to most Americans, as they'd expected the incompetence of these different immigrants.

Nonetheless, Goddard's work led to controversy as some individuals argued against the validity of the results, while others applied his test, only to be met with a wide range of unexpected results. In response to Goddard's claim on the inferiority of Jews, social workers Helen Winkler and Elinor Sachs pointed out the insufficient sample size: 148 people were tested to represent entire countries, a minuscule number compared to the millions of immigrants arriving in America. They also referenced the Department of Immigrant Aid of the Council of

Jewish Women, whose records showed only three of the 2,549 women who immigrated in the past 15 months were certified as feeble-minded. Clinical psychologist J.E. Wallace Wallin also expressed his doubts on the accuracy of the Goddard-Binet test at the 1915 meeting of the American Psychological Association. He had administered Goddard's tests to all of the "successful and wealthy" individuals in his hometown, but Goddard's test found them all to be "morons and dangerous feeble-minded imbeciles." Furthermore, He urged his colleagues to "completely [reject] the concept of the high grade moron as determined by the Binet scale" (152-154). Soon thereafter, Mary Campbell, a researcher in Chicago, gave the mayor, his aides, and all his opponents in the previous election the Goddard-Binet test, and found that nearly all of them were ranked as "morons." The American Psychological Association quickly resolved to discourage the use of mental tests for diagnosis of intelligence.

Even though Goddard's IQ test came under heavy criticism, researchers continued to try to find a use for IQ tests. Lewis Terman, a professor at Stanford University, created a new version of the test, promising eugenicists with a more reliable way of judging large groups of people. Terman attempted to improve the accuracy of his tests' results by testing about 1,000 children and 400 adults in order to determine what questions an "average" person could answer. Because he had difficulty finding enough adults to survey, he considered anyone over 14 years old to be an adult. Additionally, he intentionally selected only native-born Protestant Americans of Northern European descent, openly ignoring the results of foreign-born children because he considered them innately inferior, with no hope of ever contributing to society. Because he also found that teenagers and grownups scored approximately the same on the tests and concluded that "native intelligence" would not improve after the age of 15 or 16. Terman, Goddard, and

another psychologist named Robert Yerkes administered Terman's new test, the Stanford-Binet test, to over 1,750,000 World War I army recruits in 1917. The results of these tests were used by researchers, in particular to examine the differences between soldiers of certain races.

One such expert, Carl Brigham, an assistant professor of psychology at Princeton University and later president of the American Psychological Association, published *A Study of American Intelligence*, in which he used 160,000 of the tests to summarize an analysis of the test results. In a score distribution of the results, Brigham found the mean total correct answers of the "Total Nordic" soldiers to be higher than the "Combined Alpine and Mediterranean," which was in turn higher than the "Negro Draft." He concluded that:

According to all evidence available, then, American intelligence is declining, and will proceed with an accelerating rate, as the racial admixture becomes more and more extensive. The decline of American intelligence will be more rapid than the decline of the intelligence of European national groups, owing to the presence here of the Negro. These are the plain, if somewhat ugly, facts that our study shows (Brigham 210).

Brigham then argued for steps to be taken against the deterioration of American intelligence, calling for restrictive and highly selective immigration and naturalization laws, as well as prevention of the "propagation of defective strains" already in America — preventing reproduction of these strands, likely through marriage laws or sterilization. Over the years, a number of researchers pointed out flaws affecting Brigham's conclusions, both in how the test was applied, and in how Brigham utilized the data (qtd. in "Race and Membership" 160-161). For example, he had used less than 10 percent of the total available test results, and ended up using 160,000 army recruits to generalize about entire nations and ethnicities, never even mentioning how he determined who belonged to Nordic, Alpine, Mediterranean, or Negro. He also didn't consider the differing testing conditions and environments in which the soldiers had

grown up. When confronted with the fact that Negroes who lived in the city tested better than those who lived in more rural areas, Brigham explained this phenomenon by arguing that those Negroes in the city simply had a “better strand” of genes. However, this criticism of Brigham’s work was uncommon and his errors were widely overlooked, and, in the 1920s, most Americans, including many of the experts and leaders of the time, accepted his work without question.

Brigham’s *A Study of American Intelligence* seemed to finally answer the question of whether the Negro was equal to the caucasian. Henry Fairfield Osborn, president of the American Museum of Natural History, summarized the popular conclusion from Brigham’s book: “We have learned once and for all that the Negro is not like us” (qtd. 164). On the other hand, Sociologist W. E. B. DuBois, the first African American Ph.D. fervorously argued against the reliability of the IQ test. He recalled how in the whites’ desire to prove the inferiority of Negroes, they had tried to use the weight of the brain and skeletal structure to establish a white supremacy, but both had been proven inconsequential. Comparing these blunders to the seemingly definitive IQ tests, he criticized how, somehow, a “workably accurate scientific classification of brain power” was discovered by testing army officers on sequences of numbers and pictures of tennis courts and subsequently used to prove the inferiority of an entire race (165).

Not only were the conclusions based off the Stanford-Binet test exaggerated, but its design was also flawed in that it favored the native-born Northern European Protestant. Even at its creator, Terman, did not expect the other races to do well, so naturally, the tests would not be checked to see if they were fair for them. Terman did attempt to test those people less familiar with English as well as illiterate people in his army tests, but these tests still favored the

middle-upper class whites. Some of the tests asked about the color of sapphire or what ivory is made from, materials that soldiers lower or working-class are unlikely to have ever seen. Other questions asked more about popular culture, such as the game of five hundred, or people such as Christie Mathewson, Carrie Nation, and Alfred Noyes. While to the educated Stanford professor, these questions may have seem simple, it is unreasonable to ask a former factory worker in New York and a farmer in Georgia the same question about a Yankees baseball player (Brigham 29). On the other hand, some of the questions testing “common sense” simply do not have adequate answers, such as “Why is beef better food than cabbage?” or “If you do not get a letter from home, which you know was written, it may be because:” (13). Even the illiterate test was biased. One test asked for the identification of missing parts from pictures, but the pictures showed activities such as tennis and bowling; leisure time activities that the lower and working class would have no chance to take part in. Thus, even when equipped with multiple versions in order to consider the illiterate in English, the IQ test that was used widely as evidence of a difference in racial intelligence heavily favored the upper class whites.

The Americans, however, were more than ready to accept the inferiority of certain races, partially due to the fear of the increasing number of these immigrants to the U.S. Particularly during and after World War I, people grew fearful of spies and simply the danger of open borders because of worldwide hostility and mistrust. As a result of the conflict, millions of people were displaced, and several of these refugees immigrated to the U.S. Columnist Dorothy Thompson described “a whole nation of people [that]...wanders the world, homeless except for refuges, which may at any moment prove to be temporary” (qtd. “Race and Membership” 220). This “nation” added to the already concerning number of immigrants, but Americans were even

more startled by a story in *The New York Times*. The article quoted Leon Kamaiky, a commissioner of the Hebrew Immigrant Aid Society (HIAS), who mentioned that there were 3 million Jews in Poland who would eagerly immigrate to the U.S. if given the chance. Congress responded to the alarmed response of readers who feared that the HIAS was bringing over 3 million Jews by calling for a ban on all immigration for one year. House Committee on Immigration chairman Albert Johnson proposed the bill, arguing that “the new immigration is not the kind of quality to meet the real needs of the country. We are being made a dumping ground” (qtd. 221). After the president of HIAS assured the Senate Committee on Immigration that they did not seek out or promote immigration and there was no chance that they would be bringing even 250,000 immigrants over, the Senate decided there was no emergency or need for a ban on immigration. Even so, Congress and the general populace were concerned of the “quantity” and “quality” of the immigrants not coming from Northern Europe, and this fear led them to eagerly accept any information promising the inferiority of these different immigrants.

This racism and discrimination against the Southern Europeans did not begin with IQ tests or World War I, but stemmed from nativism alive in America for decades, and was deeply entrenched in even the most highly regarded scientists and political leaders. In 1894, Harvard graduates founded the Immigration Restriction League to resolve their fears of the “inferior hordes of degenerate people” crowding the nation (qtd. 223). In 1917, the League persuaded Congress to require immigrants to pass a literacy test and, in 1920, brought in Harry Laughlin, the director of the Eugenics Record Office in Cold Spring Harbor, to talk to the House Committee on Immigration. Laughlin brought charts and graphs analyzing hundreds of the tests on the World War I soldiers to prove the existence of “the immigrant menace.” Once, he covered

the walls of the meeting room with photographs taken at Ellis Island, and strung a banner on top, reading “Carriers of the Germ Plasm of the Future American Population” (qtd. 223-224). The House Committee was clearly biased, as it only heard from those who supported the superiority of the Nordics and ignored those who publicly disputed Laughlin’s findings. The closest the house came to hearing a contrary point of view was from a respected biologist and former eugenicist, Herbert Spencer Jennings, but when he told the committee that Laughlin’s statistics were flawed, the Committee cut his testimony short. Even the House Committee on Immigration, which should view all information in order to make the best decision on immigration laws, was subject to the racist prejudices throughout society. The Committee essentially wanted to limit the immigrants entering America, and IQ tests and eugenics gave it a scientific justification to do so.

The majority of chose to not report the incident of Jennings’s being ignored, reflecting the view of many Congress members: Laughlin’s evidence confirmed what they already believed about the inferiority of certain races, so there was no need for another point of view that was clearly wrong. Looking back, we can see the same situation with Brigham’s conclusions based on the army IQ tests — people already believed that caucasians were superior, so they readily accepted his findings, even if there were some unreliable steps leading up to his conclusion. The same can be said with Goddard’s first publication, when few people challenged the idea that the vast majority of half a continent would be mentally incompetent. For Americans, there was little need to challenge researchers when what they found was consistent with what people had believed for decades. After all, they were just confirming what was probably right by using science.

But frankly, eugenics was not a true science, but a pseudoscience that built off fears of the newcomers to America to enforce the preconceived biases of the American population. The usage of IQ tests created and supported by eugenicists was a way to try to solve the country's "problems" that were built off racist assumptions and justifying the solution with science. The conclusions were as accepted as they were because people wanted and believed them to be true even before the results were published. People were already constantly being taught about the differences between races in this time of segregation, and the results of these tests served to enforce legal justifications of discrimination such as the Jim Crow Laws. For hundreds of years, the whites in America regarded the blacks as inferior, partially due to the culture of slavery, but when the IQ tests began to be used, these beliefs were suddenly supported by science. The results were instantly credible, which fed into the reliability of the tests themselves. Even now, the principle of using standardized testing to measure intelligence is prominent with school entrance examinations. And while the SATs are not being used to claim white supremacy, these tests are still deciding at least four years of many students' lives.

Word Count: 3904

Bibliography

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This was an article including an interview with Francis Sargent, the commissioner general of immigration at Ellis Island. It expresses the concern that Americans had about the increasing number of immigrants coming to the U.S. and held a negative view of these criminal immigrants.

Boas, Franz. "Eugenics." *The Scientific Monthly* 3.5 (1916): 471-78. *JSTOR*. Web. 12 Jan. 2015.

This was an article written by a critic of eugenics. I came across this as I was looking for some of the view of the time that was against the applications of eugenics, and it offered insight on how this view, though unpopular at the time, is similar to some of the criticisms we have about eugenics now.

Brigham, Carl Campbell. *A Study of American Intelligence*. Princeton: U, 1923. *Internet Archive*. Web.

This was a book published based off the Stanford-Binet test that was applied to the military draft of World War I, 1917. It includes some of the IQ tests given to the soldiers and Brigham's own points of view on the races and how he proposed to solve them.

Brown, F. W. "Eugenic Sterilization in the United States Its Present Status." *The ANNALS of the American Academy of Political and Social Science* 149.3 (1930): 22-35. *JSTOR*. Web. 12 Jan. 2015.

This showed the problems that the U.S. had in maintaining a place for the mentally ill, a problem for which eugenics and sterilization promised a solution.

Burke, Chloe S., and Christopher J. Castaneda. "The Public and Private History of Eugenics: An Introduction." *The Public Historian* 29.3 (2007): 5-17. *JSTOR*. Web. 12 Jan. 2015.

This was a modern commentary on the horrors of the effects of eugenics and the impact it had on the U.S. It talks about the legality of sterilization in states and how certain states kept them in their laws, even after World War II.

"The Decline of the Eugenics Movement." *American Decades*. Ed. Judith S. Baughman, Et Al.

Vol. 4: 1930-1939. Detroit: Gale, 2001. *U.S. History in Context*. Web. 7 Nov. 2014.

This talked about the German view of eugenics and compared it with eugenics in America. It also pointed out that at first, Germans treated the Jews like Americans treated blacks.

Diner, Steven J. *A Very Different Age: Americans of the Progressive Era*. Ed. *Race and*

Membership in American History: The Eugenics Movement. Brookline, MA: Facing

History and Ourselves National Foundation, 2002. Print.

This was the point of view of a historian looking back at immigration to America from around 1890 to World War I. It offers the shift of the origins of these immigrants as well as why they were immigrating to the United States.

"Eugenics: Did the Eugenics Movement Benefit the United States?" *History in Dispute*. Ed.

Robert J. Allison. Vol. 3: American Social and Political Movements, 1900-1945:

Pursuit of Progress. Detroit: St. James Press, 2000. 17-23. *U.S. History in Context*.

Web. 6 Nov. 2014.

This was a more general resource that I used for general knowledge and a tracking generally of how eugenics impacted laws in the U.S.

"The Eugenics Movement: Good Intentions Lead to Horrific Consequences." *Science and Its*

Times. Ed. Neil Schlager and Josh Lauer. Vol. 6. Detroit: Gale, 2001. *U.S. History in*

Context. Web. 7 Nov. 2014.

This is a more modern view looking back at eugenics and comparing it with what is happening now with birth screenings and the choice of abortion.

"Eugenics." *Violence in America*. Ed. Ronald Gottesman and Richard Maxwell Brown. New York: Charles Scribner's Sons, 1999. *U.S. History in Context*. Web. 6 Nov. 2014.

This was another source I used for background information, but is not directly referenced.

"Eugenics." *International Encyclopedia of the Social Sciences*. Ed. William A. Darity, Jr. 2nd Ed. Vol. 3. Detroit: Macmillan Reference USA, 2008. 21-22. *U.S. History in Context*. Web. 6 Nov. 2014.

This is another background source, focusing more on the origins of eugenics, tracing it back to Charles Darwin. This was also not referenced directly.

Forgotten Ellis Island. Prod. Lorie Conway. Perf. Elliott Gould. PBS, 2007. Web.

This a documentary made, I specifically used a portion from a Youtube video called "Faces of the Feebleminded," which talks about Henry Goddard's application of his IQ test at Ellis Island. I reference the documentary's mention of Goddard manipulating the results to support his own misconceptions.

Gould, Stephen Jay. *The Mismeasure of Man*. New York: Norton, 1981. *Questia School*. Web. 20 Jan. 2015.

This is a book that follows the usage of Binet's test and how it came and was used in the U.S. It included some quotes of Binet's works, and I used this source to point out Binet's original purpose behind his IQ test and how the creator of this testing system did not intend and spoke against its being used to judge intelligence as an innate number.

Lombardo, Paul A. *A Century of Eugenics in America: From the Indiana Experiment to the Human Genome Era*. Bloomington, IN: Indiana U, 2010. Print.

This was a book that referenced mostly the beginnings of eugenics in Indiana and how it led to the forced sterilization laws and who was behind them. I did not end up referencing this book.

Race and Membership in American History: The Eugenics Movement. Brookline, MA: Facing History and Ourselves National Foundation, 2002. Print.

This is a book that analyzed eugenics. It included several primary sources and covered broad topics in eugenics. I mostly used it for the origins of IQ testing and the public's view on immigration, and it led me to other sources.

"Reevaluating Progressive Eugenics: Herbert Spencer Jennings and the 1924 Immigration Legislation." *Journal of the History of Biology* 24.1 (1991): 91-112. *JSTOR*. Web.

This journal talked about Herbert Spencer Jennings and how he became involved with eugenics. I used this source to talk about the support the House Committee on Immigration had for Harry Laughlin and lack of support for Jennings.