

The Influence of Eugenic Thinking on Special Needs Assessment Procedures. A Historical and International-Comparative Study of Germany, Italy, and the United States

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Abstract: The eugenics ideology had a global impact, leaving its mark on every country it touched. One area it influenced was the educational sector, particularly in the process of identifying students as 'educable' or 'not educable,' especially those with cognitive impairments or learning disabilities. Our research focused on investigating the influence of eugenics on assessment procedures in three countries: Germany, Italy, and the United States. The first part of our study examined the development of these assessment procedures and how they changed before and after the eugenics movement in each country. The second part aimed to compare the results from each country and identify similarities and differences. Our findings revealed that while there may be a common overarching narrative regarding the key elements, institutions, and individuals involved in these identification procedures, the underlying reality is more complex. Each country's unique history and circumstances significantly impact their position within this narrative. Our research raises questions about whether there can be a universal approach to these assessment procedures.

Keywords: Eugenic Thinking; Special Needs Assessment Procedures; Germany; Italy; United States; History of Education.

Recibido / Received: 2024-02-10

Aceptado / Accepted: 2024-06-18

1. Introduction

This paper examines the emergence of eugenics and its impact on special needs assessment procedures in three countries: Germany, Italy, and the USA. This analysis compares how eugenics has changed the identification mechanisms employed to identify children with cognitive impairment and their equivalents¹ (Miller & Schroeder, 2019) – a group that has been of eugenicists' interest ever since (Martin, Fangerau & Kareberg, 2016). The nexus of educational institutions, assessment, and eugenics may appear odd at first sight, yet it should not be forgotten that „[p]erceived social problems were assigned to education, or vice versa; an educational field was defined to solve perceived social problems» (Tröhler, 2015, p. 749). Such tendencies manifest themselves in the fact that test development (i.e. IQ testing in the USA) has heavily been driven by an underlying eugenic motivation (Zenderland 2001). Yet, this nexus of education, assessment, and eugenics can still be considered under-researched. In the selected countries, eugenics emerged at slightly different times and aligned itself with diverging political ideas and actors. Also, the political-ideological systems underlying these three geographies differ significantly with Germany and Italy (in the 1930s and 1940s) featuring a totalitarian regime (Maier, 1995) while the USA remained a liberal democracy (Tröhler, 2010; Neuhaus & Pieper, in print). This paper will try to identify changes – pre- and post-eugenic dynamics – within the educational assessment procedure. In a second step, the developments within the three countries of interest will be compared, aiming to identify underlying motifs, which could hopefully be ascribed to eugenics as its epistemic source while remaining sensitive to national idiosyncrasies.

The paper follows a five-fold structure. First, we sketch out the idea of eugenics, detailing its origins, axiomatic presuppositions, and social implications. In addition,

¹ Depending on the geographical and historical context, cognitive impairment is also thematized as a learning disability, feeble-mindedness, idiocy, or the like (Hofmann, 2017). Generally speaking, this paper focuses on those children who have been pathologized because they did not fulfill the school's aims.

we clarify eugenics' relevance for the special educational realm and highlight the value added of this comparative endeavor (section 2). This theoretical remark is followed by the pre-post-illustrations of the respective identification mechanisms (3.1., 3.2., 3.3.). Each of these diachronic juxtapositions will be preceded by contextual elaborations on the distinctive dynamics in the field of (special) education of the respective time and place. These elaborations will consider broader political and social trends and serve as a contextual basis for the dynamics related to the identification mechanisms. The final section will compare the respective dynamics to identify commonalities and idiosyncrasies (section 4). The paper concludes with a summary of key results and an outlook on future research (section 5).

2. The Emergence of Eugenics in the 19th and 20th Century

Eugenics' basic idea is that human differences can primarily be ascribed to genetic differences – a concept traced back to Francis Galton (1822-1911). The eugenic idea tilts the relationship between nature and nurture distinctively towards the former (Horgan, 1993) as «most human behavioral personality, and social, as well as physical, traits, are inherited» (Allen, 1983, p.108). Thereby, if equipped with the proper metrics and assessments, individuals would become analyzable, and the population as a whole would become steer- and manageable. Galton's concept developed slowly until the early 1900s, yet powered by the (re-)discovery and application of «Mendel's laws of inheritance» to human genetics, opening up «an entirely new set of principles with which to study inheritance in human beings» (Garver & Garver, 1991, p. 1110). Further supported by infrastructural efforts, a convincing statistical methodology and argumentation based on data (Allen, 1983), but arguably also due to the inscribed promises² of eugenics, the idea flourished in the late 19th and early 20th century in many different regions and nations, such as but not limited to Germany, Russia (Graham, 1977), the USA (Allen, 1983), Scandinavia (Roll-Hansen, 1989), and Great Britain (Brignell, 2010).

Arguably, eugenics' focus has never solely been on epistemic progress but was primarily designed as a social program to address the question of national degeneracy, particularly concerned with what shall be done with the 'feeble-minded' (Lowe, 1998). When applied as a social program, eugenics positions itself in the same field as social Darwinism. The consequences of such a worldview manifest themselves in treating different people as the better human stock that would be encouraged to procreate to ensure its continuation, an approach known as *positive eugenics*; on the other side of the spectrum, procreation is supposed to be prevented (*negative eugenics*).

The academic discipline of eugenics developed into a high-status field in the 1920s and 1930s, attracting many thriving and (in-)famous actors. At the turn of the

² Eugenics branded itself as a moral endeavor as the etymology of the term suggests: eu- (Greek: good) and -gen (Greek: to produce) defines itself as «the study of methods of improving the quality of human populations by the application of genetic principles» (Gejman & Weillbaeher, 2002, p. 217). Following Galton's reasoning, «progress of the human race depended on improving the selective transmission of the population's hereditary endowment to future generations» (Garver & Garver, 1991, p. 1109) – the intermingling of biological and socio-political arguments.

20th century, eugenics attracted German national socialists who employed eugenics to inform and further perpetuate their destructive agenda, namely the holocaust and associated campaigns (Spektorowski, 2004). In the aftermath of the Nuremberg trials and the overhaul of the Third Reich, the field of eugenics was abandoned as it was made responsible as the intellectual motor driving the destructive campaigns of the National Socialists. However, actors outside of Germany who have been driving forces of eugenics were not affected by the academic field's abandonment or, more precisely, reorientation. It can be argued that eugenics as a discipline has been replaced. However, the underlying ideas and concepts were still present after World War II (WWII) and outside of Nazi Germany (Spektorowski, 2004).

Further, it can be argued that the Nuremberg trials primarily addressed the horrors committed against 'normal' people and neglected the abhorrent actions toward disabled children and adults. Mitchell and Snyder (2003) stress this point by arguing that «one could effectively assume that if the Nazis had not moved from the persecution of biological 'deviants' to the extermination of racial, ethnic and sexual minorities, the imaginary line between 'medical intervention' and murder would not have been crossed.» Further, Mitchell and Snyder (2003) argue that eugenics research has mainly been overlooked due to its uncertainty regarding the value of disabled lives in Europe and North America, highlighting a significant «lack of historical [research] in English on the treatment of disabled people during the Holocaust» (p. 845-846), except studies on Nazi eugenics.

Considering these observations, it can be argued that eugenic thinking – despite being publicly denounced after 1945 – still permeated education (Hunter-Doniger, 2017) and further institutions without being thematized or discussed in the public realm. Further, it can be argued that the identification of deviant children, especially concerning cognitive impairment and learning disabilities, can be considered one of eugenics' core fields of interest. With the German developments being reasonably well investigated and serving as a touchstone, the illustration and comparison of developments in other countries can and should be considered a valuable desideratum to address the research and interest gap illustrated by Mitchell and Snyder (2003).

3. Identifying deviant Children in Germany, Italy, and the USA

As argued earlier, eugenics manifested itself differently in the three geographical locations, yet it played a role in the transformation regarding the identification mechanisms of deviant children. To consider the different contextual circumstances, each of the following paragraphs will commence with elaborations on more general, observable dynamics occurring when eugenic thinking played a role. Depending on the geography, these dynamics may manifest primarily in the political, social, and (special) educational fields. After recalling these dynamics, the second part of each paragraph will focus more specifically on examining the transformation of the identification mechanisms of interest.

3.1. Germany

Wider Social, Political, and Educational Changes

Even though eugenic thinking was presented before National Socialism in Germany, it gained momentum by the 1933 election and the political takeover of Adolf Hitler and the *Nationalsozialistische Deutsche Arbeiterpartei* (NSDAP). One of the first established laws was the *Gesetz zur Verhinderung erbkranken Nachwuchses* [law for the prevention of hereditarily diseased offspring], which has been considered by some branches of the special education profession as the law of the profession (Hänsel, 2018). Before the Third Reich, the *Hilfsschule* was created as a separate educational institution (Miller & Schroeder, 2019). Children who did not fulfill the necessary academic standards were sent to the *Hilfsschule* to qualify for *Hilfsarbeiten* [unskilled labor] (Füssel, 1987). Highly specialized schools for children with visual impairment and deafness also existed. On paper, all of these schools operated outside the regular educational system and, as such, belonged to the *special education* category. Nevertheless, qualitative distinctions could be identified between these different branches. Teachers instructing blind or deaf children were paid significantly higher salaries compared to the low salaries of the teaching staff at the *Hilfsschule* (Hänsel, 2014). However, the emergence of National Socialism opened a window of opportunity for the associated professions, as one primary concern of the NSDAP was bringing unions, associations, and clubs into line (German: *Gleichschaltung*). For the special educational realm, this meant that all individual associations (i.e., of teachers for blind or deaf children) were dissolved and reintegrated into the *Nationalsozialistischer Lehrerbund* (NSLB) (Hänsel, 2014). Within the NSLB, all professions dealing with non-standard children were subsumed under section V *Sonderpädagogik* [special pedagogy] (Hänsel, 2018). Teachers dealing with cognitively weak students constituted a majority over the teachers from alternative professions and, as such, also held the majority of leadership positions within section V and determined its policies (Hänsel, 2018). One result of this political shift was the increase of *Hilfsschulerlehrer's* salaries (Hänsel, 2018).

However, more ideologically driven policies were also enacted at that time. For example, the NSDAP demanded that the *Sonderpädagogik* support the state in two ways (Gebhardt, 2021). Firstly, it should educate *Hilfsschul*-students to become workers or laborers. Secondly, special education and the *Hilfsschule*, in particular, should identify children with hereditary diseases and refer them for sterilization. This two-fold demand represents a critical ideological belief of National Socialism. In this perverse worldview, special education children were *volklich unbrauchbar* [racially useless] and should, therefore, not procreate. However, subsections of these children were deemed *völkisch brauchbar* [useable for the nation] (Hänsel, 2021). The *Gesetz zur Verhinderung erbkranken Nachwuchses* put all special education students – the blind, deaf, cognitively weak, etc. – under suspicion of suffering from hereditary disease and thereby subjected to forced sterilization or euthanasia (Brill, 2019). Retrospectively, it can be stated that the majority of children being forcefully sterilized came from the *Hilfsschule* (Hänsel, 2021). Within the *Hilfsschule*, a second conceptual change took place. While all special education students were suspected

of suffering from a hereditary disease (i.e., imbecility), the *Hilfsschule* also opened up to a second population as a potential target group for its educational endeavors. Ranging under the name of *Hilfsschulbedürftigkeit* [in need of the *Hilfsschule*], the *Hilfsschule* was now also responsible for the education of those identified as just too slow for regular schooling or not capable of catching up with regular children³. Thereby, the number of children attending *Hilfsschule* rose significantly under National Socialism (Hänsel, 2018). These factors led Dagmar Hänsel (2006) to conclude that *Hilfsschule* and its staff benefitted tremendously from the Third Reich.

Processes of Identification

Prior to National Socialism and eugenics as the dominant ideological influence in the educational realm, the identification process for *Hilfsschüler* was two-fold. Initially, the regular teacher identified – usually within the first two to three years of schooling – children who struggled in regular schooling to such a degree that they already failed a grade once and, based on their current performance, are threatened to fail again. Arguably, this first identification mechanism has its roots in the practitioner’s knowledge, as Heinrich Kielhorn (1887, cited in Garz, Moser, & Wünsche, 2021) outlined his clientele in a speech based on these temporal markers. Later, in 1894, the Prussian state converted this common knowledge into binding law in the field of special education (Centralblatt, 1894). During the early days of the *Hilfsschule*, approximately from 1840 to the 1890s, identifying deviant children only consisted of the one mechanism outlined above and primarily employed tautological and morally loaded explanations of why these children failed in school. However, a discursive shift happened with the emergence of psychology and psychiatry as scientifically oriented disciplines. The brain/ intellect became the center of attention for determining which children belonged in regular educational settings and which children were genuinely too different and, therefore, needed to be transferred to segregated schools (Moser & Frenz, 2022).

To differentiate the, up to this point, monolithically treated group, a reliable, scientifically valid, and objective instrument was needed (Kuhl et al., 2012). This differentiation also determined whether the child was either sent back to regular school, *Hilfsschule*, or received psychological-medical treatment (Moser, 2005). At this point, the only assessment strategy that fulfilled the standards outlined above was the Binet-Simon intelligence test from 1904/1905 (Wolf, 1973), which helped to determine whether a child was still *bildungsfähig* [educatable] or not (Moser & Frenz, 2022). The test was translated into German in 1910 and used until 1940 to determine which failing children needed to be sent to special schools.

³ A key difference between these two groups was that children who were considered *hilfsschulbedürftig* actually made significant learning progress in these more individualized learning environments while the students being identified as suffering from a hereditary disease did not. From today’s perspective, it could be argued that the *Hilfsschule* featured students from the camps of learning disability as well as mental disability, which it differentiated internally. Hänsel and Schwager (2004) in contrast argue that a significant share of *Hilfsschul*-population simply came from socio-economic weak families.

After 1940, Gustav Lenz and Karl Tornow developed and promoted a new assessment called *Magdeburger Verfahren* (1942) that succeeded the Binet-Simon intelligence test. Lenz and Tornow (1942, p. 10) argue in favor of the *Magdeburger Verfahren* as the process to identify deviant children is too idiosyncratic to be conducted by quantitatively oriented tools, such as IQ tests, which they deem to be an abuse of mathematical methods. While the assessment replaces the intelligence test, the 'failing two years'-rule to 'qualify' a student for the assessment remains. Regarding the *Magdeburger Verfahren*, Hänsel (2019) argues that, by adopting the assessment, the discipline of special education abandoned its psychology-psychiatry-related framework. Further, Hänsel (2019) observes that subtle changes occurred. The order⁴ and responsibilities within the assessment changed, from a medical perspective, being denigrated and delegated to special education teachers (Lenz & Tornow, 1942). Children could be assessed in groups instead of individually, potentially sending more children to *Hilfsschule*. Regarding testing items, the *Magdeburger Verfahren* employed school and game-related items, such as picture stories, memorization games, and scholastic tasks (i.e., writing, language, or math). Further, the *Magdeburger Verfahren* demanded that special education teachers evaluate pupils based on behavior. However, the instructions on evaluating behavior are vague and exemplarily focus on single traits, such as talkativeness, timidity, or introversion (Lenz & Tornow, 1942).

Summarizing, it can be argued that with the rise of National Socialism and eugenic thinking, assessment procedures for cognitively weak students have become less standardized and more dependent on a single profession, namely special educators. Comparing these observations with the developments from the pre-Nazism times, it can be stated that the special education field gained competency and authority in this particular field. Simultaneously, the stakes for the students rose tremendously, and the procedure in and of itself became shakier regarding its epistemic grounds as well as its reproducibility.

3.2. Italy⁵

Wider Social, Political, and Educational Changes

Italian eugenics was not a unified theory but a movement containing various strands. The discourse about 'regenerating' the population (Bonetta, 1990) started after political unity was established (1861) and carried the seeds of future Italian eugenics. Lombroso linked genius to mental pathology and was optimistic about the

⁴ The *Magdeburger Verfahren* organizes the assessment of potentially deviant children by the consultation of three individual expertise: Firstly, the regular school teacher is asked about their evaluation of a given student, then the special needs teacher assesses the student, and lastly the medical doctor is supposed to suspend medical reasons. In their demonstration of how the *Magdeburger Verfahren* is supposed to be conducted, Lenz and Tornow construct a clear primacy of the special education expertise in the assessment and claim so multiple times (Lenz & Tornow, 1942).

⁵ Par.3.2 has been prepared and discussed by both authors, but S. Polenghi is responsible for the first subsection and A. Debè for the second.

dynamic possibility of improving human progress through the power of education to discipline 'half-degenerated' children and through individual folly and eccentricity. Sergi, the father of Italian anthropology, knew Galton personally but rejected a biological approach and connected the character of races with their civilization's cultural and sociological traits. He rejected the idea of Aryan superiority and claimed civilization was born in the Mediterranean, with great, ancient, white Euro-African civilizations. Interbreeding between races could be beneficial if black people were excluded. Sergi's social Darwinism is considered necessary a policy of segregating dangerous people and (re)educating the insane, criminals, vagabonds, and beggars through work (Mantovani, 2004; Simonazzi, 2013).

Italian eugenics was officially born following the 1912 First International Eugenics Congress, a movement involving doctors, psychiatrists, biologists, anthropologists, sociologists, statisticians, and demographers. The majority of eugenicists and the Duce supported a policy encompassing prevention, social medicine, hygiene, welfare for children, the protection of motherhood, and special schools. Most eugenicists opposed German racism: Italians were of Latin/Mediterranean stock, bound together by a spiritual and cultural unity rather than a biological one. Lombroso, Lamarck, and Evola were the guiding lights for many eugenicists. The fact that Italians were racially mixed, the influence of the Catholic Church, and Mussolini's (changing) ideas about the necessity of «building a new man» explain the complexity and the swings in the «moderate» Italian eugenics (Peloso, 2008, p. 119) (Gillette, 2002; Cassata, 2011). Birth control, sterilization, and euthanasia of the disabled were never approved, given the influence of the Catholic Church and Pius XII's encyclical of 1930 alongside Mussolini's pronatalist demographic campaign in 1927 (Pogliano, 1984; Maiocchi, 2004; Mantovani, 2004).

Father Gemelli strongly rejected racism but supported theological antisemitism. The doctor Nicola Pende proposed a «biotypology» as a Latin model of eugenics, dismissing biological determinism as «subjective and unscientific» (Gillette, 2002, p. 96). However, Pende's theorized physiological differences between the 'normal' and 'abnormal' charted a path for Italian eugenics that resented a perceived 'safe', 'Third Way' option between hereditarianism and environmentalism, balancing «the social» and «the biological» (Quine, 2012, pp. 125, 141).

The definite turn towards biological antisemitic racism, supported by the Duce, came in 1938 with the Racial Manifesto and the anti-Jewish Laws (Israel & Nastasi, 1998; Israel, 2010; Peloso, 2008). However, after the Racial Laws, the idea that the mentally ill, feeble-minded, epileptic, and maniac were a danger to the future of the race was clearly (re)affirmed (Padovan, 2005): the widespread idea of delinquents and the feeble-minded being individuals who «deviated» from the «standard» man/woman was still connected with Lombroso's concept of people being born delinquent and «morally deranged». If the environment was responsible for many moral deviations and, therefore, education and social welfare could prevent much irregular conduct, hereditary moral defects were dangerous. As Sergi had said, segregation was necessary to protect society from these people. The line between criminals and the mentally disabled was, however, too often a blurred one.

During the Fascist era, special schools and institutes for disabled people grew in number, and a great effort was made to increase the birthrate and protect maternity

and childhood through the *Opera Nazionale Maternità e Infanzia* (ONMI) (Minesso, 2007). Italy had boarding schools for deaf and blind children and special schools for those with physical disabilities. For those deemed 'insane' or 'mentally deficient,' there were only asylums. At the beginning of the 20th century, psychiatrists and psychologists, starting with the so-called Rome group (Babini & Lama, 2016) of Bonfigli, De Sanctis, Montessori, and Montesano, set up new types of institutions for these children, according to their degree of difficulties: *Istituti Medico pedagogici* [Medical-Pedagogical Institutes], which provided boarding facilities for those classified as 'moderately retarded'; *Asili-Scuola*, special schools for those 'mildly retarded'; and *Classi differenziali* [Differential Classes], remedial classes provided within mainstream schools for children classified as 'false abnormal,' that is, with no actual impairment in their cognitive function but whose learning difficulties were a consequence of a deprived environment.

The increase in special schools and institutes required a more significant number of specialized teachers. The three existing schools for training teachers had a very high standard of courses. The first and most prestigious one was established in Rome in 1900 by Montesano, followed by the second one in Florence in 1925, and the third at Milan's Catholic University, opened by Father Gemelli in 1926 (Debè, 2017; Debè & Polenghi, 2019; Benetti, 2023).

Processes of Identification

The Rome group and other psychiatrists, following Séguin and Montessori, believed that mildly retarded children could be educated and that medicine and pedagogy should work together to achieve this, contesting the pessimism of Sergi and psychiatrists such as Morselli (Benetti, 2024). The Binet-Simon test (1905) was introduced in Italy very quickly. Meanwhile, De Sanctis had developed his tests, called *Reattivi mentali*. He was critical of the Binet-Simon tests, which he considered too culturally conditioned. Moreover, he rejected a quantitative and static measurement of intelligence. De Sanctis distinguished the following categories: abnormal in intelligence, abnormal in character, mixed abnormality, sensory abnormality, and false abnormality (Lombardo & Cicciola, 2006; Ceccarelli, 2008). His dynamic conception of intelligence, similar to Montessori's, anticipated Gardner, Feuerstein, and Vygotsky. Whereas the Simon-Binet was a test for all children, designed to detect abnormality (whereas gifted or deficient), De Sanctis' *Reattivi mentali* were targeted at the 'abnormals': children who were deemed 'retarded' by elementary school teachers. The screening was performed first by teachers and then by psychologists or doctors in clinics (often connected to asylums)-(Ceccarelli, 1999). De Sanctis theorized three evaluation phases: testing selection and differentiation of children, to put them in the proper class, special school, or institute. He drew a line between the educable, who could work and be socially redeemed, and those who would not be able to work at all (Cassata, 2011). Both the *Reattivi mentali* and the Binet-Simon were used up until WWII. However, mainly in medical clinics, the Binet-Simon prevailed since the *Reattivi* did not provide a quantitative measure of general intelligence. Besides, the Neo-Idealistic culture hindered the acceptance of

experimental psychology, and testing decreased during Fascism, leaving space for subjective judgments (Cicciola, Foschi & Lombardo, 2014).

Moreover, if the first institutes, like the *Asili Scuola* of Rome and Milan (*Scuola Treves*) and the *Classi differenziali* worked very well, including in the 1930s, the actual practice in many institutes was far from good, revealing a gulf between the work of top doctors and everyday practice (Bianchini, 2019). Even in the highly cultured city of Trieste during the 1930s, the *Istituto Medico Pedagogico* made substantial mistakes from a pedagogical and psychological perspective: the mental tests (e.g., Binet-Simon, De Sanctis, Rossolimo) were not administered/interpreted correctly so that foundlings, orphans, or those with difficult family circumstances received an incorrect diagnosis of mental retardation (Cappellari & De Rosa, 2003).

The fight against the 'degeneration' of Italian stock was a concept that influenced doctors and teachers, taking the form of a bias against children with no family or who lived in a deprived environment, especially if they had the misfortune of having a relative who was alcoholic, epileptic, or insane (Cassata, 2011; Padovan, 2005; Benetti, 2024). Besides, De Sanctis' classification of 'abnormal in character' tended to be used as a label to segregate potentially dangerous children. The Giolitti Law No. 36 of 1904 prescribed that people who were «dangerous towards themselves or others» had to be committed. In 1934, the *Tribunale per i minori* [Juvenile court] was set up. The law governing this stemmed from decades of debate over juvenile delinquency. However, the Liberal request to protect the child was canceled in favor of society's need to protect itself from young 'deviants' (Guarnieri, 2008). This insistence on the dangers posed by potentially criminal children and adolescents led to thousands of minors being confined to asylums, jails, and institutes (Benetti, 2022), a pattern that would continue even after the fall of Fascism.

During Fascism, the ONMI was tasked with identifying children who needed assistance for different reasons, including 'abnormality.' Children considered ineducable due to moral corruption or severe mental retardation were committed to asylums. Asylums were soon filled with women who did not adjust to Pende's idea of the subdued «woman-mother» (Valeriano, 2017). Homosexuals were also committed or exiled (Goretti & Giartosio, 2006; Romano, 2019).

Since there were not enough welfare institutes, many children ended up in mental hospitals. The psychiatric screening of children conducted in the clinic of the Asylum of Verona, opened in 1930, reveals the importance doctors attributed to the degeneration theory and hereditary pathologies (Salveti, 2023), even if many mental illnesses were not or were not proven to be hereditary (providing one of the reasons why sterilization was opposed). For over a hundred years, children and adolescents (aged 3-15 years old) were hospitalized in Bologna's asylum. Their diagnoses varied from mentally retarded to alienated but included many other causes (e.g., sensory disability, different pathologies, and moral deficiency). Parents were often too poor to look after these children (Raimondo, Gentili, 2020; Benetti, 2024).

Founded in Reggio Emilia in 1921, the *Antonio Marro* Colony-School provided medical care, intellectual, physical, and moral education, and vocational training to mentally disabled girls and boys between the ages of 5 and 15. Although this complete approach signaled a more specific focus on the mentally impaired, until 1953, the children formally appeared as patients of the adjacent *San Lazzaro* asylum,

being admitted there because they were deemed dangerous to themselves and others. Their stay in the colony also entailed being registered in the judicial register and, therefore, an indelible social stigma. Moreover, even if inspired by Séguin and De Sanctis, the educational program also had some evident limitations: the study hours were minimal, and the teachers were rarely prepared for the education of the mentally impaired (Debè, 2024).

3.3. *The United States of America*

Wider Social, Political, and Educational Changes

The emergence and expansion of eugenics in the USA were fueled by a historical and social context fraught with racism, capital expansion, philanthropy, and the growth of statistical thinking to solve social problems. Industrialization and urbanization also created a fertile context for the expansion of eugenics in the US, with a population increase from 10 million to 54 million from 1817 to 1920 (Nielsen, 2012). The USA experienced an economic crisis, increased class disparities, the birth and consolidation of labor unions, and political unrest. Crowded cities required schools, transportation, sewage, and running water, needs that often went unmet. Such living conditions created a fertile context for the spread of disease, an increment in work-related accidents, and an increased concern about 'feeble-minded' people and social deviance. Eugenics provided material solutions and ways to think about these problems.

The advancement and use of statistics supported the belief in the heritability of intelligence and the use of intelligence testing to shape social policy. After all, the principal originators of statistics, such as Galton, Pearson, and Fisher, were eugenicists. In 1910, Goddard (1912) produced the first translation of the Binet-Simon Intelligence Scale in English and, alongside his pro-Eugenics contemporaries, called for forced institutionalization and sterilization (Laughlin, 1914).

Research centers and eugenic boards closely collaborated with governments to detect mental defects in subjects under state custody using Goddard's version of the Binet-Simon test. Sterilization laws were enacted for confirmed criminals, the insane, idiots, and imbeciles (Laughlin, 1914). After the first eugenics sterilization law in 1907, 30 states passed sterilization laws by the late 1930s (Reilly, 2015), and residential institutions were expanded to accommodate more intellectually disabled individuals (Appleman, 2018; Trent, 1994).

Eugenics also shaped Immigration laws for those mentally defective who were not able to enter the labor force (Lombardo, 2008). The Immigration Act (1917), for instance, required physicians, public health services, and immigration officers to identify mentally defective immigrants and deport them accordingly within the government-driven «manual of mental examination» (1918). Testing the Binet-Simon Intelligence Scale to identify feeble-minded immigrants, Godard stated, «one can hardly escape the conviction that the intelligence of the average 'third-class' immigrant is low, perhaps of moron grade» (Goddard as cited in Gelb, 1986, p. 328). As a result of the Immigration Act of 1917, over 55% of those deported for «mental deficiency» were predominantly from southern Italy (Nielsen, 2012).

The link between eugenics practices, racism, and the expansion of capital becomes even clearer when one understands the close relationship between school administrators and corporate leaders. Though new professional school administrators claimed objectivity by removing politics from schools and applying scientific principles, they were closely related to corporate leaders who finance much of their professional school management. Their mutual goal was to educate immigrants and racial minorities on Protestant values of hard work so that they could meet factory needs (Danforth et al., 2006).

In addition, much of the financial support for eugenic practices in institutions came from philanthropists who had become wealthy during the Industrial Revolution. Harriman financially supported the Eugenics Record Office (ERO) to be opened in 1910 (Farber, 2008). Later, with the support of the Rockefeller Foundation and the Carnegie Institution, scientific research in ERO transitioned to public education and political advocacy at the national level. The Kellogg family founded the Race Betterment Foundation in Michigan during the 1910s and the Human Betterment Foundation in California during the 1920s (Schambra, 2013).

Processes of Identification

By 1918, the US government had established compulsory education. Urban centers struggled to serve a large wave of immigrant children, most of whom spoke a language other than English and had little schooling experience. Immigrant children were also broadly categorized with labels that were precursors to disability labels such as 'backward,' 'deficient,' 'illiterate,' and 'maladjusted' (Connor & Ferri, 2013).

In schools, the way to address the increasing amounts of 'deficient students' was through special education classes. The first special education class was established in Rhode Island in 1896, and by 1922, there were at least 133 other special education classes (Osgood, 2002). These classes represented the core aspects of the progressive era: a top-down approach to fixing social problems that mixed the science of psychological measurement and the principles of scientific management and industrial structures (Danforth et al., 2006).

Goddard's adaptation of the Binet-Simon test in the US could not have arrived at a more fertile historical time. Goddard not only tested his adaptation of the intelligence scale with immigrants in Ellis Island but also pushed for the dissemination of tests through public schools by trained and specialized teachers (Zenderland, 2001). Before the First World War, the testing industry expanded significantly. This expansion includes Terman's Stanford-Binet in 1916, the Point Scale Examination for Mental Age (1915) by Yerkes and colleagues, and the Merrill Palmer test (Samelson, 1977).

During the Progressive Era, psychology was established as a science that formed close alliances with school administrators (Danziger, 1994). As tests evolved in the early 20th century, identifying feeble-mindedness moved from teachers' or physicians' estimations of children to implementing individual and group intelligence tests (Whipple, 1922). The initial amateur involvement in child study evolved into a professional field, marked by educational collaborations between educational psychologists and school administrators (Joncich, 1968). Psychology, specifically mental testing, became the most accessible ally of school administrators shaped

by the progressive era mentality (Tyack & Hansot, 1982). The mental testing industry shifted the use of standardized tests from accountability to sorting students, eliminating children with low test scores from regular classes and segregating them. It gave school bureaucrats an objective scientific tool to address immigration, the education of Black students and those deemed feeble-minded, and the preparation and sorting of youth to satisfy the demands of the labor force (Carson, 2007).

By the 1930s, the prevailing notion that intelligence was immutable and hereditary, and the primary cause of most social issues faced significant challenges. Longitudinal growth studies revealed that individuals' IQ scores could fluctuate over time, influenced by environmental factors. Healy and Bronner (1936) demonstrated that the mental test scores of delinquent children were distributed similarly to those of non-delinquent children. Further supporting this shift in understanding, the 1939 study by Skeels and Dye (1939) found that orphanage children with initially low IQ scores attained normal ranges in adulthood when provided with individual care and attention.

Despite the diminishing of radical eugenic narratives among medical professionals, eugenics ideologies were already rooted in institutional traditions and routines, including schools (Lombardo, 2008). The identification and placement of 'intellectually inferior' children in schools relied more on administrative authorities, professionally qualified staff in psychological services, research centers in state universities, and private clinics (Artiles et al., 2016; Holt, 1960). The administrators' guide, handbooks, and standards have become ubiquitous as tools for identifying children as being mentally deficient.

Around the 1960s, testing procedures evolved and were fine-tuned to recognize if a child fell into specific special education categories. Strikingly, the purpose of testing children moved from being concerned about whether students were 'feeble-minded' to being more precise about the specific kind of deficiency. The birth of the learning disabilities (LD) field in the 1960s played a part in this movement toward more precise identification. Coined by Kirk in 1963, LD shifted the emphasis from appropriate moral choices due to lack of mental control (i.e., feeble-minded) to acutely attending to students' skills, short-term memory, perception, and reading capabilities.

Based on Bateman's (1965) definition of LD, LD has been associated with a discrepancy between an average or high IQ and a significantly lower score on a standardized academic test (e.g., mathematics or reading). In 1969, LD was added as a disability category and replaced the term feeble-minded (Baker, 2002). Students identified with learning disabilities grew promptly, surpassing those who were identified with intellectual disabilities, becoming the most prominent disability category in schools. However, LD as a construct has been critiqued due to its social construction and relevance only in school settings (McDermott & Varenne, 1995; Sleeter, 1986).

Racial disparities have continuously haunted the identification of 'defective children.' Racial, ethnic, and linguistic minorities have been identified with disabilities at higher rates than their White counterparts and placed in more segregated environments (Ahram et al., 2021). Dunn, in 1968, documented that 60 to 80 percent of students placed in special day classes were non-white. This overrepresentation of

minoritized populations in special education and their placement in more segregated settings remains a matter of concern (Tefera et al., 2023). Shaped by the civil rights movement of the 1960s, several court cases have brought these concerns to the main stage. In the case of *Diana v. California State Board of Education* (1970), advocates for nine Mexican American students successfully contended that placing these children in «Educable Mentally Retarded» classes based on English-language tests infringed upon their rights, given that their primary language was Spanish. In *Larry P. v. Riles* (1979), the court found that the IQ tests used by the San Francisco public schools were culturally biased against African American children and that their use resulted in disproportionate placement of these children in special education classes. This ruling led to a ban on IQ tests for African Americans. This decision was then overturned in *PASE v. Hannon* (1980), which allowed the use of IQs but requested multiple assessment tools to identify students as intellectually disabled. Not surprisingly, federal legislation for special education requires schools to conduct non-discriminatory evaluations using multiple assessment methods.

4. Assessment between National Idiosyncrasies and Eugenic Influences. Comparison

Focusing on the comparison between the countries outlined in the previous sections, a tendency can be identified: differences and commonalities depend on the resolution with which the findings are being looked at. Generally speaking, all three countries have a similar 'meta-story' and much in common. However, these commonalities become increasingly more idiosyncratic when zooming in on specific dynamics and realizations (e.g., schooling arrangements and assessments). To provide a structure for the potentially infinite possibilities of comparisons, this comparison will focus on two dynamics: (1) developments of institution(s)/ profession(s) and (2) developments of the assessment. A two-fold structure is suggested within these focus areas: a brief outline of the shared 'meta-story' followed by a more detailed look into the national idiosyncrasies. As already hinted, this comparison is not considered complete by any means. Instead, it attempts to focus on selected facets to highlight the potential for future research in the field.

Dynamics and Developments of the Institution(s) and Professions(s)

All three countries share a commonality that the institutions responsible for failing students expanded in size, student population, and importance. Responsible for this dynamic has been the interplay of different factors, such as compulsory education/mass schooling (Neuhaus & Jacobsen, 2022), extended academic demands in schools due to a change in the labor market demands (Brill, 2019), and the emergence of statistics as a means to make (sub-)populations visible (Hofmann, 2017). As shown in section 4., eugenics thinking and ideology are tricky to pin down to a specific time as it has always competed with different ideas for primacy. As such, one can easily determine eugenics' hay days (i.e., in Nazi Germany) but never fully clarify to what extent specific subtler measures have been influenced by eugenic thinking. Therefore, the expansion of the institutions outlined above is, in some

geographies, the pre-history to eugenic dynamics, while in others, eugenic thinking has clearly inspired the enlargement of these institutions.

Alongside the institutional expansion, an internal differentiation can also be observed in all three countries. This differentiation primarily manifests in more detailed student (sub-) population constructs. So, while students have been considered 'feeble-minded' prior to these dynamics, later more specific labels emerged, such as 'learning disabled' (US), low in IQ/ intelligence, or *hilfsschulbedürftig* (Germany). These labels are expressions of dominant thought patterns at a specific time and place and mirror national developments regarding the responsible professions.

Regarding the involved professions, either new professions have been established (i.e., in Germany) or existing professions have been extended in scope, competencies, and authority. As such, it can be argued that all three countries required a more specialized profession for the newly emerging and visible phenomenon of consistently failing students. All three countries have in common that the newly established or extended profession is located between pedagogy and psychology. However, depending on the geographical context, the professions' location on the spectrum between pedagogy and psychology differs as Italy primarily favors psychologists and psychiatrists to evaluate children (and teachers to 'treat' them), Germany's *Hilfsschullehrer* are primarily pedagogically-minded in nature yet with some influences stemming from psychology, and the USA established educational psychology as an amalgam of the two disciplines.

Dynamics and Developments of Assessments

Generally speaking, it can be stated that all three countries shared two struggles regarding the applied assessment regiments. The first struggle constitutes the aim of the assessment. More specifically, all assessments intend to identify innate factors (i.e., cognitive ability, IQ, etc.); however, these factors can only be assessed by proxy, and social circumstances are always a subcomponent of the applied testing regimen. Depending on the geographical context, different social categories have been co-measured in these procedures and produced marginalized groups; for instance, in the US, race has been a defining characteristic as a majority of learning-disabled students came from African American backgrounds. In Germany, socio-economic factors, specifically poverty, have been the defining characteristic of the *Hilfsschüler*, so much so that Hänsel and Schwager (2004) considered the *Hilfsschule* the *Armenschule* [school of the poor]. While poverty has also been a 'co-morbidity' of assessed students in Italy, the Italian context also involved moral judgments, such as rebellious women rejecting the traditional role of the woman-mother. The second struggle concerns the assessment's degree of standardization. In this regard, each country addressed the issue differently. The US favored extremely standardized tests, Italy employed a mixture of standardized tests (i.e., IQ) alongside less standardized tests (i.e., psychoanalytically-oriented procedures), and Germany exhibited the smallest degree of standardization while transferring authority to the expert conducting the test (Vogt & Neuhaus, 2023). The diverging degrees of standardization most likely correlate with the professions responsible for these tasks. The US relied on quantitatively-minded educational psychologists,

Italy trusting its psychologists, which stems from a different tradition than the US psychology, and Germany letting the *Hilfsschullehrer* conduct the assessments.

Concerning the eugenic period(s), it can be stated that assessment became more subjective overall. This is surprising as eugenics considers itself an off-shoot of the natural sciences based on regularities, standards, and 'hard facts.' The exact dynamics that produced these more subjective test regiments differ when looking into the specific countries. In Germany, for instance, the entire procedure became less standardized and primarily became dependent on the experience and expertise of a special education teacher [*Hilfsschullehrer*] (Neuhaus & Vogt, 2023) while, in contrast, in the US, the subjectivity entered the assessment on the level of the individual (standardized) test, which had implicit biases (Zenderland, 2001) and thereby marginalized specific subpopulations. Italy has chosen its way regarding subjectivity, as the combination of different tests allowed for more freedom on the assessor's side.

While the assessments themselves became less standardized during the realization of eugenic thinking, the stakes of the assessment simultaneously rose tremendously as all countries agreed that the pedagogical category of being 'educatable' is a relevant marker upon which the exclusion from mainstream society can and should be negotiated. However, the options at the end of the assessment differed in terms of severity and cruelty as students were either sent to specific educational arrangements (special classes or schools) and mental asylums or were suggested for sterilization or euthanasia (Hänsel, 2021).

Summarizing, it can be stated that the general dynamics appear to be quite similar between the countries under investigation. Nevertheless, they differ somewhat on a spectrum of agreed-upon principles than in their entirety. This can be supported by the professions responsible for the assessment, which oscillate between pedagogy and psychology depending on the geographical context, with each country developing a more pronounced and detailed vision of their disciplinary self-understanding.

5. Concluding Remarks and Outlook

Through this article, we argue that the eugenics movement has a transnational history that has left profound legacies, the extent of which varies across countries. The eugenic ideology, a potent force that shaped the political, cultural, and social landscape of its time, made an enduring impact on educational institutions. Its historical significance cannot be overstated, as it has shaped the very fabric of our societies. The impact of eugenics on the development and implementation of educational assessment procedures in the examined countries is not just notable but profound. We argue that the identification of deviant children, specifically of children with cognitive impairments or learning disabilities, was one of eugenics' primary interests. The outcomes of these assessments and the subsequent treatment of the students involved were heavily influenced by the prevailing eugenic ideology, which ranged from separation to segregation and even the 'sacrifice' of students for the 'future well-being' of the nation, classifying students into 'educable' and 'non-educable'.

The main conclusion that can be drawn from the examination is that all three countries share an analogous 'meta-story' concerning the general elements of the assessment procedures for children (suspected) with learning disabilities, namely the institutions and actors in charge of the procedure along with the grounds and consequences of the evaluation process. On the surface, the procedures are very similar, and the influence of eugenics in the implementation and development of such evaluation is linked to its construction around the social group of the 'undesirable,' making officially visible those children that fell through the cracks of the educational system. However, those similarities gain national idiosyncratic character when looked at in more detail, especially when examining the specificities of each dynamic and practice. Nevertheless, this contrast exists within the 'meta-story' and comes to life in several spectrums. For example, the actors involved in the procedures ranged from more medical-centered profession, such as doctors, psychiatrists, or psychologists, to a more pedagogical-centered profession, such as teachers and special teachers. A clear center point is, in this case, educational psychologists. The same visualization method can be applied to other elements of the assessment procedures: the tools and methods implemented, the institutions, and even the outcome for the evaluated students.

Based on the chosen approach of the article and the analysis' results, future research should consider (1) looking more in detail at the national idiosyncrasies and further tying these back to historical patterns occurring at in the given geography. Another consideration could be to (2) focus specifically on the assessment procedures in each country and systematically examine each phase of the evaluation practice, first looking at it from a national perspective and then discussing its global implementation/replication/adaptation/realization. Regardless, future research could expand the study, work on this 'meta-story', involve more countries, and see if we can argue for a global tendency or even a grammar of schooling assessment procedures (Tyack & Tobin, 1994).

6. References

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