

Consciousness and enlightenment in the *Boletim de Eugenia* (1929-1933): Rethinking the concept of eugenic education in Brazil

ABSTRACT

This article analyzes the concept of eugenic education in the Boletim de Eugenia (1929-1933), the biggest specialized newspaper in the science of racial improvement and the main means of scientific racism's dissemination in Brazil. Edited in Rio de Janeiro by the doctor and pharmacist Renato Kehl between 1929 and 1931, its direction was assumed from 1932 by the professors of the Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ) Octavio Domingues and Salvador de Toledo Piza Júnior. Besides changing the periodical's characteristics, losing the aspect of a propaganda newspaper, and assuming the format of a scientific journal, the two renowned geneticists from Piracicaba scientifically supported Kehl's Mendelian eugenics, ensuring the continuity and radicalization of his project. Taking as a theoretical-methodological framework documentary research in dialogue with Critical Theory, we investigate the mobilization and the interrelation between the concepts of consciousness and enlightenment in the articles published in the Boletim de Eugenia. We found that the concept of eugenic education was presented in an ambiguous and contradictory way in these texts, reflecting the broad sense in which the term was structured by Francis Galton, but also how the notions of enlightenment and eugenic consciousness were interpreted by the journal's directors. We conclude that the term eugenic education, used in a generalizing form in the historiography of eugenics, is insufficient for a critical understanding of the narrow and broad meanings of education developed from Galton to the most radical members of the Brazilian eugenics movement.

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1. INTRODUCTION

Created by the English polymath Sir Francis Galton (1822-1911) in the late 19th century and widely disseminated in the early decades of the 20th century, the science of racial improvement was assimilated in the most diverse ways according to the sociohistorical realities of each country. In the context of debates about nation-building and the problem of miscegenation present in the Brazilian intellectual field since the end of the 19th century, eugenics

developed within the sanitary movement in the 1910s and 1920s. Initially, it presented an optimistic interpretation of the Brazilian reality, structured from the neo-Lamarckist tradition that, under the logic "to sanitize is to eugenize", enabled the approximation between hygiene, sanitation, and eugenics (Habib & Wegner, 2014).

However, in the 1920s, from the work of the doctor and pharmacist Renato Ferraz Kehl (1889-1974) and the professors and geneticists of the Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ) Octavio Domingues (1897-1972) and Salvador de Toledo Piza Júnior (1898-1988), the Brazilian eugenics movement developed a radical wing, based on Mendelian genetics, with a racist (Kehl and Piza Júnior) or ableist (Domingues) character. These intellectuals were responsible for directing the *Boletim de Eugenia* (1929-1933), the largest specialized periodical in Galton's science and the main means for the spread of eugenics in the country. Without trying to reduce the Brazilian eugenics to this sector, our article focuses on this radical wing of the eugenics movement in Brazil and its conception of *eugenic education*.

Taking as a theoretical-methodological framework documentary research on the articles published in the *Boletim de Eugenia*, in dialogue with Marx Horkheimer (1895-1973) and Theodor Adorno's (1903-1969) Critical Theory, we seek to understand the different uses of the term *eugenic education*, which in the same article could vary from a more restricted sense, synonymous with instruction or formal education, to a broader sense, synonymous with *enlightenment* or *eugenic consciousness*. From an overview of the history of eugenics in Brazil and a detailed investigation of the use of this term, we propose a critical review of the *eugenic education* concept, which encompasses not only the narrow meaning of formal education but also the broad meaning used from Galton to the *Boletim de Eugenia*'s directors.

2. CONSCIOUSNESS AND ENLIGHTENMENT BY FRANCIS GALTON

Published by Sir Francis Galton in 1909, the text *Eugenics: Its Definition, Scope and Aims* derived from a lecture given on May 16, 1904, at London University, with the presence of professor Karl Pearson (1857-1936) on the examination board. In this work, the English polymath defined eugenics as "the science which deals with all influences that improve the inborn qualities of a race; also with those that develop them to the utmost advantage" (Galton, 1909, p. 35). His first concern was to delimit the scientific field, considering that eugenics was a science based on enlightened reason and that this discussion should avoid moral judgments. Among the procedures and goals of the science of racial improvement, the first was education, broadly conceived to create racial consciousness, disseminate knowledge about the laws of heredity, extend its borders, and promote its study (Galton, 1909).

From this famous essay by Galton (1909), we observe that the notion of *eugenic education* was created as a broad concept, that is, it was not restricted to schooling or formal education, but it followed its creator's concern with structuring the scientific field of eugenics as a science-religion widely accepted in academia and understood not as a political-ideological

position, but as scientifically proven truth. The broad sense of eugenic education formed the basis of the Eugenics Education Society's founding in 1907, which, with Galton as the first president, aimed to outline the bases for teaching eugenics not only in schools but also among families and other sectors of English society (Chitty, 2007).

The same logic was presented by Galton in his classic Hereditary Genius: An Inquiry Into Its Laws and Consequences (2000), whose first edition was published in 1869 and the second in 1892. In this book, the author defended the racial "superiority" of white Europeans in comparison with other peoples of the world, especially black Africans, whose "typical stupidity" made him feel "ashamed" of his species. In this openly Eurocentric and racist perspective, the founder of eugenics postulated that eugenicists were in control over the current racial improvement process. The utopia of an improved society was getting closer, thanks to the action of eugenicists who assumed the role of guides, being the only intellectual references and scientific authorities capable of deliberating on the theme. In the crusade for racial improvement, Galton believed that education was important because it allows the development of individual skills. However, its reach was limited, as men were unequal by nature, that is, no matter how much blacks develop, they will never reach the intellectual level of whites, due to the biologically determined "inferiority" of non-white and non-European populations (Galton, 2000).

Based on Galton's originals (1909, 2000), we consider that since the foundation of the first bases of eugenics and its structuring as a scientific field in England, the concept of eugenic education was already presented in an ambiguous way and with a double meaning. In its restricted sense, eugenic education referred to formal education, synonymous with instruction or schooling, whose limits were imposed a priori by natural inequalities between individuals and, more profoundly, between "races". In its broad meaning, eugenic education encompassed the formation of the eugenic consciousness of an enlightened intellectual elite, which would contribute to the development, dissemination, and institutionalization of eugenics in the most diverse civilized countries "plagued" by the "degenerative threat". In its narrow sense, Galton (1909, 2000) did not overlook eugenic education, but its limitations were widely explored in his writings. It was in the selection of the best individuals, and not in education, that the solution to the problem of "degeneration" lay. In its broad sense, eugenic education constituted the essential basis for the dissemination of eugenics as a socially accepted science, from which the international eugenics movement should be guided (Galton, 1909, 2000).

Alongside the broad meaning of eugenic education, the concept of *enlightenment* was one of Galton and his followers' greatest concerns. The dichotomy between *reason* and *unreason* was the key mechanism for the defense of eugenics as a rationally structured science, especially after the criticism it received shortly after Galton's death, with emphasis on the article "Eugenics", published in 1916 by the anthropologist Franz (Uri) Boas (1858-1942) (Boas, 1916). This intrinsic association between eugenics and enlightenment constituted one of Galton's (1909, 2000) main discursive elements and was widely reproduced within the international eugenics movement, which, despite being a broad and heterogeneous movement that developed

in different ways according to each national context, did not renounce the fundamental bases outlined by its creator.

According to Galton (2000), the "geniuses" of modern civilization did not support the "irrational", "impulsive" and "uncontrolled" nature of the "savages". Even if this instinctive behavior developed because of the need to survive and adapt to the environment, it was inadequate for a civilized and enlightened life. Galton (2000) applied the same logic to the "half-savage" (mestizo), whose "inferior" nature made it incapable of dealing with more complex problems imposed by civilization. For the creator of eugenics, even in the face of "degeneration" arising from the crossing with "inferior" races – especially the black race dominated by "irrationality" and "impulsiveness" –, humanity found its way to rebuild civilization in enlightened reason. As was common in his texts, a strategy also used by his followers, Galton (2000) emphasized that his explanation was not based on morality or prejudice, but on science.

From interdisciplinary materialism, the "first generation" of critical theorists of the Institute for Social Research at the University of Frankfurt diagnosed the relationship between eugenics and the transformation of reason into an instrument of domination. In the article "The End of Reason", Horkheimer (1941) postulated that eugenics has its roots in the Enlightenment, claiming that the rationalization process of Modernity engendered the control and manipulation of sex by science. Under the aegis of instrumental reason, sexual relations became an object of study and regulation by the intellectuals' authority. This strategy of objectification and control outlined by the Enlightenment was, according to Horkheimer (1941), the science of racial improvement's main element, systematized by Francis Galton at the end of the 19th century and deepened by the eugenics movement in the first half of the 20th century.

This thesis, virtually unexplored in the historiography of eugenics, was deepened in the book *Eclipse of Reason*, in which Horkheimer (2015) stated that the 18th-century Enlightenment intellectuals, pioneers of bourgeois civilization, and representatives of the rising middle class, considered that reason would lead to the human emancipation. However, from the development of capitalism and the consolidation of bourgeois society, reason lost its objective dimension, becoming subjective, dogmatic, and relativist. According to Horkheimer (2015), with the advent of Social Darwinism and positivist science in the 19th century, modern civilization constituted a rationalized irrationality, in which the domination of man over nature culminated in the domination of man over man. Reconfigured as a simple servant of natural selection and devoid of critical elements, the reason became, in the name of self-preservation, emasculated, brutish, and susceptible to ideological manipulation (Horkheimer, 2015).

The critical diagnosis of the crisis of reason was also exposed in the book *Dialectic of Enlightenment*, in which Adorno and Horkheimer (2006) pondered that Enlightenment, which historically sought to overcome the myth, became a secularized myth associated with the capitalist system. For the Frankfurtian philosophers, with the formalization of reason and the loss of its objectivity, sexual relations succumbed to science and industry, while injustice, hatred, and destruction became socially accepted activities. From

the dialectical intertwining of Enlightenment with domination, racism was rationally and scientifically justified, reducing man to his nature, and allowing his sacrifice as a ritual for the civilization's preservation. Established as the foundation of Nazi eugenics, this hallucinatory and sacrificial system became the rational norm of modern society that made genocide possible through a carefully planned extermination strategy (Adorno & Horkheimer, 2006).

It is important to emphasize that, despite being responsible for the scientifically structuring of eugenics, Galton was not an isolated intellectual in the classification and differentiation of human beings according to racial criteria. As pointed out by Bethencourt (2018), the economic, political, and social context of the second half of the 19th century was marked by the advent of racial theories, structured since the development of natural history in the 18th century. In addition to the European political effervescence, characterized by the consolidation of the bourgeoisie as the ruling class, the fall of the Ancien Régime and the rise of the working class' revolutionary movements, the neocolonialism started in the first decades of the 19th century gained strength, with the gradual domination of the great powers over most of the earth's surface, increasing the number of subordinates and fostering new debates about interethnic relations around the world. From that moment on, the explanatory logic of the class struggle started to be confronted by the explanatory key of racial "degeneration", reproduced by intellectuals such as (Joseph) Arthur de Gobineau (1816-1882) and (Jean) Louis (Rodolphe) Agassiz (1807-1873), whose theories against miscegenation had a great influence on the eugenics movement developed in Brazil in the first decades of the 20th century (Bethencourt, 2018).

3. MENDELIAN EUGENICS IN BRAZIL

The delimitation of space in this article does not allow us to write a long and factual history of eugenics in Brazil. However, it is necessary to outline, especially for international readers, a brief overview of the science of racial improvement's development in the country. Schwarcz (2017) considered that in the 19th century, death came to be interpreted not as a fear, but as a challenge to be overcome. Doctors no longer depend on individual remuneration and became state-funded scientists and researchers, acting as interveners in the fight against epidemics and aiming to achieve a cure for a "sick" nation. Eugenics developed within Brazilian medical schools in this context of the emergence of medical knowledge against tropical diseases such as yellow fever and American trypanosomiasis (Chagas disease) through health and hygiene programs.

According to Souza (2016), Brazil was the first to develop a eugenics movement, which had the most supporters and was the most successful in institutionalizing eugenics in the Latin American context. The Sociedade Eugênica de São Paulo [Eugenics Society of São Paulo] was the first in Latin America and, right after its foundation in 1918, it already had 140 members, the majority formed by the country's medical elite. Among them was the doctor and pharmacist Renato Kehl, founder of the Comissão Central Brasileira

de Eugenia [Brazilian Central Commission on Eugenics], considered as the "father" and the "champion" of eugenics in the country. As demonstrated by Roitberg (2021), Kehl also became one of the greatest intellectual references for eugenicists from other countries, such as the Argentines Victor Delfino (1883-1941) and Alfredo Fernández Verano, the Peruvian Carlos Enrique Paz Soldán (1885-1972), the Mexicans Eugenio Echeverria Arnoux, Miguel López Esnaurrízar, and Alfredo Saavedra, in addition to the prestige he had among the intellectuals of the main European eugenics institutes, especially Hermann Muckermann (1877-1962) and Eugen Fischer (1874-1967) (Muckermann, 1929b).

Graduated from the Faculdade de Medicina do Rio de Janeiro [School of Medicine of Rio de Janeiro], Kehl became, from the 1920s onwards, the main leader of the eugenics movement and the greatest representative of scientific racism in Brazil. He was the creator and director of the Boletim de Eugenia, and published more than 20 books, especially Lições de Eugenía [Eugenic Lessons] (in 1929) and Sexo e Civilização: Aparas Eugênicas [Sex and Civilization: Eugenic Parings] (in 1933). As director of Bayer in Brazil, he traveled to Germany and other northern European countries, adhering to the most radical and racist measures of "negative" eugenics inspired by Aryanism and the racial hygiene policy (Rassenhygiene) developed in Germany by intellectuals of the Kaiser Wilhelm Institute of Anthropology, Human Heredity, and Eugenics. At the end of the 1920s, distancing from neo-Lamarckian eugenicists, who considered that sanitary reforms and improvements in living conditions could influence the process of improving individuals, Kehl approached the geneticists Salvador de Toledo Piza Júnior and Octavio Domingues, professors at the Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ), whose eugenics was based on Mendelian genetics (Souza, 2016).

The approach with the Esalqueans occurred when Kehl's racist stance was harshly criticized at the Primeiro Congresso Brasileiro de Eugenia [First Brazilian Congress of Eugenics]. Held in June 1929, the event marked the launch of his book *Lições de Eugenía*, which received incisive criticism from Edgar Roquette-Pinto (1884-1954) and Álvaro Fróes da Fonseca (1890-1988), two anthropologists from the Museu Nacional [National Museum] who disagreed with the demarcation of the eugenics' field on scientific racism. Accusing Kehl of practicing pseudoscience without scientific evidence, the anthropologists criticized his negative view of miscegenation with blacks and indigenous people, as well as his defense of radical measures, such as the prohibition of reproduction of individuals considered racially "degenerate" (Wegner, 2017). This clash over the role of miscegenation represented one of the numerous divergences within the Brazilian eugenics movement, which far from being homogeneous, was constituted from a complex, fragmented, and polymorphic field (Souza, 2016).

According to Wegner (2017), it was the genetics of Esalquean intellectuals – the first adherents of Mendelism in the country – that allowed the *aggiornamento* of eugenics with the Gregor (Johann) Mendel's (1822-1884) laws of inheritance. Based on this partnership, Kehl ensured more solid scientific support for his project, radicalizing his position, and facing the criticisms

received by the "moderate" wing of the eugenics movement, led by Roquette-Pinto. Initially, Domingues and Piza Júnior exchanged correspondence with Kehl (Habib & Wegner, 2014), wrote positive reviews of his book *Lições de Eugenía* in other newspapers (Piza Júnior, 1930a), and acted as collaborators, publishing their first articles in the *Boletim de Eugenia* (Domingues, 1930b; Piza Júnior, 1931). From 1931, Domingues and Piza Júnior became members of the Comissão Central Brasileira de Eugenia and, in 1932, because of Kehl's second trip to Europe (Fiuza, 2016), they started to direct and edit the periodical in the city of Piracicaba, in the interior of the State of São Paulo (Habib, 2010).

In addition to ensuring wide dissemination of positions aligned with the movement's most radical perspective, the journal represented the consummation of an intellectual partnership that strengthened Kehl's position in his field. From 1929 onwards, his Mendelian eugenics had the scientific support of two renowned geneticists and professors from one of the most traditional educational and research institutions in the country, who defended the application of genetic knowledge to human beings, since it already was successful in improving plants and animals (Habib & Wegner, 2014). However, despite the importance of this intellectual exchange between the 'father' of eugenics in Brazil and the Esalquean professors, and the relevance of the journal in the country's medical field (Nalli, 2005), the *Boletim de Eugenia* did not represent the entirety of the Brazilian eugenics movement, nor did it signify the existence of a consensus among its three directors.

While Kehl (1935) and Piza Júnior (1932, 1933) reproduced in their books and articles an openly racist position, critical of hybridization and defender of "pure" races, Domingues (1929) approached the Mendelian eugenics of Roquette-Pinto, not considering the miscegenation as a "degenerative" factor. However, defining Domingues' eugenics as "bland" (cf. Stefano, 2009) or "distanced" from "negative" eugenics are problematic interpretations, as the Esalquean also defended radical positions based on "negative" eugenics, such as the prohibition of the reproduction of individuals with "degenerative" diseases and the compulsory sterilization of "social waste", "parasites", and "dead weights" (Domingues, 1930a, 1931). This diversity of ideas among Kehl, Domingues, and Piza Júnior reinforces the need for a critical analysis of the articles published in the *Boletim de Eugenia*, allowing the elucidation of consensus and dissent, as well as the mechanisms created by these intellectuals in the process of theoretical elaboration and dissemination of eugenics as a science.

4. CONSCIOUSNESS AND ENLIGHTENMENT IN THE BOLETIM DE EUGENIA (1929-1933)

The *Boletim de Eugenia*'s 42 editions were published between 1929 and 1933. In this same period, Kehl published the books *Lições de Eugenía* (1929) and *Sexo e Civilização: Aparas Eugênicas* (1933), Domingues published *A Hereditariedade em Face da Educação* [Heredity in the Face of Education] (1929) and Piza Júnior published *Localização dos Fatores na Linina Nuclear Como Base de*

uma Nova Teoria Sobre a Hereditariedade [Localization of Factors in Nuclear Linin as the Basis for a New Theory of Heredity] (1930b). Initially released in separate issues and with a monthly drawing of one thousand copies, the Boletim de Eugenia became, as of the June-July 1929 edition, a separate part of the Medicamenta magazine, a renowned periodical (Nalli, 2005) that circulated in the medical field. With the change of directors in 1932, the periodical began to be edited in Piracicaba, losing the propaganda aspect, and taking the form of a scientific journal, with more pages and articles that were more extensive and in-depth (Habib, 2010).

The texts by Stefano and Pereira (2019), Bonfim and Kuhlmann Jr. (2014), and Mai and Boarini (2002) directly or indirectly analyzed the issue of education in the *Boletim de Eugenia*, pointing out its importance for this sector of the movement, as well as its imposed limits by the biological condition of individuals. Bonfim (2019) demonstrated that the journal followed Kehl's inflection in the late 1920s towards German and American eugenics, in which education came to be conceived as a palliative preparatory measure for more incisive eugenic actions. Without ignoring the contributions of these authors, our work will focus specifically on the broad concept of education, which appeared in practically all editions of the periodical, which since its first volume indicated its central objective: to educate the intellectual elites and their "cultured elements" according to the bases of eugenics (Kehl, 1929d). If, in the *Boletim de Eugenia*, education in its strict sense was limited and palliative, it became essential when presented in its broad sense: to enable the development of eugenic consciousness among the country's intellectual elite.

By differentiating *eugenics* (science) from *eugenicism* (practical application of eugenics), the translated text by John Edgar (1929) pointed out that in their regenerative mission, eugenicists would find people resistant to their practices, even in the face of indisputable scientific facts. Instrumentalizing the concept of enlightenment, Edgar (1929) considered that eugenics would liberate an ignorant society, dominated by the darkness of irrationality, through the light of science and reason. In this enlightening crusade, eugenicists should behave as students and educators, whose patience and perseverance should always prevail, as they would take the lead in the civilizing process (Edgar, 1929). In the text "Eugenia e Eugenismo" ["Eugenics and Eugenicism"], Kehl (1929b) shared this same differentiation, noting the need to avoid confusion between the two concepts, emphasizing that while eugenics corresponds to the science with perfectly delimited borders, eugenicism consists in the eugenic action in its educational and amplified sense.

The image of the eugenicist who socially presents himself as a tireless educator and at the same time as an eternal apprentice is the maxim of education raised to the sense of conscience, which should be cultivated and reproduced according to the guidelines established by eugenics. In the same article, Edgar (1929) used the expression formation, pointing out that the Greek people constituted a true eugenics education society, led by socially influential individuals, who managed to inculcate eugenics in common sense, transforming it into an accepted moral code and practiced by the entire population. It was in this way that Hellenic patriotism – praised by Kehl (1935) for the courage to eliminate the "weakest" in the name of "racial elevation" and

for making racial improvement part of the population's daily life – became rationally and essentially eugenic.

The enlightening mission of eugenic education was also developed in the translation of the text "Eugenía e Catholicismo" ["Eugenics and Catholicism"] by Hermann Muckermann (1929a), Jesuit priest, eugenicist, and director of the Kaiser Wilhelm Institute for Anthropology, Human Heredity, and Eugenics in Berlin. As a Catholic priest advocate of eugenics, Muckermann became an important reference for Kehl and Domingues, who believed that his theory would allow a broader reach of the most unpopular and incisive measures of eugenics in a country with Catholicism as the dominant religion (Souza, 2006). Alerting to the situation of racial "degeneration" in Germany, Muckermann (1929a) postulated the urgency of investing in the study of heredity, because only in this way the necessary enlightenment for the implementation of eugenic measures would be reached on a social scale. The German eugenicist considered education as more important than sterilization since the "humanitarian" character of eugenic education would enable the youth to make the right marital choices that, based on enlightened reason and science, would promote the "good" generation, and avoid the hereditary "evil" (Muckermann, 1929a).

In the translation of the article "Os Fundamentos Scientificos da Eugenía" ["Eugenics' Scientific Foundations"] by the Spanish eugenicist Luiz (Ramón) Huerta (Naves) (1889-1976), the idea of eliminating the "incapable" was presented as an effective eugenic method, but one that had not yet gained the necessary social acceptance. Even placed as a prophylactic measure in some texts of the *Boletim de Eugenia*, it is possible to see in this article that eugenic education in its broadest sense would be the main way for modern societies to accept the most radical actions of "negative" eugenics, such as marital control and sterilization. Considering that, except for the United States of America and Germany, public policies aimed at these measures were far from being accepted in Western countries, the eugenic ideal needed to become part of the education system. The more the ideals based on the selection of the "best" were gradually disseminated among the population, starting with enlightened intellectuals, the greater the chances of accepting the "degenerates" birth restriction (Huerta, 1929).

In the text "Educação e Eugenia" ["Education and Eugenics"], Kehl (1929a, p. 1) defended his famous maxim "the good ones are born, not made", stating that the greatest challenge of modern Pedagogy was to educate "sick" and "indomitable" people, intangible to educational efforts. For Kehl (1929a), it was useless for modern education to be based on the presuppositions of Psychology if it did not consider the biological aspects, as all the capacities that develop in the individual and make up his personality derive from innate characters. In this article, the ambiguity of the two conceptions of education present in Kehl's eugenics comes up again. Even with every effort to demonstrate that education would not be successful with "degenerate" individuals, the multiplication of eugenic families, capable of stopping the "degenerative" process, would only occur through the development of eugenic consciousness, based on sexual education strictly oriented by the eugenics' scientific guidelines (Kehl, 1929a).

Published in the December 1929 edition, the text "Limitação da Natalidade" ["Birth Limitation"] signed by Kehl (1929c) also considered the centrality of matrimonial education, arguing from census data that Brazil was dominated by "inferior" types (black), which numerically outnumbered the "middle" types (mestizos) and the "superior" types (white), making it urgent to prevent the birth rate of the "inferior". The eugenicist also argued that it was necessary to popularize the birth restriction among poor and uneducated people, that is, the eugenic consciousness should also be developed within the "unenlightened" sectors of society. Citing the example of North America, Kehl (1929c) considered that "people of good physical and moral quality are better than a large mass of poorly selected people" (p. 1), praising both birth control and sterilization of "degenerates".

In the translation of the article "Eugenia: Hereditariedade e Meio" ["Eugenics: Heredity and Environment"] by professor Herman (Bernhard) Lundborg (1868-1943), director of the Institute of Eugenics in Uppsala, Sweden, the ambiguous character of the eugenic education's concept reappeared in the journal. Lundborg (1929) stated that external factors have little influence on the individual compared to his hereditary constitution. As much as education and improvement in social conditions were not negligible, any human action, whether by doctors or educators, would not make any difference against genetic determinism. However, the broad sense also appears in this same text. While education would not be able to improve a "degenerate" child, it could convince "degenerate" parents not to procreate and encourage reproduction among those with good genetic quality. Thus, the text by Lundborg (1929) explains that, in the Boletim de Eugenia, the concept of education as racial consciousness was closely related to sexual or matrimonial instruction, always linked to the idea of reason, and opposed to behaviors guided by morals or "irrational" instincts.

Renato Kehl's prestigious position, the figure of the eugenicist as an enlightened authority, eugenics as a manifestation of the sacred, and eugenic education as a brake on the "degenerative" process appear in the articles "Tres Bellos Livros" ["Three Beautiful Books"] by Conde de Afonso Celso (1860-1938) and "Concepcionismo Inconsciente e Mortalidade Infantil" ["Unconscious Conception and Child Mortality"] by Geraldo de Andrade, both published in the Boletim de Eugenia's December 1929 edition. Celso (1929) defined Galton's science as the "eugenic religion" of which Kehl was a dedicated and enlightened apostle. Sharing the position of the Spanish politician and jurist Luiz Jiminez de Asúa (1889-1970), Andrade (1929) established a dichotomy between irrational love and rational eugenic marriage. Criticizing philanthropy and social assistance, Andrade (1929) stated that since Charles (Robert) Darwin (1809-1882) it was proven that infant mortality among the "weakest" was a tool of natural selection. He pondered that saving the lives of the "weakest" was a mistake, as it undermined natural selection and harmed the "strongest". The fight against child mortality was ultimately conditioned by eugenic consciousness, conceived as the rational limitation of reproduction, which does not exist in Brazil due to the lack of eugenic education among the population (Andrade, 1929).

The diagnosis that denounced the absence of an enlightened intellectuality was also presented by Octavio Domingues (1930b) in the text "Os Programmas de Ensino e a Genetica" ["The Teaching Programs and Genetics"], in which the Esalquean professor stated that it was not possible to disseminate eugenics and convince the population of the advantages of racial improvement in a society whose majority of members did not even know the scientific bases of heredity. To face this situation, Domingues (1930b) proposed the insertion of genetics teaching at all levels of education, a strategy considered fundamental for eugenics' popularization. This was, according to Domingues (1930b), the only way to "take these beliefs from our population, true dogmas that the oral tradition preserves and solidify" (pp. 2-3). For this, the first step was to develop eugenic consciousness among the country's intellectual elite, raising its level and making it more receptive to the fundamental ideas of eugenics.

The text denounces that Domingues not only shared the notion of enlightenment, but also Galton and Kehl's conception of eugenic education, which even ambiguous – meaning both formal education and racial consciousness – was not reduced only to its restricted sense but constituted the key element for the acceptance and wide dissemination of eugenics. In the book *A Hereditariedade em Face da Educação* (1929), Domingues approached Roquette-Pinto's Mendelian eugenics by not sharing the racist stance of Kehl and Piza Júnior, who considered miscegenation as a synonym for "degeneration" (Kehl, 1935) and an "unnatural" and "repugnant" union (Piza Júnior, 1933). However, the texts published in the *Boletim de Eugenia* proved that its directors agreed on the role of eugenic consciousness in the process of racial improvement in Brazil.

Published in the 1932 and 1933 editions, the article series "A Hereditariedade da Cor da Péle no Casamento Branco-Preto" ["The Heredity of Skin Color in Black-White Marriage"] by Piza Júnior denoted that the Esalquean professor, unlike Kehl and even Galton, did not consider "pure" blacks (non-mestizo) as "inferior". The problem for the geneticist resided in miscegenation, as he considered white and black as different "species", "pure" types that should not mix, but succumbed by letting instinct (unreason) prevail over intelligence (reason) (Piza Júnior, 1933). Based on these articles, we found that Piza Júnior's notion of eugenic education developed in a similar way to Kehl and Domingues, overcoming theoretical divergences with their colleagues in the *Boletim de Eugenia* toward the broad sense structured by Galton: if more radical interventions such as sterilization or the prohibition of "dysgenic" marriages were not desirable or even possible, it was through eugenic consciousness, whose first step was the sex education promulgated by enlightened intellectuals, that the problem of heredity could be mitigated.

At the beginning of the 20th century, a context marked by Positivism, in which science was considered a symbol of modernity, eugenics was conceived as social engineering capable of guaranteeing progress (Fiuza, 2016). Kehl (1929e) defined eugenics as a "scientific humanism" (p. 1) capable of confronting the unenlightened morality resistant to truths based on reason. In dialogue with the critique of the totalitarian aspects of Enlightenment by Horkheimer (1941, 2015) and Adorno and Horkheimer (2006), we consider that Kehl's eugenics constitutes one of the greatest examples of reason, in its

subjective and instrumental facet, transformed into myth. For Kehl (1935, p. 46), eugenics was, ultimately, the Enlightenment itself, as defined in the second edition of his book *Lições de Eugenía* through the expressions "religion of understanding" and "science-religion". This mythification was also registered in the translation of the article "Eugenía e Patriotismo" ["Eugenics and Patriotism"] (Edgar, 1929), in which eugenics was described as a supra-social science, whose ultimate inspiration was the truth, unrelated to any political, economic, or social influences.

This logic was exhaustively repeated in the articles in which the authors defended the implementation of prenuptial exams. The objectives were presented in different ways according to each author and article, but in general terms these exams were intended to allow eugenicists to identify hereditary diseases in family trees, advising couples and directly interfering in the reproductive process. In the most radical wing of the Brazilian eugenics movement represented by Kehl's scientific racism, interracial marriage and the reproduction of blacks and people with hereditary diseases were the main targets, against which the mandatory prenuptial exams and eugenic sterilization were strongly recommended (Kehl, 1929f). The decision on such a controversial and delicate matter could only be issued by eugenicists, the self-appointed authorities of enlightened truth.

5. CONCLUSION

The articles published in the *Boletim de Eugenia* (1929-1933) revealed the project to scientifically control sex, an element that constituted, according to Horkheimer (1941), one of the most totalitarian aspects of eugenics. The extreme naturalization that guided Kehl's eugenics conceived individuals as mere organic bodies that, emptied of any sociability, were reduced to objects manipulated and manipulable according to the eugenicists' selection criteria (Nalli, 2005). The regulation, objectification, and manipulation of sex by the authority of instrumental reason, according to which sexual relations should obligatorily submit to the natural laws provided by enlightened judgment, constituted the core of the eugenic education developed in the *Boletim de Eugenia*. Therefore, we consider that despite lacking updates, Horkheimer's (1941) theses on the enlightened roots of eugenics and the inseparable relationship between scientific racism and instrumental reason denounced by Horkheimer (2015) and Adorno and Horkheimer (2006) remain relevant and can foster new debates on the topic.

As highlighted by Souza (2016) and Wegner (2017) when pointing out the limits of the historiographical tradition inaugurated by Stepan (2014), based on the interpretation of a neo-Lamarckist "Latin eugenics" with a "softer" or "moderated" character, it is necessary to understand the specificities and the distinct ways in which eugenics was apprehended in the most diverse sociohistorical contexts. From the analysis of the articles published in the *Boletim de Eugenia*, we verified that there is a specific concept of eugenic education developed in this journal, which is still little explored in the historiography of eugenics. Eugenic education is, as developed from Galton to the

most radical wing of the Brazilian eugenics movement, a concept composed of ambiguities and contradictions. If in its restricted aspect it is limited, because "the good ones are born, not made" (Kehl, 1929a, p. 1), ultimately it constitutes the Enlightenment itself and the consummation of racial consciousness scientifically supported by instrumental reason.

Although the *Boletim de Eugenia*'s directors' eugenics was developed through Mendelian genetics, it shares the Galtonian basis for the double meaning of eugenic education by considering, on the one hand, the limits of education as a formal instruction and, on the other, to denote its indispensability in the development of eugenic consciousness and the advancement of the racial regeneration process. This delimitation is not always clear in *Boletim de Eugenia*'s articles, which is why we consider documentary research as the most accurate way to understand this ambiguity that has been present throughout the history of eugenics. This problem goes back to the origins of eugenics as science in Galton's works (1909, 2000), in which the English intellectual outlined the field of studies and the broad concept of eugenic education shared by his followers and consummated through the creation of Eugenics Education Society in 1907.

From the discussion presented throughout this text, we conclude our article by proposing a review of the eugenic education's concept that enables the differentiation of these two meanings and allows further research on this topic, exploring them critically and thoroughly. We believe that, from this perspective, the concept may not be reduced only to its restricted sense, giving rise to generalization and loss of criticality in the analysis. Finally, we consider that the broad concept of eugenic education can help to understand the epistemology developed by the eugenicists, in which the relationship between instrumental reason, enlightenment, and consciousness is inseparable and comprises the basis of the eugenics' transformation process – and, ultimately instance, of the scientific racism – in a socially accepted science.

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REFERENCES

Adorno, T. W., & Horkheimer, M. (2006). *Dialética do esclarecimento: Fragmentos filosóficos*. Jorge Zahar Ed.

Andrade, G. (1929). Concepcionismo inconsciente e mortalidade infantil. *Boletim de Eugenia*, 1(12), 7-8. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-12-dezembro-1929.pdf

Bethencourt, F. (2018). *Racismos: Das Cruzadas ao século XX*. Companhia das Letras. Boas, F. (1916). Eugenics. *The Scientific Monthly, 3*(5), 471-478. https://www.jstor.org/stable/6055

Bonfim, P. R. (2019). Educação eugênica: As recomendações de Renato Kehl a educadores, pais e escolares. *History of Education in Latin America - HistELA, 2*, e17449. https://doi.org/10.21680/2596-0113.2019v2n0ID17449

Bonfim, P. R., & Kuhlmann Jr., M. (2014). Eugenia e educação: Uma leitura crítica do Boletim de Eugenia (1929-1933). *11.º Encontro de Pesquisa em Educação da Região Sudeste*. https://anpedsudeste2014.files.wordpress.com/2015/04/paulo-ricardo-bonfim-moysc3a9s-kuhlmann-ir.pdf

Celso, A. (1929). Tres bellos livros. *Boletim de Eugenia, 1*(12), 6. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-12-dezembro-1929.pdf

Chitty, C. (2007). Eugenics, race, and intelligence in education. Continuum Publishing. Domingues, O. (1929). A hereditariedade em face da educação. Coleção Bibliotheca de Educação. Melhoramentos.

Domingues, O. (1930a). A saude. *Revista de Agricultura*, *5*(5-6), 223-230. https://www.revistadeagricultura.org.br/index.php/revistadeagricultura/article/view/3542

Domingues, O. (1930b). Os programmas de ensino e a genetica. *Boletim de Eugenia, 2*(13), 2-3. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-2-numero-13-janeiro-1930.pdf

Domingues, O. (1931). "Birth-control", esterilização e pena de morte. *Boletim de Eugenia, 3*(30), 4. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-3-numero-30-junho-1931.pdf

Edgar, J. (1929). Eugenía e patriotismo. *Boletim de Eugenia*, 1(3), 2. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-3-marco-1929.pdf

Fiuza, D. H. (2016). A propaganda da eugenia no Brasil: Renato Kehl e a implantação do racismo científico no Brasil a partir da obra "Lições de Eugenia". *Aedos, 8*(19), 85-107. https://seer.ufrgs.br/aedos/article/view/68669

Galton, F. (1909). Eugenics: Its definition, scope and aims. In *Essays in eugenics* (pp. 35-43). The Eugenics Education Society. https://galton.org/books/essays-on-eugenics/galton-1909-essays-eugenics-1up.pdf

Galton, F. (2000). Hereditary genius: An inquiry into its laws and consequences (3rd Ed.). MacMillan and Co. https://galton.org/books/hereditary-genius/text/pdf/galton-1869-genius-v3.pdf

Habib, P. A. B. B. (2010). Agricultura e biologia na Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ): Os estudos de genética nas trajetórias de Carlos Teixeira Mendes, Octavio Domingues e Salvador de Toledo Piza Jr. (1917-1937). [Tese de doutorado, Casa de Oswaldo Cruz/Fiocruz]. Repositório Institucional da FioCruz. https://www.arca.fiocruz.br/handle/icict/17752

Habib, P. A. B. B., & Wegner, R. (2014). De plantas y hombres: Cómo los genetistas se vincularon a la eugenesia en Brasil (un estudio de caso, 1929-1933). *Asclepio*, 66(2), p053. https://doi.org/10.3989/asclepio.2014.17

Horkheimer, M. (1941). The end of reason. *Studies in Philosophy and Social Science*, 9(3), 366-388. https://social-ecology.org/wp/wp-content/uploads/2020/02/Horkheimer_End-of-Reason_1941.pdf

Horkheimer, M. (2015). Eclipse da razão. Editora Unesp.

Huerta, L. (1929). Os fundamentos scientificos da eugenía. *Boletim de Eugenia*, 1(8), 1-3. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-8-agosto-1929.pdf

Kehl, R. (1929a). Educação e eugenia. *Boletim de Eugenia*, 1(9), 1-2. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-9-setembro-1929.pdf

Kehl, R. (1929b). Eugenía e eugenismo. *Boletim de Eugenia*, 1(8), 1. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-8-agosto-1929.pdf

Kehl, R. (1929c). Limitação da natalidade. *Boletim de Eugenia*, *1*(12), 1-2. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-12-dezembro-1929.pdf

Kehl, R. (1929d). O nosso boletim. *Boletim de Eugenia, 1*(1), 1. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-1-janeiro-1929.pdf

Kehl, R. (1929e). Propositos. *Boletim de Eugenia, 1*(1), 1-2. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-1-janeiro-1929.pdf

Kehl, R. (1929f). Questões de raça. *Boletim de Eugenia*, 1(6-7), 3-4. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-6-junho-e-numero-7-julho-1929.pdf

Kehl, R. (1933). *Sexo e civilização: aparas eugênicas*. Livraria Francisco Alves. Kehl, R. (1935). *Lições de Eugenía* (2.ª ed.). Livraria Francisco Alves.

Lundborg, H. B. (1929). Eugenia: Hereditariedade e meio. *Boletim de Eugenia*, 1(1), 3-4. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-1-janeiro-1929.pdf

Mai, L. D., & Boarini, M. L. (2002). Estudo sobre forças educativas eugênicas no Brasil, nas primeiras décadas do século XX. *Revista Ciência, Cuidado e Saúde, 1*(1), 129-132. https://doi.org/10.4025/ciencuidsaude.v1i1.5682

Muckermann, H. (1929a). Eugenía e catholicismo. *Boletim de Eugenia, 1*(4), 2-3. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-4-abril-1929.pdf

Muckermann, H. (1929b). Instituto de Eugenia. *Boletim de Eugenia, 1*(1), 3. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-1-numero-1-janeiro-1929.pdf

Nalli, M. (2005). Antropologia e racismo no discurso eugênico de Renato Kehl. *Teoria & Pesquisa, 47,* 119-156. https://www.teoriaepesquisa.ufscar.br/index.php/tp/article/view/47

Piza Júnior, S. T. (1930a). Annotações á margem das 'Lições de Eugenia' do Dr. Renato Kehl. *Revista de Agricultura*, *5*(1-2), 46-49. https://www.revistadeagricultura.org.br/index.php/revistadeagricultura/article/view/3513

Piza Júnior, S. T. (1930b). *Localização dos factores na linina nuclear como base de uma nova theoria sobre a hereditariedade*. ESALQ.

Piza Júnior, S. T. (1931). Uma nova explicação para a recombinação fatorial na Drosophila Melanogaster. *Boletim de Eugenia, 3*(30), 1-3. http://www.cch.uem.br/grupos-de-pesquisas/gephe/documentos/boletim-de-eugenia/ano-3-numero-30-junho-1931.pdf

Piza Júnior, S. T. (1932). O que pode resultar do casamento entre branco e preto. *Boletim de Eugenia*, *4*(37), 9-11. http://memoria.bn.br/pdf/159808/per159808_1932_00037.pdf

Piza Júnior, S. T. (1933). A hereditariedade da cor da péle no casamento branco-preto (conclusão). *Boletim de Eugenia*, *5*(41), 5-12. http://memoria.bn.br/pdf/159808/per159808 1932 00041.pdf

Roitberg, G. P. (2021). A educação eugenista latino-americana: Correspondências entre os intelectuais brasileiros e argentinos nas décadas de 1920-1930. *Diálogos Latinoamericanos*, *29*, 101-116. https://doi.org/10.7146/dl.v29i0.118042

Schwarcz, L. M. (2017). *O espetáculo das raças: Cientistas, instituições e questão racial no Brasil (1870-1930*). Companhia das Letras.

Souza, V. S. (2006). A política biológica como projeto: A "eugenia negativa" e a construção da nacionalidade na trajetória de Renato Kehl (1917-1932) (Dissertação de mestrado, Casa de Oswaldo Cruz/Fiocruz). Repositório Institucional da Fiocruz. https://www.arca.fiocruz.br/handle/icict/6134

Souza, V. S. (2016). A eugenia brasileira e suas conexões internacionais: Uma análise a partir das controvérsias entre Renato Kehl e Edgard Roquette-Pinto, 1920-1930. *História, Ciências, Saúde – Manguinhos, 23*(suppl 1), 93-110. https://doi.org/10.1590/S0104-59702016000500006

Stefano, W. (2009). Octavio Domingues: Concepções sobre miscigenação no contexto eugênico. *Temas & Matizes, 15,* 42-54. https://doi.org/10.48075/rtm.v8i15.3905

Stefano, W., & Pereira, A. A. (2019). A abordagem da "educação sexual" no Boletim de Eugenia (1929-1933). *Revista Pluri, 2*(1), 65-72. https://doi.org/10.26843/rpv122019p65-72

Stepan, N. L. (2014). *A hora da eugenia: Raça, gênero e nação na América Latina*. Editora Fiocruz.

Wegner, R. (2017). Dois geneticistas e a miscigenação. Octavio Domingues e Salvador de Toledo Piza no movimento eugenista brasileiro (1929-1933). *Varia Historia, 33*(61), 79-107. https://doi.org/10.1590/0104-87752017000100005

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Consciência e esclarecimento no *Boletim de Eugenia* (1929-1933): Repensando o conceito de *educação eugênica* no Brasil

RESUMO

O presente artigo analisa o conceito de educação eugênica no Boletim de Eugenia (1929-1933), o maior periódico especializado na ciência do melhoramento racial e principal meio de disseminação do racismo científico no Brasil. Editado no Rio de Janeiro pelo médico e farmacêutico Renato Ferraz Kehl entre 1929 e 1931, sua direção foi assumida a partir de 1932 pelos professores da Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ) Octavio Domingues e Salvador de Toledo Piza Júnior. Além de alterarem as características do periódico, perdendo o aspecto de jornal de propaganda e assumindo o formato de revista científica, os dois renomados geneticistas de Piracicaba respaldaram cientificamente a eugenia mendeliana de Kehl, garantindo a continuidade e a radicalização de seu projeto. Tomando como aporte teórico-metodológico uma pesquisa documental em diálogo com a Teoria Crítica, investigamos a mobilização e a inter-relação entre os conceitos de consciência e esclarecimento nos artigos publicados no Boletim de Eugenia. Constatamos que o conceito de educação eugênica se apresentou de forma ambígua e contraditória nesses textos, refletindo o sentido amplo no qual o termo foi estruturado por Francis Galton, mas também a maneira particular como as noções de esclarecimento e consciência eugênica foram interpretadas pelos diretores do periódico. Concluímos que o termo educação eugênica, empregado de forma generalizante na historiografia da eugenia, é insuficiente para uma compreensão crítica dos sentidos restrito e amplo da educação desenvolvidos desde Galton até aos membros mais radicais do movimento eugenista brasileiro.

Palavras-chave: Eugenia; Boletim de Eugenia; Eugenia no Brasil; Educação eugênica; Teoria crítica.

Conciencia y esclarecimiento en el *Boletim de Eugenia* (1929-1933): Repensando el concepto de *educación eugenésica* en Brasil

RESUMEN

Este artículo analiza el concepto de educación eugenésica en el Boletim de Eugenia (1929-1933), el mayor periódico especializado en la ciencia del mejoramiento racial y el principal medio de difusión del racismo científico en Brasil. Editado en Río de Janeiro por el médico y farmacéutico Renato Ferraz Kehl entre 1929 y 1931, su dirección fue asumida a partir de 1932 por los profesores de la Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ) Octavio Domingues y Salvador de Toledo Piza Júnior. Cambiando las características del periódico, perdiendo el aspecto periodístico de propaganda y asumiendo el formato de revista científica, los dos reconocidos genetistas de Piracicaba apoyaron científicamente la eugenesia mendeliana de Kehl, garantizando la continuidad y radicalización de su proyecto. Utilizando la investigación documental en diálogo con la Teoría Crítica como aporte teórico-metodológico, analizamos la movilización y la interrelación entre los conceptos de conciencia y esclarecimiento en los artículos publicados en el Boletim de Eugenia. Demostramos que el concepto de educación eugenésica se presentó de manera ambigua y contradictoria en estos textos, reflejando el sentido amplio en que el término fue estructurado por Francis Galton, pero también la forma particular en que se interpretaran las nociones de esclarecimiento y conciencia eugenésica por los directores de la revista. Concluimos que el término educación eugenésica, utilizado de manera general en la historiografía de la eugenesia, es insuficiente para una comprensión crítica de los significados estrechos y amplios de la educación desarrollada desde Galton hasta los miembros más radicales del movimiento eugenésico brasileño.

> Palabras clave: Eugenesia; Boletim de Eugenia; Eugenesia en Brasil; Educación eugenésica; Teoría crítica.