

**Article****The science of racial improvement: historical considerations about Brazilian eugenic education****A ciência do melhoramento racial: considerações históricas sobre a educação eugênica brasileira****La ciencia del mejoramento racial: consideraciones históricas sobre la educación eugénica brasileña****Guilherme Prado Roitberg<sup>1</sup>, Melline Ortega Faggion<sup>2</sup>**Universidade Federal de São Carlos (UFSCar), São Carlos - SP, Brasil  
Pontifícia Universidade Católica (PUC), São Paulo - SP, Brasil**Abstract**

Defined by Francis Galton (1822-1911) as the “science of racial improvement”, eugenics became popular among the influential Brazilian intellectual elite in the first decades of the Republic, aiming the biological-racial improvement of the population by combating the “degenerative threats” represented by blacks, mestizos, physically and mentally disabled. Considering this historical context and taking as a theoretical and methodological support a documentary research supported by the critique of instrumental reason, the article analyzes the intellectual production of the directors of the journal *Boletim de Eugenia* (1929-1933): Renato Kehl, Octavio Domingues and Salvador de Toledo Piza Jr. It is investigated the political-ideological foundations of eugenic education in Brazil and its role in the spread of biological racism among the country's intellectual elite in the 1920s and 1930s. It is concluded that the conception of education of these authors goes beyond the sense of schooling and aligns with a broader intellectual project that envisioned the popularization of the science of racial improvement in Brazil.

**Resumo**

Definida por Francis Galton (1822-1911) como a “ciência do melhoramento racial”, a eugenia se popularizou entre a influente elite intelectual brasileira nas primeiras décadas da República, vislumbrando o aperfeiçoamento biológico-racial da população por meio do combate às “ameaças degenerativas” representadas por negros, mestiços, deficientes físicos e mentais. Considerando esse contexto histórico e tomando como

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aporte teórico-metodológico uma pesquisa documental amparada pela crítica da razão instrumental, o artigo analisa a produção intelectual dos diretores do periódico *Boletim de Eugenia* (1929-1933): Renato Kehl, Octavio Domingues e Salvador de Toledo Piza Jr. Investiga-se os fundamentos político-ideológicos da educação eugênica no Brasil e seu papel na difusão do racismo biológico entre a elite intelectual do país nas décadas de 1920 e 1930. Conclui-se que a concepção de educação desses autores ultrapassa o sentido de escolarização e se alinha a um projeto intelectual mais amplo que vislumbrava a vulgarização da ciência do melhoramento racial no Brasil.

### Resumen

Definida por Francis Galton (1822-1911) como la "ciencia del mejoramiento racial", La eugenesia se hizo popular entre la influyente élite intelectual brasileña en las primeras décadas de la República, con el objetivo de la mejora biológico-racial de la población a través de lo combate contra las "amenazas degenerativas" representadas por negros, mestizos, discapacitados física y mental. Considerando este contexto histórico y tomando como aporte teórico-metodológico una investigación documental sustentada en la crítica de la razón instrumental, el artículo analiza la producción intelectual de los directores del periódico *Boletim de Eugenia* (1929-1933): Renato Kehl, Octavio Domingues y Salvador de Toledo Piza Jr. Se investiga los fundamentos político-ideológicos de la educación eugenésica en Brasil y su papel en la propagación del racismo biológico entre la élite intelectual del país en las décadas de 1920 y 1930. Se concluye que la concepción de educación de estos autores va más allá del sentido de escolarización y está alineado con un proyecto intelectual más amplio que preveía la popularización de la ciencia del mejoramiento racial en Brasil.

**Palavras-chave:** Educação eugênica, Movimento eugenista, Racismo biológico, Razão instrumental.

**Keywords:** Eugenic education, Eugenic movement, Biological racism, Instrumental reason.

**Palabras claves:** Educación eugenésica, Movimiento eugenésico, Racismo biológico, Razón instrumental.

### Introduction

The main objective of this article is to analyze, from a historical perspective, the theoretical elaboration of Brazilian eugenic education in the 1920s and 1930s. We start from the transition of the 19th and 20th centuries, context in which the *men of science* guided by the ideal of eugenics created a series of research institutions and organizations committed to the elaboration of social Darwinism, based on biological determinism. The term eugenics was created in 1883 by the British physician and mathematician Francis Galton (1822-1911). By definition, "eugenics" can be understood as the science of improving "race" whereas "eugenism" is understood as the sociological application of such scientific principles.

Munanga (2004) reminds us that from a biological point of view, it would be impracticable to affirm the existence of human races. However, it is notorious that in the social imaginary and in the political field the idea of race still operates with great vivacity, which makes it urgent to combat racism even considering the biological evidence. In this sense, we understand that it is necessary to clarify that we will adopt throughout the work the concept of race based on the discussions of eugenicists during the 19th century, that is, a discussion based on

the classification of human races under the criterion of skin color and phenotypic characteristics.

Initially, the eugenic science and the eugenism was developed in British territory, but then they found shelter in other countries of the world and gained notoriety in the political and ideological field. Regarding the repercussion of these ideas in other countries, we can affirm that Brazil did not escape the rule. Without losing sight of the particularities of the Brazilian context, eugenic ideas were received in the country and supported analyzes and alternatives for the Nation's development. Thus, several Brazilian intellectuals were inclined to the political-ideological project of eugenics, especially the directors of the periodical *Boletim de Eugenia* (1929-1933): the doctor and pharmacist Renato Ferraz Kehl (1889-1974) and geneticist teachers at the Superior School of Agriculture "Luiz de Queiroz" (ESALQ) Octavio Domingues (1897-1972) and Salvador de Toledo Piza Jr. (1898-1988). Through the creation of laws, the organization of congresses, courses, lectures, publication of books, articles and translations of researches carried out in other countries, these intellectuals became the greatest creators and spokespeople for eugenic education in Brazil, which we take as the object of our investigations.

Initially edited in Rio de Janeiro by Renato Kehl in the name of Brazilian Institute of Eugenics, the *Boletim de Eugenia* was launched in 1929 with the objective of spreading the science of racial improvement, attracting supporters among the "cultured men" of our country (KEHL, 1929, p.1) and "stimulate interest in our elite for eugenic problems" (KEHL, 1932)<sup>3</sup>. Its 42 numbers published between January 1929 and June 1933 circulated mainly among the medical field. Its monthly publication with circulation of one thousand copies was expanded even in its first year of existence, becoming the *Medicamenta* magazine's supplement. In addition to the fixed list of subscribers, the *Boletim* was sent monthly "to the main Brazilian and foreign institutions, government agencies, public authorities and intellectuals" (SOUZA, 2006, p.134). The content consisted of articles written by Kehl, translations of texts by intellectuals from other countries, in addition to the contributions of several members of the eugenic movement in Brazil.

We chose to analyze the eugenic thinking in the light of Education, considering how the ideas of racial improvement and the development of an eugenic project for the country gained body and prominence through the eugenic education. In this sense, the eugenic conception in the field of Education analyzed by us in this work, from the perspective of these intellectuals, is not limited to the field of educational teaching practices, but rather, to a broader political and ideological project for Brazil. We recognize the need to establish differentiations in the field of eugenic education, considering that such ideas spread throughout the educational field and were among school practices in Brazil, especially in the third decade of the 20th century with the *Escola Nova* movement.

Thus, based on a thorough analysis of the contents of books and articles published by the directors of the *Boletim*, we elucidate the reception of Galtonian science in the country and its educational aspects from the intellectual support

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<sup>3</sup>In order to expand the scope of our research and the scope of this work in an international level, we freely translated all direct citations originally written in Portuguese, as well the name of the institutions and organizations, but respecting the original name of the books and articles published by the eugenic intellectuals.

network established between Kehl, Domingues e Piza Jr., without ignoring, however, the theoretical divergences and specificities of each author. Finally, based on the critique of instrumental reason, we intend to demonstrate how the “science of racial improvement” constituted an ideological manipulation of the concept of reason that allowed *men of science*, under the aegis of eugenic education, disseminate the “racial awareness” among Brazilian intellectual elites<sup>4</sup>. We consider that, in our understanding, scientific research must assume a critical commitment in denouncing the origins and permanence of biological racism in the country of “racial democracy”, emphasizing its mechanisms of reproduction through education.

### Renato Kehl and the eugenics in Brazil

The eugenic ideas were widespread and gained notoriety beyond Francis Galton's studies in England. For this reason, we believe it is essential to point out that, in Latin America, eugenic ideas were very receptive and occupy an important space in understanding and discussing the “racial quality” of the Latin American people. According to Vallejo (2005), the “Latin eugenics” can be characterized as a theoretical body, whose diffusion occurred relatively homogeneously in countries with Catholic influence. Although the objective of this work is not focused on the discussion of ideas for improvement in Latin American countries, we emphasize that the contours of eugenic ideas in such territory allow us to circumscribe eugenic ideas in Brazil.

Despite the notoriety and repercussion of the ideas of eugenics in the countries of Latin America, it is necessary to analyze that such recognition did not occur uniformly. The differences in the repercussion of such ideas allow us to highlight the position occupied by Brazil in the eugenic scenario, as well as to locate the figure of Renato Ferraz Kehl (1889-1974), recognized as the greatest propagandist of eugenics in national territory. Kehl was born in the city of Limeira, in the State of São Paulo. He had a degree in Pharmacy and in 1915 began his studies in Medicine. Galton's ideas and discussions about racial improvement permeated Kehl's life during his medical career and influenced his thinking and writings (CARVALHO, 2016).

Kehl's intellectual trajectory cannot be recognized apart from eugenic ideas. Throughout his life, the doctor has spared no effort to leverage and implement an eugenic project for Brazil, fully dedicating his intellectual production to research on eugenics, resulting in the publication of thirty works on the theme<sup>5</sup>. Kehl's centrality in the field of eugenics can be analyzed based on the advancement of such ideas in the country. According to Souza (2006), in 1910

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<sup>4</sup>The present work does not attempt to exhaust the theme of the diffusion of eugenic ideas in Brazil. We limit ourselves to an analysis of the reception of the science of racial improvement in the Brazilian intellectual field, without ignoring, however, the need for further research that considers the popularization of these ideas beyond the elites.

<sup>5</sup>1) Lições de Eugenia; 2) Sexo e Civilização; 3) Tipos Vulgares, 4) Conduta; 5) Educação Moral; 6) Fada Hígia; 7) Bíblia da Saúde; 8) Porque sou eugenista; 9) Como escolher uma boa esposa; 10) Como escolher um bom marido; 11) Eugenia e medicina social; 12) Melhoremos e prolonguemos a vida; 13) Cartilha de Higiene; 14) Bioperspectivas; 15) Livro do chefe de família; 16) Catecismos para adultos; 17) Pensamentos; 18) Psicologia da personalidade; 19) A cura da fealdade; 20) Higiene Rural; 21) Através da filosofia; 22) Médico no lar; 23) Pais, médicos e mestres; 24) Meu guia; 25) Bastomicose; 26) Perigo venéreo; 27) Envelheça sorrindo; 28) A interpretação do homem; 29) Dicionário popular de medicina de urgência; 30) Formulário da beleza.

the first works on eugenics in Brazil were published, consisting in small articles produced by Brazilian intellectuals, namely João Ribeiro, Horácio de Carvalho and Erasmo Braga. In 1913 and 1914, eugenic works were also published in the city of Salvador, Rio de Janeiro and São Paulo. It is possible to state that, in general, eugenic science was recognized in some regions of the country in this context, that is, there were favorable conditions for its development. However, even amid such a conjuncture, the discussions on eugenics only gained more notoriety from Renato Kehl's initiatives.

The eugenicist doctor became, in a few years, recognized for spreading the eugenics ideas in the intellectual field and for openly defending a campaign for the science racial improvement. Historically, Kehl's speech in the First Eugenic Conference at the Young Men Christian Association of São Paulo in 1917 constitutes the landmark of eugenic ideas in Brazil. After this moment, it is possible to effectively identify eugenic initiatives advancing across the country. On January 15, 1918, for example, was founded the Eugenics Society of São Paulo, recognized as the first eugenic association in Latin America and the first in Brazil. The society was designed based on Kehl's intentions with the doctor and professor Miguel Couto (1865-1934) and its mission was to bring together studies and projects around the racial improvement.

The inauguration of the society included Kehl's speech and was even reported by the São Paulo's State press. In addition, the pages reported by the newspaper *Correio Paulistano* indicate that Kehl participated in numerous activities related to eugenics, lectures, interviews in the media, meetings, national and international cultural activities, being recognized as "an illustrious representative of the medical class" (FAGGION; SOUZA, 2019). After the closure of the Eugenics Society of São Paulo in 1919, Renato Kehl moves to the city of Rio de Janeiro where he would also try to found the Brazilian Institute of Eugenics. Without success in founding the Institute, Kehl would find in the field of hygiene the favorable conditions to promote his eugenic project. Thus, in 1925, the eugenicist doctor became involved in the activities of the Brazilian League of Mental Hygiene (LBHM). It is important to highlight that, in its appearance in 1923, LBHM had a program aimed at the prevention and care of "nervous diseases"; however, from 1929 onwards, its members began to support the eugenics ideas.

Between 1929 and 1932 it would operate in the city of Rio de Janeiro, under Kehl's initiative and direction, the periodical *Boletim de Eugenia*, a newspaper focused on dissemination of the science of racial improvement in Brazil. In 1931 Kehl also led the creation of the Brazilian Central Committee of Eugenics, whose objective was to manage the eugenic policies in the country (KEHL, 1931). Through a brief analysis of Kehl's initiatives, we can conclude that the eugenic project took on major contours in the popular imagination and on the national scene. The greatest proof of this influence was the Federal Constitution of 1934, sanctioned by the president Getúlio Dornelles Vargas (1882-1954), which article 138 states:

Art.138 – It delegates to the Union, the States and the Municipalities, under the terms of the respective laws:

- a) ensure support for the underprivileged, creating specialized services and encouraging the social services, whose orientation they will seek to coordinate;
- b) *stimulate the eugenic education;*
- c) support motherhood and childhood;

- d) support families with numerous children;
- e) protect youth against all exploitation, as well against physical, moral and intellectual abandonment;
- f) adopt legislative and administrative measures to restrict child morality and morbidity; and social hygiene, which prevent the spread of transmissible diseases;
- g) *take care of mental hygiene and encourage the fight against social poisons.* (BRASIL, 1934, emphasis added).

The article 145 of the Constitution also shows inclination to the ideas of eugenics by indicating that the law “[...] the presentation by the engaged of proof of physical and mental health, considering the regional conditions of the country”. In his work *Lições de Eugenia* (1935), Renato Kehl emphasizes the need of a prenuptial exam glimpsing the eugenic marriage, supporting the article 145 in the National Constituent Assembly and reiterating “that it is put into effect as soon as possible and in the best possible way to reach the expected benefits” (KEHL, 1935, p.212).

Although it gained a political and social force in the country, it is not possible to say that this movement operated in a uniform manner. Internally, the eugenic movement presented contradictions and divergences among its adherents. Amid this heterogeneity, it is possible to locate Renato Kehl's thought and the radical shift of his ideas in the field of eugenics. According to Wegner and Souza (2013), in the late 1920s Kehl resigned from the National Department of Public Health and started to dedicate himself to the activities as a director of Chemical and Pharmaceutical Industry Bayer of Brazil. In 1928, Kehl traveled to Germany and met the radical eugenic measures that were spreading in Germanic territory. When he returned to Brazil, Kehl sought to leverage the eugenic project. From that moment on, it was possible to notice that, over the years, his thinking changed from a Latin American eugenic paradigm to Anglo-Saxon and Germanic (WEGNER; SOUZA, 2013).

One of the expressions of Kehl's radical thinking can be seen in his position on eugenic sterilization. For the eugenicist doctor, it was necessary to pay attention to the growing increase of "degenerates and criminals" in society. Kehl recognized that such a measure would have a long-term result, just as it would not be easy to implement in the country. However, the eugenicist argued that sterilization could be an alternative to improve the race:

[...] we are of the opinion that sterilization is indicated in special cases of illness and misery; which must be applied, compulsorily, to certain criminals and in certain cases of somatic-psychic degeneration; which could, once widely applied, eliminate blastophoreic characters or, at least, reduce them considerably. Sterilization must, therefore, be considered as an inestimable eugenic process, not, however, a resource capable of, by itself, solving the eugenic elite problem (KEHL, 1935, pp. 223-224).

For Renato Kehl, the miscegenation process would not culminate in “whitening”, but in “mulatization” of the nation, accompanied by “their organic, psychological and moral deviations and weaknesses”. Eugenics would therefore be the scientific solution that could slow this process down, making possible the “increasingly generation of pure, perfected, superior and white offspring” (Nalli, 2019, pp.50-51).

## Renato Kehl and the Brazilian education

As we noted earlier, eugenic ideas were distributed in different sectors of the country, among them, the Education. The eugenicists saw Education as a fertile ground for the realization of the national eugenic campaign. Through eugenic education, it would be possible to achieve a commitment of individuals to the selection and preservation of the species. This does not mean that the field of Education was not permeated by differences between the eugenicists. In general, education for eugenic purposes was the common point for eugenic intellectuals; however, the concept of education differed among its adherents. Eugenicists as the anthropologist Edgard Roquette Pinto (1884-1954), prioritized education to the detriment of racial inferiority, that is, defended that progress would occur from education and not through the replacement of the population. On the other hand, the education advocated by Kehl was an education aimed at heredity, eugenic marriage, the conscious choice of a spouse, hygiene, and the formation of a healthy offspring. Renato Kehl also advocated to a sex education, which could ensure that eugenic individuals were encouraged to procreate and that there was a gradual elimination of dysgenic individuals (KEHL, 1935).

Kehl's bet on education was not based on a perspective of men's transformation, as the subjects were formed, predominantly, by their hereditary characteristics. In addition, the country's development would be related to the end of miscegenation. In this perspective, the social environment and school education could interfere in the manifestation of personality, particularly in each individual:

“The good ones are born, not made”, we have repeated numerous times. The education naturally has a great influence to mitigate or even to remove edges of character and temperament; never, however, to mitigate and remove them genetically, that is, for the real benefit of persistent effect for future generations (KEHL, 1927, p.22).

Although education presented “limits” in racial improvement, Kehl emphasizes the importance of the educational process in the eugenic project for the nation. In this sense, it seems to recognize the role of teachers:

Public and private teachers, in daily and prolonged contact with individuals of various ages, social classes and nationalities, constitute, ultimately, the great millers of nationality. They must, in the holy educating mission, always keep in mind that ignoring the science of life conservation, health conservation and improvement; ignoring the science of self-defense, the protection of offspring; in short, ignoring notions of hygiene: it is inconceivable, it is absurd, it is a crime (KEHL, 1935, p.283).

Kehl (1935) also indicated guiding methods for a national eugenic education: a) moral method and b) legislative and economic method. The first is the recognition by men of their responsibilities to future offspring. The second method was oriented to the organization of laws and measures that would stimulate the reproduction of “superior strains”.

Regarding the field of Education, Renato Kehl is no exception to the rule in terms of notoriety, as demonstrated by his participation in the First National Education Conference in 1927. On this occasion Kehl presented the thesis entitled *O problema da educação sexual: importância eugênica, falsa compreensão e preconceitos - como, quando e por quem deve ser ela ministrada*<sup>6</sup>, in which the eugenicist doctor argued in defense of sex education:

It imposes itself as a measure of individual and collective preservation, based on the highest interest of the specie, to proceed a gradual children's sex education, of young people and even adults, so that the most noble act, which is the generation, do not continue to be processed only under the instinctive impulse, only understandable and permissible among irrational animals (CONFERÊNCIA NACIONAL DA EDUCAÇÃO, 1927, p.436).

Kehl's thesis was approved with praise and had the opinion of Manuel Bergström Lourenço Filho (1897-1970), a prominent Brazilian educator. Thus, we can verify that Kehl's notoriety allowed him to circulate in several spaces and count on several interlocutors, including renowned intellectuals in the field of Education. However, Kehl's free access and recognition in several scientific fields did not make him move away from his conservative thinking, grounded in the biological racism. While openly recognizing the importance of school education, as well the educators, Kehl was opposed to miscegenation and sympathized with radical eugenic measures. This means that their conception of education is linked not to teaching practices, solely and exclusively, but to the formation of a political and ideological conscience guided by the precepts of eugenics, or, to put it another way, linked to the vulgarization of eugenics in the country.

### **The role of Esalquian intellectuals in Brazilian eugenic education**

When Renato Kehl distanced himself from the field of anthropology and sanitary medicine due to the criticisms that his most radical theses received at the Brazilian Congress of Eugenia of 1929, the eugenicist doctor found in genetics the scientific basis to sustain his biological racism, moment that marked his approach with the geneticists of the Luiz de Queiroz College of Agriculture (ESALQ) Octavio Domingues and Salvador de Toledo Piza Jr., two intellectuals who have been few studied in the historiography of eugenics. Without ignoring the importance of the existing work about the *Boletim de Eugenia* (MAI, 1999; ROCHA, 2010; SANTOS, 2005), we emphasize the need for a new look at the object, in which Domingues e Piza Jr, more than mere auxiliaries or passive recipients of Renato Kehl's project, are constituted as intellectual protagonists of the Brazilian eugenic movement, as demonstrated in their articles published in the *Boletim*.

Mai (1999) investigated the eugenic education in the *Boletim de Eugenia* until the year of 1931, without analyzing, however, the years of 1932 and 1933. We consider this period as crucial for understanding the action of the Brazilian eugenic movement, because it corresponds to Renato Kehl's trip to the eugenics institutes of Europe, resulting in the transfer of the *Boletim's* direction to

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<sup>6</sup>*The problem of sex education: eugenic importance, false understanding, and prejudices - how, when and by whom it should be taught.*



Domingues and Piza Jr., who started editing the journal in the city of Piracicaba, in the State of São Paulo. The efforts of Esalquian<sup>7</sup> geneticists to continuing the work of “vulgarizing” eugenics initiated by Kehl are clear both in their personal correspondence (DOMINGUES, 1932) and in the journal pages, which has become the largest vehicle for disseminating the fundamentals of the science of racial improvement in the country. In addition, the experience of Domingues and Piza Jr. in the field of genetics, as well as the prestige of teachers at the head of a recognized research and teaching institution in the country allowed the publication to lose the pamphlet characteristic, approaching the format of a scientific journal, broader in number of pages and deeper in his content (HABIB, 2010, p.299).

Working in the field of zootechnics and genetics, Domingues e Piza Jr. engaged in the eugenic education crusade, giving courses, conferences, lectures, assuming the *Boletim de Eugenia's* direction and, thus, the leadership of the eugenic movement in the country in the absence of Renato Kehl. In his articles, whose theoretical foundation was based on Galton's eugenics and Mendelian genetics, the Esalquian teachers postulated the elucidation of the problems related to the crossing between whites and blacks (PIZA Jr, 1933a, p.6), a strict matrimonial control and the improvement of eugenic education among families (DOMINGUES, 1929, p.137), the teaching about the principles of heredity at all educational levels (DOMINGUES, 1930, p.4) and the urgent creation of a genetics teaching program in primary and secondary schools (PIZA Jr., 1933b, p.16). Considering that only through the systematic exercise of eugenic education would it be possible to develop the “racial awareness” in the country, the Esalquian intellectuals continued the project to popularize hygienic and eugenic knowledge started by Kehl and the first generation of Brazilian eugenicists initially organized around the Eugenic Society of São Paulo (SOCIEDADE EUGÊNICA, 1919, p.23).

Taking the lead in the crusade for racial improvement in Brazil, the eugenic education of Domingues and Piza Jr. took on a central role in materializing the intervention program proposed by Renato Kehl, which aimed not only to instruct past generations, but to safeguard through the principles of Galtonian heredity the future generations. In addition, the Esalquians created action strategies to map intellectuals with the potential to compose and strengthen the Brazilian eugenic movement, including strategic sectors of enlightened Catholicism that could, according to Domingues, contribute to reduce the resistance of the Catholic Church to the science of racial improvement in the country (SOUZA, 2006, p.146). However, even assuming a common program based on Kehl's guidelines, the directors of the *Boletim* presented different conceptions about eugenics. As stated by Hochman, Lima and Maio (2010, p.495), even though it became a *lingua franca* in Brazilian and Latin American intellectual circles in the 1920s and 1930s, eugenics never had a consensual agenda, being structured from a heterogeneous political and intellectual movement and with dissenting voices. In the words of Souza (2019, p.11), "a multifaceted movement that has taken on different scientific theories and social and political ideologies, resulting in a very polysemic field".

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<sup>7</sup>The word “Esalquian” used throughout the text refers to ESALQ, which is the Portuguese acronym for Escola Superior de Agricultura Luiz de Queiroz (Luiz de Queiroz College of Agriculture).

In line with Kehl's biological racism, Salvador de Toledo Piza Jr.'s articles published in the *Boletim* defended the existence of pure races and denounced the degenerative problems of miscegenation (PIZA Jr. 1932, pp.9-11), postulating the prohibition of marriages between white and black individuals, considered by the Esalquian professor as an “unnatural” and “disgusting” union (PIZA Jr, 1933a, pp.11-12). On the other hand, even considering Kehl as a mentor and the “spiritual father” of the Brazilian eugenic movement (SOUZA, 2006, p.132) and defending the prohibition of the reproduction of disabled individuals (DOMINGUES, 1931, pp.1-4), Octavio Domingues did not believe in the existence of pure races, considering miscegenation as a positive and necessary process for the improvement of the nation (DOMINGUES, 1933, p.61). From these divergences registered both in the pages of the journal and in the books of the three directors of the *Boletim*, we could affirm that Domingues presented a “softer” conception of Galtonian science in comparison to Kehl and Piza Jr., those who defended until the last years of *Boletim's* existence a racist and anti-miscegenation position, as demonstrated by Souza's (2006) and Wegner's (2017) works. However, from a critical perspective it is possible to see that Domingues' *capacitist* interpretation is well aligned with Kehl's and Piza Jr's radical ideas.

### **The eugenic unreason of Kehl, Domingues and Piza Jr.**

For Horkheimer (2010, pp.98-100), the civilization constituted a “rationalized irrationality”, in which the domination of nature culminated in the domination of men. In the name of adaptation and self-preservation postulated by social Darwinism, men submitted and adjusted themselves to the system, in a logic representative of the triumph of instrumental reason, that allowed science to become an instrument of domination. According to Silva (2019, pp.28-31), “despite the illusion of autonomy that the scientist carries in relation to his own work, this is still a moment of reproduction of the instrumental rationality inherent in the capitalist mode of production”. From this theoretical-critical perspective, “the transcendental and fully rational appearance of scientific activity would be involved” by an irrationality typical of the bourgeois mode of economics, “which is not consciously oriented towards a general rational objective despite the rationality expressed in the perspicacity of the individuals who compete with each other” (SILVA, 2019, pp.28-31).

In the passage of the 19th and 20th centuries, this instrumentalized model of reason had in the racist and authoritarian sector of the eugenic movement captained by Renato Kehl its greatest and most cruel expression. The investigations by Stepan (2005) and Eraso (2013) demonstrated that the sterilization of women considered biologically “degenerate” in Latin America in the 1920s and 1930s were justified in the name of *eugenic reason*, that is, they were institutionalized under the *men of science's* seal, socially recognized as the authorities that hold reason and, therefore, the truth. In the words of Souza (2019, pp.9-10), eugenics emerged as an innovative “rational engineering”, the ultimate symbol of modernity that would allow the biological-racial improvement of the population and the elimination of hereditary diseases. His progressive rhetoric justified the scientific and rational administration of the hereditary composition of the human species, enabling theories and practices such as racial segregation, sterilizing surgeries, euthanasia, and genetic racism (SOUZA, 2019, p.10).

In the Brazilian context, the ideological manipulation of the concept of reason was developed through the biological racism promulgated by Kehl, Domingues and Piza Jr., who scientifically justified capitalist exploitation and social inequalities through the discourse of inequalities determined by the nature. Under the pretext of combating the degeneration, the spokesmen of eugenic reason scientifically rejected the moderate sectors of the eugenic movement headed by intellectuals such as Edgar Roquette Pinto, who considered that the problems that threatened the Brazilian population were social and not biological, which could be combated based on public policies, sanitary measures, hygiene and education. As demonstrated by Hochman, Lima and Maio (2010, p.494) when investigating the reception and circulation of eugenic ideas in Brazil, this clash showed how both Galtonian eugenics and Mendelian genetics were assimilated in different ways in the first half of 20th century.

Contrary to the interpretations that consider eugenics as a “pseudoscience”, Nalli (2019, p.33) defended the need to understand the works of eugenic intellectuals as discourses that are intended to be scientific and rational, even if they “formulate false judgments and theories, that is, epistemologically refuted”. For the author, the distinction between science and ideology in the analysis of the eugenic movement “more conceals than reveals the scientific and social claims” of its intellectuals. As Adorno (1993, p.91) considered, when rationally justified, the differentiation mechanisms between the races reduced the indignation in face of the cruelties against human beings through the discourse of dehumanization and animalization of the victims. Considered biologically inferior, the “non-humans” became susceptible to exclusion and extermination. This unthinking destruction of differences became the “always repeated attempt to, through a greater madness, distort the madness of this false perception, transforming it into reason” (Adorno, 1993, p.91). Thus, we can conceive the *eugenic unreason* elaborated by Kehl, Domingues and Piza Jr. as a science based on the authoritarian and barbarizing logic of instrumental reason, according to which “what was not seen as a human being, and yet is a human being, becomes a thing, so that he can no longer refute the manic look by any impulse” (ADORNO, 1993, p. 91).

Our hypothesis of eugenic reason as an expression of instrumental reason is in line with the historical research of Schwarcz (2017) and Schwarcz and Starling (2015), who demonstrated that the discourse of combating biological degeneration present in the Brazilian republican project, far from being irrational or pseudoscientific, was rationally justified by intellectuals in the fields of law, politics, biological sciences, and education. Constituted as scientific authorities, these intellectuals were responsible for the rational organization of the Republic in the eugenic crusade, condemning the mestizo and poor population to exclusion and extermination to guarantee the nation's progress: *in the name of healing, death*. Thus, by appropriating the subjective and instrumental character of reason, radical eugenicists guaranteed political and intellectual support in maintaining the racial hierarchy and social inequalities in the republican context, displacing the legal debate about citizenship and equality of blacks and mestizos to the field of Biology. From the deterministic and whitening logic promulgated by racial theories, it was possible to justify black and mixed-race inferiority, concealing the slave past and its direct influence on the country's inequalities (SCHWARCZ; STARLING, 2015, pp. 329-331; 342-344).

Analyzing the work of Schwarcz (2017) and Schwarcz and Starling (2015) from a critical theoretical perspective, we consider that the first half of 20th century became the “age of eugenics” due to the triumph of intellectuals who, supported by the social Darwinism and the positivist progress discourse, transformed the subjective reason into a scientific truth shared by the Brazilian intellectual elite through eugenic education. The subjective reason allowed the development of an instrumentalized and hierarchical interpretation that naturalized history and transformed social hierarchies into an immutable data. Thus, the discourse of the “sick Brazil” that needed to be cured imposed a silent but scientifically effective racism on black and mestizo populations (SCHWARCZ; STARLING, 2015, pp.342-343). And to develop this “racial conscience” effectively, the *Boletim de Eugenia*’s directors understood the need to instruct, under the aegis of eugenic education, the *men of science*. As demonstrated by Horkheimer (2010, pp.38-39), “the more scientific propaganda makes public opinion a simple instrument of obscure forces, the more public opinion appears as a substitute for reason”.

### Final considerations

We could conclude, based on the arguments presented in this article, that the Brazilian eugenic education promulgated by Kehl, Domingues and Piza Jr. took two fronts: 1. an institutional education, in the formal sense of schooling, destined to children, adolescents and educators; 2. an education directed to intellectual elites, in the sense of instruction, aiming at the dissemination or vulgarization of eugenic basis that would make possible the development of *racial conscience* among the cultured elements of the country. However, the documents produced by these intellectuals show that these two fronts were part of a broader conception of eugenic education, based on the intervention program designed by Kehl, which aimed to curb, by all possible means, the nation's degenerative process. Domingues’ capacist interpretation and the openly promulgated biological racism by Kehl and Piza Jr. demonstrate that the *Boletim*’s directors were able to overcome theoretical divergences in favor of a greater objective: the strengthening of the eugenic movement and the popularization of Galtonian science in Brazil.

From the critical analysis presented throughout this article, we scrutinized the theoretical elaboration of the science of racial improvement which, based on the authoritarian and subjective logic of instrumental reason, developed effective mechanisms that provided its reception in the Brazilian intellectual field in the 1920s and 1930s. Through the intellectual support network formed by Renato Kehl and Esalquians geneticist teachers, we can understand the scientific and progressive rhetoric of eugenic reason, which found in the field of Education the most fruitful means for its dissemination. The article 138 of the 1934 Federal Constitution, the school booklets, and the wide acceptance of the prophylactic elements of eugenics among the leaders of the *Escola Nova* movement demonstrate, finally, the breadth of Galtonian science in Brazil. Taking into consideration the relevance and complexity of the subject, we hope that our work can encourage further research on the topic, considering the permanence of biological racism and liberal eugenics in the country of “racial democracy”.

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