



Brazilian eugenics and its international connections: an analysis based on the controversies between Renato Kehl and Edgard Roquette-Pinto, 1920-1930

Vanderlei Sebastião de Souza

Professor, Departamento de História e Programa de
Pós-graduação em História/Universidade Estadual do Centro-Oeste.
Campus Santa Cruz – Caixa Postal 730
Rua Padre Salvador, 875
85015-430 – Guarapuava – PR
vanderleidesouza@yahoo.com.br

Received for publication in December 2015.

Approved for publication in May 2016.

Translated by Diane Grosklaus Whitty.

<http://dx.doi.org/10.1590/S0104-59702016000500006>

SOUZA, Vanderlei Sebastião de.
Brazilian eugenics and its international
connections: an analysis based on the
controversies between Renato Kehl and
Edgard Roquette-Pinto, 1920-1930.
História, Ciências, Saúde – Manguinhos,
Rio de Janeiro, v.23, supl., dez. 2016.
Available at: <http://www.scielo.br/hcsm>.

Abstract

In this article, I analyze the dialogue and exchanges between Brazilian eugenicists and their counterparts abroad in the early decades of the twentieth century. Through an examination of Renato Kehl's and Edgard Roquette-Pinto's eugenics projects and the controversies between these two leaders of the eugenics movement in Brazil, I investigate their contact with the movements in countries like the United States, Germany, England, Sweden, and Norway and show that the ties that the two researchers maintained with so-called mainline eugenic thought were broader and more extensive than first believed. The result was the shaping of different brands of Brazilian eugenics, expanding the international circulation of ideas and extrapolating the borders of "Latin eugenics."

Keywords: history of eugenics; Renato Kehl (1889-1974); Edgard Roquette-Pinto (1884-1954); negative eugenics; Latin eugenics.

The concept of “Latin eugenics” in debate

A well known argument has it that the brand of eugenics adopted in Brazil presented a “softer” model of thought than that adopted in countries like the United States, Germany, Sweden, and England. If eugenics measures in the latter countries originated from extreme policies of racial segregation and control of human reproduction, Brazil’s eugenics movement supposedly promoted less radical projects, involving sanitation, hygiene, and education policies and other initiatives to improve environmental conditions. Even when the focus was on Brazil’s racial miscegenation and the fact that a good share of its population was made up of descendants of indigenes and Africans, local proposals for eugenic intervention – so the argument goes – were not as radical. During the 1930s, at the height of the debate over immigration and the process of settling Brazil, the country’s eugenicists remained divided between acceptance of a mixed-race country or advocacy of replacing Brazilians with Europeans.

This portrait of Brazilian eugenics as a “softer” model was methodically drawn by historian Nancy Stepan (1985) in an article published in the 1980s. She went on to expand her argument in *The hour of eugenics: race, gender, and nation in Latin America*, released in the United States in 1991 and translated into Portuguese fourteen years later (Stepan, 2005). In its pages, Stepan examines the eugenics movement not only in Brazil but also in Argentina and Mexico and draws an interesting comparison between the region’s three main movements. While she pays heed to the peculiarities of eugenic thought in each of these countries, her chief goal (p.11) was to consider the features that characterized Latin American eugenics as a scientific and social movement closely entwined with the region’s political, scientific, and cultural traditions. As Stepan sees it, two factors were paramount in shaping a eugenics of a softer bent in Latin America: the first had to do with the region’s strong Catholic tradition and the church’s role in organizing society; the second, with the ties between the region’s intellectuals and medical and scientific thought of European Latin origin, especially French medicine.

Stepan argues that the broad influence of Catholicism in Brazil and the rest of Latin America constrained eugenicists’ interventions in discussions on marriage restrictions and human reproduction. In the eyes of Catholic intellectuals, these were matters of a moral and religious nature and as such not open to political or medical intervention; this kept them from making any more radical proposals such as eugenic sterilization (Wegner, Souza, 2013). Furthermore, the attachment that Brazilian intellectuals had to French culture and science aligned Brazilian eugenics with the neo-Lamarckian evolutionism then prevalent in French medical tradition. According to Stepan (2005), the adoption of neo-Lamarckian eugenics, whose principles reflected the notion that characteristics acquired from the environment can be passed down through inheritance, was determinant to the adoption of a less radical model of eugenics, since the former made no rigid distinctions between nature and nurture. Eschewing the “hard” concepts of Mendelian evolutionism, neo-Lamarckians trusted in so-called preventive eugenics as an alternative for racially improving future generations, associated closely with medical environmentalism and measures to reform the environment (p.22).

In both cases, the question for Stepan was the formation of a Latin eugenics and a corresponding movement based on the firm cultural and scientific bonds between Latin America and European countries of Latin origin, like Portugal, Spain, France, and Italy. Stepan's argument was decisive in showing that eugenics movements were not homogenous, nor did they follow the "mainline" of eugenic thought, as Daniel Kevles (1985) defined Anglo-Saxon eugenics. Moreover, Stepan (2005) called attention to the close relationship between local or regional scientific production and their cultural and political realities and emphasized that Latin American eugenics should not be deemed a mere reflection of eugenics movements in the United States, Great Britain, and Germany.

Stepan's undeniably solid arguments opened the way for a significant research agenda on the history of this topic in Brazil and the rest of Latin America, almost always involving research on the specific features of the region's eugenics movements. However, this framing of Brazilian eugenics as a variant of Latin eugenics had the ultimate effect of limiting analyses of the dialogue between eugenicists and of the international circulation of eugenics theories, particularly in the 1920s and 1930s. While some studies have pointed to the ties between Brazilian researchers and their US, British, German, and Norwegian counterparts (Souza, 2011; Wegner, Souza, 2013), there are still many unanswered questions regarding the impact of this circulation of ideas on the formulation of eugenics projects in countries like Brazil. Furthermore, little attention has been paid to the support that Brazilian specialists threw behind more radical measures rooted in "negative eugenics," above all projects to enforce marriage restrictions and eugenic sterilization. Likewise, we know little enough about what it meant for Brazilian researchers to endorse Mendelian genetics. What we do know is that eugenicists like Renato Kehl, Edgard Roquette-Pinto, Octávio Domingues, and Toledo Piza Júnior – to name just a few of the top leaders of the Brazilian eugenics movement – embraced Mendelian theory in diverse ways and engaged in a broad debate with eugenicists and biologists in the United States and northern European countries.

The goal of this article is to problematize the concept of Latin eugenics as proposed by Nancy Stepan. This is not to deny the specificities of the Brazilian eugenics movement vis-à-vis movements that espoused more radical eugenic policies or to deny its close relationship with culture and medical thought of Latin origin. Like Stepan, I believe that the local social, cultural, and scientific fabric was crucial to shaping the Brazilian eugenics movement, above all when we consider how Catholicism, neo-Lamarckian evolutionism, and social medicine wielded heavy influence over eugenics in Brazil. Through an analysis of the projects defended by Renato Kehl (1889-1974) and Edgard Roquette-Pinto (1884-1954) and the controversies between the two men, who waged a broad debate with US and German eugenics, genetics, and physical anthropology, I will explore how these international connections – which extrapolated the scientific and cultural confines of the Latin world – helped shape the eugenics program advocated by these researchers. My intention is to show how Kehl's and Roquette-Pinto's contacts with and ties to so-called mainline eugenics were much broader and more extensive than first imagined, ultimately molding Brazilian eugenicist projects in different ways.

Expanded borders: Brazilian eugenics in the international context

Brazil was not just the first country in Latin America to have a eugenics movement; it also had the largest contingent of followers in the region and was the most successful in institutionalizing eugenics. Simple evidence of this is that Brazil's first local eugenics society – the Eugenics Society of São Paulo (Sociedade Eugênica de São Paulo) – was founded in the 1910s and had no fewer than 140 members, most of whom were part of the country's medical elite. This roll included eminent figures like Afrânio Peixoto, Arthur Neiva, Juliano Moreira, Antonio Austregésilo, Fernando Azevedo, and Belisário Penna, as well as writers like Monteiro Lobato and the influential senator Alfredo Ellis. The eugenics movement organized the first Brazilian Eugenics Congress (Congresso Brasileiro de Eugenia) and published the periodical *Boletim de Eugenia* from 1929 to 1934. The early 1930s also brought the creation of the Central Brazilian Committee on Eugenics (Comissão Central Brasileira de Eugenia), which drew together a group of eugenicists and psychiatrists active in the Brazilian Mental Hygiene League (Liga Brasileira de Higiene Mental), another institution that took up eugenic discourse as part of its perspective.¹

Renato Kehl and Edgard Roquette-Pinto were prominent leaders among Brazilian eugenicists. Although their intellectual backgrounds and projects differed sharply, both graduated from the Rio de Janeiro School of Medicine (Faculdade de Medicina do Rio de Janeiro) in the early twentieth century and devoted themselves to studying the issue of race. Like most intellectuals of their generation, they saw themselves as public servants imbued with a responsibility to reform society and lead the country; they were convinced that science, and above all biology and medicine, possessed the tools needed to perfect future generations in racial terms. It should be underscored that the very adoption of eugenics in Brazil was part and parcel of the general enthusiasm generated by science, which at the dawn of the twentieth century was viewed as a major symbol of cultural modernity (Stepan, 2004, p.337). In the opinion of Brazilian intellectuals – and this included Kehl and Roquette-Pinto – science promised to cure Brazil's alleged civilizational “backwardness,” the effects of racial miscegenation, and all the wretchedness related to the “social question,” like poverty, rampant disease, malnutrition, and illiteracy.

While Roquette-Pinto built a reputation as a respected physical anthropologist, particularly because of his solid career at the National Museum (Museu Nacional), Kehl gained fame for his tireless work organizing the eugenics movement. Originally from São Paulo, Kehl spent his career in Rio de Janeiro, then capital of the Republic. He played a major role in the institutionalization of eugenics, published over twenty books on eugenics concepts, and served as editor of the *Boletim de Eugenia*, the chief vehicle of eugenic ideas in Brazil. He was one of the founders of the Eugenics Society of São Paulo and of the Central Brazilian Committee on Eugenics, the latter created in the early 1930s with the purpose of advising the Brazilian government on matters related to eugenic policies. Two of his most notable titles were *Lições de eugenia* (Kehl, 1929) and *Sexo e civilização: aparas eugênicas* (Kehl, 1933), in which he summarized his understanding of eugenics. Although he began his career as a participant in Brazil's early twentieth-century public health movement, which backed a preventive eugenics model that had much in common with social medicine, Kehl came to

be known for espousing a harsher brand of eugenics, largely in the style of negative eugenics, and this included his defense of radical measures like marriage restrictions and sterilization. Starting in the late 1920s, he even expressed enthusiastic support for the racial segregation policies then enforced in countries like the United States and Nazi Germany.

Roquette-Pinto trained in the fields of physical anthropology and ethnography at the National Museum, where he worked from 1905 to 1935. Much of his scientific scholarship investigated the anthropological and ethnographic characterization of Brazil's populations. His research ranged from studies of the language, customs, and social conditions of indigenous peoples and inhabitants of the country's sertão regions to explorations of the significance of racial miscegenation in the formation of Brazil (Lima, Sá, 2008; Souza, 2011). His main works deal precisely with the results of the anthropological studies that he conducted from the 1910s through 1930s. Of special note was his 1917 publication of *Rondonia: anthropologia-ethnografia* (Roquette-Pinto, 2005), based on an account of his trip to the Amazon region. Other major works were *Seixos rolados: estudos brasileiros* (Roquette-Pinto, 1927a) and *Ensaio de antropologia brasileira* (Roquette-Pinto, 1933), both of which were collections of articles published in the press or in scientific and literary journals. His most thoroughgoing study of eugenics was "As leis da eugenia" (Roquette-Pinto, 1927b), which analyzes the foundations of Mendelian heredity and Francis Galton's contributions to the construction of eugenics as a science. Roquette-Pinto did not fail to remind his readers that anyone who wanted a precise depiction of eugenics ought to "read Galton in the original" (p.167).

Roquette-Pinto's interest in eugenics stemmed both from his conviction that eugenic ideas could be powerful in promoting the biological improvement of humanity – a widely held belief at that time – as well as from his desire to comprehend the principles of human heredity. As an anthropologist dedicated to researching the physiological constitution of Brazilian "racial types," Roquette-Pinto felt that eugenics could offer valuable tools for explaining how genetic heritage worked in "human races," particularly if the contributions of Mendelian theories were taken into account. As noted by Olivia Maria Gomes da Cunha (2002, p.242), at the dawn of the twentieth century, "race and eugenics, more than mere terms, became distinct temporal dimensions that could impart an understanding of Brazilian society." While the term "race" was used to refer to history, the past, and heritage, "eugenics" was seen as the path to realizing a project to modernize and improve the future of the Brazilian nation.

Even if Kehl and Roquette-Pinto were both swept up by this modernizing ideal and shared a belief in the possibility that science could improve races, their projects for eugenic intervention were buttressed by quite conflicting principles. While Kehl advocated radical measures related to negative eugenics, like the imposition of racial and social barriers based on rigid eugenic selection, Roquette-Pinto did not recognize eugenics as a tool of racial selection or segregation. What mattered more to the latter were educational initiatives and eugenics counseling, as championed by proponents of Francis Galton's "positive eugenics." Moreover, Roquette-Pinto did not associate so-called "Brazilian problems" with the biological constitution of "national types," contrary to the notion often voiced by sectors of the country's white elites. Unlike Kehl (1929, 1933), who felt that the biggest Brazilian issue was racial miscegenation, the anthropologist from the National Museum argued that the

“*mestiços* [mixed raced] of Brazil” could be perfected genetically, and he relied on physical anthropology to rebuff racial determinism (Roquette-Pinto, 1929a).

Curiously enough, despite their ideological differences, the two foremost leaders of Brazil’s eugenics movement engaged in dialogue with very similar scientific traditions. Contrary to what has been suggested by Stepan – that Brazilian eugenicists fell in line with a Latin eugenics model heavily marked by neo-Lamarckian evolutionism – Roquette-Pinto and Kehl followed the Mendelian tradition. Rather than suffering the influence of French medicine, both men turned their attention to German, British, and US scientific traditions, endeavoring to expand the scope of international dialogue about evolutionism and the principles of Mendelian heredity. In the United States and northern Europe alike, support for Mendel’s laws came in tandem with a complete discrediting of neo-Lamarckism and his observations about how the environment influenced the constitution of racial heritage. As we know, in the form it took in these countries, Mendelian eugenics began with the principle of the immutability of genetic traits and rejected any association between unit characters and environmental influence (Stocking, 1968; Proctor, 1988). The result was the framing of a model of eugenics devised to segregate and to intervene in the process of human reproduction so as to prevent individuals who were deemed inferior from reproducing (Kevles, 1985; Stern, 2005).

While Mendelian eugenics served as a support for more radical measures, especially in the United States and some northern European countries, it must be said that this was not the rule worldwide. Even in these countries, some Mendelian eugenicists rejected scientific racism and harsher eugenics proposals, like sterilization, euthanasia, and bans on inter-racial marriage. In the United States, for example, the geneticist William Ernest Castle, author of *Genetics and eugenics*, fired well-known criticisms against the “hard” style of eugenics espoused by Charles Davenport and other staff at the Eugenics Record Office, an agency located in the state of New York that pushed for the enactment of racial segregation policies (Dunn, 1965, p.56-60; Kevles, 1985, p.319). In point of fact, the way in which Mendelian eugenics was adopted around the world must be viewed against a dual backdrop: the racial and scientific discussions being conducted in each country and the social ideologies and the political and intellectual projects defended by its followers. In the case of Brazil, as we will see later, this brand of eugenics was used to underpin radical projects, as evident in the works of Kehl, just as it was also used to endorse miscegenation as a positive element, illustrated by the interpretations of Roquette-Pinto and even of the anthropologist Alvaro Fróes da Fonseca and the zoologist and eugenicist Octávio Domingues, authors who played important roles in disseminating Mendelian eugenics among Brazilians.

Paramount among the foreign eugenicists and anthropologists with whom Kehl and Roquette-Pinto had closest ties were Francis Galton, Leonard Darwin, and Karl Pearson in Great Britain; Eugen Fischer, Hermann Muckermann, and Felix Von Luschan in Germany; Charles Davenport, Harry Laughlin, and Herbert Spencer Jennings in the United States; Herman Lundborg in Sweden; and Jon Alfred Mjøen in Norway. As demonstrated in other studies (Souza, 2006, 2011), the bonds between Brazilian eugenicists and this scientific tradition were quite solid and found expression not only in the two men’s citations and translations of works by these foreign authors but also in their correspondence with them, where they often exchanged information on research and institutional interests, along with

bibliographic data and material. Works by these foreign eugenicists were disseminated at courses at the National Museum, taught primarily by Roquette-Pinto and Fróes da Fonseca, and also in the *Boletim de Eugenia*, where Kehl published notes about these authors and occasionally translated some of their texts.

In addition to both men's familiarity with scholarship from these countries, Roquette-Pinto and Kehl kept in personal contact with some of the authors. In the early 1910s, while still an assistant to João Baptista de Lacerda – a top figure in Brazilian anthropology – Roquette-Pinto went to London for the First Universal Races Congress, which was attended by the world's leading names in physical anthropology. Brazilians heard of the congress primarily because Lacerda delivered a controversial paper on mixed-race Brazilians, which contained data on the whitening of the population (Souza, Santos, 2012). Roquette-Pinto met anthropologists and eugenicists from around the globe during the event. He also used his stay abroad to take courses in anthropology and physiology in London, Berlin, and Paris; visit museums, universities, and other scientific institutions; and forge closer ties with eminent researchers like Felix von Luschan, Rudolf Martin, and Eugen Fischer (Souza, 2011).

Roquette-Pinto's dialogue with the work of Eugen Fischer, who was perhaps the touchstone for the Brazilian anthropologist, further evinces how central the German scientific tradition was to his anthropological studies. In nearly every study undertaken by Roquette-Pinto starting in the 1920s, he cites Fischer's 1908 research among the residents of a community in German Southwest Africa. Published in 1913 under the title *Die Rehobother Bastards*, the book was a thick treatise on the anthropological traits of various racial groups in the region, with a specific focus on the effects of miscegenation among native Africans and the German colonizers known as Boers. This research soon ranked among the most revered by Fischer's peers, especially because it was one of the earliest studies to advocate the application of research on human heredity as a vital tool in physical anthropology and eugenics (Proctor, 1998; Massin, 1996).

Renato Kehl maintained even closer contact with eugenicists in the United States and countries like Germany, Norway, and Sweden as of the late 1920s. Although he had begun his career as a member of the movement for the sanitation of Brazil and had worked at public health services and with the National Department of Public Health (Departamento Nacional de Saúde Pública) in Rio de Janeiro for over ten years, his support of negative eugenics owed much to German racial hygiene (Souza, 2006). As the director of Bayer in Brazil – one of the largest German multinationals of the between-war period – Kehl traveled at least three times to Germany and other northern European countries for extended stays. His trips, which lasted up to six months, occurred right during the heyday of eugenics in Germany, between the late 1920s and early 1930s. As historiography has indicated, the "racial hygiene" movement founded under the Weimar Republic (1918-1933) laid the ideological and institutional foundations that would bolster the Nazi party's rise to power and subsequent establishment of genetic health courts as a central program (Proctor, 1988; Weiss, 1990).

In his writings from the 1930s, Kehl made frequent reference to the eugenics model adopted in Germany. In his book *Sexo e civilização: aparas eugênicas* (Kehl, 1933), he reiterated his adherence to the eugenic policies implemented in countries like Denmark, Sweden, and Germany. Relying on biologically determinist arguments of a racist bent, Kehl contended

that national problems could not be solved without a radical “biological policy” inspired on the precepts of German racial hygiene. In his interpretation, since Brazil’s great woe was “the woe of race,” the government urgently needed to forestall the proliferation of racially “undesirable” individuals, even if this meant imposing extreme measures like racial segregation, eugenic sterilization, and euthanasia (Kehl, 1933). Around that time, Kehl went so far as to praise Nazi Germany’s new genetic health courts, which enforced sterilization laws throughout the Reich. As he remarked in the second edition of *Lições de eugenia*, published in 1935, Germany was the nation where eugenics was practiced “with the greatest breadth and courage,” as reflected in its passage of mandatory sterilization laws. “The German eugenic system of racial protection has impressed the scientists and government leaders of many countries, particularly in northern Europe, which is gradually adopting the same regulatory mechanisms” (Kehl, 1935, p.25-26).

The outcome of the exchanges between the two Brazilians and these eugenics movements was Roquette-Pinto’s and Renato Kehl’s rejection of neo-Lamarckian evolutionism and their endorsement of a eugenics model that was quite distinct from the so-called Latin eugenics adopted by a good share of other Brazilian specialists and their Latin American neighbors. Both men felt that much confusion reigned in Brazil when it came to the definition of eugenics, which most eugenicists saw as part of hygiene, education, or social assistance. Kehl and Roquette-Pinto held that the boundaries between eugenics and hygiene were so blurry precisely because of the predominant Brazilian understanding of how the environment affected heredity. Although the men held divergent views on the enforcement of eugenic measures, they were of one mind in believing that the concept “eugenics” should be restricted to the “biology of inheritance,” true to the laws of Mendelian genetics. As they saw it, education, hygiene, and any other social assistance policy or policy to improve environmental conditions might well contribute to the development of individuals and the nation but had nothing to do with eugenics or the Mendelian genetics practiced by the world’s principle researchers (Roquette-Pinto, 1929a; Kehl, 1929).

Despite Roquette-Pinto’s participation in campaigns that defended education, hygiene, and public health, the anthropologist concurred with the precept that hereditary traits were immutable, since environmental conditions could not affect hereditary factors. During his talk at the first Brazilian Eugenics Congress, held in 1929, he reiterated his agreement with the main proponents of Mendelian eugenics, like Charles Davenport and Eugen Fischer. However, unlike them, he used Mendelian eugenics itself to demonstrate that nothing in the genetic makeup of the Brazilian population betrayed signs of degeneration. Rather, he concluded, the problems hampering progress and the physical and mental improvement of a portion of Brazil’s population were not related to miscegenation or biological inheritance but to the disorganized state of Brazilian politics and people’s lack of education and their poor health. In this regard, Roquette-Pinto (1929a) did not fail to reinforce congress attendees concerns’ about hygiene and education, although he held that these issues were not related to the science founded by Francis Galton.

Even greater efforts to disseminate Mendelian eugenics among Brazilians can be found in the work of Renato Kehl. During his opening address at the Brazilian Eugenics Congress, Kehl

took issue with those who advocated environmental reforms as eugenic practices capable of improving future generations. In his words, despite the “advances” achieved by civilization in recent centuries, humanity remained the “victim” of barbarism, crime, “animality, and ferocious struggle” (Kehl, 1929, p.45-47). This finding served to show:

that education and religious injunctions did not suffice to curb passions or make humanity better, more well-balanced, or more philanthropic, because man remained a slave to his very specific nature, impervious to simple moral and mental influences, chained to a force that subjugates him biologically, that casts his temperament, his character, inexorably: heredity (p.47).

While Kehl agreed that education was the “definitive fulcrum of social progress,” he thought that until the perfection of human beings was seen from a strictly biological perspective, as proposed by Mendelian eugenics, the problems of degeneration would continue to plague every nation in the world (Kehl, 1929, p.47-48). In tune with the projections of German eugenicists, Kehl argued that there would be no solution for “social woes” outside the laws of biology. In his words, all “forms of government ‘fail’ if they do not draw inspiration from the precepts of the science of life” and, further, that “policies par excellence are biological policies, eugenics-based policies” (Kehl, 1933, p.31; emphasis in the original).

The controversies between Renato Kehl and Edgard Roquette-Pinto

The radical nature of Kehl’s arguments sparked major debate during the first Brazilian Eugenics Congress, adding more fuel to his conflicts with Roquette-Pinto. The controversies had much to do with the publication of *Lições de eugenia*, released during the event. In its pages, Kehl defended a rigid policy of racial selection, grounded in measures implemented in nations like Germany and the United States. Kehl thought the Brazilian government should follow the examples set by the eugenics movements in these countries and move to ban undesirable individuals from reproducing by enacting strict eugenic policies to limit the birth of degenerates, delinquents, and the mentally ill (Kehl, 1929, p.155-156). Based on determinist and racist theories – many inspired by German Aryanism – *Lições de eugenia* also offered a rather pessimistic interpretation of Brazilian racial miscegenation. From the viewpoint of Kehl (1929, p.188-191), Brazil represented “a great laboratory of diverse elements,” home to a “heterogeneous racial mixture” that was responsible for Brazilians’ trademark “promiscuity of temperaments, elusive nature, vague and inconstant mentality, and political and social vices.” The anthropological characteristics of a good share of Brazil’s mixed-race population were so unsuitable, he said, that they yielded an “unconsolidated, weak product, lying halfway between its two constituent elements.”

Although Kehl had some heavyweight allies in the defense of these ideas – like Monteiro Lobato, Azevedo Amaral, and Gustavo Barroso – they collided head on with the projects put forward by Roquette-Pinto and his colleague at the National Museum, anthropologist Álvaro Fróes da Fonseca (Souza, 2006, p.150-155). In fact, the most trenchant critique of the theses laid out in *Lições de eugenia* was lodged by Fróes Fonseca. During his talk at the first Brazilian Eugenics Congress, Fróes da Fonseca (1929, p.79) objected to Kehl’s condemnation of race crossings and Brazil’s mixed-race population; he stressed that it was a well substantiated fact

“that the intermingling of the races [*mestiçagem*] does not generate conditions of inferiority for us and does not create any insolvable problem for us.” In strictly scientific settings, Fonseca went on to say, citing the work of Franz Boas, there was no longer anyone who lent credence to the alleged inferiority of blacks, Indians, and those of mixed race, an argument voiced by “those who lauded Aryan blood” (Fonseca, 1929, p.78). In the eyes of Fróes da Fonseca, Kehl’s ideas were nothing more than doctrinaire ideology and theses that had been “twisted and altered” by prejudice to serve his purposes. He lamented even more the fact that the “false science” spread by Kehl was reaching “proselytes” and “repeaters,” many of whom were willing to broadcast this bias among Brazilian intellectuals and the public at large.

Like Fróes da Fonseca, Roquette-Pinto (out. 1931) felt it was the role of physical anthropology to disprove those who relied on a “false biology” (like that practiced by Kehl, for example) to condemn miscegenation. In his words, “Brazilian anthropology negates and demoralizes the pessimists” because research conducted at the National Museum had demonstrated that the racial formation of the Brazilian population was consonant with what science wanted (Roquette-Pinto, 1929a, p.147). In point of fact, the brand of anthropology practiced at this institution, especially by Roquette-Pinto and Fróes da Fonseca, was meant to redeem the Brazilian man, and the nation, by constructing a scientific interpretation capable of countering the most extreme eugenic discourses and racial ideologies. As argued by Ricardo Ventura Santos (2002, p.118), Roquette-Pinto thought that it would be possible not only “to consider the direction Brazil was taking as a nation but also to engage in direct action, through science and technology, in quest of solutions to concrete national problems.”

Although Roquette-Pinto himself considered eugenic discourse to be a valuable tool in the effort to regenerate the human, he felt that the more radical projects defended by Kehl were incompatible with the propositions of “true” science. In his opinion, while eugenics was “a fashionable topic” cultivated by renowned scientists, it was far from a mature science, free from preconceived notions. In his opinion, as he had noted about the 1929 congress,² eugenics still stood on the bridge that spanned the gap between “biology and social issues, politics, religion, philosophy, and... prejudice” (Roquette-Pinto, 1929b, p.1). The heated debates, racial prejudice, and confusion over the definition of this concept and application of related measures bore witness to the tremendous ignorance surrounding this science (Roquette-Pinto, 1929b, p.1-6). Like Fróes da Fonseca, Roquette-Pinto believed that only bias and hasty analysis explained why some eugenicists could argue that blacks and those of mixed race were biologically inferior, whether in Brazil or abroad. For these authors, some scientists took a faulty approach to eugenics precisely because it was a “fashionable topic” that involved social issues and controversial policies.

In his review of the book *Prometheus: or, biology and the advancement of man*, by US eugenicist Herbert Spencer Jennings, Roquette-Pinto (out. 1931, p.31) emphasized that “hasty eugenicists” – among whom he included his colleague Kehl – were eager to ban “the weak” from reproducing and to boost reproduction of “the best” at any price. The problem, Roquette-Pinto stated, echoing Jennings’ arguments, was that not only did eugenics not know which “the best” were, it also lacked the power to control a couple’s genetic combinations to the point where they would produce nothing other than a eugenically perfect child. Since every

individual is the result of “an inextricable and always variable biochemical complex,” eugenic reproduction simply did not afford the genetic stability envisioned by many eugenicists (Roquette-Pinto, out. 1931, p.31).

In an article published in the mid-1930s, Roquette-Pinto posed the question of how much humanity actually stood to gain from the genetic alterations proposed by certain advocates of eugenics. While he said that the “eugenic ideal” was to work toward the steady perfecting of humanity, he did not agree with the “methods of selection and crossings” suggested by the “hasty eugenicists” who wanted to improve the human species the same way that plants and animals were improved. Even the benefits of genetic modifications obtained through zoology research, according to Roquette-Pinto (25 mar. 1936), could be questioned, since the eventual consequences of this interference could not be known. Moreover, when it came to improving humans, the anthropologist stressed that one should not hide the fact that if biology managed to offer “certain secure solutions to some social problems, on the highest planes, solutions could not always be purely biological” (p.180).

The disparities between Roquette-Pinto and Kehl appeared yet again in discussions over eugenic sterilization. In January 1934, in response to the sterilization laws enacted in Germany under Adolf Hitler, the newspaper *O Globo* launched a survey of the topic among Brazilian physicians, anthropologists, and eugenicists.³ Once again, Brazilian specialists turned their eyes to the German model, precisely at one of the most symbolic moments in world history, when the Nazi government was promoting violent eugenic practices that would culminate in the persecution and extermination of Jews, homosexuals, and non-Aryan ethnic groups. It should be remembered that Eugen Fischer, often cited by Brazilian eugenicists, sat on a German genetic health court and helped oversee the Nazi government’s policy of biological Aryanization (Proctor, 1988, p.40-41; Steinmetz, 2007, p.232-233).

In addition to Roquette-Pinto and Kehl, the newspaper *O Globo* also heard from eugenicists Pacheco e Silva, Leonídio Ribeiro, Leitão da Cunha, and Oscar Fontenelle, well-known figures in the medical community and eugenics movement. The interviewees had not only participated in the first Brazilian Eugenics Congress in 1929 but were also longtime enthusiasts of discussions of race and eugenics in Brazil. The survey launched by *O Globo* detected heavy support for Germany’s sterilization laws, except by Roquette-Pinto and Leitão da Cunha, both of whom favored sterilization in certain cases but still cast doubts on the benefits of the measure.

The first intellectuals interviewed were Roquette-Pinto and Kehl (on January 2 and 3, 1934, respectively). This can be interpreted as recognition of their status as authorities on the topic, although it may also have been a newspaper strategy to draw more attention to the survey, given that the two men’s clashes of opinion were public knowledge. According to Roquette-Pinto (2 jan. 1934), the issue of sterilization should be viewed as an “extremely complex” matter, since science had not yet been able, with any certainty, to identify people who displayed “good” or “bad heredity.” In some cases, he said, sterilizing a degenerate might well mean “depriving future humanity of some men of genius,” given that an alleged degenerate might be a carrier of hereditary genius. Moreover, “sterilization in series,” as envisioned by the German government, might easily be misused or might not have the desired effect in terms of perfecting the human species.

Kehl, conversely, had no doubts about the importance of eugenic sterilization in perfecting future generations; rather, he was an entrenched enthusiast of German eugenic policies. Kehl explained that he had laid out his opinion on the topic very clearly in *Sexo e civilização: aparas eugênicas*, which he had released after a trip to northern Europe. He argued, however, that his view was not founded in hasty ideas of “last-minute sentimental inspiration” but rather in “many years of study and observation” (Kehl, 3 jan. 1934, p.1). He said that it was completely reckless to decry sterilization as an absurdity – an allusion to the interview given one day earlier by Roquette-Pinto – “especially when you consider that it has been adopted in a country like Germany, where such matters are not decided like some impromptu speech” (p.1). Disagreeing with Roquette-Pinto, Kehl felt there was no major challenge to identifying appropriate sterilization cases, since eugenicists could make this call backed by rigorously scientific criteria that pinpointed any “flaws” or “anomalies” of a hereditary nature. From his viewpoint, since sterilization was a simple and judicious measure, there was no doubt that it would eventually become a reality in Brazil as well (Kehl, 3 jan. 1934).

Mirroring the Brazilian Eugenics Congress, the eugenics movement was divided between those who were for harsher eugenic measures and those who opposed such radical projects. Generally speaking, the defense of these conflicting projects derived from very distinct interpretations of the origin of Brazilian problems. According to the group led by Kehl, Brazil’s great woe was a “question of race,” and therefore eugenics should at all costs bar “undesirables” and members of races deemed heterogeneous from reproducing. The eugenic ideal championed by this group was the gradual homogenization of the Brazilian population, even if this meant resorting to “unpopular” measures like mandatory sterilization, racial segregation, and a rigorous process of immigrant selection. Conversely, the group more aligned with Roquette-Pinto held that Brazil’s dilemmas did not stem from the racial or biological makeup of its people, just as they had argued during the congress. The country’s greatest dilemma, as Roquette-Pinto (1929a) had repeated time and again, consisted of its problems of a social and political nature, and this justified opposition to the extreme measures aimed at replacing the Brazilian population with European immigrants.

As mentioned earlier, Kehl’s and Roquette-Pinto’s divergent views on immigration were also rooted in distinct projects. While the former supported racial eugenic selection, based on principles of racial inequality, the latter contended that the criteria for selecting immigrants should be grounded in an analysis of the abilities, physical complexion, and health of individual immigrants, whatever their racial origin. This clash was quite apparent in the papers presented at the first Brazilian Eugenics Congress, especially in the discussions triggered by Azevedo Amaral’s lecture, in which he called for a strict and selective immigration process grounded primarily in eugenic criteria regarding racial superiority. In the opinion of Azevedo Amaral (1929, p.333), immigration should be seen as a eugenic problem of utmost importance to the formation of the Brazilian nation, and this justified enforcement of a rigid policy of racial selection, particularly in terms of biological abilities. In his opinion, Brazil should do whatever it took to bar “undesirable” immigrants, principally blacks and Asians, since mixing with these groups would engender inferior, degenerate offspring. Furthermore, he believed that not even eastern or southern European immigrants, who he saw as racially

inferior to northern Europeans, would serve the purposes of the settlement of the Brazilian territory. From a eugenics perspective, he felt that the most desirable immigrants would be from northern Europe, like Germans and Scandinavians, who displayed more “satisfactory” hereditary traits (p.335-338).

As a longtime proponent of a strict racial segregation policy, Kehl favored Azevedo Amaral’s proposals and sided with prominent figures like Miguel Couto, Xavier de Oliveira, Oscar Fontenelle, and Ernani Lopes. For them, it was primarily a matter of prohibiting the entrance of immigrants who would make no contribution to the racial purification of Brazil. Opposition to this proposal was led by Roquette-Pinto and Fróes da Fonseca, with the backing of Fernando da Silveira, Levi Carneiro, Belisário Penna, and Fernando Magalhães, who believed that a rigid racial selection policy was an attack on Brazilians themselves, since most of the country’s population was miscegenated. In his talk at the Brazilian Eugenics Congress, Roquette-Pinto observed that the country’s population was not dysgenic, as some eugenicists would have it; rather, he emphasized, anthropology “proves that the Brazilian man needs to be educated and not replaced” (Roquette-Pinto, 1929a, p.147).

Over the following years, immigration was a controversial topic both for authorities concerned with the supply of labor power and Brazil’s production and for those whose concern lay in “the problem of race” and settlement of the national territory. As historiography has shown, both sides felt that immigration would play a determinant role in Brazil’s civilizing process, its economic progress, and the very formation of nationhood, thereby justifying the discourse that defended the entrance of European immigrants, who were perceived as better fit to achieve these goals (Geraldo, 2007, p.11-29; Seyferth, 2008, p.147-153). In the 1930s, arguments for selective immigration were largely grounded in questions that had been raised during the Eugenics Congress and that served as guidelines for the projects then being advanced. Since the “Revolution of 1930,” as shown by Endrica Geraldo (2007, p.60-67), the Getúlio Vargas government had made the regulation of immigration one of its priorities. Concern over this matter was so heightened that it sparked heated debate during the 1933-1934 Constituent Assembly. In his speech before the opening of the assembly, Vargas observed that the entrance of foreigners had to be regulated and stressed that immigration policy could not continue in the direction it had been headed under previous administrations (p.66-67).

In the prelude to passage of the constitution of 1934, the immigration debate was by far the topic that ignited the greatest tensions among the congressmen responsible for drafting the country’s new charter. For a group of influential deputies like Miguel Couto, Xavier de Oliveira, Arthur Neiva, and Pacheco e Silva, all of whom were physicians and intellectuals with ties to the eugenics movement, the regulation of immigration pursuant to racial criteria was crucial to the future of the country. During the plenary session in the lower house, some of the discussions were guided by the eugenics perspective, and Kehl and Roquette-Pinto were frequently cited to legitimize arguments in favor or against certain selective immigration policies. Deputy and eugenicist Xavier de Oliveira, who was close to Kehl, actually mentioned German anthropologists and eugenicists like Eugen Fischer, Alfred Ploetz, and Fritz Lenz. Oliveira wanted to legitimize the idea of racial barriers and, because Roquette-Pinto was often referenced by the deputies who repudiated radical selective

immigration measures, he also wanted to demonstrate that, in terms of interracial crossings and eugenics questions, the authority of this Brazilian anthropologist could be challenged by “that of foreigners of great worth,” (Oliveira, 1934, p.146).

The names Renato Kehl and Edgard Roquette-Pinto were so entwined with this debate that the Vargas administration decided to appoint both to a sub-committee charged with reviewing the immigration laws passed by the 1933-1934 Constituent Assembly. The committee was chaired by sociologist and historian Oliveira Vianna, who was well known for his work on the racial question in Brazil and was a longtime ally of Kehl in the eugenics movement. The results of this committee, as observed by Souza (2011), exacerbated the hard feelings between Kehl and Roquette-Pinto. Because of their intellectual and ideological differences, they ran into all sorts of clashes and impasses when attempting to define the terms of the draft bill on “the qualitative selection of immigrants.” It was no accident that Roquette-Pinto apparently did not take part in the final editing of the bill that was submitted to Oliveira Vianna but instead limited himself to offering observations and revisions that addressed certain aspects contradictory to his vision. In his editing remarks, he was quite critical of the final product, since the report drawn up by Kehl urged enactment of radical eugenic selection measures based on racial criteria and on the alleged existence of superior and inferior races, a principle that the anthropologist from the National Museum had always rejected.⁴

Final considerations

As we have seen, the eugenics model adopted by Renato Kehl and the one embraced by Edgard Roquette-Pinto differed in many regards while displaying similarities in others. When the question was how to define eugenic science or how to view evolutionary biology, both agreed that eugenics was a science whose boundaries were defined by Mendelian genetics and had nothing to do with the neo-Lamarckian concepts or hygienist environmentalism promoted by a good share of the Brazilian medical community. However, when the debate was over different forms of eugenic intervention, they found themselves in diametrically opposed camps. While Kehl defended the enforcement of negative eugenics and proposed radical measures like marriage restrictions and racial selection and segregation, his opponent believed that racial miscegenation did not result in degenerate populations or “inferior racial types,” consonant with his own analyses of mixed-raced Brazilians. As an advocate of positive eugenics, Roquette-Pinto put his trust in eugenics education as a way of encouraging conscious marriage and conscious human reproduction born from a commitment to produce “healthy offspring,” regardless of racial origin (Roquette-Pinto, 1927a, 1929a).

Contrary to what has been argued by Nancy Stepan (2005), Roquette-Pinto’s anti-racism was not influenced by the anthropology of Franz Boas, a German anthropologist who settled in the United States and acquired fame for his introduction of cultural anthropology and critiques of harsher eugenic measures. Although the Brazilian anthropologist had been familiar with the work of Boas since the early 1910s, his anti-racism and his approach to eugenic ideas were not related to Boas’s influence but to a reading of Mendelian geneticists and physical

anthropologists, mainly from the United States and Germany. Roquette-Pinto himself made it a point to declare that between Boas's anthropology and Davenport's genetics, he preferred the latter's Mendelian observations over the former's conclusions about the relation between organism and environment (Roquette-Pinto, 1929a, p.139).

Unlike Roquette-Pinto, Kehl, through his contact with the German and US schools, came to conjoin Mendelian genetics and scientific racism, feeding a radical authoritarian program in eugenics. In books and articles published in the *Boletim de Eugenia* and in the Rio de Janeiro press, Kehl (21 abr. 1932, p.7) repeatedly cited the international institutions that had been employing radical measures "to cut to a minimum human residue, made up of the unfit, degenerate, and criminals." In a book published in 1933, he listed the "successful" eugenics programs implemented in the United States, Germany, England, and Sweden and emphasized that racial segregation and eugenic sterilization policies should be implemented in Brazil, especially because of the "undesirable crossings" responsible for engendering a "largely degenerate population" (Kehl, 1933, p.183-199). In critiquing the proponents of racial miscegenation, in a clear reference to Roquette-Pinto himself, Kehl pointed to the "rigor of the Mendelian formulas" adopted by "reliable world-renowned authorities" like Herman Lundborg, Fritz Lenz, Ernst Rüdin, and Jon Alfred Mjøen, authors who drove home the need to impose extreme measures in racial selection and segregation (p.202-203).

As I have endeavored to show, although Kehl and Roquette-Pinto took different paths in their support of eugenics programs, their references derived from a close dialogue with Anglo-Saxon and German eugenics and not with Latin eugenics, as suggested by Nancy Stepan. While the concept "Latin eugenics" undoubtedly affords an interesting approach to the eugenics model produced in Brazil and the rest of Latin America, above all in relation to the influence of neo-Lamarckian evolutionism and the role played by Catholic tradition in shaping the region's eugenics movements, the use of this concept ultimately conceals the broader international exchange between Brazilian eugenicists, anthropologists, and geneticists and eugenics movements outside of the Latin stream. By extending the analysis beyond Latin eugenics, we gain a more nuanced understanding of the circulation of ideas and the complex international networks with which Brazilian eugenicists were involved in the early decades of the twentieth century, as I have endeavored to show through Kehl's and Roquette-Pinto's work. Furthermore, recognizing this dialogue requires us to take a fresh new look at the very history of biology in Brazil, since it means we must consider the role of Mendelian theories in the fields of eugenics, genetics, medicine, and physical anthropology.

Conversely, associating so-called Latin eugenics with a softer model of eugenic thought can also conceal the fact that Brazilian researchers like Kehl embraced scientific racism and radical programs for eugenic intervention, particularly when it came to racial segregation and eugenic sterilization policies. As we saw in the survey conducted by the newspaper *O Globo* in 1934, most Brazilian eugenicists not only supported the use of eugenic sterilization but also applauded the eugenics programs enacted by Nazi Germany, which were to have a catastrophic outcome. Similarly, debates over marriage restrictions, the segregation of the mentally ill, sex education, eugenic abortion, and selective immigration occupied an important place in the programs put forward by the Brazilian eugenics movement. Although

Roquette-Pinto had influential allies in his battle against negative eugenics methods – including Gilberto Freyre, Alvaro Fróes da Fonseca, and Arthur Ramos – many Brazilians saw these more extreme proposals as viable alternatives for “eradicating” the alleged woes caused by the country’s unbridled miscegenation and social deprivation.

NOTES

¹ On the activities of the Brazilian Mental Hygiene League and the various applications of eugenics in the field of psychiatry, see Reis (1994) and Wegner and Souza (2013).

² As chair of the first Brazilian Eugenics Congress, Roquette-Pinto may have intended that this text be read at some point during the event, although nothing is found in the annals. It should also be remembered that the text was published as one of the chapters of *Ensaios da antropologia brasileira* (Roquette-Pinto, 1933).

³ The sterilization laws enacted by Nazi Germany were also reported and debated in scientific journals like *Archivos Brasileiros de Hygiene Mental*, which published the full text of the law in early 1934. According to an editorial by the journal, it was “extremely opportune” to translate the “great new German law on the sterilization of degenerates;” the commentary also pointed out that the whole world was turning its attentions to eugenics (A Lei..., 1934, p.54). On this debate, see Wegner and Souza (2013).

⁴ Part of the records produced by the committee, including the draft of the final bill, can be found in Edgard Roquette-Pinto’s personal archives, held by the Brazilian Academy of Letters’ Memory Center (Centro de Memória da Academia Brasileira de Letras). On this debate, see Souza (2011).

REFERENCES

- A LEI...
A lei alemã de esterilização dos doentes transmissores de taras. *Archivos Brasileiros de Hygiene Mental*, v.5, n.1, p.54-55. 1934.
- AMARAL, Azevedo.
O problema eugênico da imigração. *Actas e Trabalhos do Primeiro Congresso Brasileiro de Eugenia*, v.1, p.327-340. 1929.
- CUNHA, Olivia Maria Gomes da.
Intenção e gesto: pessoa, cor e a produção cotidiana da (in)diferença no Rio de Janeiro, 1927-1942. Rio de Janeiro: Arquivo Nacional. 2002.
- DUNN, Leslie Clarence.
William Ernest Castle: 1867-1962. Washington: National Academy of Sciences. 1965.
- FONSECA, Álvaro Fróes da.
Os grandes problemas da antropologia. *Actas e Trabalhos do Primeiro Congresso Brasileiro de Eugenia*, v.1, p.63-86. 1929.
- GERALDO, Endrica.
O “perigo alienígena”: política migratória e pensamento racial no governo Vargas (1930-1945). Tese (Doutorado em História) – Unicamp, Campinas. 2007.
- KEHL, Renato.
Lições de eugenia. 2.ed. Rio de Janeiro: Livraria Francisco Alves. 1935.
- KEHL, Renato.
Devem ser esterilizados os enfermos incuráveis? (Inquérito entre os cientistas brasileiros). *O Globo*, Rio de Janeiro. 3 jan. 1934.
- KEHL, Renato.
Sexo e civilização: aparas eugênicas. Rio de Janeiro: Livraria Francisco Alves. 1933.
- KEHL, Renato.
Pelos gerações futuras: esboço de um programa avançado de eugenia nacional. *Jornal do Comércio*, Rio de Janeiro. 21 abr. 1932.
- KEHL, Renato.
Lições de eugenia. Rio de Janeiro: Editora Livraria Francisco Alves. 1929.
- KEVLES, Daniel.
In the name of eugenics: genetics and the uses of human heredity. Berkeley: University of California Press. 1985.
- LIMA, Nísia Trindade; SÁ, Dominichi Miranda (Org.).
Antropologia brasileira: ciência e educação na obra de Edgard Roquette-Pinto. Belo Horizonte: UFMG; Rio de Janeiro: Fiocruz. 2008.
- MASSIN, Benoit.
From Virchow to Fischer: physical anthropology and “modern race theories” in Wilhelmine Germany. In: Stocking Jr., George (Ed.). *Volksgeist as method and ethic*. (History of anthropology, v.8). Madison, Wisconsin: The University of Wisconsin Press. p.79-154. 1996.

- OLIVEIRA, Antônio Xavier de. *O problema imigratório na Constituição Brasileira: razões americanas de uma campanha parlamentar de brasilidade*. Rio de Janeiro: A. Coelho Branco Francisco Editor. 1934.
- PROCTOR, Robert. From anthropology to rassenkunde in the German anthropological tradition. In: Stocking, George (Ed.). *Bones, bodies, behavior: essays on biological anthropology*. (History of anthropology, v.5). Madison: The University of Wisconsin Press. p.138-179. 1998.
- PROCTOR, Robert. *Racial hygiene: medicine under the nazis*. Cambridge: Harvard University Press. 1988.
- REIS, José Roberto Franco. *Higiene mental e eugenia: o projeto de "regeneração nacional" da Liga Brasileira de Higiene Mental (1920-30)*. Dissertação (Mestrado em História) – Unicamp, Campinas. 1994.
- ROQUETTE-PINTO, Edgard. *Rondonia: anthropologia-ethnographia*. Rio de Janeiro: Fiocruz. 2005.
- ROQUETTE-PINTO, Edgard. Os fundamentos biológicos da sociologia. *Jornal do Comércio*, Rio de Janeiro. 25 mar. 1936.
- ROQUETTE-PINTO, Edgard. Devem ser esterilizados os enfermos incuráveis. *O Globo*, Rio de Janeiro. 2 jan. 1934.
- ROQUETTE-PINTO, Edgard. *Ensaio de antropologia brasileira*. São Paulo: Cia. Editora Nacional. 1933.
- ROQUETTE-PINTO, Edgard. Prometheus: or, biology and the advancement of man – Rio de Janeiro. *Boletim de Ariel*, n.1, p.31-33. out. 1931.
- ROQUETTE-PINTO, Edgard. Notas sobre os typos antropológicos do Brasil. In: *Actas e Trabalhos do Primeiro Congresso Brasileiro de Eugenia*. Rio de Janeiro: [s.n.]. p.119-147. 1929a.
- ROQUETTE-PINTO, Edgard. O congresso de eugenia. Arquivo de Antropologia Física do Museu Nacional, primeiro Congresso Brasileiro de Eugenia, A.F.T 4.1.002, p.6 (Museu de Astronomia e Ciências Afins, Rio de Janeiro). 1929b.
- ROQUETTE-PINTO, Edgard. *Seixos rolados: estudos brasileiros*. Rio de Janeiro: Mendonça, Machado e Cia. 1927a.
- ROQUETTE-PINTO, Edgard. As leis da eugenia. In: Roquette-Pinto, Edgard. *Seixos rolados: estudos brasileiros*. Rio de Janeiro: Mendonça, Machado e Cia. p.163-208. 1927b.
- SANTOS, Ricardo Ventura. Mestiçagem, degeneração e a viabilidade de uma nação: debates em antropologia física no Brasil (1870-1930). In: Penna, Sérgio (Org.). *Homo Brasilis*. São Paulo: Funpec. p.113-129. 2002.
- SEYFERTH, Giralda. Roquette-Pinto e o debate sobre raça e imigração no Brasil. In: Lima, Nísia Trindade; Sá, Dominichi Miranda (Org.). *Antropologia brasileira: ciência e educação na obra de Edgard Roquette-Pinto*. Belo Horizonte: UFMG; Rio de Janeiro: Fiocruz. p.147-178. 2008.
- SOUZA, Vanderlei Sebastião de. *Em busca do Brasil: Edgard Roquette-Pinto e o retrato antropológico brasileiro (1905-1935)*. Tese (Doutorado em História das Ciências e da Saúde) – Casa de Oswaldo Cruz/Fiocruz, Rio de Janeiro. 2011.
- SOUZA, Vanderlei Sebastião de. *A política biológica como projeto: a "eugenia negativa" e a construção da nacionalidade na trajetória de Renato Kehl (1917-1932)*. Dissertação (Mestrado em História das Ciências e da Saúde) – Casa de Oswaldo Cruz/Fiocruz, Rio de Janeiro. 2006.
- SOUZA, Vanderlei Sebastião de; SANTOS, Ricardo Ventura. O Congresso Universal de Raças, Londres, 1911: contextos, temas e debates. *Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas*, v.7, n.3, p.745-760. 2012.
- STEINMETZ, George. *The devil's handwriting: precoloniality and the German colonial state in Quindao, Samoa, and Southwest Africa*. Chicago: The University of Chicago Press. 2007.
- STEPAN, Nancy. *"A hora da eugenia": raça, gênero e nação na América Latina*. Rio de Janeiro: Fiocruz. 2005.
- STEPAN, Nancy. A eugenia no Brasil: 1917-1940. In: Hochman, Gilberto; Armus, Diego (Org.). *Cuidar, controlar, curar: ensaios históricos sobre saúde e doença na América Latina e Caribe*. Rio de Janeiro: Fiocruz. p.331-391. 2004.
- STEPAN, Nancy. Eugenesia, genética y salud pública: el movimiento eugenésico brasileño y mundial. *Quiipu*, v.2, n.3, p.351-84. 1985.
- STERN, Alexandra. *Eugenic nation: faults and frontiers of better breeding in Modern America*. Berkeley: University of California Press. 2005.

STOCKING, George W.

Race, culture and evolution: essays in the history of anthropology. Chicago: The University of Chicago Press. 1968.

WEGNER, Robert; SOUZA, Vanderlei Sebastião de.

Eugenia “negativa”, psiquiatria e catolicismo: embates em torno da esterilização eugênica no Brasil. *História, Ciência, Saúde – Manguinhos*, v.20, n.1, p.263-288. 2013.

WEISS, Sheila Faith.

The race hygiene movement in Germany, 1904-1945. In: Adams, Mark (Org.). *The Wellborn Science: eugenics in Germany, France, Brazil and Russia.* New York: Oxford University Press. p.8-68. 1990.

