

Bodies of the Future in Ideal Societies: Representations of Eugenics in Brazilian Modernist Literature

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ABSTRACT

This article aims at analyzing the representations of eugenics in two utopian novels of Brazilian modernist literature: *A Amazônia Misteriosa* (1925) by Gastão Cruls and *O Presidente Negro ou o Choque das Raças* (1926) by Monteiro Lobato. Diverse and contradictory, these representations are proposals for radical and aesthetic eugenics, shaping a dense arena where fictional narratives fight each other to lure readers into certain views on nationality and science.

Keywords:

Eugenics; Modernist literature; Utopias; Brazil

RESUMO

Este artigo pretende analisar as representações de eugenia em duas obras da literatura utópica modernista brasileira, *A Amazônia Misteriosa* (1925) de Gastão Cruls e *O Presidente Negro ou o Choque das Raças* (1926) de Monteiro Lobato. As representações são diversificadas e contraditórias, propostas de eugenias radicais e estéticas, compondo uma densa arena de lutas entre narrativas ficcionais que pretendem seduzir o público leitor para determinadas visões de nacionalidade e ciência.

Palavras chave:

Eugenia, Literatura modernista, Utopias; Brasil

Bodies of the Future in Ideal Societies: Representations of Eugenics in Brazilian Modernist Literature

This article aims at analyzing the representations of eugenics in two novels of Brazilian Modernism utopian literature: *A Amazônia Misteriosa*¹ (Mysterious Amazonia) published in 1925 by Gastão Cruls and *O Presidente Negro ou O Choque das Raças*² (The Black President or The Clash of Races), published in 1926 by Monteiro Lobato.³ Incorporating fantastic and utopian adventures, these novels, whose target public were the young readers, both share and criticize “the idea that through scientific means it is possible and desirable to improve the nature of mankind and thereby society”⁴. Representations of science and technology differ in both, shaping a dense arena where fictional narratives vie to attract readers to certain views on nationality and science. An important aspect in these novels is the appeal to scientific interventions, such as eugenics, upon the individual and collective bodies as an instrument of order and social regeneration.

The aspiration to organize a new social order by appealing to emergent areas in experimental biology is similar to many aspects of the structure of utopian thought. The latter are present in the theoretical structure of eugenic science as well as in fictional discourses that attempt to persuade about the political viability of this view of the future. These fictional narratives are a part of the core of eugenic conceptions⁵. Examples of this pattern are two utopian fictional narratives by Francis Galton, the pioneer of modern eugenics: *The Eugenic College of Kantsaywhere* and *The Donoghues of Dunno Weir*⁶.

Like Galton, both modernist authors approached in this paper, incorporated and trans-created concepts of experimental biology and the eugenic discourse on the body, composing fictional narratives about the present and the future. As Donald Childs remarks, “although it by no means it earned everyone’s trust and support, the science of eugenics and the social-policy debates to which it gave rise interested everyone in the early years of the twentieth century”⁷. This wide interest was held by different ideological circles, from the conservative and authoritarian - usually considered more connected to eugenics - to the left-wing ones, such as Fabian socialism in England, or even anarchist factions, like the French individualist anarchists in the period between wars⁸.

We can say that the relationship between eugenics and utopia began before the historical period under consideration. According to Patrick Parrinder, it would be even possible to state that “traditional utopia depends on eugenics just as it depends on stability, social stratification, and the abolition of private property”⁹. From different perspectives and social contexts, Plato, Thomas More and Tomasso Campanella had already conceived a relationship between utopia and the control of reproduction, aiming at improving the social body. Nevertheless, with the rise of eugenics as a social movement after the 1870s, most utopias had eugenics as an element of their constitution¹⁰. They converged on the

¹ G. Cruls, *A Amazônia Misteriosa* (Rio de Janeiro: José Olympio, 1973).

² M. Lobato, *A Onda Verde / O Presidente Negro ou o Choque das Raças* (São Paulo: Brasiliense, 1969).

³ M. Del Picchia, *A República 3000* (São Paulo: Companhia Editora Nacional, 1930).

⁴ C. Nordlund, “Endocrinology and Expectations in 1930s America: Louis Berman’s Ideas on New Creations in Human Beings”, *British Journal of History of Science*, 40 (1, 2007), 84.

⁵ For a discussion on the role of scientific and technological narratives in the construction of reality, see L. Sfez, *Técnica e Ideologia: Uma Questão de Poder* (Lisboa: Piaget, 2002).

⁶ F. Galton, “The Eugenic College of Kantsaywhere”. *Utopian Studies* 12 (2, 2001): 191-209.

⁷ D.J. Childs, *Modernism and Eugenics* (Cambridge/Mass.: Cambridge University Press, 2001), 9.

⁸ R. Sonn, “Your Body is Yours: Anarchism, Birth Control, and Eugenics in Interwar France”. *Journal of the History of Sexuality*, 14 (4, 2005): 415-432.

⁹ P. Parrinder, “Eugenics and Utopia: Sexual Selection from Galton to Morris”. *Utopian Studies* 8 (2, 1997): 1-12.

¹⁰ *Ibid.*

belief, typical of large sectors at the end of the 19th and the beginning of the 20th century, that “science and rationality must subdue the inexorable demand of blind nature and human instinct”, allowing for social progress¹¹.

The authors involved made the appropriation of the eugenic discourse an attempt to understand and intervene upon social reality, trying to shape a political alternative, a new *technopolis*. Therefore, it is not surprising that both novels here discussed present utopian or dystopian dimensions.

It is important to highlight the significant political component of utopian thought in this context. According to Fredric Jameson, utopia has “always been a political issue, an unusual destiny for a literary form”.¹² Raymond Trousson also argues that literary utopias need to be inscribed within the network linking contemporary political, historical and ideological systems¹³. When it proposes alternative economic and social models, utopia has the “essentially epistemological function” of providing “cognitive estrangement”¹⁴. This political program is, therefore, manifested as a representational framework, derived from the characteristics of the utopian text, a *collage* of the most fragile “positive signals from the past and the future”¹⁵. It is essential to bear Jameson’s methodological observation in mind: “the utopian text is, accordingly, not to be seen as a vision or a complete representation but as a semiotic operation, a process of interaction between contradictions and contraries, which generates the illusion of a model society”¹⁶.

These Brazilian utopias were important elements in a historical moment characterized by political conflict including *tenentismo* (a political-military movement); an increase in social unrest -growth of the working-class and feminist movements, the universal suffrage movement and the proposals and efforts to implement many modernization projects in the socio-cultural area. In Brazil, within the context of the Old Republic prior to the Revolution of 1930, eugenics brought the promise of an efficient solution to the social conflicts caused by ethnic and social diversity, through the construction of a new racial and national identity based on a bio-political process of racial homogenization. For Nancy Leys Stepan, eugenics was a scientific and social movement of the first decades of the 20th century, that as a science, it was based on new interpretations of the laws of human heredity and as a social movement, it developed a series of proposals that allowed “society to guarantee constant improvement in its hereditary composition”, by encouraging the reproduction of the most “adequate” and discouraging the reproduction of the “inadequate”¹⁷.

Monteiro Lobato and Gastão Cruls are examples of Latin-American intellectuals influenced by the eugenic discourse who, according to Stepan, “made use of the supposedly universal discourse of science to interpret modernity and progress”¹⁸. If eugenics was a “discursive project to structure a cultural prescription and medical and moral investigation”¹⁹, in the novels here analyzed, it meets and interacts with modernist discourses about Brazilian uniqueness and the quest for national identity. Nevertheless, just

¹¹Sonn, 418. Lyman Tower Sargent observes that despite this tendency to exalt science in 19th century utopias, ambivalence regarding the adequate use of science is also present in the period. Ambivalence would turn into disappointment in 20th century utopias; see “Utopias and Dystopias of Science”, *Morus: Utopia and Renaissance*, 4 (2007): 79-91.

¹² F. Jameson, F., *Archaeologies of the Future* (New York: Verso, 2005), XI.

¹³ R. Trousson, *História de la Literatura Utópica* (Barcelona: Península, 1995), 27.

¹⁴ Jameson, XIV.

¹⁵ *Ibid.*, 29.

¹⁶ *Ibid.*

¹⁷ N.L. Stepan, *A Hora da Eugenia: Raça, Gênero e Nação na América Latina*. (Rio de Janeiro: Editora Fiocruz, 2005), 9.

¹⁸ *Ibid.*, 14.

¹⁹ *Ibid.*, 15.

as eugenic discourses in Latin America were far from monolithic, these novels point out to different views on eugenic policies, albeit based on a same discursive substratum of racial nature. These approaches correspond to different views on science as well as on nationality and modernity. Monteiro Lobato would manifest frantic exaltation whereas Gastão Cruls total denial of eugenics. In this way, they resemble the modernist authors discussed by Childs in *Modernism and Eugenics*, “there were many ways, then, in which eugenics could be incorporated into one’s understanding of the past and the present and, more interestingly and more controversially, into one’s vision of the future – whether that vision was progressive or reactionary”²⁰.

Eugenics and organic idealism in *Choque das Raças*

In *O Presidente Negro*, Lobato, as many people at that time, Monteiro Lobato shifted from his earlier conception of sanitation as a strategy²¹ for the construction of a modern nation to eugenic techniques, which are omnipresent in the novel²². The book also points out to the importance of the categories of gender and race for the understanding of eugenic discourses.

This movement of ambiguous radicalization can be partially understood as a function of the historical context in which the novel was written. This book was the starting point of Monteiro Lobato’s editorial project in the United States. The main purpose in including strong elements of scandal in the novel, especially regarding racial issues, was according to Marisa Lajolo²³, the expectation of financial gains. Therefore, and accordingly to testimonies made at that time, the book was written “especially for the American public”²⁴.

On the other hand, the novel also reflected the contradictions of the Brazilian ongoing process of modernization, particularly the local elite’s desire to overcome archaic national structures through scientific reason which, in Lobato’s view, also included the racial aspects.²⁵ Therefore, it was within the context of his search for a new concept of nationality that Lobato first approached the sanitarian movement and later the eugenic conceptions. This was explicit in his correspondence with Renato Kehl, the founder of the Eugenic Society of São Paulo²⁶.

In the novel, the social organization of the United States in 2228 is the result of a systematic application of so-called “organic idealism”, a pragmatic view whose “messiah” was Henry Ford and which overcame European “utopian idealism”. Its main features included standardization of products, dispersion of urban industry, while industry as a

²⁰ Childs, 9.

²¹ This approach to eugenics, hygiene and sanitation within the Brazilian context is also observed by Stepan.

²² In *O Problema Vital* (The Vital Problem) of 1919, published with the support of the Eugenic Society of São Paulo and the Pro-Sanitation League in Brazil, Lobato, influenced by hygienist ideas, brings back his character *Jeca Tatu*, pointing out to the possibility of redemption of rural people by means of sanitation measures. M. Lobato, *O Problema Vital*, in *Mr. Slang e o Brasil e Problema Vital* (São Paulo: Brasiliense, 1968), 221-340, particularly the new version of the short story *Jeca Tatu*, on 329-340.

²³ M. Lajolo, “Negros e Negras em Monteiro Lobato”, in *Lendo e Escrevendo Lobato*, Ed; E.M. Teixeira & M.C.S. Gouvêa (Belo Horizonte: Autêntica, 1999), 65-82.

²⁴ Ed. C.L. Azevedo, M.M. Camargo & V. Sachetta. *Monteiro Lobato: Furacão na Botucindia* (São Paulo: Editora SENAC, 1997), especially the chapter “Um Romance Americano”, on 213-222. Regarding *O Presidente Negro*, see also: P. Diwan, *Raça Pura: Uma História da Eugenia no Brasil e no Mundo*. (São Paulo: Contexto, 2007); R.S. Causo, *Ficção Científica, Fantasia e Horror no Brasil: 1875 a 1950*. (Belo Horizonte:UFMG, 2003); Lajolo; and G.L. Queluz, “Eugenias Modernistas”, *Tecnologia e Sociedade*, 2 (2006): 241-58.

²⁵ Azevedo, 205.

²⁶ Diwan.

whole was considered a product of the harmonious association of the different social classes.

In other words, the rational organization of work was the fundamental basis of American success. The principle of efficiency had permeated the organization of the State, which had taken the entrepreneurial system as its model, together with a representative system based on the rational selection of the most capable, strong and balanced.

Here Lobato dialogs with the various movements of rationalization of work that spread in Brazil in the 1920s, revealing his enthusiasm for Ford. According to Carmem Azevedo, “he found in Ford the synthesis of his struggle for the application of scientific processes to all levels of human activity. Comparing him to Gutenberg – with whom he would share honor in the pantheon of work heroes –, Ford gave the definitive solution to extirpate poverty from the Earth”²⁷. The principle of eugenics is added to the principle of efficiency. Indeed, they are interlaced in the same desire for productivity and social control and the same “organic idealism”²⁸.

In the novel, positive and negative eugenic measures are intermixed in the description of the constitution of the imaginary and powerful America of 2228. Miss Jane, one of the main characters, narrates a bio-political history of the American economic success, assessing it as a eugenic phenomenon. In Miss Jane’s view, the triumph of eugenics in the United States had started with the immigration of the “most eugenic elements of the best European races”, the representatives of a “beautiful indicator of energy” like those onboard the Mayflower.²⁹ To her, the positive eugenic process of gradual improvement of the genetic stock had continued through the institution of restrictive immigration laws at the beginning of the 20th century – and here Lobato certainly refers to an *Immigration Restriction Act*, or *Johnson Act*, approved by the American Congress in 1924³⁰.

Continuing with the analysis of the novel, after the prohibition of immigration expansion, Francis Galton’s eugenic ideas had been systematically implemented by a *Ministry of Artificial Selection*³¹. These measures had essentially been the result of negative eugenics. First, a *Spartan Bill* had become law in 2031, eliminating malformed newborns. Then, the *Owen Law*, or *Race Code*, “had promoted the sterilization of the deviant, the mentally ill, in short, everybody who might cause the future species harm because of bad ancestry”³². In this way, the disabled, the deaf-and-dumb, the lepers and the hysterical, as well as the immoral, the prostitutes, the swindlers, the mystics, the bureaucrats and the rhetoricians would disappear. The aim was the systematic sublimation of quality in detriment of quantity. Once again Monteiro Lobato stresses the eugenic trend of the judicial structure of the state and the imposition of the main eugenic “discoveries” on the population, in an authoritarian way, through the legal structure³³.

The *Race Code* also proposed eugenic measures on sexuality, enacted by the State, regulating the right to reproduction and the control marriages in order to obtain “perfect

²⁷ Azevedo, 205.

²⁸ It would be interesting to carry out studies comparing Monteiro Lobato’s and H. G. Wells’ approaches. The similarities between the proposals for social organization in *O Presidente Negro* and in some of Wells’ texts, like *Anticipations* (1895), are significant, as the same enthusiasm for eugenic practices and the exaltation of efficiency are present. On Wells’ eugenic ideas between 1895 and 1905, see J.S. Partington, J. S. “The Death of the Static: H. G. Wells and the Kinetic Utopia”, *Utopian Studies* 11 (2, 2000): 96-111. The same author analyzes the relationship between Wells and eugenics in the 1930s and 1940s in “Wells Eugenic Thinking of the 1930s and 1940s”, *Utopian Studies* 14 (1, 2003): 74-81. R.S. Causo compares the impact of Wells on several Brazilian novels including *O Presidente Negro* e *A Amazônia Misteriosa*.

²⁹ Lobato, *A Onda Verde*, 203.

³⁰ Stepan, 189. See also Diwan, 36-7.

³¹ Lobato, *A Onda Verde*, 211.

³² *Ibid.*, 212.

³³ V.R.B. Marques, *Medicalização da Raça*. (Campinas: UNICAMP, 1994)

product quality”³⁴. Nancy Stepan argues that matrimonial eugenics, a special form of negative eugenics, was essential to Latin American eugenic conceptions due to the religious and political limitations established by the socio-historical context³⁵. Therefore, medical examinations and marriage certificates played a significant role. This feature had an effect on the novel, in which the couples had to report to a *Eugenometric Cabinet*, in order to have their “eugenic indexes” and “psychosomatic” harmonization analyzed. If approved, they were granted a reproduction license. Still, approved couples were sent to *Erópolis* for their honeymoon, a city with no geometric streets, but irregular meanders, where nuptial nights provided the finest aesthetic sensations, essential for beauty and harmony to be formed at the “first contact of gametes”³⁶. *Erópolis* children would be the new elite, America’s *aristogenia*. This imaginative environmental stimulus to reproductive quality control described by Lobato seems to dialog with Renato Kehl’s neo-Lamarckian synthesis, advocating the idea that environment might influence the germinative plasma of the new generations.³⁷

This eugenic emphasis on sexuality control focused essentially on women, regarded as reproductive bodies that ought to be subjected to hygienic and eugenic processes in order to guarantee the prosperous and biologically homogenized future of the future citizens of the country. Lobato’s reflections on the subject of the female body are shown when the narrator claims that it is through eugenics that women achieve “the restless beauty of Arabian mares”, perfect beauty, without evoking “their grandmothers, some of them thin and others fat, these all buttocks, those like a plank with enormous breasts and horse teeth – a real collection of anatomic monstrosities”³⁸.

Stepan comments on the different understandings of historians of the political meanings of this emphasis on the woman’s body. Some claim a conservative and antifeminist character of eugenics. Others have a more positive view on the extreme care towards women’s and children’s health professed by this eugenic tendency, which would be attractive to reformers and left-wing sectors³⁹. However, our analysis of *O Presidente Negro* demonstrates the author’s clear bias for the conservative and antifeminist position⁴⁰. Lobato seems to rate negatively the debate on women’s vote, a right conquered by American feminists in 1919, and the growth of the feminist movement in Brazil, exemplified by the creation of the *Federação Brasileira pelo Progresso Feminino* (Brazilian Federation for Feminine Progress) organized by Bertha Lutz in 1922, whose main aim was to conquer the right for women’s vote. In the novel, Lobato claims that the main leader of the feminist party developed a revolutionary theory on male and female evolution in *A Simbiose Desmascarada* (Unmasked Symbiosis):

“Miss Elvin’s central idea was that woman was not man’s natural female, as the lioness is to the lion, the hen to the rooster, and the female dolphin to the male dolphin. Man’s natural female had been repudiated a long time ago – and everything would attest to the extinction of such poor animal. He had

³⁴ Lobato, *A Onda Verde*, 282.

³⁵ Stepan, especially the chapter: “Eugenia Matrimonial: Gênero e a Construção da Eugenia Negativa”, 149-186.

³⁶ Lobato, *A Onda Verde*, 246

³⁷ On Renato Kehl’s eugenic conception see, L.A. Castañeda, “Da Eugenia à Genética: Alcoolismo e Hereditariedade nos Trabalhos de Renato Kehl”, in *Anais do VI Simpósio Nacional de História da Ciência e da Tecnologia*, Ed. I. Alves & E.M. Garcia (Rio de Janeiro: SBHC, 1997), 252-257. See also, Diwan, especially the chapter “Renato Kehl, O Médico do Espetáculo”, 123-52.

³⁸ Lobato, *A Onda Verde*, 232.

³⁹ Stepan, 116.

⁴⁰ M.A.A. Teles, *Breve História do Feminismo no Brasil*. (São Paulo: Brasiliense, 2003). A deeper study of gender issues in Monteiro Lobato is required, as ambivalences are evident, e.g. the criticism of feminism is complemented by a defense of matriarchy.

repudiated and kidnapped her, as the Romans had done to the Sabine women, woman being the female of another mammal of slight anatomic similarities to Homo. Miss Elvin thought that these pre-historic ‘Sabine creatures’ were amphibians deprived of their females in the Roman way”⁴¹.

Regarding Miss Benson’s narrative, her friend Ayrton, remarks that “women have not benefited much from the eugenic remedy to their brains”⁴². Miss Benson comments this is not the case, as it is clear that women are different, and concludes her argument by mixing biological and political reasons in an ironical final attack to feminism:

“The culture created by men could not adjust to the woman’s brain, whose very especial function has always been influenced by certain mysterious glands. This is why feminism failed. The only result of all this conflict was the feminist and hateful woman-man who has man’s ideals in her mind (...)”⁴³.

Lobato’s dense mixture of eugenic and endocrinological arguments is an example of the transposition of scientific ideas into the political discourse of several conservative thinkers of the time. Lobato elaborated a fictional narrative, where the legitimacy of the modernizing power of science strengthens the effort to maintain the status of Brazilian elites in the face of the advance of social movements like feminism.

The evolutionist racial bio-history, narrated by Miss Benson, had given rise to the American phenomenon, ridding the country of “poisonous toxins, the Asian spirit of castes and the European clash of classes”.⁴⁴ These toxins would have been the basis for the emergence of social classes, whereas the particular interests of classes had been extinguished by organic idealism, especially negative eugenics. Actually, Jane explains, “all conflicts in the world were the result of antisocial action”, performed by perverted and rhetorical agitators, whose acts had been marked by tumult and anarchy, by the “violence of language and acts”.⁴⁵

Lobato seems to follow the tendency, emphatically pointed out by John Carey, to interpret the interest in eugenics by many modernist poets and novelists as a particular expression of fear of and contempt for the masses, “the principle around which modernist literature and culture fashioned themselves was the exclusion of the masses, the defeat of their power, the removal of their literacy, the denial of their humanity”⁴⁶.

In the novel, Lobato subjects the social issues to the biological sphere. According to him, even poverty, “the cancer seen by old philosophers as human contingency is gradually extinguished while selective progress operates its logical effects”⁴⁷. The new social and productive organization succeeds in eliminating the three burdens of society, “the idle, the sick and the poor”. Rather than being defeated by public, paternalistic and inefficient policies, translated into the old trinomial punishment, remedy and charity, they are extinguished by eugenics, hygiene and efficiency respectively. Thus, in his adoption of more radical eugenics in opposition to social philanthropy, Lobato complements the process of biologization of politics, by classifying the poor as abnormal organisms that can be improved⁴⁸.

⁴¹ Lobato, *A Onda Verde*, 223.

⁴² Lobato, *A Onda Verde*, 223

⁴³ Ibid., 225.

⁴⁴ Ibid, 205

⁴⁵ Ibid, 280

⁴⁶ J. Carey cited, in Childs, 18.

⁴⁷ Lobato, *A Onda Verde*, 282.

⁴⁸ Diwan, 36-37.

Eventually, Lobato would see the racial issue as an obstacle to American social welfare and the arrival of the “blacks, as the only initial mistake in that happy composition”. To Miss Jane, “in this process, racial hatred has been transformed into fecund prophylaxis, as it impedes the denaturalization of races, the free game of cosmic forces (...) Hatred has created the glory of human eugenics in America”⁴⁹. To her, this contradiction, inserted in the very essence of the formation of America, provided its own dynamism. In this way, she observes, Brazil had opted for miscegenation, the worst possible solution within this context. Based on the discourse of some eugenic tendencies stating that Brazilian racial degeneration caused by hybridization was irreversible, Miss Jane claims that racial interaction “has dismissed the possibility of a supreme biological expression in Brazil”.⁵⁰

In the novel, although the black population in the United States is subjected to the same *Race Code*, it actually grows more in proportion than the white one, totalizing one third of the population. In the face of racial conflict, some solutions are suggested: one is the “whites’ solution”, which entails the transfer of blacks to the Amazon River Valley, and the other, is the “blacks’ solution”: to divide America in two, reserving the South for the blacks and the North for the whites. At this point, the black leader Jim Roy takes advantage of the division of whites in two parties - the *Masculine Party* and the *Feminine Party* - and is elected president. Racial conflict increases as result and civil war appears on the horizon.

However, before the new president’s inauguration, incumbent President Kerlog reconciles with the feminist party leader and begins to think on how to prevent the enactment of the “blacks’ solution”. Based on the principle that race reasons are superior to State reasons, he asks the *Supreme White Convention* to pass John Leland’s motion - significantly, the creator of the aesthetic child-care program – according to which “the Race Convention decides to alter Owen’s Law in order to include camouflaged black pigment in the list of degenerations that imply sterilization”⁵¹. The white Americans’ representatives, upon pleading for more radical social control, such as segregation or elimination, in this dystopian text, reflect and deepen the conservative logic of a significant part of Brazilian elites, who believed that social conflict disaggregated the established order.

The “camouflaged black pigment” mentioned was a process of de-pigmentation used by the black population to have a whiter skin. Complete whitening, the new “ideal of the black race”⁵², still required to eliminate Afro hair. This image appeals to a social imaginary where “questions of racial identities have long focused on perceived morphological characteristics; discussions of physical appearance carry particular histories of race and racism”⁵³. Like skin color, “concern with hair, hair growth and hair manipulation often mirrors more general attitudes toward race and racial difference”, expressed for instance in Brazil by the elite’s desire to whiten the Brazilian population⁵⁴. Therefore, the “white convention” tried to find a definitive solution in a time of “apprehension about racial mutability and blending”.⁵⁵

In the novel, hair straightening was, in fact, a lure for actual sterilization, made by omega-rays equipment invented by a certain John Dudley. Three months later, 97% of blacks had been sterilized after submitting to treatment with omega-rays, while unaware of

⁴⁹ Lobato, *A Onda Verde*, 207.

⁵⁰ *Ibid.*, 207

⁵¹ *Ibid.*, 322.

⁵² *Ibid.*, 239.

⁵³ R. Herzig, “Removing Roots: 'North American Hiroshima Maidens' and the X-Ray”, *Technology and Culture* 40 (4, 1999): 723-745, on 727.

⁵⁴ *Ibid.* For a discussion of racial theories in Brazil see: L.M.O. Schwarcz, *Espetáculo das Raças*. (São Paulo: Cia. das Letras, 1993).

⁵⁵ Herzig, 728.

these consequences - including Jim Roy. The eugenic principle of involuntary sterilization had been taken to the extreme of genocide.

The use of omega-rays in the novel seems to parallel the actual properties and uses of X-rays properties and uses in real life. In the United States, in the 1920s, X-rays were used in salons to remove body hair. Moreover, advertisements of some of such salons suggested that X-rays were also able to “banish dark traces”. The name “John Dudley” itself seems to allude to researchers John Daniel and William Dudley, who in 1896 first discovered the hair-removing properties of X-rays after the later had been exposed to their action.⁵⁶ Certainly, Lobato was also informed about the lethal effects resulting from long exposure to X-rays - which was increasingly being perceived by scientists -, and applied them in a ironic way in the book. The imperceptibility of omega-rays to users also seems to reflect the “enigmatic nature” of X-rays for the general public.

The book reaches its anti-climax with Kerlog’s and Jim Roy’s meeting, one day before inauguration, when Kerlog reveals discloses the real effect of omega-rays on the black race, i.e. its extinction. After Kerlog leaves, Jim Roy becomes powerless and dies. With the help of the alliance between the *Male* and *Female Parties*, Kerlog is re-elected, and states, “the black problem has been solved in the best possible way for the superior race, the holder of the supreme scepter of the human race”⁵⁷.

The last obstacle for the development of a super civilization through eugenics had been removed. In Dudley’s words, “the problem that politics has tried in vain to solve could be solved by science in a magic process”⁵⁸. In the novel, the same science that had grounded the process of rationalization of production is a political instrument for intervention on bodies and the pacifier of ethnic-social conflict.

It is important to emphasize the regeneration and transformation of the body through eugenics in the novel. This policy transformed all men into indistinct and powerful units of efficiency and all women into “perfect beauty”⁵⁹. The bodies of the blacks, through a radical intervention – de-pigmentation and hair-straightening - were denied their own features. Miss Jane briefly describes experiments of anatomic separations allowing for the development of new sensorial abilities by breaking the symmetric human design. She describes a certain Doctor Lewis’s experiments: “through a delicate surgical process, he disconnected the optical and auditory nerves, making the two branches autonomous”⁶⁰. Therefore in *O Presidente Negro*, the human body and production technologies are articulated in a new eugenic plenitude, reconfigured in myriads of micro-political relationships and expressed in a new social materiality.

Eugenics and endocrinology in the jungle

The novel *A Amazônia Misteriosa*⁶¹ is connected to the Paradise setting. This is the place where physician Gastão Cruls locates his utopias and dystopias. Indeed, through his literary utopia he diagnoses “forms of insanity affecting entire societies rather than single individuals” and proposes a “metaphorical cure” for the Brazilian society.⁶²

⁵⁶ Ibid., 734.

⁵⁷ Lobato, *A Onda Verde*, 323

⁵⁸ Ibid., 295.

⁵⁹ Ibid., 232.

⁶⁰ Ibid., 184

⁶¹ See: Causo; also, F.L. Iachtechen, “O Discurso Eugênico Através da Literatura: Impressões sobre o Início do Século XX”. (Specialization in Brazilian Literature and National History Monograph, Curitiba: UTFPR, 2005) and F. A. Skorupa. *Viagem às Letras do Futuro* (Curitiba: Aos Quatro Ventos, 2002)

⁶² F. Dietz, “The Images of Medicine in Utopian and Dystopian Fiction”, in *Comparative Essay in Literature and Medicine*, Ed. B. Clarke & W. Aycock (Lubbock: Texas Tech. University Press, 1990): 115-126, on 119.

This is a regressive utopia, a nostalgic view on the golden age of America. The hallucinatory effects of *aiguec*, a drug, are described by Emperor Atauvalpa, who travels with the narrator to Pre-Colombian American civilizations, such as the Aztec and especially the Incan⁶³. The latter is described as a plentiful communist society, “the most beautiful and flourishing empire that has ever existed”⁶⁴, as follows:

“There was no private estate there and there was no reason for any monetary system (...) According to individual needs and under official inspection, there were supplies for all the population in the large warehouses in every city, provided by farmers, workers and craftsmen working for the government. In this way and under such a wise communist regime, the nation was coherent and prosperous, in communion of their assets and beliefs, never hating or having passions caused by social differences and oscillations of fortune.”⁶⁵

These civilizations had been destroyed by conquerors, “explorers”, essentially consisting of “the scoria of the dungeons, the malefactor rabble that had escaped from prison... licentious adventurers (...) – the mob and rabble of the dens”⁶⁶.

The Amazons found by the European scientist Jacob Hartmann in the jungle were vestal virgins of the Sun Temple, who had fled from the conquerors, representing nothing but the reminiscence of “the people, the remains of the whole nation, the despicable remains of the civilizations that were annihilated by the implacable force of a whole nation”⁶⁷. They were, therefore, the degeneration of an original Incan civilization. This makes it possible to understand eugenic practices like the ritualistic choice of sexual partners, the exclusion of male newborns, the disabled and twins in this society. They were simultaneously practices of resistance and maintenance of cultural and religious traditions.

Cruls opposes and relates these eugenic practices to the presence of scientist Jacob Hartmann in Amazonia. These primitive mores belonged within a context of resistance and cultural preservation against imperialistic practices⁶⁸, with no organic rupture with nature despite their connection to a process of degeneration of the civilization.

Hartmann’s presence in Amazonia is justified by the need of “direct experiments on human bodies”, restricted in Europe because “besides exposing individuals to serious risk to life, they cause serious and irreparable damage”⁶⁹. This “need”, caused by the urgency of scientific advance, is satisfied in Amazonia because, in Hartmann words, the area was inhabited by “savage tribes that live in total barbarism and are hostile to their vicinity, in permanent warfare and mutual extermination”⁷⁰. We can say that Amazon is the place where Hartmann, through his experiments, will be able to create a new world, indeed a utopia, impossible to be constructed in the imperfect society of Europe. Certainly, this personal utopia would become a medical dystopia, “depicting man as a fallen creature driven by *hubris* (excessive pride) to transgress what his authors regard as the proper limits for man’s interference in nature”⁷¹.

⁶³ Cruls, 79-88.

⁶⁴ Ibid., 82.

⁶⁵ Ibid., 84-85.

⁶⁶ Ibid., 87.

⁶⁷ On the myth of Amazons see, R. Vainfas, “A Problemática dos Descobrimientos e da Colonização da América”, in *História e Utopias*, Ed. J. M. Monteiro & I. Blaj (São Paulo: ANPUH, 1996): 219-228.

⁶⁸ For a discussion on the role of science and technology in the strategies of Western dominance, see: M. Adas, *Machine as the Measure of Men*. (Ithaca/ London: Cornell University Press, 1994).

⁶⁹ Cruls, 113.

⁷⁰ Ibid., 114.

⁷¹ Dietz, 116.

Hartmann uses the children eugenically discarded by the Amazons to take to extremes his experiences of intervention on the body and its sexual functions, attempting to transcend the species fixation, rejuvenate organisms and reshape bodies with no ethical limitations whatsoever. He introduces himself as the “favorite assistant of Professor Steinach”, who

“for a long time, has been concerned with the study of some very curious issues of great interest to science, such as the problem of the growth of living beings, animal sexuality and the possibility of prolonging life by rejuvenating aged organisms”⁷².

Physiologist Eugen Steinach (1861-1944), from Vienna, was a real historic character, responsible for researches on the role of hormones in sexual definition and rejuvenation and related to a surgical procedure that bears his name and consists of

“(…) a ligature followed by severe vasectomy of the spermatic duct (...) applied only to one of the two spermatic ducts (...) in the event that (aside from sexual ability), the propagating ability is to be conserved, restored and prolonged”⁷³.

This operation was of great interest to eugenicists as it was one of the “measures to encourage fertility in the gifted” as well as a strategy to rejuvenate older people⁷⁴ so as to enable better reproductive quality in larger groups of the elites. Steinach’s experiments were also “cited to support a Lamarckian conception of heredity”⁷⁵.

Encouraged by the simplicity of conducting “experiments on the living”, Hartmann extended his initial interest in researching aphasia to the core of Steinach’s themes, all related to “the glands of internal secretion, growth, sexuality and renovation of organic energies”⁷⁶. This concern of Hartmann with new topics led to experiments on the effects of amino-acids on the growth of children, resulting in immense growth in one child and dwarfism in another. In another experiment, the thyroid and thymus of a child were removed, resulting in disturbs of ossification. It is important to point out that the experiments on aphasia were not neglected by the scientist, despite the difficulty in finding an “exemplar” adult to carry them out. This difficulty did not hinder the trepanning of a Syrian in order to prove Hartmann’s theory on the existence of a main center for words in human brains, surrounded by secondary centers, allowing to learn new languages. The trepanning had partially proven his theory, as the Syrian had forgotten Portuguese. These experiments convinced him that through

“(…) a slight modification in the chemistry of a certain animal species, its intimate constitution is disturbed in such a way that it becomes apt for fecundation by another and totally different species, even by an animal of a totally different class. It is just a matter of the early and slow sensitiveness of the body to moods and secretions of different species, which eventually prepare an internal way in another suitable organism for the development of

⁷² Cruls, 113.

⁷³ Kammerer cited in Childs, 157.

⁷⁴ Steinach had also performed testicle transplants from heterosexuals to homosexuals in order to “cure” homosexuality. He had also carried out experiments on the ovary transplants in male guinea pigs, obtaining “evidences” of fertilization. He was nominated for the Nobel Prize several times. C. Sengoopta, “Secrets of Eternal Youth”, *History Today* 56 (8, ago. 2006): 50-56.

⁷⁵ Childs, 160

⁷⁶ Cruls, 116.

its own seed. This modification in chemistry, perhaps caused by diatheses, hormones and colloidal mycelii, is similar to the sudden mutations observed in the vegetal kingdom”⁷⁷.

On the ground of the “sensitiveness of the body to the germinating element”⁷⁸, Hartmann performed a series of unusual matchings between animals, mainly hybrids of different classes: agouti and sloth, manatee and tapir, or the one originated in the artificial insemination of a gypsy bird and a *jacuaru* (a species of reptile). However, his main experiment in this field was the “hominid” resulting from the artificial insemination of an Indian woman and a spider monkey. Hartmann explains that the success of such experiment was due to the double graft of spider monkey’s ovaries in the Indian woman, presupposing “circulation and innervations, allowing for the real incorporation of the new organ into the economy of the body”⁷⁹. He exulted when the successful graft enabled him to take over Steinach, who had achieved merely ephemeral results in experiments on rejuvenating persons by processes of transplantation. He claims that the Indian woman subjected to the experiment had been over 60 years old and had become significantly younger, with the appearance approximately of a 30 year-old.

Hartmann assesses that his experiments, mainly the latter, had resulted in a remarkable biological synthesis and in the end of the “theory of the selection of species”⁸⁰. The radical intervention in the bodies had led to a new, monstrous, order of nature, produced by science. So as observed by Dietz, in several medical dystopias, “the ambitions of physicians fail and they create monsters instead of new men”⁸¹. The pathetic outcome of such a vicious and dehumanizing experimental process - a half-human hybrid - is regarded a success by the scientist. This self-justification seems coherent with Nordland’s observation:

“The discourse on the significance of experimental biology has always been oriented towards the future rather than the present. In other words, claims have dealt not so much with the actual practices of biology but rather with the possible consequences of these practices in the near future”⁸².

Hartmann seems to represent the new expectations of the 1920s and 1930s, where “endocrinologists would be able to control, design and improve humans by using hormone replacement therapy”⁸³. According to Alfonso Buch, if endocrinology “originates from the millenary dream of defeating death and old age”, to transcend the foundations of the human condition, it is also “the first collective enterprise offered by medicine to succeed not only in the speculative realm of distant aims but also in located experiments”⁸⁴. These

⁷⁷ Ibid., 117.

⁷⁸ Ibid., 118.

⁷⁹ These radical experiments described in the book might have been inspired by the operations with monkey glands performed by Serge Voronoff, which involved “the grafting of testicular tissue from chimpanzees or baboons into ageing men”. These transplants aimed at fighting age and senile debility caused by “the exhaustion of the testicles”, Sengoopta, 50-56. For a discussion about the Brazilian reception of Voronoff’s ideas see, E.M. Cupersmid & T. P. R. Campos, “Os Curiosos Xenoimplantes Glandulares do Doutor Voronoff”. *História, Ciências e Saúde-Manguinhos*, 14 (3, 2007), 737-760

⁸⁰ Cruis, 116.

⁸¹ Dietz, 117.

⁸² C. Nordlund, “Endocrinology and Expectations in 1930s America: Louis Berman’s Ideas on New Creations in Human Beings”, *British Journal of History of Science*, 40 (1, 2007), 84.

⁸³ Sengoopta, 50-56.

⁸⁴ A. Buch, *Forma y Función de un Sujeto Moderno: Bernardo Houssay y la Fisiología Argentina (1900-1943)*. (Bernal: Universidad Nacional de Quilmes, 2006), 99.

improvements were to be applied to all mankind and the new human beings resulting would constitute a new ideal society⁸⁵.

Cruls juxtaposes this new scientific expectation brought by endocrinology to the “natural” eugenics of the Amazons, this primeval science of heredity, de-authorizing and criticizing both, despite his understanding of the traditional nature of the latter and the appreciation of the promises and relevant scientific acquisitions of the former. In his conception, the ideal society is the one which is collectively built and transcends social differences and injustices, like the Incan Society, rather than a medical utopia that transgresses the “natural state” of humankind.

Final Considerations

Within the specific social context of the 1920s, both novelists approached scientific narrative by means of their discursive practices, trying to participate in the struggle for representations of the ideal society. Aiming at children and young readers, they wrote adventure and fantastic novels in order to mobilize them towards a new project of nation, towards another utopia. Menotti Del Picchia, the first to point out to the relationship between both fantastic narratives, synthesized this goal:

“To write popular novels means to offer the country a double service: to nationalize more and more the book for the masses and to make our literature more Brazilian, embedding entertaining and amusing narratives in our environment. This is the best way to socialize our landscape and the spirit of our people.”⁸⁶

The utopian/dystopian narratives discussed in this paper took place in a moment when eugenics had occupied the “cultural space of social interpretation, because it articulated new and powerful images of health like the issues of heredity and race”⁸⁷. Thus, Monteiro Lobato considers eugenics the main responsible for the future success of America, and Gastão Cruls points out to the importance of certain primitive eugenics among the Amazons while criticizing the relevance of the discursive eugenic substratum for Dr. Hartmann’s conception of the world. Both authors also point out to the incidence of scientific practices in individual bodies within the process of composing a new social body, either the efficient and perfectly beautiful bodies of 2228 America, or the pathetic and vicious results of Dr. Hartmann’s experiments..

Nevertheless, not only do both discourses reflect the prominent role of eugenics in the intellectual debates of that time, but they also deflect them. The authors take a political position regarding scientific narratives, especially eugenic discourses, appropriating and transmuting their concepts. Monteiro Lobato deals with a radical eugenic project, which would be remarkable in the following decade⁸⁸, suggesting its articulation with other methods of rationalization of society, like Fordism, through an “organic idealism”. Gastão Cruls repudiates scientific practices that rectify the social being, including besides eugenics the new endocrinology, and proposes as his regressive utopia, an idealized conception of a communist Incan society.

⁸⁵ Nordlund, 83.

⁸⁶ M. Del Picchia, *A Filha do Inca e Kalum: Romances Fantásticos* (Rio de Janeiro: A Noite, 1946), 139.

⁸⁷ Stepan, 15.

⁸⁸For an analysis on the radicalization of eugenics in Brazil in the 1930s, see J.R. Franco, “Degenerando em Barbárie: A Hora e a Vez do Eugenisismo Radical”, in *Higiene e Raça como Projeto: Higiene e Eugenia no Brasil*, Ed., M.L. Boarini (Maringá: Eduem, 2003), 185-215.

Therefore, it is to be remarked that when modernists approached scientific narrative, they allowed for the modernization and political strengthening of their discursive practices on the one hand, and on the other, they were inscribed within a process of production and diffusion of certain images of science, which were articulated with the desire of the intellectual elites for social transformation and construction of national identity.

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