

Science and Politics in Brazil: Genetic ancestry research as an argument against racial quotas in public higher education

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Abstract

After much controversy, the decree regulating the institution of the Quotas Law in public institutions of higher education in Brazil was published in the Official Diary on 15th October, 2012. Under the new law, at least 50% of seats in public universities must be reserved for applicants who attended high school in public schools entirely. The reservation is based on economic and social criteria. Since its approval, Quotas Law has divided opinions, especially with regard to the reservation of university places for blacks. The history of discussions is long and with the advent of technologies related to genetics, standards of sociability in contemporary Brazil have been discussed also in terms of genetic interpretations. In recent years, genetic studies have been used as an argument to legitimize the adoption of certain laws (as in the case of the Biosafety Law and the decriminalization of abortion of anencephalic fetuses) or to try to invalidate them (as in the example of Quotas Law). Considering the relationship between science and politics in Brazil, this paper aims to discuss the use of genetic ancestry research as a contrary argument to public policy of quotas for blacks in public higher education.

Introduction

After much controversy, the decree regulating the institution of the Law 12,711 (Quotas Law) in universities and federal institutions of higher education in Brazil was published in the Official Diary on October 15th, 2012. Under the new law, at least 50% of seats in public universities must be reserved for applicants who attended high school in public schools entirely. These seats will be divided between two groups: half will go to

those who have gross family income per capita equal to or less than 1.5 minimum wages; and the other half will go to students who declare themselves black, brown or indigenous, in proportion of the population equal to that found for these groups in the latest census held by the Brazilian Institute of Geography and Statistics (IBGE) in the State where the vacancies are offered.

Since it was approved by the Senate in August 2012, the Quotas Law has divided opinions, being a recurring issue in the media. On one hand there is the argument that it is necessary to segment the students because:

(...) only the social quota, with economic factors, fails to solve the exclusion by which blacks go through. To get a taste of the ineffectiveness of the social quota in relation to the insertion of blacks, just see USP numbers. Despite the social inclusion policies, the number of black students there remains very low (ORIONE, 2012).¹

On the other hand, there are researchers that although they agree with the existence of quotas, they oppose racial segmentation:

I believe in the relevance of quotas in public universities, but they must be social, with well-established economic criteria. An affirmative policy in this format would bring the same practical effect without creating this kind of ethnic division that is not a correct educational measure. If the idea is to facilitate the integration, creating these niches can stimulate further discrimination (RANIERI, 2012).²

Debates about the approval of the Quotas Law have been mainly focused on racial issues. Defenders of racial quotas argue that Brazil is a mestizo country, where there is a great inequality between blacks and whites in access to goods such as education

¹ Fragment extracted from a text published in *O Estado de São Paulo*, on 9th August, 2012. Available at: <http://www.estadao.com.br/noticias/impreso,voce-e-a-favor-das-cotas-raciais-,913538,0.htm> [Accessed in: 27th January, 2014].

² Fragment extracted from a text published in *O Estado de São Paulo*, on 9th August, 2012. Available at: <http://www.estadao.com.br/noticias/impreso,voce-e-a-favor-das-cotas-raciais-,913538,0.htm> [Accessed in: 27th January, 2014].

(ESGARIO, 2012)³. Discussions in this regard have led the Brazilian government to adopt a series of public policies designed to mitigate the disparities between ethnic-racial groups. Among those who are opposed to affirmative action for admission of blacks in public higher education, justifications go from the risk of generating even more discrimination (RANIERI, 2012), to the argument that the racial criteria is problematic and generates doubts (PEDROSA, 2012)⁴.

The history of discussions is long and with the advent of technologies related to genetics, standards of sociability in Brazil have been discussed also in terms of genetic interpretations. In recent years, genetic research has been used as an argument to legitimize the adoption of certain laws (as in the case of the Biosafety Law and the decriminalization of abortion of anencephalic fetuses) or to try to invalidate them (as in the example of Quotas Law). The participation of the geneticist Sergio Pena at a public hearing held by the Federal Supreme Court (STF), to discuss racial quotas, is an example of this and, therefore, invites to a reflection on the relationship between science and politics in Brazil. Thus, this paper aims to discuss the use of genetic ancestry research as a contrary argument to public policy of quotas for blacks in public higher education.

Methodology

Bibliographic research was chosen as a methodological tool to discuss the concepts of sociobiology and biosociality and to debate how genetic ancestry research has been brought into the politics field in Brazil. Furthermore, the author used the content analysis (BARDIN, 2008), in an attempt to interpret the messages present in a video⁵ in which the geneticist Sergio Pena made a pronouncement in a cycle of debates promoted y

³ Reference taken from an interview published in the newspaper *Folha de S. Paulo*, on 9th August, 2012. Available at: <http://www1.folha.uol.com.br/fsp/cotidiano/59723-assegurar-acesso-e-dever-do-estado-afirma-senadora.shtml> [Accessed in: 26th January, 2014].

⁴ Reference taken from an interview published in the newspaper *Folha de S. Paulo*, on 9th August, 2012. Available at: <http://www1.folha.uol.com.br/educacao/1134313-nenhum-pais-impo-obrigacao-desse-tipo-diz-professor-sobre-projeto-de-cotas.shtml> [Accessed in: 27th January, 2014].

⁵ Video available at: <http://www.youtube.com/watch?v=dtzYP3-Hzhk> (Part 1) and <http://www.youtube.com/watch?v=j9dcpprUd5s> (Part 2) [Accessed in: 16th December, 2013].

the Federal Supreme Court (STF) in 2010, regarding the reserve of seats for blacks in universities and in other public institutions⁶.

Results and Discussion

On *The Origin of Species*, from 1859, Darwin suggested that only the most prepared to environmental conditions would be able to survive. His theory of evolution, the growing prestige of the biological sciences in the late nineteenth century and also the technical progress led to the strengthening of the belief that science could offer rational solutions to social problems. In consonance, emerged initiatives to make politics more rational, what would happen through its biologization. This combination contributed to the birth of the eugenic thought (WEINDLING, 1989; LARSON, s/d; NERI, 1999 *apud* MONTEIRO, 2005, p.128).

Agamben (1998) emphasizes that when the set of individuals becomes the primary resource for politics, care with life involves measures such as excluding those considered defective. It was what happened in the eugenic social projects from nineteenth century and first decades of twentieth century, which attributed great value to the improvement of life by eliminating the pathological, seen as a threat to the overall health of the social organism.

The consolidation of this sociobiological thought, according to which biology would have answers to the society dilemmas, provided the basis for the implementation of eugenic projects and consequent politicization of human life. With the advent of technologies related to genetics, contemporary biomedicine has been identified as a new form of eugenics, accused of judging human life and its value, intervening on it in order to eliminate differences taken as defects.

For Rabinow (1999), “the new genetics may remodel society and life with an infinitely greater force than the revolution in physics has never had” (RABINOW, 1999, p. 143). The author takes a critical view at the sociobiology and suggests a different approach to the relationship between biology and society. He proposes the concept of

⁶ The cycle of debates promoted by the Supreme Court in March 2010 happened because the Supreme had to judge an action from Democrats party against the quota system of the University of Brasilia, and also an action against the quota policy of the Federal University of Rio Grande do Sul.

biosociality, which draws attention to the influence of biological technologies, especially genetics, on the social and cultural dynamics.

Rose (2001) assumes that a new form of life is been constituted to the extent that humans begin to understand themselves from their genetic constitution. In the era of vital politics, biological ethics and genetic responsibility, the way how individuals make their choices about having children, getting married and establishing financial plans go through biology in a way it was not used to go before.

According to Gaspar Neto and Santos (2011), some studies show that the development of biotechnology has been accompanied by its spread by all spheres of human and not human life (BOLNICK et al., 2007; SANTOS; BORTOLINI; MAIO, 2010 *apud* GASPAR NETO; SANTOS, 2011, p. 229). In this context, the knowledge related to biology and medicine, among them the genetic ancestry tests, began to have a greater impact on the lives of individuals and countless social implications.

The interpretation of the results of such tests involves a complex set of issues ranging from the “sense of identity to the familiar feeling, from acceptance or negation of the ‘race’ concept to racism, from spiritual perspectives to political ideologies” (GASPAR NETO; SANTOS, 2011, p. 231). The authors emphasize that, when applied in large groups, these tests may raise a series of discussions. In this sense, they highlight:

(...) beyond the microscopic scope of interpersonal and kinship relationships, the reach of the impact of this kind of test can be much greater to the extent that the analyzes of genetic genealogy are seen as capable tools, concretely and symbolically, of corroborating or refuting institutional measures oriented to the political, economical and social benefit of social groups, whether they are minority or not (BOLNICK et al., 2007 *apud* GASPAR NETO; SANTOS, 2011, p. 231).

Genetic ancestry and racial quotas

Gaspar Neto and Santos (2011) point out that in the last decade, the geneticist Sérgio Pena acquired great public visibility in Brazil, with marked involvement in discussions about ‘race’ and race relations. Founder and president of Laboratory GENE -

Center for Medical Genetics, he developed some studies on the ancestry of the Brazilian population. When building his speech of opposition to racial quotas, Pena relies on the argument that “the low degree of genetic variability and of structuring the human species is incompatible with the existence of races as biological entities” (PENA, 2005, p. 321).

In a speech on the Supreme Court on March 4th, 2010, the geneticist presented data from a molecular study developed with 934 Brazilians, from four geographic regions of Brazil: North (Pará), Northeast (Ceará and Bahia), Southeast (Rio de Janeiro) and South (Santa Catarina). Through a panel of DNA testing, the research could define the Brazilians ancestry and their Amerindian, European and African ancestral proportions. According to the results, almost all Brazilians have the three ancestral roots, and the predominant genomic proportion is European.

Pena (2010) also highlighted the fact that the IBGE census does not treat the ancestry, but the color of Brazilians, through the criteria of auto-categorization. So, his study also sought to compare data related to IBGE categories of color prevalent among Brazilians (white, brown and black) to the genetic ancestry of the national population. The research indicated that the ancestry profile is extremely similar among Brazilians who declare themselves as white, brown and black, in terms of European, African and Amerindian ancestry. The aspect that Pena tries to emphasize through this finding is that:

In Brazil, the color, evaluated phenotypically, has a very weak correlation with the degree of African ancestry. At the individual level, any attempt of prevision becomes impossible, in other words, by inspecting the physical appearance of a Brazilian we cannot reach any reliable conclusion about his degree of African ancestry (PENA, 2005, p. 336).

To reinforce his position contrary to racial quotas, Pena emphasized in his speech that “the skin color is not genetically associated with any intellectual, physical or emotional skill” (PENA, 2010). And based on the observations made through his research on genetic ancestry of Brazilians, he concluded his speech in STF saying that:

The relationship between skin color and ancestry in Brazil is tenuous. In many regions of Brazil, skin colors have different meanings. The only biologically coherent division of Brazilians is

in 190 million people and scientifically the segmentation of Brazilians is not justified (PENA, 2010).

As one can realise, the new genetic technologies and the knowledge gained with them were brought to the politics as a tool for legitimizing certain ideological and political positions. Considering this scenario, it is important to discuss the fact that the scientific arguments are placed as absolute and unquestionable truth, as evidenced in a part of the video in which Pena (2010) states:

Science can never say what must be, but science can say what it is not. Thus, science serves to reject fallacies and prejudices that play a liberating role in the exercise of moral choices. And science has a unique tool to fulfill its role, the one from empirical evidence, in other words, from experimental facts. Nothing else counts. Science never believes only in words, it is always questioning and seeks the reality behind appearances, opinions and emotional appeals (PENA, 2010).

One can notice here that science is elected as superior, objective, as a practice exogenous to society. As exemplified above, this discourse of truth of science, specifically of genetics, has been used as a tool to delegitimize the adoption of racial quotas in Brazilian public universities. The purpose of this paper is not to defend or criticize the quotas, but to draw attention to the aspects implicit in discussions like that promoted by the STF.

According to Jasanoff (2005), it is necessary to recognize that scientific knowledge is not constructed independently of society. For the author, the relationship between science, politics and society should be understood as a multidimensional process of “co-production”, “in which the problems of society and the problems related to nature are simultaneously addressed and resolved” (JASANOFF, 2005, p. 22). Natural and social orders are produced at the same time. It is not science that determines politics, or the politics that determines science; or culture that determines this or that or is guided by them. Political, social, cultural and economic processes emerge simultaneously.

The “co-production” concept helps to understand the complexity involved in discussions on public policy with racial-ethnic character, while serving as a warning to

the refusal of reductionism based on technological, social or cultural determinism. Considering issues as controversial as the racial quotas, this concept can be seen as a way to balance the discussion, taking into account during the debate not only the influence of science but also the social context.

Conclusion

For all that has been discussed throughout this paper, it is necessary to make some reflections: Why the geneticist Sérgio Pena was invited to make a pronouncement in the cycle of debates promoted by STF about the quota policy? What does it say about the weight of science, and more precisely of genetics, in contemporary Brazil? It is understood that science is not exogenous to society and should not be seen this way, since one cannot deal with social and scientific orders as separate variables in a system of mechanical forces. For this reason, it is necessary to take a critical look at the discourse of the experts and keep in mind that science is human, fallible and soaked in values. When discussing the racial quota system, one must consider that the linear conception of the relationship between science, technology and development is not sufficient to explain the complexity of the relationships involved in political projects.

It seems appropriate, then, to say that discussions should not focus only on the arguments against or pro quotas, on the judgment of the genetic ancestry of Brazilians or on the feeling of belonging to particular ethnic-racial groups. When thinking about issues such as the quotas' reservation, which has significant influence over the Brazilian society, one must evaluate if the way they were planned, quotas are able to solve the problems at stake. Are the affirmative actions working? How has been the experience in universities where it has being applied? What is the political impact behind racial quotas? These are just some questions for which answers must be found.

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