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# The History of Science in Brazil Out of the Center

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# **Abstract**

The nineteenth century, in the Western world, was marked by great changes, among the changes in this period, we point out, the advent of history as the continuous passage of time and as a record of the actions done by men in the past. Such innovations characterized this period as the century of history. Thus, researching, knowing and spreading the past became the goal of a new social group, the historians, who postulated a new reading and a new explanation of the past based on the National History and, in this way, had to face and overcome the Antiquarians and their collecting practices. In this sense, the present article presents one of the facets of the struggle for the monopoly of historical knowledge, focusing on the specific case of the Museum of Natural History established in the second half of the 19th century out of the political and economical importance and the reasons for its absence in the records and Works of the time.

*Keywords:* 19th and 20th century, history, natural history, brazil

#### 1. INTRODUCTION

In Ceará, in the middle of 1871, a private collector, Dr. Joaquim Antônio Alves Ribeiro, Medicine Doctor of the Santa Casa de Misericórdia and Captain of the National Guard, had a small museum with objects of Natural History, open to the public . (...) the physician requested to donate it to the government to compose the initial nucleus of a Natural History Office in the province in exchange for an honorary distinction (LOPES, 1997, pp. 151-152).

The above passage was recorded by Maria Margaret Lopes in her PhD research, later published in a book under the title: O Brasil redescobre a ciência: os museus de história natural no século XIX (Brazil Rediscovers Science: natural sciences museums in the nineteenth century), where the author presents us an in-depth study on the Brazilian museums of natural history of the 19th century. Although she did not specifically focus on the reality of the Province of Ceará<sup>1</sup>,

<sup>&</sup>lt;sup>1</sup> One of the 27 Brazilian states. Located in the northeastern part of the country, the area with the largest social inequalities. The capital of Ceará is the City of Fortaleza



the author mentioned the request for donation of the collection of Dr. Joaquim Antônio Alves Ribeiro to the President of the Province in 1871, who in turn asked the then Director Of the National Museum( in Rio de Janeiro), Ladislau de Souza Mello Netto (1838-1894), to issue an opinion on the case. In his reply, the director replied in the affirmative, as this would be a good opportunity for the creation of a local museum if the articles offered were in good condition and of good quality (LOPES, 1997, pp. 151-152).

The positive opinion attested by the scientific authority, in this case, the director of the National Museum, did not satisfy the President of the Province, most likely the bachelor in direct, Fluminense, José Fernandes da Costa Pereira Júnior, who did not take possession of the collection, because according to Margaret Lopes "... the president of the Province of Ceará considered that the objects were not in very good condition, they were not so frightening." And continues the author, "... the physician [donor of the collection] enjoyed a modest position, scarce fees, and no position of man to know." Finally, according to the same author, "(...) besides, since she considered that very few people in Fortaleza were dedicated to Natural History, it was a high expense for the province, which had more urgent needs" (LOPES, 1997, p 152).

Faced with an explicit reference to the existence of a Natural History Museum in Ceará, we began to examine the Brazilian historiographic production on the historical process of the formation of the natural history museums and eventual references about the Museo Cearense in the eighteenth century.

In this sense, we identified another mention of the collection to Dr. Alves Ribeiro's Museum of Natural History, in the article by Ulpiano Toledo Bezerra de Menezes, professor of the University of São Paulo (USP), who in an overview about Brazilian museums in the century XIX, commented the relationship of these with Natural in Brazil, stating that:

It was, therefore, to be expected that our nineteenth-century museums would have chosen Natural History as their horizon: the Museu Nacional de Belém (founded in 1866 and reorganized in 1894, already With the features of the current Museu Paraense Emílio Goeldi), the Museu Paranaense (1876), or those of Fortaleza, Maceió, Belo Horizonte (the last three, from the 1870s, did not survive) (MENEZES, 1994, pp. 573).

In the citation, Professor Ulpiano Menezes only reaffirmed the non-continuance of the Fortaleza Museum in the 1870s, together with the museums created in the cities of Maceió (AL) and Belo Horizonte (MG), without mentioning, But more details such as: the name of the founder, how the museum was constituted, where, when and for how long it worked.

Continuing the study, still in the list of mentions, a third reference identified to the Museum of Natural History of Fortaleza (Ceará) was made in an important collection dedicated



to the Studies of Philosophy and History of Science in Brazil. In this study, the Brazilian researchers Maria Amélia Mascarenhas Dantes, Silva Figuerôa and Maria Margaret Lopes presented an overview of the main studies on the History of Science in Brazil from 1870 to 1920, focusing on the studies that investigated the formation of Engineers; Geological survey commissions; The museums and the natural sciences, and finally, the medical sciences in the main cities. In the topic in which the authors approach the Brazilian museums, we find the following statement:

There was significantly increase not only in quantity, but also in scientific and social importance of those institutions during the last decades of the nineteenth century in Brazil, especially until the mid-1860s. Despite the attempts to create provincial museums (in Bahia, Alagoas, Ceará), the National Museum in Rio de Janeiro, that had been working since 1818, was still practically the sole institution of that kind in the country. (DANTES; FIGUEIRÔA; LOPES, 2011, p. 100).

Again, the museum created in Fortaleza is alluded to quickly and without further information, being cited only to exemplify the province's inability to create the museum and to get rid of the various difficulties encountered in the nineteenth century in terms of continuity Of the museum in question.

Even in the face of these brief information, it is clear that during the period in question there was an interesting meeting in the main city of Ceará in the 19th century; Because on the one hand there was a medical professional heavily influenced by the paradigm of natural history and, on the other hand, a growing social interest in prospecting, identification, custody and exhibition of natural and / or man-made objects. In this sense, it was at the confluence of these interests that the physician was certainly encouraged to set up his collection and for unknown reasons, he later decided to donate his collection to the auspices of the province of Ceará (STUDART, 1910, p.66).

In Brazil, natural history museums constituted as privileged spaces for nineteenth-century scientific research and production (LOPES: 1997); hence the French researcher Dominique Poulot referred to this type of museum, in a general way, as "museum-atelier of science" (POULOT: 2013). Throughout the 19th century, several natural history museums were created in different Brazilian locations: the National Museum in Rio de Janeiro; Museu Paranaense, in Curitiba; Museu Paraense Emílio Goeldi, in Belem do Pará; Museu Paulista, also known as the Ipiranga Museum, in São Paulo. In addition to sharing their respective foundations in the nineteenth century, all these institutions were maintained throughout the twentieth century, with various changes and reformulations, from their respective foundations to the present day. This continuity has allowed historians and researchers interested in



museums to study and research the process of formation, creation, institutionalization, development, and maturation of these museum spaces.

However, even with the broad development of research and themes related to natural history museums, spanning from the nineteenth century to the twenty-first century, there are still few studies about museums and their importance outside the "most dynamic" areas of Brazil. In this sense, it is necessary to cross sources and information, as suggested by the current historical knowledge and its method for tracing alternative paths to these interdicts.

An alternative to the lack of information regarding this museum was to seek information about its founder, creator, maintainer and later donor - since it was a private collection - Dr. Alves Ribeiro. When searching for information in the Dicionário Bio-Bibliografico (Biobibliographic Dictionary) of the historian of Guillerme Studart (1856-1938), we find that in his characteristic narrative of factual traits there were some data about the creator of the museum, such as: full name, date and birth, city Christmas and sonship. At this moment we learned that the creator of the natural history collection in focus was Joaquim Antônio Alves Ribeiro, who was born on January 9, 1830, in the city of Icó (southern region of Ceará) and was one of the 17 children of the consortium of the Coronel Manoel Alves Ribeiro with Mrs. Alexandrina Mendes Ribeiro (STUDART: 1910, p. 06).

Following the "factual" information about Alves Ribeiro, Studart adds that he graduated in medicine from Harvard University, in the United States, in 1853, and underwent a thesis (revalidation of the diploma) at the Faculty of Medicine in Bahia. In Fortaleza, he was a doctor at the charity hospital, surgeon at the National Guard. He was also a corresponding member of the Imperial Academic of Medicine of Rio de Janeiro, of the Medical Society of Massachusset, of the Society of Natural History of Frankfurt and of the Society Helping the National Industry. In his lifetime, he was awarded the Knight of the Order of the Rose (December 2, 1858) and the Order of Christ (October 12, 1867). He died in the city of Fortaleza on May 2, 1875, a victim of cancer of the stomach (STUDART: 1910, p.66).

Finally, Studart in his survey gives us other data on the collection created by Dr. Alves Ribeiro, when recording that:

This doctor owes the first museum Ceará saw; After his death the various collections, some of them very precious, were donated to the state government (STUDART, 1910, p.66).

Unlike the arguments of the president of the province of Ceará in 1871, who disqualified the collection of Ceará physician trained in the United States, Guillerme Studart recorded that among the collections of the museum there were "some very precious." One



possible explanation for this evaluation divergence is the formation of Studart, who, like Dr. Alves Ribeiro, shared the same interest in medicine, since Studart was formed in that area by the faculty of Bahia in 1877, at which point The paradigm of Natural History was still in vogue. Hence his positive analysis of the pieces of the museum's collection when he outlined the life of Dr. Alves Ribeiro in his Bio-Biliografico Dictionary.

Even though there was a difference of 23 years between Dr. Alves Ribeiro and Guillermo Studart, young Studart probably met and even attended Dr. Alves Ribeiro's museum in the capital of Ceará, since both lived in the same city, and That, afterwards, young Studart chose the profession of the creator of the natural history museum as medicine, which might have stimulated the future historian of Ceará to record the history of the museum in detail, but unfortunately he did not take it And did not deepen the historical information about his colleague's natural history collection. What motivated this silence? What reasons did Studart not register this ingenious scientific space in Ceará? Why not write the museum in the history of Ceará?

#### 2. EXCLUDING NATURAL HISTORY

Before you know what the story says about a society, you need to know how it works within it. This institution is written in a complex that allows only one type of production and prohibits others. Such is the double function of the place. It makes possible certain researches due to conjunctures and common problems. But it makes others impossible; Excludes from discourse what is its condition at a given moment; Represents the role of censorship in relation to the present postulates (social, economic and political) in the analysis (CERTEAU, 2002, pp. 76-77).

Throughout the 19th century, Brazil underwent several political, economic and social transformations. Before, during and after these transformations grew, among others, the concern with Brazilian history summarized in the question: How to write the history of Brazil? In other words, it was sought to know where the Brazilian people came from, what their constitution and, especially, their place in the future? On a greater or lesser scale, the above mentioned issues, along with others, were the object of different answers offered by different scholars (REIS, 1999).

Thus, to those interested in Brazil's historical knowledge of the nineteenth century, it would be better before any factual answer to the philosophical-historical speculations on Brazil to possess the full knowledge and mastery of the specific rules of historical knowledge forged in the nineteenth century, postulating "knowledge of the past becomes The task of a discipline with all its implications - a method, an apprenticeship and a career "(GUIMARÃES, 2002, p.184). Such



a situation meant in practice the reservation of a specific area of knowledge for a specific activity that sought professionalization, that is, the legitimacy of history and the historian was sought, the professional apt to speak of the past.

It would be up to the historian merely search, record and talk about the past by relying exclusively on diplomatic documents, that is, official written documents that would make it possible to reestablish the connection between the past and the present, To supply the silences of the past (GUIMARÃES, 2002, p.184). This is understood only as the significant political acts for the formation and maintenance of the Nation.

In addition to this functionalist justification, aiming the legitimization and upliftment of the Nation, the nineteenth-century historians also clashed and disputed with the antiquaries, for the primacy of control of the past, as well as for the recognition and acceptance of their actions in society. Thus:

To the erudition proper of the Benedictines of Saint Maur, an activity of historical professionals was counteracted, whose work should necessarily be aimed at an audience, formulating, to the practice of history, new and different demands, according to a political and Socially distinct, whose watershed was undoubtedly the experience of 1789. The old collections, object of the practice of antiquarianism and come to light from the proper criteria of the culture of these scholars, should now be reorganized according to a clear criterion , Defined based on the principles formulated by a generation geared towards the political and symbolic construction of the nation (GUIMARÃES, 2002, p. 187)

Among the goals set and the results achieved, nineteenth-century historians had to overcome guerrilla warfare, confront internal and external opponents, demonstrate their validity and consequently superiority, only to enjoy acceptance, prestige And admiration in their respective nations as the true guardians of the past.

It is within the aforementioned tensions that we must bear in mind the writing of the history of Guillerme Studart, considered by many the greatest historian of Ceará and arguably "one of the most known and respected names in the historiography of Ceará" (ALCÁNTARA, 2004, p. 12), a recognition obtained through meticulous documentary research and subsequent publication in the form of books addressing wide and varied aspects of the historical reality of his homeland.<sup>2</sup>

As a member of a community in formation, that of historians in Brazil and in Ceará, Studart operationalized his research for the "reconstruction" of Ceará's past, focusing

<sup>&</sup>lt;sup>2</sup> The influence of Studart was so great that deserves one of the epithets the Historical Institute of Ceará is: "The House of the Baron" in honor of the distinguished historian of Ceará that was transformed into a "paradigm" for other historians. However, such respect has transcended the life of the researcher and the same is widely acknowledged to this day by his prodigy in research.



specifically on the political aspects that would later impact on the historical process of Ceará. In working out this selection Studart, and the other historians of 19<sup>th</sup> and 20<sup>th</sup> century, put into action the double movement of historical writing. As Michael de Certeu tell us:

Before you know what the story says about a society, you need to know how it works within it. This institution is written in a complex that allows only one type of production and prohibits others. Such is the double function of the place. It makes possible certain researches due to conjunctures and common problems. But it makes others impossible; Excludes from discourse what is its condition at a given moment; Represents the role of censorship in relation to the present postulates (social, economic and political) in the analysis (CERTEAU, 2002, pp. 76-77).

As a member of a community in formation, that of historians, Studart operationalized his research for the "reconstruction" of Ceará's past, focusing specifically on the political aspects that would later impact on the historical process of Ceará. In operationalizing this selection Studart put into action the precepts mentioned above in the epigraph written by Michel de Certeau, who analyzing *The Writing of History* emphasized the double movement of this writing that "allows only one type of production and prohibits others." As a direct and illustrative result of this orientation, conscientious or not, historians of Brazil and Ceará too, sought to distance themselves from antiquaries, whom believed that "objects spoke for the times when they were made" and thus, the antiquarians, would express their objectivity, experimentation And neutrality characteristic of erudite (MOMIGLIANO, 2004, pp. 88-89).

Dr. Alves Ribeiro's natural history museum, even though he did not call himself an antiquary, shared several aspects of the antiquary tradition, namely: the collection of indistinct objects, the lack of qualification of the owner in the historical proceedings and the failure to appreciate the history of the country. Thus, by failing to "historicize" this scientific space, Stuart was struggling with the prevailing historical precepts accepted and practiced by nineteenth-century historians, in which case he did not develop his office as a historian.

On the other hand, we may add in this "inventory of differences" that the nineteenth-century conception of science was exclusively European, that is, made and developed in Europe, the only place suitable for such a feat, and only later To other parts of the world. This again excluded Dr. Alves Ribeiro, who studied and graduated in the United States.

### 3. CONCLUSION

Throughout the nineteenth century, the phrase "wie es eigentlich gewesen" (as it actually happened) was considered as the unconditional maxim to the full exercise of the historians and direct reflection of the activities developed by this professional. In reviewing the



case of the natural history museum created in the capital of Ceará in the second half of the nineteenth century, we find that, unlike the eagerness to detail and tell everything as it really happened, Guilherme Stuart's most acclaimed historian, chose not to record what actually happened.

In theory, Studart possessed all the elements and motivations to "history" this museum, because on the one hand this was the first museum in the city, created by a doctor who studied abroad; On the other hand, the future Baron was born and raised in the city of Forteleza, most likely attended the museum and even personally met his creator, since later he shared with him the choice of medicine as an initial formation and even with so many reasons he wrote nothing about "Its creator and nor on its creation", that is, nothing recorded about Dr. Alves Ribeiro or about his museum of natural history.

But underlying the silence of the historian weighed "the social coercion of the group under the individual," in other words, Studart, by not mentioning anything or nothing about the natural history museum, explained its linkage to the prescription of historical knowledge advocated by historians Who sought to assert themselves as the only fit and prepared to discuss and know the true past, the national, differing from the collectionist zeal of antiquaries without goals, without methods and devoid of national exaltation.

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