Machine Translated by Google hific Journal of Knowledge. ISSN: 2675-9128. São Paulo-SP.

Year V, v.1 2025. | submission: 2025-09-11 | accepted: 2025-09-13 | published: 2025-09-15

Virtual access and digitization of collections in museums in the Northeast: a survey based on data from the Brazilian Institute of Museums (IBRAM) during the pandemic period 2020-2021

Virtual access and digitization of collections in museums in the Northeast: a survey based on data from the Brazilian Institute of Museums (IBRAM) during the pandemic period in 2020-2021

Jennifer Katarina Miranda da Silva

#### **SUMMARY**

This article presents an exploratory study on virtual access and the digitization of collections in museums in the Northeast based on data from the Brazilian Institute of Museums.

(IBRAM), during the 2020-2021 pandemic period, in which the process of email communication with institutions and the search for virtual catalogs are presented. After reviewing all available email addresses of museums in the Northeast region made available by the IBRAM platform, Museusbr, the museums that would be able to provide virtual access to their content during the pandemic period of social isolation were selected, enumerated, and analyzed. It was concluded that most museums were not prepared to provide your services virtually.

**KEYWORDS:** Virtual Access, Digitization of Collections, Museums in the Northeast, Virtualized museums.

#### **ABSTRACT**

This article presents an exploratory study on the virtual access and digitization of collections in museums in the Northeast from data from the Brazilian Institute of Museums (IBRAM) in the 2020-2021 pandemic period, the process of communication by email with museums and the search for virtual collections are presented. Communication with museums in the Northeast was made available by the IBRAM Museumsbr platform, the museums were selected, and the museums that would be able to provide virtual access to their content during the pandemic were listed and concluded that most museums were not prepared to provide their services in a virtual way.

**KEYWORDS:** Virtual access, Digitization of Collections, Museums in the Northeast, Virtualized Museums.

### Introduction

The research was conducted during the covid-19 pandemic, in 2020-2021. The survey was made by the most up-to-date source for learning about Brazilian museums, the Institute's platform Brazilian Museum Association, Museusbr (http://museus.cultura.gov.br/). Created by Ordinance No. 6, from January 9, 2017, Museusbr is part of the national museum identification system and is a platform for collaborative mapping, management and information sharing about Brazilian museums. On this platform, museums are registered and these



information can be consulted by the population. Through this data, it was established contact with registered museums in the Northeast by email, and for this purpose the following was created e-mail: <a href="mailto:artesnorn@gmail.com">artesnorn@gmail.com</a>. Contact by telephone was ruled out due to the closure of the museums, because of the Covid-19 pandemic. Based on this, a survey was carried out of the museums in the Northeast registered with IBRAM, a total of 840 institutions, and the graph showing which museums contacted and responded to both questions initials (whether the museum had a digitized collection and whether this collection could be consulted virtually; and whether the museum would at least have a virtual catalog or an organization of the total information of the collection, with images to provide them).

Knowing that museums are spaces of memory and, in their regions, they are often the the only cultural institutions present with the social responsibility of teaching and being in the service of life, as IBRAM states

In the world of culture, the museum takes on a wide variety of diverse and engaging functions. A desire for memory seduces people and leads them to seek out records both old and new, leading them to the world of museums, where doors are constantly opening. Museology is now shared as a practice at the service of life. (IBRAM, 2011)

The museum is this place of knowledge, of the science of reason, but also of emotion, a place in which sensations, memories, ideas and images show the moral, scientific and essential social categories of culture for human beings. These essential categories are thought of by various social institutions that are in the vicinity of the museum, and by the managers of the museums themselves museums. However, what is essential in culture for these *people* is not always *institutional* that will reach and be essential for the public, since the culture is diverse and creates categories. Thus, the museum presents itself, as stated by IBRAM (2011), as a "space fascinating place where one discovers and learns, where one expands knowledge and deepens awareness of identity, solidarity and sharing."

In this way, social life recovers the human dimension with the teaching and presence of issues that are erased, forgotten or treated as trivial in the whirlwind of everyday life, because each

A person who visits a museum not only learns about others, but also learns more about themselves.

Perceiving the museum with this potential for change and social transformation and knowing that, during the pandemic period, culture began to be consumed remotely, obtaining these email responses became relevant to know how communication was taking place museum with the public (at a distance), if the institutional email worked, if they were operating remotely during the pandemic. Museums should be spaces that provide the most diverse contacts with their audiences. Thus, it is thought that

They are windows, doors and portals; poetic links between memory and the oblivion, between self and other; political links between yes and no, between the individual and society. Everything human has a place in museums. They are good for exercising thoughts, touching affections, stimulating actions, inspirations and intuitions. As technologies or tools that articulate multiple temporalities in different sociocultural settings, as territories that foster experiences of estrangement and familiarization, as entities that devour and resignify the meaning of things, museums operate with memories and heritage and are part of basic needs of human beings. In this way, one can understand that in each and every museum, human genius is present, the indelible mark of humanity. Among the most diverse cultural and social groups, there is a clear need and a notable desire for memory, heritage, and museums. This social phenomenon is not exclusive to the contemporary world, although in the contemporary world it has great

visibility. These needs and desires do not correspond automatically guaranteeing the rights to memory, heritage and museum. The exercise of these citizenship rights must be earned, affirmed and reaffirmed daily. (STORINO; CHAGAS, 2007, p. 06).

### Digitized digital collections and museums

Museums are physical and/or digital spaces; the place where one intends to preserve, institutionalizing the memory of a country, a state, a city or people. They are institutional spaces for reflection on the present and can promote dialogues and questions about the future. There are different types of museums around the world: science museums, history, eco-museums, museum cities, etc. The Brazilian Institute of Museums (BRAZIL, 2009) consider them as follows:

in accordance with Law No. 11,904 of January 14, 2009, which established the Museum Statute, "For the purposes of this Law, museums are considered to be non-profit institutions that conserve, research, communicate, interpret and exhibit, for the purposes of preservation, study, research, education, contemplation and tourism, collections and collections of historical, artistic, scientific, technical or any other cultural value, open to the public, at the service of society and its development. (BRAZIL, 2009).

Based on this quote, museums should communicate with the public through questions current, in addition to developing ways to safeguard collective memories that are important for time, space and people. The museum is a place of thought and, therefore, has a important educational role (similar to the role of a school). It exists to improve the society and promote culture and knowledge within it. Curator and artist Luis

Camnitzer (2019), in the article about the Museum of Image and Sound - MIS-SP, compares the museum to a school. Thus, the artist learns to communicate and the audience would have to learn to do connections. However, while the school is divided into grades and levels, the museum often aims to reach everyone, regardless of age, without making such compartmentalization. Therefore, museums today must be connected with the public by technological means of communication. As Bottallo (2007, p.6) explains:

museums have been dealing with the issue of *Culture* and its relationship with communication society and what this might mean in the constitution – and/or in the review – of a *system of applied museological actions*. In other words, the relationship between museums and the *mass media* may imply a possible verification of theoretical and pragmatic lines in the applied areas of museology: museum documentation, preventive conservation, restoration, educational action, expography, exhibition curation, evaluation, audience research, publications made by the institution, among others. Likewise, theoretical thinking needs to be verified, since the concept *of Museum* has expanded and reflections on its role have intensified, either by the need to follow some proposals coming from the *mass media*, or to position oneself in the face of this phenomenon.

These discourses are exposed in museums within museum systems, which carry within them also the forms of communication with the public. In this way, communicating is part of the action museum system. Museums can communicate with the public through websites, of in-person exhibitions, e-

emails, social networks, and this falls within one of the definitions of a museum, as Bottallo explains (2007, p. 6):

among the definitions of *Museum* given by UNESCO, one that qualifies it as "a means of communication, the only one dependent on non-verbal language, objects and demonstrable phenomena." Even considered a institution linked to the preservation of Culture - and, more specifically, of so-called High Culture or elite culture - the museum has reentered the Communications society as an unquestionable institution. Despite occasional clashes with the market, in particular, proposed by modern and contemporary arts, the museum is not another institution to be questioned as an organic permanence. For On the contrary, its form/structure proposes a new conjunction of interests with other media, and also with other sectors of the cultural industry, allowing various poetics to use the museum as a space for ratification. Which does not mean that contemporary art does not raise new questions, mainly in relation to established values, such as: heritage, the that can be museumized/collected, how to exhibit and preserve among others questions. (Our emphasis).

Therefore, the museum must be connected to other media and communicate with the public in a remotely through social media. This work verifies email communication with museums in Northeast and other forms of digital access that have become more relevant with the pandemic Covid-19, with social isolation and the need for virtual cultural consumption. Currently, a living museum would be a museum capable of communicating in person and virtually, having public access to its collection, even from a distance. Museum collections are characterized within museology, as the formatting of relationships between people and socially relevant objects (museum facts). Within museology, the following are linked: museum facts, which are, according to Waldisa Rússio (1990, p. 7):

[...] the science that seeks to study and understand the phenomena *linked* to the museum. And, the museum is characterized as "the profound relationship between Man, the knowing subject, and the object, part of the reality to which the human being also belongs and over which he has the power to act, a relationship that takes place in an institutionalized and ideal setting: the museum." (Our emphasis).

These museological relationships are very relevant for museums, as the museum must be with open access to the community and in constant dialogue with society and issues current, providing access to different

relevant objects and constantly forming museum facts. In this way, museums, in pandemic, would have a relationship with the public as users,

In the specific case of museums, users are all those who utilize a service made available by the museum institution. Thus, the public of museums corresponds not only to visitors (people who enter or have entered the museum), but also to the portion of those who, in some way, without a face-to-face relationship with the museum, enjoyed the services or goods made available (ordering books or other materials by catalog, visits to traveling exhibitions, recipients of educational activities carried out effect on schools). (MOREIRA, 2007, p.101)

On the other hand, when we refer to the public, it is necessary to make a distinction between the actual or effective audience and the potential audience, also known as the target audience. The author explains that

Regarding the first, it refers to the group of individuals who have already visited or used the museum; while the second case includes all people who, due to their specific characteristics, are likely to become a real or effective audience. We therefore have two fundamental axes to consider when using the concept of audience: one that refers to space (interaction with the museum inside or outside its doors, therefore, visitor or non-visitor) and another related to time (interaction already carried out or potential, therefore, real or potential audience). (MOREIRA, 2007, p.101)

Thus, museum audiences, during the pandemic, would position themselves as users and audiences relative linked to the time and power of future in-person visits or a search knowledge remotely, or remote visits in cases of virtual or virtualized museums.

If we think about how memory today is linked to the virtual, moving in towards the virtual space, we place the concrete dimension into the abstract. Little by little, the concrete objects become virtual, as Dodebei (2007, p. 93) states, who "despite retain the same characteristics of creation and individual property. Memories,

At this stage, they are duplicated in a new format, with their own address and visibility exponential", which makes the image of the work in the museum's collection a duplicate image and, therefore, with a new look at museum works and a wide potential for access to same.



Thus, we can divide museums into: (1) virtual museums, which are completely online virtual space and (2) virtualized museums, are physical museums that also provide virtual images and data, since the virtual presents itself as a concept in the philosophy of Gilles Deleuze (1988, p. 335), who states that the

virtual is not opposed to the real, but "has a full reality as virtual". In Difference and Repetition (1988), the philosopher argues that the virtual would be a part of the real, as if everything object had two coexisting parts. One of the parts is the virtual and the other is the possible part. In this way, we can understand that the real is to the possible as the virtual is to the possible. to the current. The virtual represents the problematic, the portion that lacks a resolution or, according to Deleuze, of an "actualization". He is not closed in on himself, he is not ready and predetermined. The current is precisely this response to the virtual. In contrast, the possible is the ready, finished, predetermined portion. Thus, the virtual process would be the "update", while the process of the possible, the "realization" (DELEUZE, 1988, p. 169). Thus, in the philosophical sense, the virtual is an important dimension of reality, and inherent to the human being in his dimension of thought. Contemporary art museums, because they are institutions of memory of today, they do not need to be entirely in the virtual environment, but offering virtualized access would be essential.

What is a reality in museum practice is the digitization of collections, which has been carried out for over a decade in Brazil, making image banks available to the public, 360° online visits, manual catalogs and online catalogs, 3D scanning and replicas of works. Thus,

There would be three different typologies to define the museum in cyberspace. The first would be the "electronic brochure," which encompasses almost all Brazilian museum websites and functions as an advertising space, presenting the institution and providing information about its hours and programming. In the second category, the "museum in the virtual world," institution provides information about its collection, often with images of exhibitions or even virtual tours that show what the its circuit. In this case, the physical museum is designed for the virtual space, which is used, above all, to exhibit the collection in the technical reserve or the short-term exhibitions that have already left the circuit. The "museums" truly interactive", the third category, are considered museums virtual in fact, because their structure in cyberspace is not just a reproduction of the physical space, meaning that the visitor will not only "own" the collection but will also be responsible for its expansion. With this proposal, the group itself will be able to create its own memory and exhibit it in a highly visible space, which perhaps could not be done otherwise. happen on a concrete physical plane. (DODEBEI 2007, p.99)

7

Open and remotely accessible collections online offer the public access to uses of such diverse collections, which indicates that Brazilian Museums,

besides being in a physical space, they are interesting to be in the virtual space. In this dynamic space, each user can build their own route through real spaces and created to be accessed at any time. The Avicon Committee of the International Council of Museums, created in 1991, proposes a systematization of knowledge so that borders are, in fact, expanded, and therefore constitutes an important indication of that the use of new technologies is a phenomenon that changes the daily life of museums in around the world. This way, museums can get closer to the public and, as proposed, it is in this way the borders are expanded and it becomes possible to visit many museums in the the whole world, virtually. Thinking about it, with this decades-old proposition, it will be that this systematization is being carried out in museums in the Northeast region of Brazil?

# Museums in the Northeast: virtual access and digitization of collections

Of the existing museums in the Northeast, 840 are registered with the Brazilian Institute of Museums (IBRAM). Of these museums, which were contacted by email,

102 answered both questions asked, 103 were automatically answered with
the "email address not found" message, 188 did not provide email contact
mail, but only available by phone. Some museums did not have any
of the two contacts; 456 did not respond to the email; 2 emails were blocked.

Of the 102 museums that responded to the survey, the question was whether the museum had a virtual catalog, virtual collection or collection data with images: 21 of the museums stated that they had a catalog; 45 said they did not have a catalog; 182 did not have email contact; 459 did not responded (which may have occurred due to lack of updated contact information in the Museusbr platform); and 2 emails with questions about the catalog were blocked. The graphs for this research were made using the Google Spreadsheets online application , application very similar to Microsoft Office Excel. The application helped automate the research. Thus, all the study graphs were created. Below is the graph that shows the percentage of museums in the Northeast that responded by email to research questions.

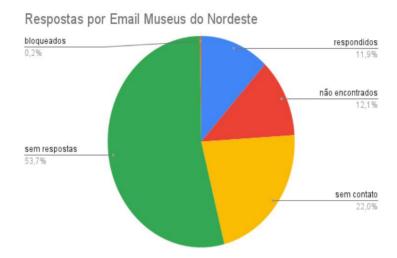


Figure 01 - Graph of email responses from museums in the Northeast. Source: survey data, 2021.

In the survey, we asked for the catalog, images of the collection and the website of the museums that made the collection available virtually. The museums that sent this information composed 2 lists: (1) list of museums which responded that they had catalogs, (2) and those museums that responded that they did not have a catalog.

Most of the museums that responded to the survey and entered the list of museums with catalog were museums in the State of Ceará. In the list of museums without catalogs, the majority were museums in the State of Bahia, which, proportionally, is the state in the Northeast with the most museums. The first list of museums with catalogs included museums from the states of Rio Greater North, Ceara, Maranhão, Bahia, Alagoas, Sergipe, Pernambuco and Paraíba. In second list of museums without catalogs, museums from the same regions appeared, however, in both lists, no responses appeared from museums in Piauí.

Both lists with this data follow in the body of the work below and the graph below shows, in percentage, how the Museums of the Northeast are in relation to the access of the public at a distance through virtual catalogs, which can be provided remotely to the public to meet the need for museum visits during the pandemic period.



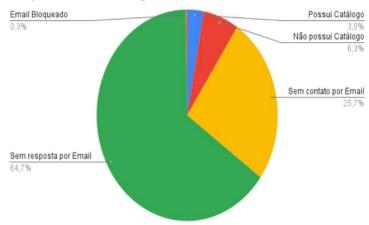


Figure 02 - Graphic responses about catalogs of Museums in the Northeast. Source: survey data, 2021.

# List of Museums that responded having a Virtual Collection Catalog

- 1. Memorial of the Labor Court (TRE-RN)
- 2. Ricardo Brennand Institute (PE)
- 3. Memorial Mother Menininha do Gantois (BA)
- 4. Professor Tarcísio Medeiros Electoral Memory Center (RN)
- 5. Toy Museum (CE)
- 6. Historical Geographic Institute of Paraíba
- 7. Professor Jairo José Campos da Costa Cultural Foundation Association (RN)

- 8. Memorial of the Judiciary of the State of Ceará (CE)
- 9. UFC Museum (CE)
- 10. Memorial Dom Helder Câmara (PE)
- 11. Craftsman Fernando Rodrigues dos Santos Memory Space (AL)
- 12. Dynamic Folklore Museum (MA)
- 13. Alzira Soriano Virtual Museum (RN)
- 14. Virtual Maritime Museum of the Far East (PB)
- 15. Bojogá Museum (CE)
- 16. Museum of Ceará (CE)
- 17. Capiba Center Station Train Museum (PE)
- 18. Sea Turtle Museum (SE)
- 19. Sebrae Memorial Maranhão (MA)
- 20. Memorial of the Public Ministry of Maranhão (MA)
- 21. Museum of Industry (CE)

# List of Museums that responded that they do not have a Virtual Collection Catalog

- 1. Mamulengo Museum (PE)
- 2. Raimunda de Caneca School of Arts Museum Crato (CE)
- 3. Acari Historical Museum (RN)
- 4. J. Borges Memorial (PE)
- 5. Pernambuco Press Museum (PE)
- 6. IMIP Museum (PE)
- 7. Zé do Carmo Museum (PE)
- 8. Artisan Irinéia Rosa Nunes da Silva (AL) Memory Space
- 9. Bahia Art Museum (BA)



- 10. Memorial of the Labor Court of Ceará (CE)
- 11. Historical and Cultural Center of the Vicente de Paula Rios Museum (CE)
- 12. Discovery National Park (BA)
- 13. Abrolhos Marine National Park (BA)
- 14. Open Sea Turtle Museum (BA)
- 15. Experimental Art Museum (PB)
- 16. Museu Casa de Cultura Hermano José (PB)
- 17. House of Quinca Moreira (CE)
- 18. Museum of the American Man Foundation (MA)
- 19. Municipal Museum of Historian Marineusa Santana Basílio Leite (CE)
- 20. Museum of Gastronomy of Maranhão (MA)
- 21. Impuma Museum (BA)
- 22. Santo Antônio Solar House Museum (BA)
- 23. Euclides Vital do Nascimento Historical Preservation Museum (CE)
- 24. Memorial Father Antonio Vieira SJ (CE)
- 25. Rag Doll Museum (CE)
- 26. Colonial House Museum (BA)
- 27. Natural History Museum of the State University of Paraíba MHN/UEPB (PB)
- 28. Museum of Sertaneja Culture of the State University of Rio Grande do Norte (RN)
- 29. Memorial of the Public Ministry of Maranhão (MA)
- 30. Cowboy Museum (CE)
- 31. ACM Institute (BA)
- 32. Museum of Minerals and Rocks, Federal University of Pernambuco (PE)
- Oceanography Museum of the Serra Talhada Academic Unit Federal Rural University of Pernambuco (PE)
- 34. National Nursing Museum MUNEAN (BA)



- 35. Tempostal Museum (BA)
- 36. Mamulengo Museum (PE)
- 37. Historical Geographic Institute of Paraíba (PB)
- 38. Câmara Cascudo Museum (RN)
- 39. Zoology Museum of the State University of Feira de Santana (BA)
- 40. Severina Paraíso da Silva Memorial (PE)
- 41. Cafua das Artes (MA)
- 42. Historical Museum of São Vicente (RN)
- 43. Museum of Visual Arts MAV (MA)
- 44. Quinca Moreira House Museum (CE)
- 45. Cathedral Museum (BA)

### **Final Considerations**

With this data from museums obtained by the Museusbr platform, during the pandemic period from 2020 to 2021, it was possible to note that most of the museums in the Northeast that responded to the research projects do not offer remote/virtual access to the public. The pandemic and isolation originating from it brought to the forefront the need for remote/virtual access to culture, thus marking an access distance that doubles: not in person, much less virtual, as well as the absence of a minimum catalog offering, basic information to visit the museum. In addition, there is a widespread difficulty in museums in the Northeast registered with IBRAM to communicate by email (64.7% of museums do not responded to the survey), which may have happened due to not receiving the message by museums, due to the lack of updating of data on the Museusbr platform, due to the pandemic, museums are not operating in person and there may be a gap in their virtual communications, and a possible absence of means of communication digital or lack of resources to automate communication; 25.7% of these museums do not even offer contact via email or institutional website. The research showed a small sample that needs further clarification and research on the virtualization of museums in

Northeast, the fact is that cultural public policies are needed that put into check virtual access to museums, since the vast majority of Brazilian museums are public institutions that must serve the population.

#### References

BRAZIL. Law No. 11,904, of January 14, 2002. Establishes what museums are in Brazil. **Official Gazette** of the Union: section 1, Brasília, DF, p. 1-80, January 15, 2009.

BOTTALLO, M. **Power, culture and technology:** the art museum and the communication society.

Novos Olhares Magazine - Issue 19 - 1st half of 2007 - Study Group on Media Product Reception Practices - ECA/ USP. 2007. Available at: <

https://core.ac.uk/download/pdf/268348681.pdf > accessed on: November 20, 2021.

DELEUZE, G. (1968) Difference and Repetition. Rio de Janeiro: Graal, 1988.

DODEBEI, IGV **Memories of people, things, and computers:** museums and their collections in cyberspace. In MUSAS - Brazilian journals of museums and museology, no. 3. Rio de Janeiro: National Institute of Historical and Artistic Heritage, department of museums and cultural centers, 2007.

IBRAM. **Guide to Brazilian Museums/Brazilian Institute of Museums.** Brasília: Institute Brazilian Museums, 2011.

MOREIRA, FJM A reflection on the concept of public in local museums. In **MUSAS**- **Brazilian journals of museums and museology**, no. 3. Rio de Janeiro: Institute of Historical Heritage and National Artistic, Department of Museums and Cultural Centers, 2007.

RÚSSIO, W. The concept of culture and its interrelation with cultural heritage and preservation. Museum Notebooks (IBPC), Rio de Janeiro, n.3, p.07-12, 1990.

OLIVEIRA, E, DG On the border between two worlds: the relationship between museums and art galleries.

University of Brasília, 2018. In: International Symposium on Systemic Relations of Art (1st: 2018: Porto Alegre, RS)

Art beyond art: Proceedings of the 1st International Symposium on Systemic Relations of Art [electronic resource] / Maria Amélia Bulhões, Bruna Fetter, Nei Vargas da Rosa, organization.

- Electronic data (1 file). - Porto Alegre: Federal University of Rio Grande do Sul, 2018.

Is the Museum a school?. Museum of Image and Sound MIS-SP, 2021. Available at < <a href="https://www.mis-sp.org.br/educativo/blog/a6be0286-addf-4df1-9f1e-41f91575842b/o-museu-e-uma-escola">https://www.mis-sp.org.br/educativo/blog/a6be0286-addf-4df1-9f1e-41f91575842b/o-museu-e-uma-escola</a> > accessed on: June 3, 2021.





ABOUT the organization. **Ministry of Tourism**, 2021. Available at < https://www.gov.br/museus/pt-br/acesso-a-informacao/institucional/sobre-o-orgao > accessed on: January 15, 2022.

STORINO, CMP; CHAGAS, MS Museums are good for thinking, feeling, and acting. In **MUSAS - Brazilian journals of museums and museology**, n.3.Rio de Janeiro: Institute of Historical and Cultural Heritage National Artistic, Department of Museums and Cultural Centers, 2007.