

Conservation and Restoration of Built Heritage – Europe and the Lions: Assets Integrated Into the Sobrado Dos Toledos – Iguape – Brazil

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Abstract: The aim of this article is to present the stages of restoration and conservation of the assets integrated into the Sobrado dos Toledos, in Iguape- Sao Paulo-Brazil, located in southeastern Brazil. The historic building is an important neoclassical architectural landmark built in the first half of the 19th century. It is a place of memory of an important economic moment in the city, that of rice cultivation, driving important investment in large neoclassical style residences. The Sobrado dos Toledos are icons of Portuguese Neoclassicism of the 18th and 19th century. This building is the only example to be found in the entire city that has the striking presence of the monuments that decorate the façade of the mansions. The ornamental images are striking representations of a European elite, a reflection of a period of great economic prosperity, mainly thanks to rice cultivation. We will highlight the two main decorative elements that adorn the façade of the Sobrado dos Toledos: The Lions, a set of two sculptures and the other a statue representing Europe, both in Portuguese faience. The restoration was part of the Archaeological Rescue and Monitoring Project for the restoration of the Sobrado dos Toledos in Iguape-SP.

Keywords: Iguape; Assets integrated into the Sobrado dos Toledos, Memory, Restoration, Neoclassicism in Brazil.

I. Introduction

The artworks which compose the Sobrado dos Toledos, in Iguape (Brazil), are icons of Portuguese Neoclassicism of the 18th and 19th century. This building is the only example to be found in the entire city that has the striking presence of the monuments that decorate the façade of the mansions. The ornamental images are striking representations of a European elite, a reflection of a period of great economic prosperity, mainly thanks to rice cultivation.

Despite the gold boom, the most important economic phase of the city was that of the rice industry, which began to take root at the end of the 18th century and reached its peak in the first half of the 19th century.

Its production, especially from the third decade of the 19th century, was destined for the internal consumption of the colony (and later the Brazilian Empire), and the wealth obtained from the export of rice made it possible to build large residences, mills, newspapers, theater companies and a new parish church, an accumulation of wealth that can still be seen today in the neoclassical mansions scattered around the current Historic Center¹ of the city of Iguape.

II. Neoclassicism in São Paulo

In the second half of the 19th century, São Paulo experienced a cultural environment that was sensitive to various changes, such as the expansion of the territory, technological innovations, in the fields of knowledge and art, among others. According to Azevedo (2012), the idea of reverence for the past lies in the condition of bearing witness to the source of memory, in recognizing the passage of time as a kind of treasure (Azevedo, 2012, p. 19). In this sense, Walter Benjamin tells us that the value of authenticity is “the quintessence of everything that has been transmitted by tradition, from its origin, from its material duration to its historical testimony” (Benjamin, 1985, p. 168, our translation). The transmission of the tradition of the past, according to Benjamin, has gone through a process of diffuse and complex memory since the 19th century. In literature, the muse of memory in the narrative became the muse of memory in the novel, in other words, the transformation of the consecration of the hero, of the myth, into a complexity of diffuse facts (Benjamin, 1985, p. 211). The tradition of a heroic and narrative past was transformed into the free manipulation of images of the past ordered by memory.

The imagistic relevance of the past through the visualization of diffusion in the materialization of a reception in modernity would demonstrate, according to Azevedo (2012), a recognition of the full human achievement in the past. The present dialogue with the past, especially with regard to the architecture of cities, is configured in the dialectic of the past with the modern present, in the diffuse memory of the past and the recognition of the construction of a heritage that is no longer heroic and mythological, but through the ritual imagery of the cult of new perceptions of the old.

Contemporary concepts of the reception and use of the past are relevant to a better understanding of this dialectic between past and present. According to Silva, Funari and Garraffoni (2020), in order to understand the notions of reception and uses of the past, it is necessary to point out the distance between the genesis and the subsequent recreation of the past. In this way, each moment uses the past to recreate its time, interests and circumstances (Francisco *et al.* 2020, p. 44).

Monteiro Lobato (1939), in his book *O Minotauro: Maravilhosas aventuras dos netos de Dona Bentana Grécia Antiga* (“The Minotaur: Marvelous Adventures of Dona Benta's Grandchildren in Ancient Greece”), says that in our city, São Paulo, there is not a façade that doesn't have shapes invented by Greeks. “The Ipiranga Monument in São Paulo is Greek from head to toe. The columns, the capitals with their acanthus leaves... the friezes and architraves, the cornices and triangles, everything is Greek” (Lobato, 1939, p. 14, our translation). According to Gilberto da Silva Francisco, the influence of classical urban architecture on São Paulo's landscape is undeniable. The modernization project of the late 19th and early 20th centuries, known today as eclecticism, was very prominent (Francisco, 2015, p. 28). The modernist perspective of the 1920s, with the artistic avant-garde in the debates about what it means to be Brazilian, brought a critique of classical eclecticism. In institutional spheres such as the National Service of Historical and Artistic Heritage (Sphan), founded in 1937 and composed of Brazilian modernist leaders such as the architect Lúcio Costa, eclecticism was considered a gap in the history of art (Francisco, 2015, p. 29).

This universe of reception of classical elements took place gradually in São Paulo, as a project aimed at the elite at the beginning of the 19th century, based on architectural insertions in a language that arrived transformed by other architectural compositions. These compositions were present in the imagined urban landscape of the city in the civilizing discourse idealized in ancient sources. For Gilberto da Silva Francisco,

¹ This Historic Center is the first urban complex in the State of São Paulo to be protected by IPHAN in 2011.

classical architecture or the “classical language of architecture” is understood as the debate about the reception of Greco-Roman forms, reworked since the Renaissance (reverberating globally in 17th/19th century France, the United States, Rio de Janeiro and São Paulo), present today as a “historical fact”. This presence can be seen in the cultural heritage, in the listed buildings, in the monuments in today's urban landscape (Francisco, 2003, p. 4). In São Paulo, the so-called “neoclassical” forms began to appear in the urban landscape in the mid-19th century, but it was not until the second half of the 19th century that they were widely developed, for example in the projects of Ramos de Azevedo². His work dialogues with other movements and different architectural styles and can be thought of from another point of view—the eclecticism. For Artur Rozestraten, “*eclecticism, as a design process of free compositional association between ancient architectural and decorative elements of different origins, was already announced in the last decades of the 18th century*³ and perhaps survives in contemporary São Paulo”.

Following the reflection proposed by Gilberto Francisco (2015), in this universe of interdisciplinary understanding of research, we believe that to understand the movement of reception of “neoclassical” elements, transformed and re-signified over the decades in São Paulo, it is important to have as a basis for interdisciplinary dialogue, that is, archaeology, architecture, literature, history, conservation and restoration. According to this author, architects and archeologists brought information and architectural references to Europe for new projects, the so-called “Greek revival” (Silva, 2015, p. 77). The so-called classical antiquity, re-signified in the landscape of the modern city of São Paulo at the end of the 19th century, brings us a wished civilizing ideal, present in the speeches and through the architectural styles in the central public spaces.

III. Neoclassicism in Iguape

This new concept was taken to the other cities and especially to the city of Iguape, so that the built heritage of Iguape contains important elements of a remarkable movement in Brazilian architecture. The areas of the city correspond to many phases of occupation that represent the diversity of architectural manifestations that occurred in different economic periods. Gold mining in the 16th century, shipbuilding in the 18th century and rice cultivation in the 19th century marked the urban fabric of the city and its buildings, such as the churches of Nossa Senhora do Rosário dos Homens Pretos, São Benedito and the Basilica of Bom Jesus de Iguape, inaugurated in 1858, all built in the colonial style with whale oil, shells and gravel (Iphan, 2009b). According to Daniel Pereira (Iphan, 2009b *apud* Pereira, 2013), the urban core of Iguape is characterized by its urban layout, with streets intersected by narrow alleys, and by its architectural composition of different periods and styles. The urban complex is made up of stone and limestone mansions and townhouses. Sobrado dos Toledos is an example of the neoclassical style built in São Paulo in the first half of the 19th century. It is the oldest architectural complex in the city.

IV. Historical Context of the Building

The building known today as Sobrado dos Toledos was built in the first half of the 19th century by José Carlos de Toledo, one of the wealthiest men of his time. Historian Agnaldo Valentin (2006) reports that José Carlos appears in the list of commercial taxpayers as the owner of a “business house in Rua do Comércio” (now Major Rebelo Street) for some years in the 1850s. The commercial house probably operated in the Sobrado dos

² Francisco de Paula Ramos de Azevedo was an architect and builder who graduated in Engineering and Architecture from the School of Civil Engineering at the University of Ghent in Belgium in 1878. He designed and built the most important public, institutional and private buildings in the city of São Paulo during the fifty years he was in charge of his office. Cf. (Wolff de Carvalho, 1996, p. 165).

³ For Cláudio Duarte *et al.* (2022), “*Neoclassicism was a cultural movement that emerged in Europe in the mid-18th century. It was a rational reaction to the Baroque emotionalism of the 17th century. This movement is composed, on the one hand of a revivalist aspect and, on the other hand, of an aspect of fantasy, of imagination—which creates a “classic” that is above all a threshold to modernity (see discussion in Rozestraten (2011)).* (Duarte; Hora; Godoy, 2022, p. 177, our translation).

Toledos, which is why it is estimated that the property was built at the end of the 1840s. The building was confiscated by the courts due to the family's debts, and in 1879, the heirs purchased the Sobrado from the Municipal Court of Iguape. On October 25, 1918, Antônio Carlos de Toledo Junior and others sold their shares to Ana de Toledo Aguiar, a devotee of Bom Jesus.⁴ On July 31, 1931, she donated the building to the Iguape Sanctuary to house poor pilgrims during the patron saint's festivities. The building became known as the "Sobradodo Santo" (Fortes, 2010).

Today, the Sobrado is owned by the Diocesan Miter of Registro (SP) and is protected by the Council for the Defense of Historical, Archaeological, Artistic and Tourist Heritage (Condephaat),⁵ as well as being located within the perimeter classified by the National Institute of Historical and Artistic Heritage (Iphan).^{6,7}

The building was abandoned until 2018, when it was restored with funds from the Growth Acceleration Program (PAC),⁸ a Federal Government program, managed by the National Institute of Historical and Artistic Heritage (IPHAN).

⁴Patron saint of the city of Iguape.

⁵Condephaat is the *Council for the Defense of Historical, Archaeological, Artistic and Tourist Heritage*, which takes care of all the cultural heritage present in the city and state of São Paulo.

⁶The *National Institute of Historical and Artistic Heritage* (Iphan) is a federal agency linked to the Ministry of Culture, in charge of preserving Brazil's cultural heritage. Iphan's mission is to protect and promote the country's cultural assets, ensuring their permanence and enjoyment for present and future generations.

⁷It is registered by Condephaat, process no. 00469/1974, resolution of February 06, 1975, inscription in the Heritage Book no. 93, p. 11, of February 17, 1975; and it is located within the perimeter registered by IPHAN, according to the public notice published in the Official Gazette of November 12, 2009, Heritage Process no. 1.584-T-09, with inscription in the Historical Heritage Book and in the Archaeological, Ethnographic and Landscape Heritage Book.

⁸The Growth Acceleration Program (PAC), which began in 2007, is a Federal Government initiative coordinated by the Ministry of Planning that has promoted the resumption of the planning and execution of major social, urban, logistical and energy infrastructure works in Brazil. In 2013, in an unprecedented way in the history of preservation policies, the Ministry of Planning authorized the creation of a line exclusively for historic urban sites protected by IPHAN, giving birth to the PAC Historical Cities.



Figure 1- Sobrado dos Toledos, photo from 2018. Available at: <https://www.projete.eng.br/obra/sobrado-dos-toledos>. Dec. 13, 2023.

The historian Roberto Fortes (2010) reports that the German traveler Robert Ave-Lallemant, who visited Iguape in 1858, was dazzled by the Sobrado dos Toledos for its size, as well as the two lions and the “America” (remarking that the German traveler misidentified the image, which will be discussed later) that adorned its façade. According to the traveler:

Iguape is a graceful and peaceful town, quite regular and clean; the 1,500 inhabitants live in whitewashed houses, many of them beautiful, and some even magnificent townhouses. The most beautiful house in town, a splendid corner house, has fifteen windows in a row on one side and eight or nine on the front; above it is an “America” and two terrible lions, all made of fired clay and glazed white, which have a formidable effect. And speaking of the notables of Iguape, the clay lions should not be forgotten (Ave-lallemant, 1995, p. 100).

The IPHAN dossier on the registration of the Historic Center of Iguape adds an important piece of information on the origin of the ceramics in the Sobrado, as an example of Neoclassical architecture ⁹ in Iguape. Its façade is decorated with porcelain from Porto. In 2018, the entire building began to be restored and several professionals from different fields (archaeologists, engineers, architects, historians, restorers, among others) were mobilized to start the work.

⁹<http://portal.iphan.gov.br/uploads/ckfinder/arquivos/Centro%20hist%C3%B3rico%20de%20Iguape%202009.pdf>

However, it wasn't just the historic building that needed to be restored. The Lions and Europe artworks at the top of the building's façade also needed attention.

V. Stages of restoration: Identification of the sculptures and technical elements present

The sculptural ensemble consists of three ceramic sculptures, a female figure representing the European continent, i.e., the personification of Europe, and the representation of two lions, all located at the top of the townhouse façade. As described above, the neoclassical style was influenced by a period of archaeological discoveries of the so-called "classical world,"¹⁰ with Greco-Roman representations in white marble being widespread during this period.

VI. Material composition of the sculptures

The material used for producing both the lions and the figure of Europe is ceramic, common or fine earthenware (*faïence*), corresponding to a ceramic body in *chacota*,¹¹ completely covered with an opaque stanniferous glaze (white or colored with oxides). This earthenware differs from common ones by having a transparent stanniferous glaze (with or without coloration) that covers the ceramic paste in a beige or brownish-black color. The designation of this earthenware comes from the secret of its production: the addition of limestone to the paste, which acts as a melting agent. "*The process of crushing and sifting the limestone ends up giving this pottery its baptismal name: pó-de-pedra*['stone dust']" (Souza, 2013 *apud* Madureira 1997, p. 180). Its production began in the 18th century in England, when the aim was to obtain a product with the qualities of porcelain at low cost, to meet the growing demand of the market.

The raw materials used in the *fine porcelain* industry of the time can be divided into two categories: the ingredients for the porcelain—clay, lead, tin, sand, salt and paints; and the fuel for the kilns, the *carqueja* (*Baccharis trimera*). In addition to these products, there were other "*by-products that were used in the preparation of tin glazes and glaze paints, as well as in the experiments carried out to produce powdered stoneware and the corresponding plumbiferous glaze*" (Souza, 2013 *apud* Fernandes, 2008, p. 21-22, our translation).

Before the clay could be worked, it had to be prepared. This preparation included five operations: *wetting, mixing, straining, kneading, and heaping the clay*. Two methods were used to shape the pieces: the lathe or the molds. Depending on the process used, we can distinguish between pieces *made on a lathe* or *turned*—simple shapes, usually rounded, that can be made on a lathe—and pieces made in a mold or shaped by hand. At the end of the lathe or mold process, when the clods had taken their final shape, the pieces were decorated with elements such as ears, wings, and sleeves. When a sufficient number of pieces were ready, they were moved to the drying room. The first firing took place after the raw pieces were well dried, resulting in the *chacota* or *biscuit*.

The book *Arte da Louça Vidrada* ("Art of Glazed Pottery") states that the firing process lasted between 30 and 36 hours. The fired pottery was then removed from the mold and was ready to be glazed and painted. The

¹⁰The so-called "classical world" in this case refers to the elements present in the monumental decorations common to the Classical and Hellenistic periods in the case of Greece and its Mediterranean settlements, and to the elements of the Roman period. At present, this term "classical" is under discussion, because in view of new studies and the complexity of the representations known in both cases, we call it the Mediterranean world.

¹¹Chacota (or biscuit): an object or artifact made entirely of ceramic material. This ceramic object, depending on the raw material of which it is composed, has been fired in the open air and under the action of the sun or in a kiln at temperatures of up to 980°C and has the final shape of the piece (the body). Note: in some pieces of ceramics, the biscuit is subjected to temperatures between 1150°C and 1250°C. In the case of porcelain, a material we don't work with, the biscuit is exposed to 1250°C. Other materials are then applied to the biscuit, and it is again exposed to high temperatures, resulting in the final piece: decorated and glazed.

first step was to prepare the glaze, which consisted of lead and tin purchased in bars or rods. It was calcined, then ground and sifted until a very fine substance was obtained. This was the basis of the glaze. After the glaze bath, the pieces could have two destinations: if they were only to be covered with white, they went to the second firing; if they were to be decorated, they went to the painting shop. The second firing was used to fix the glaze and/or the decorative colors and to glaze the pieces (Souza, 2013).

The white earthenware ceramic sculptures that arrived in Brazil were produced in Portugal, in the region of Porto and Gaia; the most popular factories that sent the pieces were Devesas and Santo Antônio do Vale da Piedade, especially in the mid-19th century. For this reason, we can even consider the possible dating of the construction of Sobrado dos Toledos, associated with the 1858 report by the aforementioned German traveler Robert Avé-Lallemant. It is therefore possible that the sculptures may have come from Portugal.

The use of this type of ceramic sculpture in outdoor areas (gardens) dates back to the 18th century. The sculptures produced at the *Real Fábrica de Louça do Rato* ("Royal Pottery Factory of the Rat"), in Lisbon, reached their peak between 1781 and 1816, under the administration of João Anastácio Botelho de Almeida, although production continued almost until the factory closed. It is precisely during this final phase that, in 1826, an important shipment of "statues, groups and vases" was reported to have been sent to Rio de Janeiro, destined for the Royal Estate of Bela Vista or the Palace of São Cristóvão. This order included the creation of new figures and vases. The *Real Fábrica de Louça*, also known as the *Real Fábrica de Louça do Rato*, was closed in 1835; there is no news of other ceramic centers producing large pieces for placement in gardens or other outdoor spaces until the mid-19th century (Queiroz, 2014).

The revival of the production of pieces took place in Porto and Gaia, where the most important factories were located, such as Santo Antônio do Vale de Piedade, Devesas, Massarelos, Miragaia, and Carvalhinho. However, the overwhelming majority of the pieces used in Brazilian architecture can be attributed to the factories in the north, thanks to the exports made at that time (Queiroz, 2014).

The themes used in the creation of the pieces followed the taste for Greco-Roman mythological erudition, with representations of Mercury, Jupiter, Diana, and even the Muses. However, new themes also appeared, such as Greek dancers in various poses. Another aspect that stands out in the representations of these images are the themes associated with allegories, such as the Gratitude, the Friendship or the Kindness. However, the themes that predominate in the ceramic images used on façades, both Portuguese and Brazilian, follow a different logic, more oriented to the rhythms of life and time, such as the months of the year, or the Four Seasons, the Four Continents, and the personifications of Commerce and, above all, Industry. These themes sought to show progress and the mastery of time and space, which was the logic of modernity at the time and could give the sculptural ensemble the greatest aesthetic impact (Pais, 2012; Queiroz, 2014).

VII. The Lions and Europe: restoration process

According to the Atemporeport (2013), the choice of lions to adorn the edges of the façade of Sobrado dos Toledos is a symbol of the economic power of its owners, members of a local elite. The symbols allude to power, strength, wisdom and protection. It is possible that this decoration refers to the lions on the "Mycenaean gate,"¹² according to the author (Atempo, 2013). As mentioned above, Avé-Lallemant (1995, p. 100) notes and qualifies them as "terrible lions". Another aspect that attracts attention is the surface treatment, in fired clay and glazed in white, which has a formidable effect.

¹²The Lion Gate of Mycenae, in southern Greece.

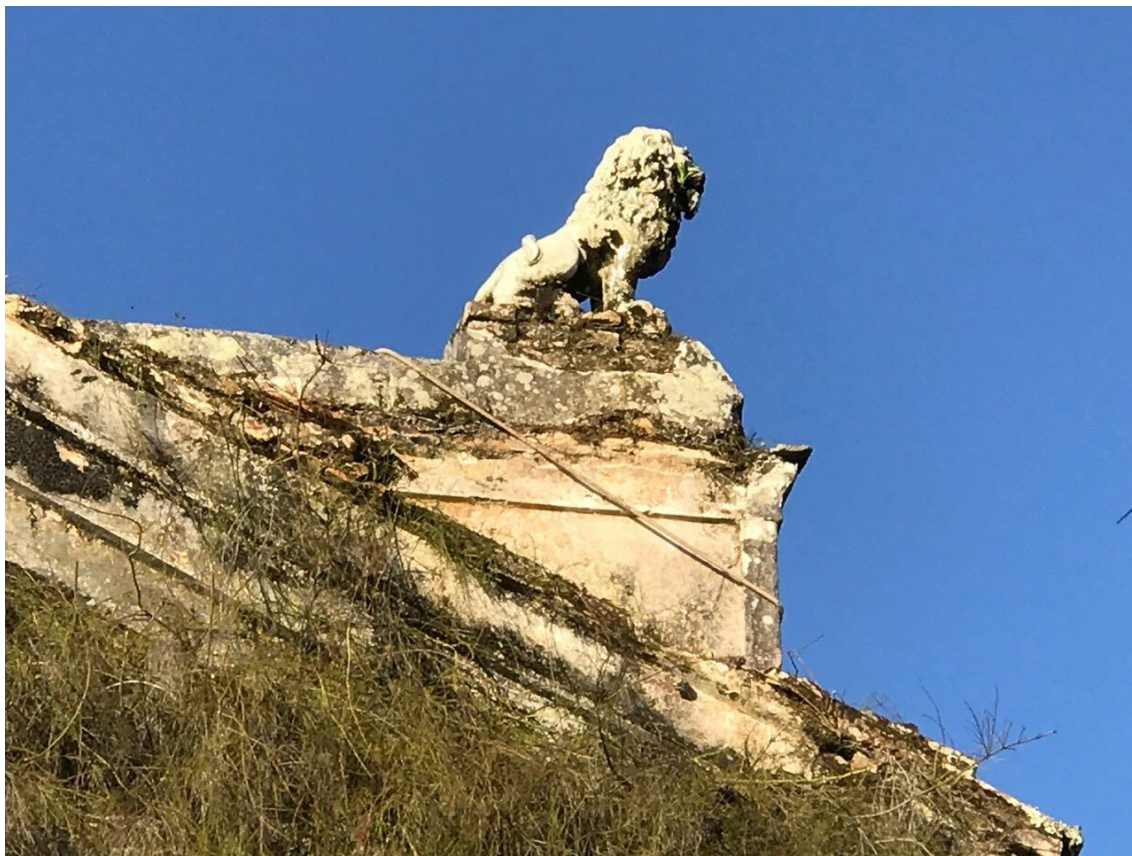


Figure 2. Record of one of the lions at Sobrado dos Toledos.
Atempo Preservation and Restoration Collection, 2013.

The statue representing the figure of America, described by the traveler Lallemant, could be a representation of Europe. The catalog of the former Portuguese Devesas Factory shows a very similar piece, almost identical to the one found at the top of the mansion. The allegory shows a woman dressed in a cloak, wearing a crown, holding a scepter in her right hand, a globe in her left hand and a column at her feet, demonstrating the supremacy of the Roman Empire, categorized as a representation of Europe. There are some variations of this representation, but the basic attributes are always the same. The representation of America has other attributes such as a bow in the left hand, an arrow holder on the back and an arrow in the right hand, as well as a bare back, a headdress, and a feathered skirt, as shown in the images represented in the DevesasFactoryCatalog¹³ (Atempo, 2013):

¹³The Devesas Factory Catalog refers to the most diverse set of ceramic artifacts from the period 1890-1910 in Portugal, with the aim of promoting the diversity of production. Some of the showcases have been missing for many decades, while others have not been given their due value as a historical, heritage, documentary and even aesthetic reference.

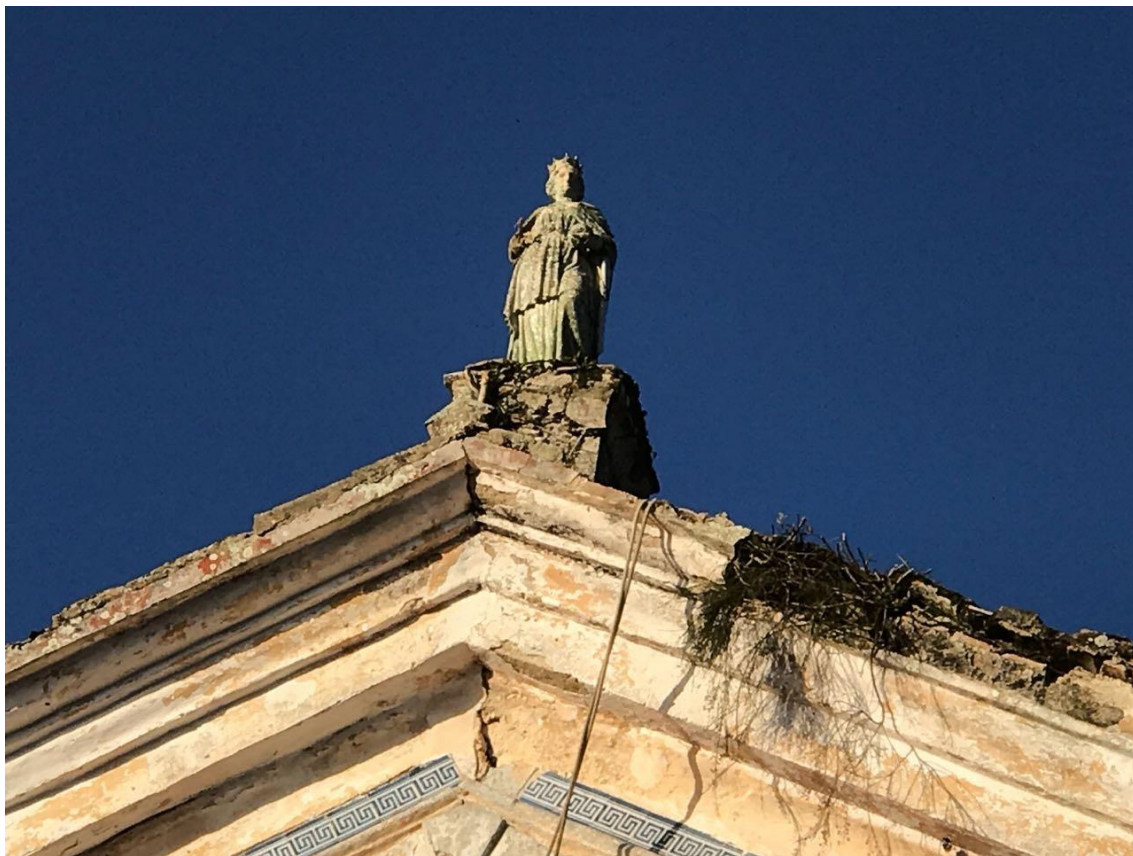


Figure 3-Representation of Europe at the top of the main façade of Sobrado dos Toledos.
Atempo Collection (2013)

VIII. The Restoration Process

The restoration process began with the removal of the sculptures from their pedestals. On this occasion,¹⁴ the restorer¹⁵ carried out an initial analysis of the sculptures, which revealed the advanced state of deterioration due to lack of conservation and the urgent need for restoration. The sculptures are exhibited outdoors, exposed to the elements, which in itself requires preventive conservation.

The entire restoration process was preceded by a comprehensive study that included the identification of the assets, historical, formal, technical and iconological analysis, and a thorough diagnosis that provided a set of information to determine the state of conservation of the assets, to understand how the deterioration processes occurred and to find solutions to stop these processes. Everything was documented photographically.

The Europa sculpture was identified with the images in the catalog of the Devesas Ceramic and Foundry Factory.

Below is an image of the Sobrado dos Toledos with images of the assets integrated into the façade:

IX. Conservation Status Analysis

¹⁴The restoration work of the assets integrated in the Sobrado dos Toledos began in Iguape on September 26, 2018, when they had already been removed from the top by the restoration team of the mansion and placed in a technical reserve.

¹⁵Adriana Vera Duarte, the restorer in charge of the technical aspects.

At the time of the preliminary analysis of the state of conservation of the sculptures, the pieces had already been removed from their original location at the top of the façade of Sobrado dos Toledos. They had been removed by the team restoring the mansion and were in a technical reserve, along with other excavated artifacts.

On this occasion, a recurrence of pathologies was noted in the three sculptures, which links weather damage and lack of conservation with the predominant presence of lichens, fungi, missing parts, gaps, fractures, stains, loss of glaze, detachments, cracks, dirt (including deposits consistent with excrement) and repainting.

The lichens in particular have caused aesthetic changes to the three sculptures. Seen from a distance, the sculptures have become greenish, and the biofilm that has formed has obscured details and damage that can only be seen by removing the biofilm.

Lichens produce organic acids that penetrate the inner layers of ceramics and can cause very serious irreversible damage. This may be one of the factors that contributed to the extensive glaze loss that formed and affected the substrate in several areas.

It is worth considering the hydrological aspects of the city of Iguape, as they affect the state of conservation of the sculptures and mansions. The study site is located in the Vale do Ribeira region, which includes the Ribeira de Iguape river basin and the Iguape-Cananéia-Paranaguá Estuarine Complex, or Lagamar (Carneiro, 2005). The main characteristics of this region are the presence of the sea, with long lines of beaches such as Ilha Comprida and Juréia; many islands embedded in the mainland (Cardoso, Cananéia, Comprida); numerous channels, “seas” and bays. The influence of the tides, especially around Iguape, is strongly felt in the rivers; altitudes just above mean sea level; very rich surface drainage in the coastal strip; diverse vegetation, mangrove forests, tropical forests and marginal dikes, patches of *sambaquis*; high humidity and rainfall; high and uniform temperatures (Petrone, 1966 *apud* Carneiro, 2005).

The region has high rainfall rates of more than 2000 mm per year, “especially in summer, caused by the strong warming of the continent, which causes local frontal rains resulting from the passage of cold fronts, particularly intense in late fall and early summer” (Carneiro, 2005, p. 42, our translation), creating a favorable location for the proliferation of lichens.

The sculptures were transferred to the atelier with the infrastructure to perform restoration and ensure their safety. A detailed diagnosis was carried out to complement the analysis of the state of conservation of each of the three sculptures.

After the initial cleaning of each sculpture to remove lichens and deposits from the surfaces, organoleptic examinations were carried out with magnifying glasses and lights to assess the physical condition, and several high-resolution photographs were taken to record the damage and its extent, the incrustations, organisms, old restorations and their degree of deterioration.

The damages identified in the three sculptures in this second analysis were greater extent of glaze loss, blistering, delamination, other cracks, fissures, more fractures and gaps, depigmentation, identification of other organisms such as live cockroaches (*Periplaneta americana*) inside the Europa sculpture, greater extent of repainting, and peeling of paint layers.

With the completed analyses (which were possible), the treatment proposal can be formulated more confidently, and the conservation and restoration procedures can be carried out with greater assurance.

X. Damage Map

The damages were recorded on the Damage Map:¹⁶ a specific restoration report, which records covered or uncovered damages with several information, including size and extent of damages and pathologies.

¹⁶For didactic reasons, the Damage Map is presented here in a simplified form.

a) “Europe” sculpture



Approx. measurements:
Height: 1.04 m / Base: 30 cm
-Cement on the base.

Figure 4-Europe. Photo: Atempo. (2018)

Back detail:

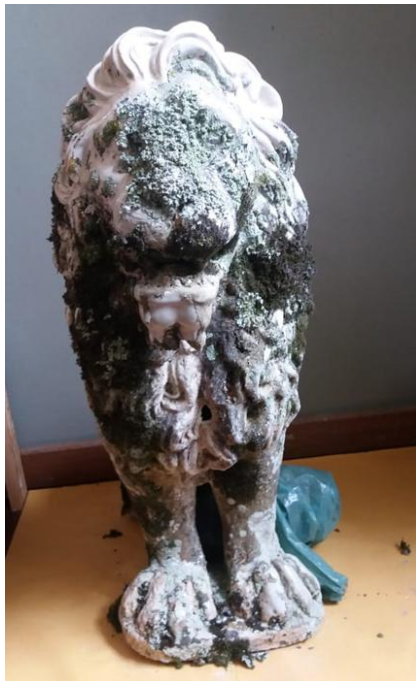


Figure 4.1- Back detail - Europe. Photo: Duarte, Adriana V. (2018).

Pathologies

- Widespread dirt.
- Details of the sculpture are covered with lichens of different green tones.
- Presence of fungi.
- Identification of live cockroaches (*Periplaneta americana*) and spiders.
- Old restoration (some repainting).
- Loss of right arm (Fig. 4).
- Cracks.
- Gap (hole in the piece).
- Loss of glaze (about 90%).
- Extensive loss of substrate.
- Presence of cement in the base.

b) Lion 1



Approx. measurements:
Height: 70 cm / Base: 53 cm

Figure 5- Lion 1. Photo: Atempo (2018)



Figure 5.1-photo taken from the lion's side- Lion 1. Photo:Atempo (2018)

Pathologies:

- Widespread dirt.
- Details of the sculpture are covered with light greenish lichen.
- Presence of spiders.
- Widespread incrustations.
- Blistering.
- Gap (hole).
- Areas of cracks (small lines) and fissures (cracks of varying depth).
- Loss of glaze (peeling) in several areas (about 40%).
- Old interventions (repainting in several areas).
- Peeling of paint layers.
- Small generalized fractures.
- Detached hindpaws.
- Presence of cement in the base.

c)Lion 2

Side:

Approx. measurements:

Height: 70 cm / base: 53 cm



Figure 5.2 Front detail. Photo: Atempo, 2018

Front:
-Fractures in the toes



Side detail - head

Figure 5.3- Front and head detail - Lion 2. Photo: Atempo. (2018)

Pathologies:

- Widespread dirt.
- Details of the sculpture covered with lichen of various colors.
- Presence of spiders.
- Small generalized fractures.
- Partial fracture of two toes on the front paw.
- One (1) missing hindpaw.
- Widespread incrustations.
- Areas of cracks (small lines) and fissures (cracks of varying depth).
- Blistering.
- Loss of glaze (peeling) in several areas.
- Old interventions (repainting in several areas).
- Peeling of paint layers.

- Loss of ceramic material.
- Presence of cement in the base.

XI. Treatment proposal (for the three sculptures)

All the proposed works were carried out in accordance with the conservation and restoration standards established in the *Restoration Charter* of April 6, 1972, reproduced by the Brazilian National Institute of Historical and Artistic Heritage (IPHAN), using specific restoration techniques and materials.

The techniques and procedures proposed for the treatment respected the principles of restoration proposed by Cesare Brandi (2013), such as minimal intervention, reversibility and distinguishability of materials, as well as the commitment to absolute respect for the aesthetic, historical and material integrity of the sculptures.

According to Cesare Brandi, restoration aims to recover the potential unity of the artwork, and, as a product of human activity, it has two instances: the aesthetic instance, related to its enjoyment, and the historical instance, since it was crafted by someone, at a certain time and in a certain place. For Brandi, one instance prevails over the other.

Given that the artwork is defined first and foremost in its dual aesthetic and historical polarity, the first guideline of inquiry will be to determine the necessary conditions for the enjoyment of the work as an image and as a historical fact (Brandi, 2013, p. 103).

The reintegration of the support and/or the glaze (the superficial layer that gives the ceramic its shiny appearance) was carried out with the aim of achieving an aesthetic result, using specific restoration materials that were different from the original. They followed the principle of material reversibility and minimal intervention, limiting the areas of loss while respecting the areas that had been preserved up to that point in the restoration.

For the prostheses, the right hand of Europe and the Lion's paw, the decision was based on aesthetic fruition and the restoration of artistic unity. No additions were made hypothetically.

(...) restricting our behavior in relation to the work of art to respect for the work of art, which implies its conservation and respect for the integrity of what has come down to us, without harming its future (Brandi, 2013, p. 126).

The identification of the Europa sculpture in the Devesas Factory Catalog was used as a reference for the production of her prosthetic hand and scepter.

XII. Stages of the proposed treatment:

- Cleaning and sanitizing.
- Biocide application.
- Removal of paint coatings.
- Consolidation of fractures.
- Filling in the gaps.
- Producing and restoration of missing parts.
- Chromatic reintegration.
- Glaze reintegration.
- Protective layer for parts exposed to the elements.

Performed Interventions

a) Procedures performed on the “Europe” sculpture:

- Sanitizing to remove lichen and surface dirt with soft bristle brushes.
- Mechanical removal of incrustations and deposits with precision tools.
- Removal of repaint layers with gel descaler (previously tested) and use of *Lecron*.
- Chemical cleaning with deionized water and neutral detergent with a swab.
- Removal of cement from the base with micro-grinding and precision tools.
- Spray application of a quaternary ammonia-based biocide diluted with deionized water against biological agents.
- Stuffing the areas of loss with a filler (marble dust, calcium carbonate, polyvinyl alcohol, acrylic putty, deionized water, and pure pigments).
- Preparation of the prosthetic arm and scepter of Europe:
- Modeling of the right arm of Europe in plasticine according to the picture in the Devesas Catalog, where its original position was checked.
- Blue silicone casting from the plasticine part.
- Making the prosthesis in stone plaster using the blue silicone mold.
- Fixation of the prosthesis with a pin made of non-oxidizing material, positioned as shown in the Devesas Catalog.
- Finishing with filler, acrylic resin *Paraloid B72* diluted in xylene with pigments for chromatic reintegration.
- Application and reapplication of layers of *Paraloid B72* resin diluted in xylene and *Tinuvin 292*,¹⁷ for the final protection of the parts exposed to the elements.
- The scepter was carved from wood (cedar) and coated with animal glue, filler and layers of *Paraloid B72* resin diluted 25% in xylene and pigments.
- The scepter was attached to the sculpture with epoxy-based adhesive.
- Application of two coats of *Paraloid B72* resin diluted in xylene and *Tinuvin 292* for the final protection of the pieces exposed to the elements, as well as to restore the shine of the lost glaze.

b) Procedures performed on the “Lion1” sculpture:

- Sanitizing to remove surface dirt and organisms with soft bristle brushes.
- Mechanical removal of incrustations and deposits with precision tools.
- Removal of repaint layers with gel descaler (previously tested) and use of *Lecron*.
- Removal of cement from the base of Lion 1 (paw area) with micro-grinding and precision tools.
- Chemical cleaning with deionized water and neutral detergent with a swab.
- Spray application of a quaternary ammonia-based biocide diluted with deionized water against biological agents.
- Fixation of loose hind paws with a stainless-steel pin and epoxy-based adhesive.
- Stuffing the areas of loss with a filler (marble dust, calcium carbonate, polyvinyl alcohol, acrylic putty, and deionized water).
- Chromatic reintegration with *Paraloid B72* resin and pure pigments.
- Application of two layers of *Paraloid B72* resin diluted in xylene and *Tinuvin 292* for the final protection of the pieces exposed to the elements, as well as to restore the shine of the lost glaze.

c) Procedures performed on the “Lion 2” sculpture:

- Sanitizing to remove organisms and surface dirt with soft bristle brushes.

¹⁷*Tinuvin 292*: A light stabilizer that is added to the coating to provide protection against photochemically induced oxidation caused by oxygen and UV light.

- Mechanical removal of incrustations and deposits with precision tools.
- Chemical cleaning with deionized water and neutral detergent with a swab.
- Removal of repaint layers with gel descaler (previously tested).
- Removal of cement from the base of the sculpture (paw area) with micro-grinding and precision tools.
- Spray application of a quaternary ammonia-based biocide diluted with deionized water against biological agents.

Reconstruction of the hind paw:

- Molding of the existing paw in a blue silicone mold.
- Creation of a replica (paw) in stone plaster from the blue silicone mold.
- Fixation of paw with a stainless-steel pin and epoxy-based adhesive.
- Finishing with leveling compound and layers of *Paraloid B72* resin diluted in xylene, pigments and protective layers.
- Stuffing the areas of loss with a filler (marble dust, calcium carbonate, polyvinyl alcohol, acrylic putty, and deionized water).
- Chromatic reintegration with *Paraloid B72* resin and pure pigments.
- Application of two layers of *Paraloid B72* resin diluted in xylene and *Tinuvin 292* for the final protection of the pieces exposed to the elements, as well as to restore the shine of the lost glaze.

Presentation of the restored pieces

The entire restoration process lasted an average of ten weeks. Once the pieces were restored, they were returned to their original location on the plateau of the Sobrado dos Toledos building, as shown in the pictures below:



Figure 6- Sculpture of Europe restored.



Figure 7a/7b- Sculptures of the Lions restored. (Photo: Atempo).



Figure 8- Placement of pieces on the plateau of the Sobrado dos Toledos building. Photo: personal archive (2018).

Final considerations

The analysis of the characteristics of the local architecture and the traces found in the Sobrado dos Toledos, as well as the comparison with the specialized bibliography on the evolution of the Brazilian dwelling,

provide an important reflection on the taste for eclecticism spread by the European influence. This taste may also have been the result of local and regional factors.

In this way, we understand, in line with Hodder (1999), that material culture is a construction and a means of communication involved in social practice, the conception being in the construction of codes of representation, or the manifestation of symbolic practices constituted and situated in relation to the group. Material culture studies are primarily interested in explaining phenomena of cultural change, basically from three interrelated dimensions structuring social life: form, space, and time (Lima, 2011).

The fascination and interest in earthenware objects is a matter of personal taste, which can only be assessed by each individual. It is noted that objects affect people in the same way that they use them, and in this relationship, nothing needs to be said or written—all the elements of attachment occur in manipulating the artifacts.

The three sculptures at the top of the Sobrado dos Toledos help us understand the message that was intended to be conveyed by using them on the facades: an idea of progress and mastering time and space. The discourse transmitted by these facades carried a symbol of modernity, even though it sought to combine it with an expression of classical tradition. The image of Europe, according to Zarankin (2002), is sometimes of an imposing nature. Social objects, therefore, are loaded with their own values and meanings; they are not just passive reflections, but active participants in the formation of human beings. In our view, one of the most important issues for understanding society is the changing use of material culture in identity construction in terms of ethnicity, status, gender, and age. These changes are an expression of new hierarchies and power relations (Senatore; Zarankin, 2002). According to Pais (2012), it is a fusion of elements and influences that create a scenic language in the city. It is a theatricalization of urban space that gives it the evocative appearance of a stage set, where the population, thanks to the rigid behavior of the time, assumes the role of actors. Practical architecture in Brazil reflects a simple and clear logic, whose dominant message is associated with the progress and renewal of the Industrial Revolution, which according to Pais:

Here, ceramic sculpture lost its decorative and bucolic role, derived from its placement in garden spaces, to take on, especially from the end of the third quarter of the 19th century, a dimension of programmatic discourse, praising new values and the emergence of the new rising class, the bourgeoisie (Pais, 2012, p. 5, our translation).

From a broader perspective, the study of material culture can be guided by different theoretical approaches. Importantly, in the case of the study area, we are dealing with a place that has undergone significant changes in uses and meanings of spaces since its establishment. These changes can be interpreted independently of rigid temporal markers; it's about the growing need to go beyond conceptions of time or history.

The sculptures, now restored, have been returned to their original location at the top of the Sobrado dos Toledo's pediment. Given that the sculptures are outdoors, preventive conservation is essential to prevent further deterioration, as recent interventions have made restored areas more vulnerable than unrestored ones.

It is recommended to carry out quarterly preventive maintenance, which means sanitizing with a soft brush and non-pressurized water to remove the biological agents which are accumulated daily.

Replacing them with replicas and moving the originals to a museum in town is a possibility the people of Iguape can discuss. This alternative could be considered with regard to their conservation, in accordance with the recommendations by Brandi (1977):

The place, like the material, contributes to the manifestation of the image. Therefore, the removal of an artwork from its original site should only take place when it is indispensable for its conservation (BRANDI, 1977, p. 11-12, our translation).

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Bibliography

- [1] Atempo Preservation and Restoration. (2013). Projeto de Restauro do Sobrado dos Toledo - Iguape/SP.
- [2] Avé-lallemant, Robert (1812-1884). (1995). Viagem pelo Paraná - 1858. Curitiba: Fundação Cultural.
- [3] Azevedo, Elciene (Orgs.). (2012). Escravidão e suas sombras. Salvador: EDUFRA.
- [4] Benjamin, Walter. (1985). Obras Escolhidas. (v. 1. Translation by Sérgio Paulo Rouanet. São Paulo: Brasiliense.
- [5] Bittencourt, Doris Maria Machado de. (2007). Arquitetura de pedra e cal no litoral sul e vale do Jaçuí nos sécs. XVII e XVIII: Colônia do Sacramento, Rio Grande, Viamão e Santo Amaro. Santa Cruz do Sul: EDUNISC, pp. 18-25.
- [6] Brandi, Cesare. Teoria da restauração. (2013). 4th ed. Ateliê, Artes e Ofícios.
- [7] Carneiro, Rafaelle Rocha Souza (2005). A pesca da manjuba (*Anchoviella lepidentostole*) e o canal do Valo Grande: uma relação de (des)continuidades em Iguape-SP. 2005. Thesis (PhD in Human Geography)—College of Philosophy, Literature and Human Sciences, University of São Paulo.
- [8] Da Silva Francisco, Gilberto. (2003). Tradição clássica no Brasil contemporâneo: o estilo “neoclássico” e a metrópole paulistana. In: Anais Primeira Semana de Arqueologia: Arqueologia e Poder, UNICAMP, pp. 1-11.
- [9] Da Silva Francisco, Gilberto. (2015). Vasos gregos e relações internacionais. Revista do Museu de Arqueologia e Etnologia. n. 25, 2015, pp. 191-213.
- [10] Antonio Almeida da Costa & C. (1910). Catálogo da Fábrica Cerâmica e de Fundição das Devesas..^a, Villa Nova de Gaya, Portugal. Gaya/Porto: Real Typ. Lith. Lusitana.
- [11] Duarte, Claudio Walter Gomez; Hora, Juliana Figueira; Godoy, Marília Gomes Ghizzi. (2022). Retratos do Patrimônio Arquitetônico Neoclássico Brasileiro: a Casa de Frontaria Azulejada de Santos e proximidades visuais. VEREDAS - Revista Interdisciplinar de Humanidades, v. 5, n. 9, pp. 176-195.
- [12] Hodder, Ian. (1999). The archaeological process: an introduction. Oxford: Blackwell.
- [13] IPHAN. (2009b). Dossiê de Tombamento de Iguape. São Paulo: Minc/IPHAN.
- [14] Lobato, Monteiro. (1939). O Minotauro: maravilhosas aventuras dos netos de Dona Benta na Grécia Antiga. O Estado de S. Paulo.
- [15] Pais, Alexandre Nobre. (2012). Um tema de fachada: a escultura cerâmica portuguesa no exterior de arquiteturas luso-brasileiras. Portal Vitruvius, v. 15, n. 09. Available at: <http://www.vitruvius.com.br/revistas/read/arquitextos/13.148/4484>.
- [16] Queiroz, Francisco. (2014). Os mostruários da Fábrica de Cerâmica das Devesas. In: Actas do II Congresso Internacional sobre Patrimônio Industrial: Patrimônio, Museus e Turismo Industrial: uma oportunidade para o século XXI. Porto, Catholic University, May 22-24, pp. 84-91.
- [17] Reis Filho, Nestor Goulart. (2004). Quadro da Arquitetura no Brasil. 10th ed. São Paulo: Perspectiva.
- [18] Silva, Glaydson José da; Funari, Pedro Paulo; Garraffoni, Renata Senna. (2020). Recepções da Antiguidade e usos do passado: estabelecimento dos campos e sua presença na realidade brasileira. Revista Brasileira de História, v. 40, pp. 43-66.
- [19] Sousa, Laura Cristina Peixoto de. (2013). A Fábrica de Louça de Santo António de Vale de Piedade, em Gaia: arquitetura, espaços e produção semi-industrial oitocentista. Thesis (Master's Degree in Archaeology)—University of Porto, 2013. v. 1.
- [20] The Restoration Charter. (1972). Ministry of Education, Italy. Memorandum n. 117, April 6.

- [21] The Venice Charter. (1964). International Charter on the Conservation and Restoration of Monuments and Sites. ICOMOS, Venice.
- [22] Valentin, Agnaldo. (2006). Uma civilização do arroz: agricultura, comércio e subsistência no Vale do Ribeira (1800-1880). Thesis (PhD in Economic History)—College of Philosophy, Literature and Human Sciences, University of São Paulo.
- [23] Wolff de Carvalho, Maria Cristina. (1996). Bem-morar em São Paulo, 1880-1910: Ramos de Azevedo e os modelos europeus. *Anais do Museu Paulista: História e Cultura Material*, v. 4, pp. 165-200.