

Industrial heritage in Brazil and their legacy: from abandonment to recovery

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Abstract. The process of deindustrialization in Brazil led to the abandonment of various industrial structures and heritage sites, which ended up becoming dangerous abandoned spaces. This article focuses on the importance of recognizing industrial buildings as part of the country's historical heritage, highlighting their significant contribution to understanding the history and evolution of Brazilian society. To illustrate this importance, this article mentions successful examples of rehabilitation and reuse of old factories, such as SESC Pompeia and the Bhering Factory, along with an analysis of the abandonment of the Dom Pedro II Docks Warehouse. These cases serve as inspiration and a model for future initiatives aimed at preserving and recovering Brazil's industrial heritage, demonstrating both cultural and economic benefits for contemporary society.

Keywords. Industrial heritage, Industrial decay, Heritage recovery, Industrial space reuse, Brazilian industrial heritage.

1. Introduction

When discussing cultural heritage, it's common to initially think of historical assets dating back centuries or millennia, and classics from ancient times. Rarely we associate something from our more recent history with cultural heritage. Thus, when we delve into heritage in our recent history, industrial assets arise. Industries served as significant landmarks in the division of historical periods, altering the course of humanity and leaving a legacy that continues to influence the present day. Unfortunately, society often fails to recognize the importance of these assets to the world, resulting in significant abandonment of industrial sites, a trend not uncommon in Brazil. However, there are notable examples of industrial constructions that have been reclaimed and restored, promoting new uses adapted to contemporary society, such as museums or cultural centers, while preserving the history that the industry has left behind. Thus, our objective has been to raise awareness about the significance of preserving these industrial heritage showcasing both exemplary and cautionary examples found in Brazil, aiming to raise awareness about the importance of industrial heritage to society. Initially, it will provide insights into the history of industrialization in Brazil and examine the enduring legacies it has left behind.

2. The industrial heritage in Brazil

The process of industrialization in Brazil is considered belated, yet it traces its origins back to the 16th century. The more formal historical records in the country began around 1500 when the lands became a colony of Portugal. During this period, known as "colonization," the economy primarily revolved around sugarcane production and the extraction and importation of a tree known as "Pau-Brasil." At that time, the prevailing industrial means were the sugarcane mills, which featured simple machinery operated by slaves, such as cane grinders. However, in 1785, the development of industries in the colonies was prohibited, as the Portuguese Crown sought to avoid competition with the production made in the Kingdom of Portugal.

It was in 1808 that one could truly say the Brazilian industrialization process commenced, as with the arrival of the Portuguese royal family to Brazil, a decree was issued to allow the country's industrial development. Consequently, various new industries and manufactures emerged, especially in the southeastern region of the country, in states like Rio de Janeiro and São Paulo, which echoes in the development of the Brazilian cities to this day. During this phase, industries ranging from textile to agricultural emerged, yet their development was hindered because, in addition to other challenges notwithstanding, despite the considerable

production potential in Brazil, the majority of raw materials used at the time were still imported, thereby increasing the cost of production. Thus, it was from 1840 onwards that the initial thrust of the industrial revolution in Brazil occurred. Laws and tariffs were enacted to stimulate local production, initially with a greater focus on textile manufacturing, but also propelling various other sectors such as soap and candles, glass, beer and vinegar. During the 1870s, due to the decline of the coffee-growing region of the Paraíba Valley and certain sugar production areas, many plantation owners invested in the cotton textile industry and other industrial sectors. The implementation of a wide railway network in the Southeastern Region also stimulated the emergence of new industrial activities, primarily in São Paulo.

From the early 19th century, the expansion of industry underwent some changes and recorded exceptional growth, increasing from 3,000 to 13,000 in 13 years. Then, between 1930 and 1956, during the government of Getúlio Vargas, the period known as the "Brazilian Industrial Revolution" stands out. It was during this time that a significant shift occurred in Brazil's domestic policy, moving away from favoring traditional oligarchies towards a new economic approach. This new phase witnessed the gradual replacement of immigrant labor with domestic workers, alongside the development of a robust industrial infrastructure. During this period, the government endeavored to create and foster industries, with a special focus on those transforming raw materials into large-scale goods, also characterized as "heavy" industries. Thus, the focus, which was almost entirely agricultural, began to shift towards the infrastructure sector, with the establishment of the first steel mills in the country, concrete production, and the transportation industry.

Up until then, Brazil was experiencing excellent industrial development, but due to the political instability that occurred in the country, under the leadership of Jânio Quadros and João Goulart, some sectors began to face difficulties in continuing. Everything got worse in 1964, when the Military Dictatorship was instated, attempting a failed investment in industrial zones that did nothing to aid industries and ultimately worsened the country's inflation, reducing the purchasing power and hindering the development of Brazilian society.

Therefore, a new phase called "deindustrialization" began. The 1980s became known as the lost decade due to the stagnation of the country's development process, and the industrial sector, which represented 46% of the Brazilian GDP, plummeted to only 25%.

Naturally, in many economies, as their populations become wealthier and allocate more resources towards services rather than previously acquired consumer goods, this transition is known as mature deindustrialization [2]. However, it is notable that in

certain economies, such as the Brazilian and other Latin American ones, this process occurred even before the average income of the population reached levels that justified such a change, resulting in premature deindustrialization. This scenario resulted in the creation of abandoned industrial sites, spreading the remnants of now obsolete industries throughout Brazil. Thus, what was once a symbol of development and national pride became a source of shame for cities, with noisy and empty spaces, high crime rates, and other dangers.

3. Abandonment as fate

As time progresses, industrial processes undergo a constant evolution, driven both by technological advancements and the emergence of new practices. Consequently, the cores and structures that form an industrial complex are subject to experiencing gradual obsolescence in certain uses and functions over time. This scenario often leads to the deterioration or even complete loss of the assets that compose this industrial environment. As Maia [3] puts it, the changing times ultimately trigger this destruction, beginning with the destruction of functions. Functional obsolescence is one of the major reasons for the existence of this problem, as the changing values of society and its ways of life make it necessary to change the type of spaces and buildings raised. The Industrial Revolution is linked to a rapid urban demographic expansion, as rural areas are depleted in favor of unprecedented urban development. Consequently, cities suffer greatly from the abandonment of the industrial neighborhoods that helped shape them. The discussion surrounding the legacies industrialization is still in its infancy and often neglected, resulting in a lack of effective public policies to preserve these heritages. Furthermore, in addition to the effects of time and human activities—or the absence thereof—changes in function and use of structures contribute to rendering these locations obsolete. The most adequate solution to such neglect is the recovery of these assets for the city and society. In order to recognize something as a valuable heritage, people need to feel the significance that it represents for history. In this sense, there are some examples of what can be done to reclaim industrial heritage, bringing life back to those places and promoting their use and occupation while protecting their historical value and importance.

4. Social and memory relations with industrial heritage

The process of recognizing heritage evolves historically, motivated by a series of reasons ranging from cultural and documentary aspects to symbolic and memorial issues, expanding over time. Additionally, it involves a scientific dimension, as heritage assets carry knowledge across various fields of expertise. It also encompasses an ethical dimension, as it seeks to preserve traces of the past

without arbitrarily erasing or distorting them, ensuring that both present and future have access to the knowledge and symbolic value, as well as the support of collective memory that these cultural assets provide.

When addressing issues related to industrial heritage today, it is crucial to integrate them into discussions about cultural heritage comprehensively. It is common for attempts to treat industrial heritage as an exception in the field of restoration due to the unique characteristics of these assets, which differ from any other set of assets grouped by type or historical period, for example. However, adopting this stance often leads to a predominantly empirical approach to industrial heritage, treating it as an anomaly that escapes any attempt of regulation.

Therefore, when studying the recovery of industrial assets, some principles are used as a basis, regulated by the International Council on Monuments and Sites (ICOMOS - a UNESCO organisation) and the IPHAN (Institute of National Historical and Artistic Heritage), with restoration principles tailored to industrial and social assets.

5. Case studies from abandonment to reuse

Here, we will examine three cases of abandonment and reuse of industrial heritage: SESC Pompéia, Bhering Factory, and Galpão do Valongo. The aim is to showcase some interventions that follow restoration principles to serve as examples or incentives for future interventions. In the case of Galpão do Valongo, which represents abandonment, solutions for its rehabilitation will be discussed.

5.1 SESC Pompéia

The SESC Pompéia is an example of a complete renovation, transforming an old abandoned factory into one of the most renowned cultural centers in Brazil, designed by the famous architect Lina Bo Bardi, and serving as a great reference to all types of projects and interventions.

The old factory was built in 1938 by the German drum company Mauser & Cia LTDA, and the architecture of the buildings was based on a typical English design from the early 20th century. Years later, with the decline of industrial use, the site was purchased by Sesc, an institution that promotes culture, leisure, education, health, and assistance, which initiated its restoration alongside the architect Lina Bo Bardi, an icon of local architecture, responsible for the project of MASP (São Paulo Museum of Art Assis Chateaubriand).

In her design, Lina revealed the structure of the factory by joining bricks with reinforced concrete, showcasing what sustained that industrial site, and adapted it to the new uses of the location, creating a contrast between the grayness of the construction

and the colorful intervention. But one of the noblest functions of architecture and restoration is the inclusion of the People as a component. This involves the formulation of a comprehensive and inclusive program, along with spatial solutions that promote accessibility, bringing public life into the interior of the Center. These measures should be designed to cater to and generate interest among different age groups and social classes, without any form of discrimination. It is believed that this approach is fundamental to the success of the project. SESC Pompéia stood out in this aspect, with an open and inviting street, exhibition spaces, a public restaurant with communal tables, and strict prohibition of cars, the cultural center became a true "citadel of freedom," as dubbed by some, During the summer, the wooden deck turned into the "Paulistano beach," providing outdoor activities for the entire community. Thus, what was once a space in a state of abandonment [Fig. 1] transformed into a revitalized space teeming with life and appreciation for an industrial asset [Fig. 2].





Fig. 1 and 2 - SESC Pompéia - Before and After.

These changes have contributed to transforming the place, which was previously neglected and dangerous, into a true oasis in the midst of the city, providing comfort and safety for visitors.

5.2 Bhering Factory (Fábrica Bhering)

One of the oldest factories in Brazil, and one of the most renowned producers of chocolate and ground coffee, Bhering Factory also suffered from neglect. The building features an exceptional architectural design, with excellent examples of the use of structure and glass for natural lighting, in addition to showcasing modern and sophisticated machinery during its operational period. With the decline of industrialization, the manufacturing process was reduced, almost leading to bankruptcy, resulting in the deterioration of the building [Fig. 3].



Fig.3 - Bhering Factory in poor condition of preservation.

Thus, its former owner promoted Bhering Studios and Bhering Rental on the premises, leading to the filming of some famous national movies at the factory location. Consequently, the place drew the attention of artists and the alternative culture enthusiasts of the city. Over the years, the factory's rooms and other spaces began to be rented out and occupied at more affordable rates by the artistic class, reminiscent of what happened in Berlin in the post-war period during the 70s and 80s, and in Hungary with the emergence of ruin pubs, the bars in Budapest's ruins, in the 2000s. Consequently, minor modifications were made to the Factory, enhancing safety for those inhabiting the spaces, albeit without significant expenses or new interventions [Fig.4].



Fig.4 - Artistic Installations at Bhering Factory

Today, Bhering Factory is inhabited by a diverse range of people, serving as a cultural and creative hub in the heart of Rio de Janeiro. It houses art galleries, a bookstore with an excellent collection, studios, offices, and hosts various exhibitions and artistic and photographic events. Additionally, there are permanent shops offering handicrafts, clothing, furniture, as well as a restaurant and bar, bringing vibrancy not only to the interior of the building but also to its surroundings.

5.3 The Valongo Wharf and the Warehouse of the Dom Pedro II Docks

The Cais do Valongo, in Rio de Janeiro, built in 1811,

emerged as the main port of entry for enslaved Africans in the Americas. Located in Rio de Janeiro, it was included in the UNESCO World Heritage List in March 2017. Approximately one million slaves passed through the Cais in 40 years, making it the largest receiver of enslaved individuals in the world. Its inclusion in the list represents the recognition of its importance and value as a memory of the violence represented by slavery and the resistance of the population victimized by it. This strengthens the shared historical responsibility of Brazil and all United Nations member countries, as well as the recognition of the invaluable historical contribution of African people and their descendants to the cultural and socioeconomic formation of Brazil and the entire American continent. In 2012, the Rio de Ianeiro City Hall supported the demands of Black Movement Organizations and transformed the space into a preserved monument open to public visitation. The Cais do Valongo became part of the Historic and Archaeological Circuit of the Celebration of African Heritage, which establishes landmarks of Afro-Brazilian culture in the port region, alongside the Jardim Suspenso do Valongo, Largo do Depósito, Pedra do Sal, Centro Cultural José Bonifácio, and Cemitério dos Pretos Novos. Despite all this importance, the Cais houses the Armazém Docas Dom Pedro II, which is in a state of abandonment and structural danger. This shows how industrial assets are not as recognized by society, as even while located in a listed site, the warehouse does not receive its due attention [Fig. 5].



Fig. 5 - Warehouse of the Dom Pedro II Docks, abandoned with graffiti and vandalism.

Therefore, the place that represents so much of the history of Brazil's Black population, built by André Rebouças, one of the few Black engineers of his time, is treated with neglect and abandonment. Such neglect should be addressed by the entities responsible for the safeguarding of historical and industrial heritage, as well as by the population. The Warehouse has received numerous proposals for reuse, but none have been carried forward.

There are proposals that include the valorization of Black culture, museums telling the history of Cais do Valongo, among various others, including inspirations to be followed as previously seen. SESC Pompeia can inspire the works on the Warehouse, as a portrayal of the reuse of existing construction into

a new icon, and Bhering Factory as inspiration for a simpler occupation, without excessive expenses or resources.

6. Conclusion

Certainly, one understands the historical and social significance that industrial heritage offers us, and it is in everyone's interest to occupy these spaces. Consequently, it is hoped that society increasingly becomes aware of this importance, and that there is a growing encouragement towards the restoration of our industrial assets, thus safeguarding our past from oblivion and neglect.

7. References

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