

# Creation, Transformation and Metamorphosis

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Proportion Harmony Identities



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## CREATION, TRANSFORMATION AND METAMORPHOSIS

The texts presented in *Proportion Harmonies and Identities (PHI) - Creation, Transformation and Metamorphosis* were compiled to establish a multidisciplinary platform for presenting, interacting, and disseminating research. It also aims to foster awareness and discussion on *Creation, Transformation and Metamorphosis*, focusing on different visions relevant to Architecture, Arts and Humanities, Design and Social Sciences, and its importance and benefits for the sense of identity, both individual and communal. *Creation, Transformation and Metamorphosis* has been a powerful motor for development since the Western Early Modern Age. Its theoretical and practical foundations have become the working tools of scientists, philosophers, and artists, seeking strategies and policies to accelerate development in different contexts.

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# From production spaces to exhibition spaces: The metamorphosis of contemporary industrial architecture in Southern Spain and Portugal

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**ABSTRACT:** The obsolescence of industrial architecture due to the exhaustion of its productive activity has for decades been leading to the creation of spaces of opportunity for new uses, resulting in a wide variety of renovations, from the most conservative to the most avant-garde ones.

The metamorphosis of production spaces has given rise to different types of uses, among which the most recurrent one is probably the combination of cultural spaces with other uses. We often find cultural-multipurpose buildings that house a museum whose collections have nothing to do with the industry that gave rise to their construction or where, on the contrary, the old machinery is kept in its place as part of an industrial museum.

After an exhaustive search for sources and in-depth fieldwork carried out in both southern Spain and Portugal, it became clear that there was a lack of studies on industrial museums providing an overview focused on this geographical area.

In this context, this research has enabled us to carry out an initial quantitative analysis of these industrial museums, on the one hand, and, on the other hand, an estimate of how the metamorphosis from production architectures to exhibition architectures has taken place.

**Keywords:** Industrial Architecture, Industrial Museums, Reuse, Spain, Portugal

## 1 INTRODUCTION: ON THE METAMORPHOSIS OF CONTEMPORARY INDUSTRIAL ARCHITECTURE

According to L. Racionero (1979, p.48), every period of metamorphosis, whether called revolution by the politician, renaissance by the cultural humanist, or paradigm shift by the historian of science, is a change of intentions; and it necessarily entails a new direction in creative activity towards the production of original shapes.

The author recalled the controversy between the different definitions of what it means to be original. He gave as examples Gaudí, who thought it was a return to origins, and Artaud, who said that the works of the past belonged in the past. The writer was questioning whether art was a reformulation of the same archetypal experience in the specific language of each period, or a totally new creation born under unrepeatable circumstances.

According to A. Capitel (2005, p. 62), in his article on the metamorphosis of contemporary architecture, some works seem to be seeking a new rupture, whether they are called radical or neo-avant-garde. He also adds a series of characteristics that, according to

him, can be easily found in the new panorama of contemporary architecture. These would be as follows:

Firstly, informalism, a term that refers to the unconventional, to that which lacks a geometric or organic shape, to the attempt to eliminate formal values from the content of architecture, which, he adds, is an old and utopian pretension.

Secondly, inspiration. According to A. Capitel, avant-garde architecture claims to be based on any element that produces that inspiration. He adds that, although truth does not exist in architecture, it is nevertheless a discipline, an art, extraordinarily crafted over time, in which even the simple Vitruvian rules remain valid even if they undergo new interpretations.

Lastly, ignorance of place which, according to the author, seems not to be taken into account, treating the building as a piece of furniture, when architecture is a habitable immovable object that relates in one way or another to a given place. He acknowledges that positive references have considered place in projects and reiterates that architecture cannot be independent of its relationship to place.

Especially since the last decades of the 20th century, we have started to see avant-garde interventions in the rehabilitation and reuse of industrial architecture



Figure 1. Elder Museum of Science and Technology. Las Palmas de Gran Canaria, Spain. Former warehouses of the shipping company Elder DempsterLines Ltd. Photo by Sheila Palomares Alarcón, 2018.

converted into cultural buildings, multifunctional buildings, interpretation centers, hotels, libraries,...

However, according to the analysis carried out by S. Palomares (2020) in the south of the Iberian Peninsula, there is a perceived lack of industrial museums as an architectural typology in these transformations. This is why we propose this study.



Figure 2. Ribeira Grande Contemporary Art Centre, Azores, Portugal. Former alcohol and tobacco factory. Photo by Sheila Palomares Alarcón, 2018.

Having found that there are no studies focused on an overview of industrial museums located in southern Spain and Portugal, the aim of this paper is, on the one hand, to carry out a quantitative analysis of industrial museums and, on the other hand, to analyze the interventions made in these architectures in several case studies. How has the metamorphosis from production architecture to exhibition architecture taken place?

## 2 INDUSTRIAL MUSEUMS IN THE SOUTH OF THE IBERIAN PENINSULA: AN APPROACH

As mentioned above, this research was motivated by the fact that there is no known study focused on an analysis of industrial museums in southern Spain and Portugal. The exact number of these buildings,

their characteristics, or how they have been transformed into museums is unknown.

We should note that, just as architecture is an immovable property related in one way or another to where it is located, industrial architecture is closely linked to the machines set up inside it. Architecture responds to them, to their use, and to production cycles.

Machines are often embedded in the ground and when they disappear, what remains are spaces of unquestionable architectural value, usually suitable for multiple uses thanks to their spatial conditions, but where part of the exchange of knowledge is lost: the discourse is incomplete.

According to Alexander and Alexander (2008, p.11), it was not until the 19th century that museums began to identify themselves as 'guardians of objects' and as spaces for learning, participation, and public discussion.

During the 26th ICOM General Conference held in Prague in August 2022, a new definition of the museum was adopted: 'A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits its tangible and intangible heritage. Open to the public, accessible, and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally, and with the participation of communities, offering varied experiences for education, enjoyment, reflection, and knowledge sharing' (ICOM, 24 August 2022).

This is why we share the words of P. Biel (2016, p. 1592), who states that

the industrial museum [...] cannot limit itself to showing the material culture of industrialisation, but must also show how machines work, the working conditions of the labourers, the way of life of the various social classes, the role of individuals in the production process. In short, it must make the culture of production and work visible and comprehensible. This is the only way to understand the impact of technology and the field of work and its ideological, social and individual repercussions'.

Without wishing to delve into a terminological analysis of what a museum is, we consider that an industrial museum, regardless of whether or not its machines, as pieces of movable heritage, can be observed freely to allow visitors to learn about how something was produced in the former factory, should consider a functional route in which the source of energy used and the logistics of transportation play a key role.

### 2.1 *Industrial Museums in Andalusia*

Andalusia has 17 state museums whose management has been transferred, none occupying a former

industrial building or related to the region's industry (Ministerio de Cultura y Deporte, n.d.a.).

As of now, there are ten other museums managed by the 'Consejería de Turismo, Cultura y Deporte,' of which only the Andalusian Centre for Contemporary Art of Seville, located in the Monumental Ensemble of the Cartuja, is related to industrial heritage (Junta de Andalucía, n.d.).

In the 'Registro Andaluz de Museos y Colecciones Museográficas de Andalucía'<sup>1</sup>, 'there are 174 records without a name or location information, making it difficult to analyze Andalusian museums as a whole.

The 'Directorio de Museos y Colecciones de España' allows making searches by province which list the museums under municipal management, albeit not specifying their characteristics or whether or not they are included in the 'Registro Andaluz de Museos y Colecciones.' We found that there are ten in the province of Almería, 22 in the province of Cadiz, 43 in the province of Cordoba, 22 in the province of Granada, 7 in the province of Huelva, 17 in the province of Jaén, 33 in the province of Malaga, and 23 in the province of Seville.

Among these, for example, in the province of Cordoba, we found the following industry-related museums: the Ceramics Museum in La Rambla (new building), the Fernando Morales Almond Museum (new building), the Hecoliva Olive Oil Museum in Cabra (old building), the Aniseed Museum in Rute (former Destilerías Duende), the Antonio Espadas Museum in Peñarroya-Pueblonuevo (former 'Santa María' flour factory), the Historical Museum of Belmez and the Mining Territory (no information); in the province of Huelva, the 'Ernest Luch' Riotinto Mining and Railway Museum (former industry); in the province of Jaén, the Paco Tito Pottery Museum, Memory of Everyday Things (no data); in the province of Malaga, the Museum of Glass and Crystal (old civil architecture), the Malaga Wine Museum (old civil architecture) (Ministerio de Cultura y deporte, s.f.b).

Despite not being included in these lists, the research carried out so far has allowed us to identify other museums related to the Andalusian industry which are not mentioned in the databases mentioned above. Many of them are mentioned in various publications on *Industrial Tourism* from the different Andalusian provinces (Junta de Andalucía, n.d.). For example, the Oil Culture Museum in Baeza (Jaén), the El Dique Museum - Navantia de Puerto Real (Cadiz), the Triana Ceramic Centre (Seville), the Vélez-Málaga Sugar Museum (Malaga) or the Tharsis Mining Museum (Huelva).

## 2.2 Industrial Museums in Southern Portugal

In southern Portugal, in the Alentejo and Algarve regions, the *Directorate General for Cultural Heritage* (DGPC) has under its care - under direct management - only one of the 16 museums it is responsible for across the entire country - the *Frei Manuel do Cenáculo National Museum* in Évora, which has no connection with the region's industry.

By 2021, 159 museums had joined the *Portuguese Museum Network* (RPM), of which 15 are in the Alentejo and 5 in the Algarve (Neves and Santos, 2021). Of these, only one, the Portimão Museum (a former cannery), under local administration, is related to the Algarve's industrial past.

There are other regional and local networks - with an informal structure - that include different types of museums, such as the *Algarve Museum Network* or the *Baixo Alentejo Museum Network*, which has several examples of museums related to the region's industry, such as, for example, the CEA Museum Unit (former water lifting station), in Évora; the Compressor Station Museum Unit (former compressor station), in Aljustrel, or the Ervidel Rural Centre (former olive oil mill); the Quinta da Esperança Museum House (former farm), in Cuba; the Miner's House (former miner's house), in Mértola, or the *Lagar de Varas* (former olive oil mill), in Moura (CIMBAL, n.d.).

These data are only an approximation to the real number of museums in southern Portugal since there were 109 museums listed in the Alentejo alone in 2021. The 'museum' was one of the cultural facilities most frequently found in the various municipalities (76.6%), only second to libraries (95.7%)<sup>2</sup> (Neves and Prista, 2022, p.40).

In this context, there are many museums focused on the industrial past of the Alentejo and the Algarve that are not mentioned in national databases. For example, the São Domingos Flour Museum (former factory); the Aljustrel Mining Park (former mine); the Lousal Mining Museum (former power station); the Belver Soap Museum (new building); the Blankets and Tapestries Museum Centre (former factory), also in Belver; the Ponte de Sor Art and Culture Centre (former factory), or the Portalegre Tapestry Museum (old civil architecture).

Several private museums, usually associated with active wine and olive oil companies, such as the Melara Picado Nunes Olive Mill Museum, in Santo António das Areias or the Cella Vinaria Antiqua Wine Museum, in Vila de Frades.

1. Governed by Law 8/2007 on Museums and Museum Collections of Andalusia (BOJA no. 205, of 18 October), which began regulating the creation of museums and museum collections that until then did not require the express authorisation of the 'Consejería de Turismo, Cultura y Deporte'.

2. Since the definition of industrial museum is not clear, the museums referred to in these networks often include museum units - see the case of Alcoutim - Blacksmith's House - or the Alcoutim Municipal Museum, which keeps a collection related to industry.

Although they are not exactly museums as such, we should mention the Loulé Rock Salt Mine, which houses an art gallery and an exhibition where you can learn about engineering and geology along a route through the mine's galleries; and the Coffee Science Centre (Delta Cafés), in Campo Maior.

### 3 FROM PRODUCTION SPACES TO EXHIBITION SPACES: TYPES

The research carried out so far has allowed us to state that, in general, when there is an intervention in an industrial building to use it for a different purpose, the original materiality and characteristics of the building are preserved, but the machinery is only maintained in a small number of those interventions.

In the vast majority of cases, it was not the designer's decision not to include the machinery, but a consequence of the fact that neglect and the passage of time meant that when the opportunity to refurbish these buildings came about, not much of their inside had been preserved.

This circumstance has meant that reusing the building involved, on the one hand, the conservation and/or rehabilitation of the property and, on the other hand, the attribution of a new function to the property.

As Gilabert (2009-2010, p. 388) also refers, the new use requires an effort of imagination ranging from more conservationist to more avant-garde positions, including reusing these museums as museums. The musealization of this heritage has given rise to a wide variety of interpretations: from the musealization of the building itself as a museum to the transformation of the building into a container for museum collections that have nothing to do with the industry.

According to Gilabert (2009-2010, p. 389), in this context, museology plays, on the one hand, with the wide range of buildings associated with industrial architecture and, on the other hand, with the interdependent relationship that the monument has with its surroundings and with its productive function; offering a broad spectrum of different models resulting from the interpretations of industrial heritage that may fall within the concept of a museum.

Private and public entities have promoted the 'metamorphoses' mentioned below and can be divided into two groups. Minimal interventions and projects that add contemporary extensions to existing buildings.

As an example of the first type of intervention, we can mention the Sem-Fim Restaurant, Olive Oil Museum, and Art Gallery in Telheiro, which is a privately-owned restaurant where visitors can observe the olive oil production process in its entirety, as the machines for the production of the precious oil are still in place and integrated into the new use of the building as a restaurant.

It is one of the few cases in the southern Iberian Peninsula where a modern olive oil mill, one of the first examples of the continuous system, has been preserved in a good state of repair, being on display together with old photographs and movable elements that contribute to a better understanding of the olive oil production process.



Figure 3. Sem-Fim Restaurant, Olive Oil Museum, and Art Gallery in Telheiro. Former Lagar do Caeiro. Photo by Sheila Palomares Alarcón, 2019.

There are several publicly-owned former flour factories in both countries. Although some of them have not been registered as museums but as interpretation centers and/or facilities with similar use, the fact is that they have become exhibition spaces that preserve a large part of their machinery in place, contributing to a better understanding of the production process, in addition to being spaces for research, such as the aforementioned Ponte de Sor Art and Culture Centre in Alentejo (Portugal), which also preserves the archive of the old company; or the Interpretation Centre of Fuerte del Rey Rural Village (Spain)<sup>3</sup>.

We should highlight the Lousal mining museum, located in what used to be the power station of the mining complex that served the town and its population, which was inaugurated in 2001. This museum preserves many of the machines used to produce electricity and others used to make ice and houses an important museum collection focused on Lousal's mining past.

There are many cases in which, as mentioned above, pieces of machinery are preserved in isolation, displayed after the interventions as exhibition items that help visitors understand contents usually displayed on information panels.

It is the case of the Nuestra Señora del Carmen Cultural Centre that houses the Vélez-Málaga Sugar Museum (Malaga), located in the old sugar factory with the same name, which operated from the mid-20<sup>th</sup> century until 1991.

3. To learn more, please refer to Palomares (2020).

Following its decommissioning, even though, in 1993, an urban development agreement preserved this building for cultural use as municipal property, much of its machinery was stolen over the years.



Figure 4. Vélez-Málaga Sugar Museum, Spain. Former Nuestra Señora del Carmen sugar factory. Photo by Sheila Palomares Alarcón, 2022.

For this reason, some of the equipment still inside the building was recovered, and the museum's content is completed with an exhibition showing the sugar industry's importance to the town (Rodríguez, 2006).

Regarding the second type of intervention, we can mention, for example, the Triana Ceramics Center in Seville or the Baking Industry Interpretation Center in Alcalá de Guadaira (Spain), which have preserved part of their original structure and have extended their facilities using a contemporary language. As their names indicate, despite being facilities where visitors are introduced to the production of pottery or flour, they are not museums.

The Triana Ceramics Center, in addition to preserving and restoring the old pottery complex, taking into account the archaeological study and the research carried out by a specialist in social anthropology, developed an exhibition center for ceramics and an interpretation space for tourist routes in Triana, both publicly owned and two privately-owned commercial areas, a shop and a workshop. (Hernández and López, 2014, p. 104, 107, 121).

The Baking Industry Interpretation Centre of Alcalá de Guadaira houses in a single building,

which used to be a flour factory, the municipal tourist office, a workshop, and a multi-purpose room.

The musealization of the space corresponding to the old flour mill consisted of a series of panels located on the different floors where a large part of the machinery is preserved, completed with an experience with 3D glasses that explains the importance of the flour industry for the town (Palomares, 2020, p. 295).

#### 4 CONCLUSION

At the beginning of this research, we asked ourselves what industrial museums existed in the south of the Iberian Peninsula. After an initial approach to these buildings, we have been able to establish three main types of museums resulting from their metamorphosis from production spaces to exhibition spaces:

- Those that house exhibition spaces that have nothing to do with the old industry. They may correspond to other architectural typologies.
- Those who consider the property an item that deserves to be exhibited on its own (industrial building) and may or may not display exhibitions related to the old factory or to the region's industry.
- Those that consider both the property (old factory) and the movable assets located inside it as key elements of the museum. They are probably industrial museums.

As mentioned throughout this paper, many museums in the south of the Iberian Peninsula focus on showing a specific town's industrial past (or present).

However, there are very few industrial museums, especially due to the fragility of the factories' movable assets, which often disappear over the period of neglect or transition between their decommissioning and the beginning of their transformation.

We have identified two main approaches to the transformation of former factories into museums: some more conservative and others more avant-garde.

Conservative approaches have mainly involved the consolidation and rehabilitation of the building and/or machinery, if any, and its adaptation to the change of use with minimal interventions.

The avant-garde ones, resulting from the variety brought about by inspiration, are very different, informalist or not, ignorant of the place or aware of it. They have given rise to a wide variety of metamorphoses which, despite being subject to criticism, have preserved the industrial heritage to a greater or lesser extent.

As stated by J.C. Rico (2002, quoted by Brigola, 2004, p.7), universities and museums have a common mission: research. In this context, we hope this paper will form the basis for future



research on industrial museums in the southern Iberian Peninsula. Museums that we hope can be the subject of further analysis, both in the museum itself and in universities.

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