

Geographical Analysis of Industrial Heritage and Landscapes of Industrialization as Tourism Resources

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ABSTRACT

Industrial heritage tourism is currently one of the most recent and spectacular trends in the international tourist scene. The recovery of old industries and mining areas is a resource with a great power of attraction for its visual and aesthetic effects linked to technique, society, economy and territory. At the same time it provides numerous advantages for the employment, the environment and the collective memory of local populations.

Keywords: Industrial heritage, industrialization, landscape, cultural heritage, tourism.

INTRODUCTION

The generalization of the industrial production process in the last two centuries, with important chronological differences according to the zones, has created a wide set of buildings, machinery and territories linked to industrialization. The dereliction and closure of factories was a very striking aspect of the productive modernization undertaken in the second half of the twentieth century and since then many vacant spaces have emerged. A phenomenon of impressive proportions, the urban, architectural, economic and social impact, as well as the emotional one, made us reflect on the possibilities of recovering these structures with a different purpose than the original one and relaunching the economy of the areas of old industrialization.

The evolution of the concept of heritage has played a very important role in this objective, parallel to the new demands made by society. If it is valued by purely artistic criteria, it has gone on to include everything that serves as a testimony of a time to understand the past and reinforce collective memory in the present. Heritage has become an intellectual exercise of selection of cultural assets on which to project the materiality of some values. The criteria that govern at each stage the understanding of what is and is not heritage make it a concept in continuous transformation and basically

cultural. These conceptual changes allow us to speak of patrimonialization rather than heritage in the strict sense, that is, configuration of what is understood by heritage in each moment.

METHOD AND CONCEPTUAL PRECISIONS

The method used in this research is qualitative and interpretive. It has consisted in the documentary and bibliographic review of significant authors in relation to the subject of analysis, as well as the conceptualization and typological classification of heritage inherited from industrialization. The method is completed with a geographic interpretation of territorial character. The buildings inherited from industrialization are analyzed as part of a territory and as a cultural recovery objective for tourism. In the research an intense field work has been done to know directly some of the most important places and buildings from a patrimonial point of view and as tourist resources.

After some trips in the eighteenth century, with a deep interest by the most varied observations, including those referring to the technique, and the fascination that brought about progress in the nineteenth century, the attraction for industrial production declined with the arrival of the twentieth century. From that moment on, the cultural aspects began to identify themselves with the artistic, and the industrial intensification of the early twentieth century

made their advances habitual and, therefore, less seductive. Massive tourism, initiated after World War II by travelers who were not interested in anything other than sun and beach, ended up eliminating interest in industries.

Since the economic crisis of the mid-1970s, interest in industries has been reborn, especially those abandoned within the urban space (Pardo, 2004). High chimneys, disused machines and derelict plots in privileged locations created a strong impact on the citizen, local authorities and researchers in the countries of old industrialization. Many of the ruins were identified as emblems of some areas or cities. Then, it was decided on a conservation that kept alive the memory of the productive past and became an instrument of economic development with new proposals for cultural use that involved the local community (Benito, 2002).

Industrial heritage is the youngest of all patrimonies because it encompasses a set of structures, pieces and machines that have been used until relatively recent dates (Figure 1). For most of the population, this heritage lacks the values referred to the old and artistic, but has managed to arouse an interest not initially foreseen. Scientific approaches and different definitions have been provided from different fields, emerging a very enriching multidisciplinary analysis (Guzmán y Fernández, 2003).



Figure 1. Hydraulic boat-lift of the historic Canal du Centre, Belgium. World Heritage List (Author: Carlos J. Pardo)

For TICCIH, the world organization in charge of the conservation of industrial heritage, this legacy includes all the samples inherited from the beginning of the Industrial Revolution, in the second half of the eighteenth century, to the present day. Yet it does not rule out the study of the previous pre-industrial and proto-industrial roots. This heritage includes the constructions of

industrial culture that have a historical, technological, social, architectural or scientific value, such as buildings, machines, workshops, mills, factories, mines, warehouses, means of transport and all its infrastructure, as well as the sites where social activities related to industry, such as housing, religious worship or education, are developed. In addition to these material manifestations, immaterial ones are also of a great importance.

The definition of industrial heritage offered by TICCIH basically coincides with those contained in some national protection plans and programs, as is the case with the National Plan for Industrial Heritage in Spain. This document states that this heritage is the set of elements and manifestations between the middle of the eighteenth century, with the beginnings of mechanization, and the moment when it begins to be replaced totally or partially by other systems in which automation is involved.

Although the term of industrial heritage is conventionally admitted today, there are notable differences in terms of thematic and chronological limits. Some authors consider it quite broadly and they introduce the structures of extraction, transformation and transport of all periods of history. Others authors place special emphasis on the vestiges of the first industrialization, linked to coal and steam, due to the consequences it had on the social, economic and territorial configuration of contemporary reality. In other cases the concept of industrial monument extends to the testimonies inherited from the second and third Industrial Revolutions, based respectively on oil and electronics. These periods would be as worthy of patrimonial attention as the previous one.

In any case, the most general point of view and interpretation is that it considers that the concept of industrial heritage must refer to the productive and technical elements inherited from the period between the end of the eighteenth century, when industrialization begins in Great Britain, and the development of automation in the second half of the 20th century. It is in these two centuries that a very varied series of manifestations was created corresponding to the first and second phase of the Industrial Revolution, with an indisputable cultural value that has become a demand for tourism in the most developed countries.

In the study of the legacy of industrialization, two different but complementary conceptions

converged. On the one hand, the British conception, chronologically earlier, is limited to the visible vestiges, its reconstitution and its description, valuing first of all the building. It is "industrial archeology," a term coined by Donald Dudley in 1950. Shortly thereafter, in 1955, it was used in an article by Michel Rix, which affirmed the need to preserve the legacy of the Industrial Revolution in the city of Manchester. In 1966 industrial archeology became an university section of the University of Bath, the Ironbridge Museum was soon created and the first periodical publication on the subject was published: the *Journal of Industrial Archeology*, with studies of both specific buildings and areas marked by the industrialization, acquiring the discipline a progressive territorial character.

On the other hand stands the French conception, especially represented by Louis Bergeron, who uses the term industrial heritage and confronts the elements inherited with the archives, written or iconographic documents and, eventually, with the oral memory. The French works, moreover, include the study of cases in a more general history.

But these concepts are, in a way, complementary. Industrial heritage emphasizes the importance of preserving the testimonies inherited from the Industrial Revolution in Europe. Alongside this concept exists the other, which completes it as a method and becomes particularly relevant in the rescue of this heritage: industrial archaeology. This last denomination has been blurred as much as the use of the concept of industrial heritage has become widespread. Instead of discovering the oldest vestiges through a meticulous and rigorously archaeological practice, today researchers are more interested in the global interpretation of existing elements (Figure 2).



Figure 2. Former textile factory Casarramona, Spain. (Author: Carlos J. Pardo)

In relation to the classification of industrial heritage, four different categories can be established: industrial monuments, groups of industrial buildings, industrial landscapes and industrial systems and networks. This categorization focuses on the most important features of the different historical manifestations.

Industrial monuments are specific or partial evidence of a certain industrial activity with sufficient historical, architectural or technological value. The industrial monuments are the most numerous and have often been the subject of actions framed in wider programs of urban regeneration, which include the recovery of old factories with remarkable architectural and aesthetic values or with specific characteristics of particular technical relevance (Stratton, 2000).

Groups of industrial buildings are coherent and complete samples of a given productive activity in which all the basic material and functional components are preserved. They are groups of separate or connected buildings which are of outstanding universal value from different points of view, because of their architecture, their homogeneity or their place in the landscape.

Industrial landscapes are larger territories or areas in which all the fundamental elements of the production processes of one or more industrial activities are preserved. Interventions need greater actions and seek to incorporate the territory as an unquestionable framework of economic and social relations.

They tend to be areas of old industrialization in which the interventions pursue a complete environmental and landscape regeneration. When tourism focuses on transformation, the proposals are usually to open ecomuseums, where the territory becomes a further element of preservation, or museums integrated into a more complex and extensive network of interpretation of industrial heritage (Stuart, 2012; Tempel, 2012).

Industrial systems and networks serve to transport water, energy, goods, passengers, communications, etc.

They constitute, by their patrimonial values, a material testimony of the territorial organization, the mobility of the people or merchandise or the way to construct the public work of the considered period.

RESULTS ON PROTECTION AND CONSERVATION OF INDUSTRIAL HERITAGE

The Athens Charter of 1931 established the basic international principles on the conservation of historic monuments, stating the desire for each State to have the necessary legal instruments to enable intervention in case of emergency. National legislation should enshrine the superiority of the right of the collectivity over any private interest. From this document, the heritage legislation of many countries included the obligation to protect and manage the historical legacy from the State.

Concern for heritage resurfaced strongly after World War II as a result of the urban devastation occasioned. In 1945 UNESCO stipulated that the agency would ensure the conservation and protection of the universal heritage. In 1954, the Hague Convention made express reference to the commitment to safeguard cultural property in the event of war and regulated the measures to be taken to prevent indiscriminate destruction.

In the 1960s, industrial building recoveries began, following the guidelines issued by different international documents. Taking as precedent the Athens Charter of 1931, in 1964 the Charter of Venice was drafted. In this document you can see the influence of the restorative activity that took place after World War II, guided more by cultural reasons than by the scientific criteria that inspired the Athens Charter. The document focused on the architectural aspects, but extended its scope of action from the specific building to the whole historical set. From this perspective, the recovery of the old factories would be accompanied by a more global intervention on the surrounding territory. In this way, the concept of landscape was promoted and the protection of large historical assets with high cultural values became more prominent.

In 1972, the Convention Concerning the Protection of the World Cultural and Natural Heritage defines the elements that integrate both legacies and identifies the management and intervention criteria in the form of specific recommendations to avoid destruction or serious alteration resulting from economic and social evolution. The final document highlights the most relevant planning and inventory measures, urging that each country approve programs that are necessary for the irreplaceable objective of protection, with adequate services, facilities and methods.

In this Convention the World Heritage Committee was created and its composition and functions were defined, including the elaboration of the List of World Heritage Sites. The signatory countries must undertake to submit an inventory of cultural and natural heritage properties located in their respective territories that must be included in the World Heritage List. In 1999, the Hague Convention developed a second safeguard protocol with more specific and detailed measures, such as the need for countries to have emergency plans for cultural heritage in times of peace.

In the mid-1970s, some documents were drawn up that took as precedent the Athens and Venice Charters to incorporate new theoretical perspectives and to improve the practice in the international fulfillment of the conservation. This is the case of the European Charter of the Architectural Heritage, drafted in Brussels in 1975 on the occasion of the Year of the Architectural Heritage. Another document is the Amsterdam Declaration which, drafted in the same year as the previous document, ratifies the values of the European Charter of the Architectural Heritage and places special emphasis on the idea of rehabilitation and integral conservation of monuments. The Declaration reflects the expansion of the concept of architectural heritage experienced in the early 1970s, from the notion of monument, groups of buildings or sites of preferential interest to everything built that is presented as an entity for the consistency of its style and for the trace of history of human groups for generations. The landscape, thus generated, is understood as a narrative space built over time, complex and, at the same time, expression of memory and authenticity of places. It is also committed to a heritage conservation that becomes the main objective of urban and territorial planning.

The Krakow Charter of 2000 was signed as an update of that of Venice of 1964. This charter was prompted by the objective of adapting the general principles of patrimonial protection to the emerging cultural framework. The text incorporated elements that were not present until that date, such as the multidisciplinary approach and the need to include new technologies and scientific studies in the restoration projects. Any intervention should be strictly related to its environment, territory and landscape. Industrial heritage was implicitly included as integration of landscapes and buildings, the only way to increase economic

and social development along with nature and environment.

In the same year 2000, the European Landscape Convention was presented in Florence. Its most important objectives were to promote the protection and management of landscapes, as well as to organize European cooperation in this field. The landscape was defined as a part of the territory as perceived by the population and whose character is the result of the action and interaction of natural and / or human factors. This concept transcends the concept of territory, understood as physical support and puts all the emphasis on the population, in correspondence with the most recent evolution of the notion of heritage and how to approach it in all its variants (Figure 3).



Figure 3. Sewell Mining Town, Chile. World Heritage List (Author: Carlos J. Pardo)

For several decades, heritage documents consider that industrial heritage should be understood as an integral part of the cultural legacy, although with its own characteristics that require a protection that must take into account its specificity. It is committed to global protection and no intervention can compromise the historical integrity or authenticity of the place. The introduction of new uses is allowed, but when sites are of special historical importance it is recommended to respect the materials and maintain the original patterns of construction. Reuse is an advisable measure, from the general principle of sustainable development to avoid wasting energy and built elements. This plays a very significant role in the economic regeneration of deteriorated or declining areas and in the emotional stability of the local communities, which face the end of a long-term source of employment (Cole, 2004).

The vulnerability of this legacy was commonplace for a long time, especially in the city, where factories became the main element of soil release. The destruction was favoured by the absence of inventories of industrial heritage, as well as a rigorous investigation. The generalization of a very classic and limiting notion of the concept of a monument ended up doing the rest.

Industrial heritage, although implicitly included in several general recommendations, was only explicitly included in two Council of Europe working papers of the late 1970s and early 1980s: one on industrial archeology (1979) and another on European industrial cities (1983). However, it was the Nizhny Tagil Charter for Industrial Heritage, signed in Moscow in 2003, the most comprehensive international document on this subject. Beyond certain temporary inaccuracies, because it also considers the pre-industrial and proto-industrial legacy as industrial, the Charter takes into account immaterial testimony and social aspects as the foundation of the legacy of industry, with special emphasis on the importance of identification, inventory and investigation of the properties.

In 2011 the XVII General Assembly of ICOMOS (International Council of Monuments and Sites) took place in Paris. During this meeting the text of the Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes, known as the Dublin Principles, was adopted. The principles then ratified were the following, all oriented to assist the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World: (i) Document and understand industrial heritage structures, sites, areas and landscapes and their values; (ii) Ensure effective protection and conservation of the industrial heritage; (iii) Conserve and maintain the industrial heritage; (iv) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research.

The recovery of industrial heritage began in Britain in the 1960s by the impulse of some local and national associations, such as the Association for Industrial Archeology (AIA). The result has been really positive and many material manifestations of the British industrial past have been preserved and protected. In

parallel, the first museums were created specifically for the dissemination and understanding of the properties of the industrialization. An interpretation centre was opened in Ironbridge, which soon became a reference point for other industrial museums in the United Kingdom and other European countries. There, the first international conference on industrial heritage was held in 1973. The most important result was the creation of The International Committee for the Conservation of Industrial Heritage (TICCIH) on the occasion of the Third International Congress on the Conservation of Industrial Monuments, held in Sweden in 1978.

In other countries, the conservation of the industrial properties spread later, first in Northern Europe, the United States and Canada. Then, in the countries of Southern Europe (Figure 4). Although they had not been part of the first industrial nucleus, they did have areas that started the process early and had significant elements. Eastern Europe, Asia and South America aimed most recently at the industrial heritage recovery movement.



Figure 4. Former factory of chocolate Menier, France. Author: Carlos J. Pardo

Over time, industrial heritage has achieved due recognition as a very important part of the history of the last two centuries and as a culture of the territories (Cossons, 2011). This can be observed in the policy carried out by the UNESCO Heritage Committee. This Committee prepares the World Heritage List, including in 1978 in that category the Wieliczka salt mine (Poland). This mine became the first industrial site considered part of the heritage of humanity. Since that date, others sites have been included: the Royal Saltworks of Arc-et-Senans, 1983 (France); Ironbridge, 1986 (United Kingdom); Völklingen, 1994 (Germany); Crespi d'Adda,

1995 (Italy); Blaenavon, 2000 (United Kingdom); Saltaire, 2000 (United Kingdom); Derwent Valley Mills, 2001 (United Kingdom); Vizcaya Bridge, 2006 (Spain)...

DISCUSSION ON INDUSTRIAL HERITAGE, TERRITORY AND TOURISM. A REVIEW FROM A GEOGRAPHICAL POINT OF VIEW

Industrial heritage is the legacy of the industrial age and, as such, material and immaterial testimony linked to the memory of work and place, and to the history of technology and science that made possible all kind of productive progress. It is a heritage that influences in today's society through the reinforcement of the collective identity, the image that it projects of itself, the memory of labour, social and environmental conflicts and the contemplation of the landscapes generated (Dambron, 2004). Cultural resources are also considered that all of them have been used frequently for the implementation of a wide range of tourism initiatives. (Jansen-Verbeke, 1999).

This legacy transcends the architectural or monumental aspects and reaches, beyond a specific building, the traces that a productive activity has left on the territory. The landscapes of the industry acquire the category of cultural landscape because they have contributed to the construction of the collective identity. In these places, industrialization has marked ways of living and working that have remained indelible in the territory, offering a landscape as a visual result, and in the memory of people. The industrial landscape, therefore, is a perceptible concept and a complex reality loaded with cultural elements that belong to society as a whole.

Tourism has opened up great possibilities for reuse of buildings, converted into large containers of machinery, techniques and processes, as well as landscapes, with an aesthetic that is far from conventional, but with a great evocative power (Bergeron, 2003; Stuart, 2012). Some projects have achieved great success and have become indisputable benchmarks such as the Oberhausen Gasometer in Germany, the former Bankside Power Station in the United Kingdom, or the Riotinto mining area in Spain.

The legacy of industrialization has promoted in Europe the creation of different cultural routes, at a regional, national and supranational level. This is the case of the European Route of Industrial Heritage (ERIH), created in 1999

(Ebert, 2003). The German regions of Saarland and North Rhine-Westphalia, with others of Great Britain and Holland, formed the original nucleus of a route to which other key European regions have been associated in relation to the continent's industrial activity. The patrimony of industrialization also becomes, in this way, an element of European integration (Hospers, 2002).

Tourism of industrial heritage refers to one of the two types that can be differentiated in the so-called industrial tourism, depending on the centres visited (Pardo, 2008). The first one is *industrial tourism of factory or productive type*, which consists in the visit to industries still in active operation. The second one is *industrial tourism of heritage or historical type*. In this case, the visits focus on abandoned factories or mines, reused such as museums or tourist interpretation centres. The interest is basically cultural. The ecomuseums are very significant examples of this second type of industrial tourism.

Ecomuseums are museums of industrial territories that preserve the identity of an area, whose landscape and buildings are inseparably incorporated as interpretive elements. The landscape is used as a fundamental aspect of the project and as a result of the history of the places and living conditions of its inhabitants. It is a type of museum that was born in France in the 1970s, as a social and economic alternative and as a strategy to maintain defined industrial cultural spaces and improve their environmental conditions. The two types of industrial tourism have been more important in the countries of Northern Europe than in the countries of the South. In Germany, Sweden, Finland, the United Kingdom or Denmark the new projects were welcomed from the beginning with real enthusiasm. In Spain, France, Italy, Greece or Portugal the interest has been later because of the greater weight of the historical-artistic heritage. In any case, the factories in operation and the vestiges recovered from the industrialization create flows of visits and a cultural offer in continuous growth that manages to incorporate many regions to the main tourist routes.

CONCLUSION

The origin of the industrial heritage museums was related to the movement of preservation of the popular aspects emerged in Scandinavia in the late nineteenth century, subsequently exported to the United States during the inter-

war period and intensified in the United Kingdom in the 1960s. It was the beginning of a new museology in which the factory buildings took the attention of the most varied institutions and cultural entities, interested in turning abandoned industries and machines into objects of visit for the tourism. The benefits of such conversion were soon valued, not only in relation to the economic development of local communities, but also to the preservation of the identities of many places still anchored to the collective memory of what industrialization represented. The shared protagonism between historical, technical and territorial aspects in the interpretation of the industrial heritage is an indisputable attraction factor, as well as a fascination for the discovery of some explanatory keys of the current society. Visitors to the ecomuseums and museums of industrial heritage, distributed throughout Europe and other developed countries, demonstrate the power of attraction and fascination for the legacy of the Industrial Revolution in its most diverse material and immaterial manifestations. Nor can we forget that the increase in this tourist demand, which is so specialized and focused, has evolved along with the available leisure time in developed societies. Industrial heritage tourism links current society to the productive past through the visit to certain buildings and representative landscapes, turned into museums and cultural resources of local origin. In this way, a new geography of tourism is centered on the symbolism of monuments and industrial territories. It is a cultural heritage of undoubted historical and geographical interest that is both time and space (Pardo, 2014).

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