

## New approaches to Spain's industrial heritage

PAZ BENITO DEL POZO

*University of Leon*

HENAR PASCUAL RUIZ-VALDEPEÑAS

*University of Valladolid*

SUMMARY: I. INTRODUCTION: HERITAGE STATUS OF THE INDUSTRIAL LEGACY. II. THE NATIONAL PLAN ON INDUSTRIAL HERITAGE. III. PROTECTION AND MANAGEMENT OF INDUSTRIAL HERITAGE IN THE REGIONAL FRAMEWORK. IV. THE CONTRIBUTION OF OTHER RELEVANT ACTORS: THE HERITAGE ASSOCIATIONS. V. INDUSTRIAL HERITAGE, TERRITORY AND GEOGRAPHY. VI. CONCLUSIONS. VII. BIBLIOGRAPHY.

### I. INTRODUCTION: HERITAGE STATUS OF THE INDUSTRIAL LEGACY

Over the last few decades, the complex and broad concept of cultural heritage has come to include the more specific, delimited concept of industrial heritage. This type of heritage has only lately been recognised in Spain if we compare it with other countries such as the United Kingdom, France, Belgium or Germany. This is connected with the intensity of the historic process of industrialisation, with its impact on the territory and social awareness of industrial ruins. The old factories were undesirable elements in the landscape, ugly buildings with no artistic or monumental value: they could not compete with cathedrals, palaces, monasteries or other constructions considered artistic and enlightened architecture. In the mid-twentieth century, Spanish society was not prepared to recognise the cultural and identity value of factories, railway stations, iron bridges, etc. This was because, until that moment, the dominant discourse had excluded such elements from the category of historic

and artistic heritage. Consequently, the legislation in this respect took no notice of them. Neither was there a positive social perception of the industrial legacy (intellectual and artistic voices, citizens' collectives...). For their part, the public and private agents involved in the protection, conservation and renovation of singular urban, rural or port buildings paid no heed to derelict buildings situated in unattractive areas, even though they may be interesting from the point of view of the real estate business. In short, everything at that time favoured the denigration of the old factories, their machinery and the documentation hidden in the companies' archives. It could be said that the general feeling was one of permissiveness as regards the abandonment and destruction of the legacy of industrial history.

Nevertheless, the confluence of various factors in the 1980s awoke the interest of certain collectives in industrial heritage. Some of these catalytic factors were: a) the experience of the conservation and valuation of industrial heritage in other parts of Europe, b) the circulation of information and publications reflecting on industrial ruins, and c) direct knowledge of actions and projects concerning the conservation, protection, recuperation and new uses of industrial ruins in old industrialised regions. Thus, it can be said that, in Spain, awareness of the value and significance of industrial heritage took hold under the influence of the first French *eco-museums*, the British, Belgian or German mining and industrial museums, and the reuse of old factories in cities that were modernised in the post-Fordist era (Benito del Pozo, 2002; Álvarez Areces, 2007; Pardo Abad, 2008).

The impact in the media of the recognition in 1994 of the first factory as a UNESCO World Heritage Site must be added to the above. We refer, of course, to the steel works of Völklingen, an integral, 6 hectares, steel complex that dominates the city of the same name in the Sarre region of Germany, and which was built and equipped in the 19<sup>th</sup> and 20<sup>th</sup> centuries. At the start of the 1990s, this factory was «the only one still intact in all of Western Europe and North America»<sup>1</sup>. The criteria used by the Heritage Commission to select this site conveys the profound and radical change in the social and institutional perception of industrial ruins: «To exhibit an important exchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design» and «To be an outstanding example of a

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1. [http://portal.unesco.org/es/ev.phpURL\\_ID=45692&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/es/ev.phpURL_ID=45692&URL_DO=DO_TOPIC&URL_SECTION=201.html)

type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history»<sup>2</sup>.

Abandoned factories, as exponents of the industrial memory of a time and place, thus pass to centre stage in the consideration of what is culturally valuable. In Spain, it is not until 2006 that UNESCO introduces the first industrial element to its World Heritage List: the *Vizcaya Bridge*, situated between Getxo and Portugalete, in the Estuary or «Ría» of Bilbao in the Basque Country, considered one of the most outstanding constructions of Europe's Industrial Revolution and iron architecture. More recently, in 2012, the second world recognition was achieved: the *Mines of Almadén*, in Ciudad Real, an example of the mining landscape and the culture of work linked to the exploitation of mercury (the Mining Park of Almadén includes Spain's main assets inscribed in the World Heritage List with the name *Mercury Heritage. Almadén & Idrija*). Both recognitions reinforce the arguments, as well as being a stimulus for those defending the industrial heritage of a country, Spain, with an enormous cultural heritage, but which hardly pays any attention to the most singular industrial remains.

This paper presents a reflection on the evolution of the approaches to industrial heritage in Spain. It aims to establish the institutional strategies and actions (on a national and regional scale) and the proposed academic lines of research that have set trends over the last decade. The aim is to show that industrial heritage has gained in prestige and recognition, and that it is gaining strength as a rising territorial resource at the service of urban tourism and local development. To do so, we shall analyse the following contents using a qualitative methodology: (a) the strategies or proposals of the National Plan on Industrial Heritage sponsored by the Cultural Heritage Institute of Spain (IPCE); (b) the most outstanding regional initiatives in the protection and management of industrial heritage; (c) the influence of the industrial heritage associations; and, (d) the results of the research in Geography that stress the relationship between industrial heritage and territorial development, with special reference to industrial landscapes, itineraries and routes.

## II. THE NATIONAL PLAN ON INDUSTRIAL HERITAGE

The National Plan on Industrial Heritage (PNPI) plays a vital role in the recognition and valuation process of industrial remains in Spain.

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2. <http://whc.unesco.org/en/criteria/>

This plan was drafted by a commission made up of technicians from the General Administration of the State and the Autonomous Regions, as well as independent experts. The preparatory work for this national document included an interesting debate, in addition to shared reflection, leading to a diagnosis concerning the situation of Spain's industrial heritage. Broad lines were traced for making a joint strategy for interventions. The organism responsible for piloting this work was the Cultural Heritage Institute of Spain (then the Historical Heritage Institute of Spain), part of the Ministry of Education & Culture.

Besides considering the high testimonial value of this type of heritage and its specific nature within the field of restoration and conservation, the need for such a Plan could be justified by the identification of the risk of deterioration or the disappearance of the industrial elements and ensembles in disuse. Such threats come from a lack of legal protection, the absence of any immediate economic profitability, their location in urban spaces with a high land value and scarce social and institutional awareness of the value of such assets.

The foundation document, approved by the Spanish Council on Historic Heritage in 2001, sets out the problems of defining industrial heritage, taking into account the conceptual ambiguities contained in the national and regional legislation concerning historic heritage. So the identification and chronological framework of industrial heritage were established in the Plan, as industrial heritage was defined as the set of exploitative elements linked to a «particular production process, a particular technological system, characterised by mechanisation, within a manifestation of a social capitalist relation (...): manifestations being understood as those between the mid-18<sup>th</sup> century, with the beginnings of mechanisation, and the moment when this was totally or partially replaced by other systems in which there was automation» (PNPI, 2001).

In accordance with the above, each of the pieces that make up this heritage is considered an industrial asset. Of these, it is possible to distinguish between isolated industrial elements, industrial ensembles and industrial landscapes. The Plan also contains the criteria for valuing and selecting (intrinsic, heritage and viability), as well as the thematic areas, which include all the productive sectors and activities.

Beyond these initial considerations, the National Plan on Industrial Heritage is a management tool oriented towards three objectives: establishing a methodology for shared interventions by the different public administrations, coordinating the participation of the many

institutions that can intervene in the protection of heritage assets and the programming of the necessary investments to carry them out. In this sense, the balance of its application over the ten years it has been in force demonstrates the attainment of significant achievements, although there are also some limitations.

The work methodology is divided into four phases. First of all, there is the need to create an initial catalogue of the assets selected as the first interventions. These are then given prior studies for their documentation and for declaring them Heritage of Cultural Interest (or «BIC» in Spanish) to guarantee their protection. Thirdly, guidelines are written to provide integral knowledge of the assets in order, lastly, to facilitate the creation of intervention projects for their conservation and restoration.

Having technically evaluated the proposals, the initial catalogue was limited to an inventory of 50 industrial assets which are representative of Spain's industrialisation process. However, by 2010, only nine prior studies had been carried out under the auspices of the Plan and a similar number of guidelines and projects. The participation of the Autonomous Regions in the development of this work and the distribution of investment was highly unequal (Humanes, 2011). The institutional decisions declaring BICs did not show the same commitment from the different public administrations either. This was in part due to the responsibility for conservation and the restrictions concerning use that these measures involved. The lack of coordination between the administrations involved in these projects and the lack of monitoring instruments are further notable weaknesses in the results of the Plan.

Despite these limitations, there can be no doubt that the mere existence of this management instrument has contributed to an increase in the social consideration and institutional recognition given to Spain's industrial heritage. It should also be recognised that it has served to foment some relevant conservation and restoration interventions. It should not be forgotten that it propitiated a certain advance in promoting scientific knowledge concerning the assets of the industrial culture (Pardo 2016). Nevertheless, its period of validity having expired, the accumulated experience over this time showed the need for a profound revision of the Plan, giving rise to a new edition that came into force in 2011.

From the conceptual point of view, the new document considerably widens the notion of industrial heritage, incorporating

relevant contributions. The new approaches rework and broaden the significance and scope of industrial heritage, giving priority to the interpretation of these assets, not as mere isolated elements, but as part of their territorial context. At the same time, the value of the intangible assets of the industrial culture is stressed, as are the testimonies and memories of work. It is a renewed, integral and geographic vision that gives pride of place to the industrial landscape, identified as the result of a process that configures space in line with the productive needs, creating buildings, artefacts, machines, communication and energy infrastructures, systems and networks of spaces (Humanes, 2011). The landscape is understood and interpreted globally, as a result of a historical process that organises a territory built up of «cultural and natural elements, material and immaterial elements, tangible and intangible elements, whose interrelations determine their character; (...) the spatial structure that springs from this process is a cultural landscape» (Cruz, 2011: 44). In this sense, each productive activity designs specific ways of organising the territory; so the mining valleys, the steelworks, the textile colonies, the shipyards, the workers' villages, the energy, communications and transport installations, or the railway lines and infrastructures, all acquire the consideration of landscapes of cultural interest that must be interpreted within the framework of complex territorial, heritage systems (Cruz, 2012).

For the development of this new planning stage that began in 2011, the document establishes the list of the *100 Elements of Industrial Heritage in Spain*, created by the association «TICCIH-España», as an indicative initial catalogue. Additionally, some essential questions were incorporated as novelties relating to the intervention criteria (table 1). In accordance with the international references and following the specific maintenance and conservation guidelines of the *Nizhny Tagil Letter* (TICCIH, 2003), the idea is stressed that the conservation of industrial heritage depends on the preservation of its functional integrity, and therefore, interventions should be aimed at their maintenance. The idea is also stressed that industrial heritage may play an important role in the regeneration of run-down urban areas or regions in decline, promoting interventions that can help to boost local development. Measures aimed at encouraging research in this field also form part of the strategic backbone of the document, as well as the actions needed to foment knowledge of the industrial culture and to promote their diffusion in order to favour greater social awareness.

**Table 1. Intervention programme of the National Plan on Industrial Heritage 2011**

| Interventions  | Proposals   |
|--|---|
| To know the main industrial heritage sites in Spain  | To make a list of the main elements of the industrial heritage sectors mentioned in the above Plan  |
| To encourage the study of productive sites to know their history and importance as a testimony to the industrialisation in their territory   | To encourage studies on the material history of industrialisation   |
| Disseminate the relevance of industrial heritage as an identity factor in the European context and make the population and those responsible for heritage aware of its state of preservation and study | To carry out actions to disseminate and educate, so society will better understand the importance of Industrial Heritage as a testimony of the involvement of our country in the industrial process and therefore better understand the history of the last few centuries |
| Dissemination of examples of the conservation of industrial heritage   | To disseminate examples of good practices in the preservation and reuse of industrial heritage  |
| The industrial landscape   | To locate the most important industrial landscapes in the country, starting with the protection plans of the Autonomous Regions   |
| Industrial heritage and local development  | To encourage industrial tourism and disseminate examples of the regeneration of territories and districts which have had a positive impact  |
| Investment plan in industrial heritage   | The investments must be carried out with heritage assets or industrial landscapes of a high national value  |

*Source:* National Plan on Industrial Heritage. Own elaboration.

On a separate issue, the Plan now has better defined and more precise tools to work with. With a period of validity of ten years, an annual programming of the interventions can be designed and they can be given an instrument for control and coordination (the Technical Monitoring Commission), responsible, among other things, for controlling compliance with the objectives, fomenting the elaboration

of methodological studies, proposing interventions in accordance with the formulated lines of work and carrying out a periodic evaluation of the results. From the budgetary point of view, the document includes an investment programme and foresees the criteria for the co-financing and distribution of the commitments among the different public administrations, also incorporating the economic contributions of private agents (associations, foundations and individuals).

Certainly, the time interval for its application is still insufficient for a global evaluation of the level of compliance and the progress in carrying out the foreseen interventions. Nevertheless, the balance of the first five years has brought results worth mentioning.

On the one hand, a greater institutional coordination can be appreciated, since harmonised information is currently available on the situation of Spain's industrial heritage, after carrying out a study in 2012 to know the degree to which the inventories of the Autonomous Regions have been completed<sup>3</sup>. Considerable progress has also been made in the number of prior studies, master plans and intervention plans that have been carried out. In addition, these interventions are now documented and accessible, thus facilitating the consultations of researchers and those responsible from institutions, as well as contributing simultaneously to giving greater social visibility to the interventions on industrial heritage. With respect to this last question, the Plan has also promoted the celebration of a good many courses, symposiums, congresses and seminars, including support for the edition of specialised publications that bring together the scientific contributions concerning our knowledge of industrial heritage, as well as the recommendations, work methodologies and good practice codes, aimed at the identification, preservation and reutilisation of heritage.

### III. PROTECTION AND MANAGEMENT OF INDUSTRIAL HERITAGE IN THE REGIONAL FRAMEWORK

Spanish legislation on heritage, contained in the Law 16/1985, of June 25th, on Spain's Historic Heritage, does not contain any direct reference to industrial heritage. In the said Law, heritage is defined in article 1.2 as follows: «Spain's Historic Heritage is made up of the properties and movable objects of artistic, historic, paleontological, archaeological, ethnographic, scientific or technical interest». The lack of any explicit

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3. [www.mecd.gob.es/planes-nacionales/actuaciones/arquitectura-industrial.html](http://www.mecd.gob.es/planes-nacionales/actuaciones/arquitectura-industrial.html)



reference to industrial heritage is not, however, an unavoidable problem, as legal protection for industrial elements and ensembles can be given through considering them assets of artistic, ethnographic, scientific or technical interest. On a regional scale, the legislation enacted throughout the 1990s hardly modified at all the general meaning of the definition and scope of the national law, although some advances were made. For instance, the Law 9/1993, of September 30<sup>th</sup>, on the Cultural Heritage of Catalonia, in its article 18.2.g, establishes that «the movable scientific, technical and industrial heritage» is part of Catalonia's cultural heritage; while the Law 8/1995, of October 30<sup>th</sup>, on the Cultural Heritage of Galicia, in its preamble, alludes to the protection of the assets related with industrial activity, an aspect set out particularly in article 66, entitled «Immovable assets of an industrial nature». The regional legislation approved in the final years of that decade already contained direct references to the industrial heritage, as can be seen in the Law 11/1998, of October 13<sup>th</sup>, on the Cultural Heritage of Cantabria and also in the Law 12/1998, of December 21<sup>st</sup>, on the Historic Heritage of the Balearic Islands, and even, although in a more oblique way, in the Law 10/1998, of July 9<sup>th</sup>, on the Historic Heritage of the Community of Madrid.

The regional laws that have been approved since the year 2000 are more explicit in recognising industrial heritage and regulating its protection. Worth noting are the Law 1/2001, of March 6<sup>th</sup>, on the Cultural Heritage of Asturias and the Law 12/2002, of July 11<sup>th</sup>, on the Cultural Heritage of Castile & Leon, which serve as examples for analysing the most novel proposals concerning the conservation and protection of Spain's industrial heritage. One of the most interesting aspects of these regional laws is that they promote the creation of inventories of industrial heritage, which can fill the gap left by the absence of a national inventory, as set out in the report of the TICCIH 2015, which points out that the total number of industrial elements and assets with some kind of protection in Spain, at the start of 2013, had risen to 1,046, of which 380 had the maximum level of legal protection, i.e., they had been declared Assets of Cultural Interest, whose acronym in Spanish is BIC, (TICIIH, 2015: p. 158) (Figure 1).

The management of the industrial heritage in the sphere of the Autonomous Regions is based on the creation of inventories of a more or less exhaustive nature that aim to rigorously bring together all the elements that form part of the legacy of industrialisation. This sometimes includes assets of an ethnographic type and also factories and machines that may still be active, as long as their origin is historic. These inventories may, in some cases, be a management instrument developed within a

wider regulatory framework, defined by a heritage policy plan promoted by the corresponding regional government (Biel & Cueto, 2011).

If we take the Autonomous Region of Castile & Leon as an example, whose case has been analysed in a recently published collective book (Manero & García Cuesta, 2016), the regional government has, since 2005, had the use of an instrument called the *Historical Heritage Plan of Castile & Leon* (Plan PAHIS) that includes, among its sectorial actions, the creation of an *Inventory of the Historic Industrial Heritage of Castile & Leon*. The aim of this tool concerning policies on industrial heritage, executed in the period 2006-2011, is to identify, register and plan actions for the protection, conservation and enhancement of industrial assets, in turn divided into five categories: *landscape, industrial complex, industrial building, machinery and mechanisms, and isolated industrial element*. Apart from its achievements, which have their own importance, this tool and the actions it leads to are a symptom of the regional institutions' firm commitment to the recognition of and support for industrial heritage and for its reuse in spaces as diverse as the mining valleys, rural areas and cities. Nevertheless, the Inventories of Industrial Heritage in existence in many other Autonomous Regions of Spain and reviewed by diverse authors (Biel & Cueto, 2011), do not guarantee that the interventions will always be suitable. This is because many social and institutional agents participate in the decisions taken, and these agents have differing interests, which do not always coincide with the same view of heritage; that is, good practices are not guaranteed (Manero & García Cuesta, 2016: 316-317).

According to the experts, in the inventories of industrial heritage, «knowledge aimed at managing the elements, ensembles, landscapes and intangible heritage should take precedence. Inventories contribute to defining industrial heritage and constitute the first step on the road to protecting these cultural assets that make up our recent past, are part of our identifying traits and of the memory of work and place»<sup>4</sup>. This integral approach is transferred to the formation of public and private managers through specific courses supported by the Spanish Institute of Cultural Heritage itself.

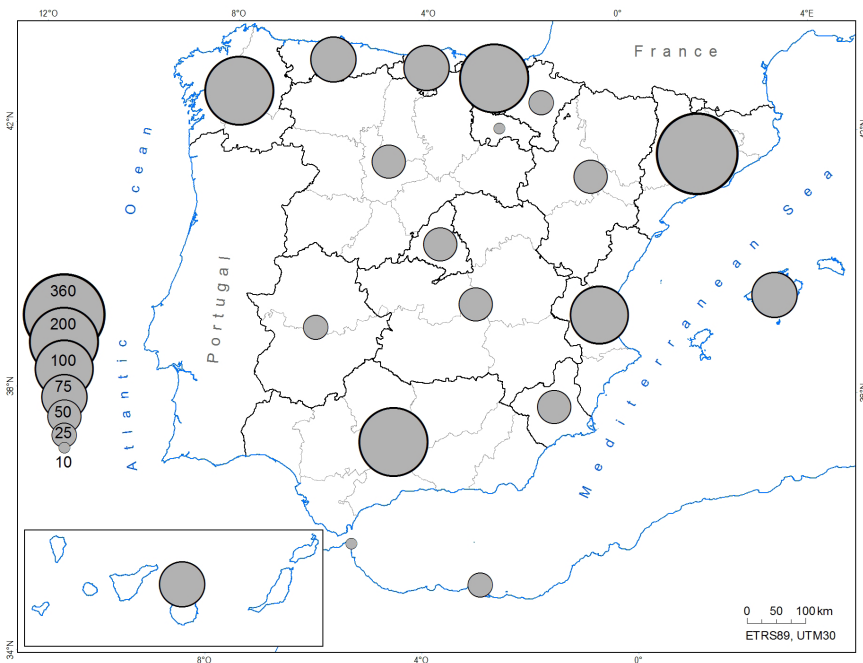
The experience of the Autonomous Region of Asturias yields other elements for reflection and represents one more step towards a committed management and protection of the industrial heritage. Between 1985 and 1987, the *Inventory of the Historic Industrial Heritage of Asturias* was created

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4. <http://ipce.mcu.es/pdfs/Inventarios.pdf>

at the behest of the cultural authorities of the region by the Department of Geography of the University of Oviedo. The aim was to know and evaluate the volume of disused industrial structures and machinery in the region. This register is still incomplete and today is already outdated, which has brought about the institutional initiative to encourage the figure of the *Urban Catalogue* (UC). This is a document with guidelines in which each industrial asset should have an individualised file with the corresponding decisions concerning its protection and planning, in accordance with the legislation on cultural heritage and urban planning<sup>5</sup>. In short, the proposal from Asturias involves overcoming the instrumental framework of the *Inventories* and considering the management of the industrial heritage not only from the perspective of the most suitable conservation and intervention, but also by providing added value to the heritage asset as an element of urban and territorial planning.

**Figure 1. Total number of industrial heritage elements protected by Autonomous Regions**



Source: Taken from TICCIH, 2015: 159.

5. <https://www.asturias.es/portal/>

#### IV. THE CONTRIBUTION OF OTHER RELEVANT ACTORS: THE HERITAGE ASSOCIATIONS

As the IPCE itself recognises, there are many agents that help to strengthen the notion of industrial heritage, to find out more about it through study and to raise awareness of its value as an element of territorial identity and as a resource. First of all, we should take note of the intense work carried out by the association for the defence of the Industrial Heritage TICCIH-España, constituted under the Organic Law 1/2002, of March 22<sup>nd</sup>, possessing the legal capacity and full capability to function as a non-profit body. The existence of TICCIH-España is subject to its international counterpart (created in 1978) and its aim is to raise awareness of and to defend the industrial heritage. It does so by organising courses, congresses and seminars of a high scientific level, as well as dissemination activities, with publications that describe the experiences of different interventions throughout Spain. Through its website, it is possible to follow its activities, with links to numerous convocations and information concerning industrial heritage, considered from the point of view of five sectors or work groups: the culture of work, mining heritage, farming heritage, cultural landscapes and endangered heritage<sup>6</sup>.

As far as the study and dissemination aspect is concerned, one contribution of the TICCIH is worth mentioning: the collective book entitled *100 Elements of the Industrial Heritage of Spain* (Biel & Cueto, 2011), a rigorous work well recognised among experts and cultural institutions as a reference work in the matter. This proposal selecting 100 important elements of Spain's industrial heritage by Autonomous Regions goes some way to making up for the lack of a truly national inventory. This explains why the IPCE has assumed the said list of elements as a first unofficial catalogue to protect and conserve between two and ten industrial assets in each Autonomous Region.

The congresses that the TICCH-España organises should also be mentioned; to date there have been a total of six editions of the international event, where scientists and experts explain their ideas and display the results of their research in order to share knowledge with society and the public administrations. It is the public administrations that ultimately have the responsibility for taking decisions and managing the heritage. Thus, the interest of TICCIH-España in maintaining an open and fluid means of communication with the cultural authorities of the central government, as well as with the regional and local governments, who are the ones that establish which industrial assets:

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6. <http://ticcih.es/>

receive protection, i.e., are declared assets of cultural interest or BIC (the maximum level of protection); are registered in the *Regional Inventory* of industrial heritage; or are included in the Urban Catalogues. It is worth stating that, to the present time in Spain, a total of 100 industrial elements have been declared BICs, representing only 0.6% of the total number of BICs in the national territory, a «percentage lower than other European countries of the centre and north of the continent with a more intense historical industrialisation» (Pardo Abad, 2016: 217).

**Table 2. Industrial Heritage Associations in Spain**

| Association   | Territorial sphere        | Character                                       | Year |
|---|---------------------------|---|------|
| TICCIH-España   | National                  | Industrial heritage                             | 2002 |
| Incuna  | Regional – Asturias       | Industry, Culture and Nature                    | 1999 |
| Asociación LLámpara   | Regional – Castile & Leon | Industrial heritage                             | 2008 |
| Buxa. Asociación Galega de Patrimonio Industrial                  | Regional – Galicia        | Industrial heritage                             | 2008 |
| Asociación Vasca de Patrimonio Industrial y Obra Pública (AVPIOP) | Regional – Basque Country | Industrial heritage                             | 1984 |
| Asociación del Museo de la Ciencia y la Técnica de Cataluña       | Regional – Catalonia      | Industrial & technical heritage                 | 1979 |
| Asociación de Patrimonio Industrial Valenciano (APIVA)            | Regional – Valencia       | Industrial heritage                             | 2013 |
| Asociación para la Recuperación del Patrimonio Industrial (ARPI)  | Regional – Valencia       | Industrial heritage                             |      |
| Fundación Sierra Minera de La Unión                               | District – Murcia         | Mining heritage                                 | 1998 |
| Fundación Patrimonio Industrial de Andalucía                      | Regional – Andalusia      | Industrial heritage                             | 2009 |
| Fundación de Ferrocarriles Españoles                              | National                  | Railway heritage                                | 1985 |
| Madrid, Ciudadanía y Patrimonio                                   | Regional – Madrid         | Historic, artistic, cultural & natural heritage | 2009 |

Source: Own elaboration.

As for the activity of associations on a regional scale, this is a late phenomenon in Spain; although there does exist a very dynamic group of associations that are in expansion and are committed to protecting industrial heritage in numerous Autonomous Regions. These associations of a cultural nature play an important role in the conservation and defence of industrial heritage, with the stress on the testimonial and identity value of this type of heritage, considered to be a fundamental part of the collective memory and a local sense of identity. They focus on activities and actions that connect regional development, sustainability and the defence of industrial heritage as an element of social progress and productive resource. These industrial heritage associations have put down the deepest roots and have the greatest presence in Catalonia, Asturias, Madrid, Andalusia, Galicia, the Basque Country, Valencia and Castile & Leon.

## V. INDUSTRIAL HERITAGE, TERRITORY AND GEOGRAPHY

Geographers who work and reflect on industrial heritage cannot disassociate themselves from the largest collective of Spanish geographers that develop research lines on heritage, all of whom aim to connect heritage, culture and territory under the optics of revitalising the territory, local development, urban invigoration or planning and land use (Fernández Salinas, 2003; Mata, 2008; Troitiño, 2011; Fera, 2013; Gómez Mendoza, 2013; Capel, 2014). In the specific case of industrial heritage, the research works define it as a territorial resource that requires protection, interventions and new uses, with tourism being the economic activity most closely linked to the public and private strategies aimed at enhancing the value of the inherited industrial elements and ensembles (Hidalgo, 2010; Pardo Abad, 2010; Zárata, 2011; Cañizares, 2011; Benito del Pozo & Alonso, 2012; Prat & Cánovas, 2012; Dot & Pallares-Barberá, 2015; Sánchez Jiménez, 2016).

From the conceptual and methodological point of view, recent research in Geography has shown results with a notable depth and analytical value for advancing in the rigorous knowledge of heritage landscapes of all kinds (Zamora, 2001; Troitiño & Troitiño, 2010). The contributions of some authors (Silva & Salinas, 2017) are worth mentioning, since they deal with how to approach the study of heritage landscapes through three novel concepts: that of heritage vectors, defined «as the attribute around which the social and institutional

identification of landscapes is condensed, and which allows us to discern what is worth the name of heritage inside them and where they are located»; and the concepts of heritage density and intensity, which allow us to differentiate different degrees of heritage status within the landscapes. The combined use of the three concepts would allow us to identify, protect, organise and manage heritage landscapes (Silva & Fernández, 2017: 147-148), and this, obviously, can also be applied to industrial landscapes.

Empirical research is linked to the focus on industrial heritage as a resource with a potential to encourage territorial development or as a factor that favours the dynamics of economic growth, urban renewal and diversification of the tourism in all types of spaces and scales. In this sense, three especially fruitful lines of analysis can be distinguished:

A) Industrial heritage as a tool for revitalising the territory

This line represents one of the first contributions of geographical analysis to the consideration of industrial heritage as an element that can be used as a lever for development in territories affected by processes of crisis and deindustrialisation. The first works referred to mining areas, industrial port areas and highly industrialised cities with large, obsolete and bankrupt enterprises. When these spaces lose the structural support of the industry in the economy, they generate ruins that are the starting point for reviewing the potential of the industrial legacy and its possible use. In this context, the studies of geography analyse the strategies for creating industrial museums, mining parks and eco-museums, as well as their impact. Within this framework we have, for instance, the work on the mining parks of *Riotinto* in Huelva, *Almadén* in Ciudad Real, *Andorra-Sierra de Arcos* MWINAS in Teruel and *La Unión* in Murcia (Cañizares, 2011); or the coal mines of Asturias (Suárez Antuña, 2014) and Castile & Leon (Hortelano, 2011) and the eco-museum of Castelló de Empuries (Prat & Cánovas, 2012). The impact on all these areas of the abandoning of the mining and industrial activities is clear, as well as the value of the heritage that remains and the importance of its management in generating a resource that, in a cultural and touristic key, can revitalise depressed areas after the loss of their traditional activities. Similarly, the thesis of Cristina Hidalgo (2010) is a rigorous study centred on the value of the mining-industrial and railway heritage as a resource for territorial development.

## B) Industrial heritage in the processes of urban renovation and competitiveness

This line of research contributes notable results and is applied to the majority of Spanish cities subject to processes of urban requalification and renovation, focusing on such large cities as Madrid, Barcelona and Bilbao, or on medium and small sized cities such as Avilés, Ferrol, Ponferrada, Leon and Valladolid (Calderón, García & Pascual, 2005; Benito del Pozo & Piñera, 2014; Benito del Pozo, 2016). Among the recent works, the approaches of Hidalgo & Palacios (2016) on Madrid and Dot & Pallares (2015) on Barcelona are worth noting. In the first case, the authors analyse how the industrial heritage contributes to revitalising urban tourism. They reach the conclusion that «the industrial heritage of Madrid is not integrated with the city's touristic offer and the commercial touristic products are still scarce». In order to solve this problem, the authors propose a strategic plan on the part of those responsible in the public sphere, as well as the commitment of private agents, in the creation of touristic products of a cultural-industrial nature (Hidalgo & Palacios, 2016: 209). In Barcelona, the old industrial suburb of Poblenou is submitted to the analysis of the role industrial heritage plays in its touristic relaunch. The conclusion is that the said heritage forms a part of the iconic nature and symbolism of Barcelona's new, touristic landscape and that it is a kind of heritage that is positively valued by tourists. However, it is still not correctly visualised in the tourist guides or the information given by hotels as points of interest to visit. This diminishes the effectiveness of the industrial heritage as an urban, touristic resource (Dot & Pallares, 2015: 30).

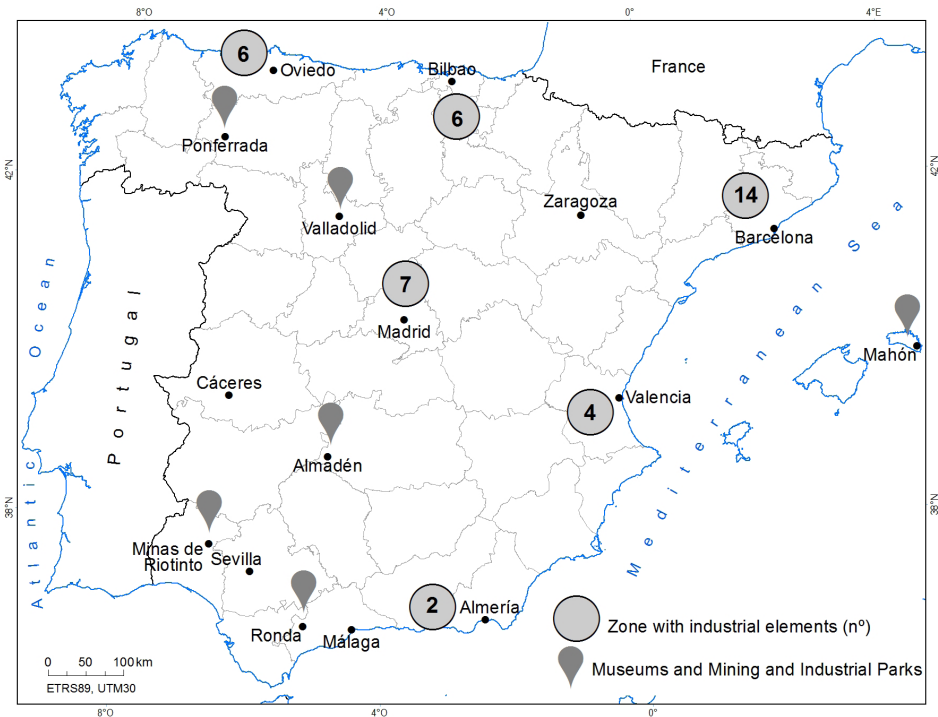
## C) Industrial heritage and its relation with the new forms of tourism

This is a very modern and strategic approach in Spain, since the touristic function is essential to the national economy and all the regions and cities aspire to developing this activity as part of their productive base (Pardo Abad, 2010 & 2016). Especially worth noting because of its novelty factor is the approach of Rico & Baños (2016) on the touristic coastal destinations. In the context of the processes of touristic renovation in consolidated coastal destinations, one of the actions used by both public and private agents is the strategy of diversification of the touristic product on the basis of the valuation of elements of cultural heritage. The authors identify industrial heritage as a thematic area of great potential for boosting cultural tourism on the Costa Blanca-Alicante, a wager that «due to its widespread location



throughout the Province, it may result in its touristic use providing the dominant touristic model with greater coherence. This can contribute in some measure to the correction of the territorial imbalance generated by the traditional location of the said activity in the coastal areas and their hinterlands». (Rico & Baños, 2016: 316).

*Figure 2.* Distribution of the elements and routes of Industrial Heritage in Spain proposed by European Route of Industrial Heritage (ERIH)



Source: Taken from ERIH: <http://www.erih.net/>

## VI. CONCLUSIONS

This review of recent approaches to industrial heritage in Spain can conclude that Spanish society, through its cultural, academic and social institutions, has undergone a notable advance in the recognition and valuation of the remains inherited from the historic industrialisation. Industrial heritage is, at the present time, a rising star, although it is still quantitatively small if compared to the

protected historic and artistic heritage. In the official sphere, there has been an evolution towards a change of scale in the concept and conservation of industrial assets, from monument to industrial ensembles and to landscapes created by industry, which involves recognising the territorial dimension of the industrial heritage and the proposition of interventions that can have an impact on both the territory and society. For their part, the regional governments are ever more committed to the defence and reuse of industrial heritage. This takes the form of a more specific legislation and a management that opts for creating inventories and catalogues of industrial assets in order to programme and plan future interventions to enhance and give new uses to singular buildings, infrastructures and landscapes. From the point of view of the social agents, the network of associations that defend industrial heritage, foment their study and apply pressure where necessary to encourage interventions from both the public and private sphere, has been strengthened. The action of these agents is favoured by the social networks and the visibility they have through internet. Finally, Geography stands out as one of the sciences most committed to industrial heritage, publishing numerous analyses in scientific journals and publications, as well as academic works (master theses and dissertations). The results of this research outline the importance of industrial heritage, identify strategies and demonstrate their territorial impact, both as a touristic resource and as a factor that reinforces the identity of rural and urban spaces due to the link with the memory of the productive activities of each place and its work ethos.

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