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The column, which appeared regularly and covered the period April 2010 (issue 5) to April 2014 (issue 12/13), played host to a series of contributions from senior foreign experts, who have given a broad overview of the problems and prospects for safeguarding and reusing industrial archeological assets in their own countries (Croatia, Spain, France, Germany, Britain, and the Czech Republic).

The experts who were invited to contribute were given a schematic list of the issues to be explored: an overview of the associations active in defending the industrial heritage, systems for listing and documenting industrial archeological sites, the legislative and regulatory framework for their protection, a selection of best practices for the reuse and conversion of abandoned industrial structures, etc.

Their contributions offer a very wide-ranging picture, and a very topical picture, of the state of play as regards the industrial heritage in their own countries. This allows us to see how far policies aimed at protecting and safeguarding this heritage converge on a common core set of principles, both practical and theoretical.

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Edited by Massimo Preite

TOWARDS A EUROPEAN HERITAGE OF INDUSTRY

Edited by  
Massimo Preite

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# TOWARDS A EUROPEAN HERITAGE OF INDUSTRY





Associazione Industriale  
per il Patrimonio  
Archeologico Industriale



The English translations of the *Preface* (Giovanni Luigi Fontana),  
and the chapters *New Horizons for Industrial Heritage* (Massimo Preite)  
and *The Colline Metallifere Grossetane National Park: from mining park to geopark* (Alessandra Casini),  
are by Gavin Williams. The translations of the Heritage Forum forewords by Massimo Preite  
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## PREFACE

**Giovanni Luigi Fontana**

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This volume brings together the articles published in the *Heritage Forum* column in "Patrimonio industriale", created and edited by Massimo Preite for the magazine of AIPAI (Italian Association for the Industrial Archeological Heritage). The purpose of the column is to present analyses and experiences in the international sphere that are particularly significant for people who work in the various fields of studying, protecting, conserving and promoting the tangible and intangible assets produced by industrial civilization.

Thanks to the range of issues discussed, and the prestige of the authors, this collection offers a clear representation of AIPAI's global approach, and its multiplicity of interests in relation to its fields of activity. It highlights the networks of relations built up over time with academics, experts, associations, museums and institutions that work in this sector internationally. It stresses the Association's efforts on behalf of knowledge of the industrial heritage, and its promotion, in all its forms, and for drawing up strategies to safeguard and promote that heritage, in such a way as to combine the "Italian approach to industrial archeology" with the most advanced international experiences and initiatives.

For that matter, an international connotation has marked the development of AIPAI ever since its origins, from the decision of this writer to found a new, more open and inclusive association, a decision taken in 1996 in Paris, following a seminar organized by Louis Bergeron at the Le Creusot-Monceau ecomuseum, and already defined in its mission, and in its operational policies, at that convivial gathering "chez-Procope" in Paris with the Italian participants at the same seminar, my colleagues Patrizia Chierici, Gregorio Rubino, Ivano Tognarini and Claudio Zanier.



The harmony of intent and of interests with Louis Bergeron, the then President of TICCIH – The International Committee for the Conservation of the Industrial Heritage, and a man with a great knowledge of situation in Italy, as can be clearly seen also from his article, published here – encouraged immediate connections with the international context of a considerable part of the activities promoted and organized by the AIPAI, both with the presence of foreign academics and experts at all the Association's most important conferences, and with the participation of AIPAI members at major events in several European countries, and in America and Asia, and with the work in the framework of TICCIH – by agreement with the subsequent chairmanship of Eusebi Casanelles – that culminated with AIPAI's and the ICSIM's organization of the 13<sup>th</sup> TICCIH Congress in Terni and in Rome in 2006.

The constant "open-door" approach to the international dimension also marked the initiatives in AIPAI's educational activities, primarily with the profuse efforts made in partnership with universities, and in support of them, for the creation and development of the post-graduate Master's course in Conservation, Management and Promotion of the Industrial Heritage (the MPI course), activated in 2002 by Padua University, the home of the Master's course, by the Venice University Institute of Architecture and by Turin Polytechnic, the first and only Master's in this sector in Italy. This was followed in subsequent years with a consortium between the founding universities, Milan Polytechnic, the Universities of Ferrara, Naples and Cagliari, and the National Research Council (CNR)–Institute for Archeological and Monumental Assets in Lecce. The MPI has been geared towards helping young newcomers to the sector to acquire the main theoretical and technical knowhow and skills necessary for devising strategies of knowledge, cataloguing, and conservation, or drawing up projects to salvage, develop and manage the industrial heritage, here in Italy and internationally. AIPAI celebrated the 10th anniversary of the MPI Master's in 2012 with a special edition of the magazine "Patrimonio Industriale". This edition went back over its activities up until today, highlighting its fundamental role in educating hundreds of new experts on the industrial heritage, which also became, right from the start, a cornerstone also of many regional AIPAI bodies, and now of the "Patrimonio Industriale" magazine itself.

The MPI experience has also been able to project itself into the international context by means of the Master Erasmus Mundus TPTI – *Techniques, Patrimoine,*

*Territoires de l'Industrie: Histoire, Valorisation, Didactique* and the international doctorate in HERITECHS – Heritage, Cultural Economics, Technology and Sustainability. These are nothing less than incubators of new workers in the heritage sector, educated with a multidisciplinary course geared towards transferring to the countries of origin all over the world, approaches, criteria, models and good practices interventions presented, analyzed and discussed at the associated Universities of Paris 1 Panthéon-Sorbonne (coordinator), Padua, and Evora, and in internships at related universities and authorities in Europe, America, Africa and Asia. The TPTI Master's recently entered a new phase, with the expansion of the consortium at the Universities of Alicante, Praga, Sfax (Tunisia), Tecnológica Federal do Paraná (Brasile), and its confirmation for a second five-year period by European bodies, and its membership of the new Erasmus Plus programme. The network of associated universities includes UNAM (Mexico City), Campinas (Brazil), Ouagadougou (Burkina Faso), and Tongji (Shanghai).

The international education system has further expanded, forming connections with the research networks on the issues of industrial heritage which, meanwhile, thanks to Padua University's major internationalization projects and programmes, have made it possible to apply research methodologies, and to transfer educational models to various places in the world, as with the *Company Towns in the World* project, which has created a permanent network of researchers on this subject in 40 or so countries, scattered across all the continents: with the *talleres* and with the *diplomado* in *Conservacion y valorizacion sostenible del patrimonio hidraulico, industrial, arquitectonico y urbano*, which is about to see the start of its third edition at the Instituto Politecnico Superior José Antonio Echevarria (CUJAE) in Havana, run by a partnership between this Polytechnic and the Universities of Padua and Alicante; with the research activities under way in various states of Brazil, in Argentina, Uruguay, Messico, and Cuba in the context of the inter-university cooperation, and with the summer schools on productive systems, the industrial heritage, and territorial identities, already set up and scheduled in Argentina with the involvement of Universities and academics from various countries in Latin America.

In this international projection of AIPAI's activities, and the activities of the academics who look to AIPAI, the Italian perspective as regards the industrial phenomenon, and on its legacy, have been able to contribute in a significant way

to international debate on research subjects, and on periodizations. This debate entered a new phase as of the 1980s. As everyone knows, at the time, discussion on what is to be regarded as industry questioned the very concept of the industrial revolution, and of the factory, as the product of *modern industrialization*. This point of view – it should be stressed – was disputed in Italy ever since the start of industrial archeology: according to Franco Borsi, for example, industrial archeology was firmly connected to architecture, full stop. Moreover, it was necessary to bear in mind the various routes of *industrialization* in Europe and outside Europe, in relation to the specific features of the respective contexts: for Italy, one need only cite the role of the networks of artificial water channels as a source of energy, and installations such as fulling mills in training for specialist manufacturing skills that have a long history based on well-established technical and productive skills, originally fuelled by the many innovations borrowed from other cultures and civilizations, not to mention the role of the Renaissance courts and the Italian republics in giving a powerful boost to a technical culture able to make a deep impact on the local area, addressing large-scale problems connected to the art of war, the exploitation of raw materials, and mechanics.

In that period, the studies by Carlo Poni, and the great flourishing of contributions concerning proto-industrialization, following the famous article by Franklin Mendels, combined with Pollard-inspired interpretations of the industrial phenomenon on a regional scale, reinforced this vision that expanded the research areas and time boundaries of industrial archeology, linking up with the extreme positions of certain founding fathers, such as Buchanan, who, again in 1972, defined “an industrial monument” as “any remnant of the obsolete phase of an industrial or transportation system, from Neolithic flint mines to the airplane that is now obsolete, or the computer”, or such as Kenneth Hudson, who suggesting transforming the discipline into a sort of archeology of labour, adopting as the reference period the whole of human history, from prehistory to our day. In any event, even restricting the time span to so-called modern industry, all the above-mentioned activities have confirmed that the industrial phenomenon is independent of national borders, and steps across them, both in the earliest times and in the days of multinationals, and also that, both in historical research and in its applications to heritage problematics, it is necessary to take action accordingly.

As regards the field of research, another line of intersection of research and

planning developed within AIPAI with more advanced international research relates to the now widespread conviction that we can no longer restrict ourselves to the “industrial monument”. Rather, we must extend our research to the whole set of spatial relationships that this monument establishes with the local area. In the shift from monuments to sites, and finally to landscapes, from the object to the system, the idea has become established that a building, a machine, a productive process must always be interpreted in relation to energy sources, natural resources, technical and cultural systems, communications networks, and the services that make production possible: in a word, to the territories in which they are located, and to the unceasing processes of transformation (for geographers: territorialization or re-territorialization) which affect them. In these processes, the interactions between the local and the supra-local, between the regional and international dimensions, are a constant feature of both the formation phase of the physical heritage of industrialization (tangible and intangible) and of the phase of its reuse with different functions, or its re-inclusion in new development dynamics that use the industrial heritage as a lever.

In this sense, a comparison of the good practices drawn up in the different national contexts (and which are described more fully in the following pages) is certainly the right point of departure to spread an agreed international “culture” of the industrial heritage.

Accordingly, we are indebted to Massimo Preite for putting these articles together, and for highlighting the wealth of stimuli and suggestions contained therein. They will be of benefit to all those who constantly deploy their skills of intelligence and doggedness in transmitting the values of our industrial civilization to future generations.



# NEW HORIZONS FOR INDUSTRIAL HERITAGE

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## WHY HAVE A FORUM ON INDUSTRIAL HERITAGE

With the publication of the first issue of "Patrimonio Industriale", the magazine of the Italian Association for the Industrial Archeological Heritage (AIPAI), we saw the start of a column – Heritage Forum – that was aimed at taking stock of conservation practices and the advancement of the industrial heritage in Europe.

The column, which appeared regularly until the suspension (which we hope will be temporary) of the publication of the magazine, covering the period April 2010 (issue 5) to April 2014 (issue 12/13)<sup>1</sup>, played host to a series of contributions from senior foreign experts, who have given a broad overview of the problems and prospects for safeguarding and reusing industrial archeological assets in their own countries (Croatia, Spain, France, Germany, Britain, and the Czech Republic).

The experts who were invited to contribute were given a schematic list of the issues to be explored: an overview of the associations active in defending the industrial heritage, systems for listing and documenting industrial archeological sites, the legislative and regulatory framework for their protection, a selection of *best practices* for the reuse and conversion of abandoned industrial structures, etc.

Since this list was not binding, the authors followed the outline list that was put forward with a broadly independent approach. Nevertheless, their contributions offer a very wide-ranging picture, and a very topical picture, of the state of play as regards the industrial heritage in their own countries. This allows us to see

how far policies aimed at protecting and safeguarding this heritage converge on a common core set of principles, both practical and theoretical.

As the curator of this column, this writer has duly accompanied the experts' articles with a comment of his own, without this ever aimed at being a mere summary of the content of each article. On the contrary, the experiences and situations described have been used as a yardstick, to measure and highlight how far behind Italy is, and how many shortcomings it suffers from, when it comes to managing its national industrial heritage, compared to other countries.

Readers rereading these comments cannot fail to note how critical this writer has been (sometimes very critical) in noting the weak points in the operational context of industrial archeology in Italy. The incomplete state of regulations protecting industrial archeological sites, the backwardness of cataloguing systems, and the scant inclination to put forward Italy's industrial heritage for inclusion on international heritage lists (UNESCO, ERIH etc) are shortcomings that seriously penalize individual attempts to preserve our country's disused industrial sites.

However, the sense of this volume, which collates the Heritage Forum articles that appeared in the AIPAI magazine in the years 2010-2014<sup>2</sup>, is not to make new comparisons between Italy and the rest of Europe. These have already been addressed, and can be found in the brief introductions to the actual essays. Instead, the aim is to offer a comparative analysis of the various articles in order to identify trends (including spontaneous trends) to realign individual national experiences with a common nucleus of guidelines that could be summed up as follows:

- the denationalization of the industrial heritage, and delegating its conservation to the institutions that administer regional contexts;
- a new conception of the industrial heritage that refers to the re-assembling of separate industrial archeological sites in groupings that are increasingly large (from an isolated site to a landscape);
- the evolution of the principles of conservation of the industrial heritage, from total conservation to its reuse in major urban regeneration schemes, and territorial conversion projects (regeneration through heritage);
- the multiplication of initiatives aimed at getting international recognition for the industrial heritage;
- moving beyond a merely national vision of the industrial heritage, in the direction of a new, transnational vision.

In several countries, the central institutions have taken on responsibility for documenting and protecting the industrial heritage: in Spain, a *Plano Nacional de Patrimonio Industrial* was approved in 2000, directly inspired by the *Ministerio de Cultura* and run by the *Instituto de Patrimonio Cultural de España*. In France it was thanks to the splendid initiative of the *Cellule pour le patrimoine industriel* (set up within the Culture Ministry in 1983) that industrial sites have also been able to benefit from the status of "historical monuments". In Britain, the first registers of industrial archeological sites, dating back to 1963, famously gave rise to the *National Record of Industrial Monuments*, which then became part of the digital archives of the *Royal Commission on the Historical Monuments of England*. The experience of the Czech Republic, as regards protection of its industrial heritage, follows the same course: the first industrial sites, classified as "monuments" in the *National Heritage Institute*, were followed in 1996 by new research projects involving the technical and industrial heritage promoted by the Ministry of Culture.

More recently, however, we have seen the beginnings of a gradual withdrawal of the central state, and a growing "regionalization" of industrial heritage protection policies. In Spain, the administration of the industrial heritage has been caught up in this decentralization, as shown by the highly relevant overview by Julian Sobrino of laws issued by local authorities: the *Ley del Patrimonio Histórico de Andalucía* (2007), the 2001 *Ley in Asturias* etc. In France the central state, whilst retaining a coordination role, has gradually delegated to the regions, as of 2004, the "*service de l'inventaire du patrimoine culturel*" (Dufresne G., 2001, 07): the Poitou-Charente and Champagne-Ardenne regions have already carried out this task. In a federal country, Germany, the Laender have taken on responsibility for protection of the industrial heritage: the precursor was the *North-Rhine Westfalia Land*, with the rescue of Zollern 2/4 (threatened with demolition), and the promulgation of the 1975 NRW Program, which put the conservation of industrial monuments on the agenda for the first time.

In the case of Italy (Bergeron L., 2011, 06), we can identify a unique form of "regionalism": in this instance, the term does not denote an intermediate level of government that takes on responsibility for conservation policies, but refers to the polycentric aspect seen in the development of the discipline of our



industrial archeology. However, on careful analysis, we can also glimpse, here in Italy too, industrial heritage protection initiatives, on a regional scale, although these are somewhat less than uniform: following the lead of Piedmont Region (1995) and Trento Province (2000), no less than five other Italian regions (Friuli V. G., Lombardy, Molise, Sardinia, and Umbria) brought in special laws to set up ecomuseums between 2006 and 2008 (many of which feature important industrial archeological sites).

To conclude this initial comparison between protection systems in the various countries, one may well wonder how far this common trend towards "regionalization" of the management and conservation of industrial sites (relieving central government of this burden, by making the regions more responsible, although without departing from the principle that the public authority is the prime player) is an effective solution in the long term, given the prospect of increasingly scant resources. The time has perhaps come to look at the British model more carefully (Faull M., 2013, 11), and the "*souplesse de sa politique patrimoniale*"<sup>3</sup> that, not contemplating direct government involvement, gives the conservation of its heritage to independent institutions (English Heritage, charitable trusts etc.) for which there is no equivalent in the continental European tradition.

## LANDSCAPE AS THE NEW DIMENSION OF INDUSTRIAL HERITAGE

Another important theme common to many of the articles involves the centrality of the "landscape". By this we mean an expansion of the heritage value from the industrial site itself to the wider range of factors (tangible and intangible) that have historically interacted with the productive activities (the habitat, services, infrastructure, canals, social capital etc).

Perceiving and interpreting this set of factors in terms of a "landscape" means "thinking of this set of elements and processes not as individual phenomena, but as parts of an interconnected system"<sup>4</sup>. An attention to this approach is more than evident in the various articles.

In Spain (Sobrinó Simal J., 2010, 6), on the occasion of the fifth *TICCIH España* Congress (2009), emphasis was placed on the need to adapt the *Plano Nacional de Patrimonio*, following ratification of the European Landscape Convention in

2007. Signing up to this convention means that the landscape is adopted as an irreplaceable scale of reference for the protection and advancement of the industrial heritage. Margaret Faull (2013, 11) highlights the difficulties faced by surviving industrial landscapes in being protected and correctly interpreted. These difficulties are essentially due to the fact they are considerable large. However, the inclusion of the mining landscapes of Blaenavon (2000) and Cornwall (2006) on the UNESCO World Heritage List (WHL) seem to have blazed a trail for more recent inclusions (2012), such as the mining sites of Wallonia and the *Bassin Minier Nord Pas de Calais* (Patou M., 2011, 7). The shift from Blaenavon to Nord Pas de Calais is highly significant, in that it marks a significant conceptual widening of the notion of cultural landscape. As far back as 2002, at a UNESCO workshop in Ferrara, Peter Fowler pointed out that the new category of cultural landscapes within the Convention should have envisaged more room for application, and that "the *notion of cultural landscape is, for the Commission, a synonym for rural landscape*", and that it was time to expand this notion to include urban landscapes and industrial landscapes"<sup>5</sup>. The listing of the above-mentioned mining landscapes seems to mark the fulfillment of this hope.

In recent years, significant case studies have also come from Germany involving the protection, management, and development of the industrial heritage in terms of landscape (Steiner M., 2011, 8). The vision of the industrial heritage at the scale of landscape is underpinned by the notion of "*industriekultur*", a term that is hard to translate, but which stands for "*a comprehensive study of the diverse impacts industrialization has had on human culture, also including a critical interpretation of present-day processes*".

The examples cited by Steiner are well-known, and relate to the rehabilitation of two large industrial regions in Germany – the Ruhr and Lusatia – which, following their deindustrialization, saw regeneration process steered by a body – the *Internationale Bauausstellung (IBA)* – specially devised for the promotion of major urban and territorial projects. This somewhat atypical body, whose mission lasted 10 years, was only tasked with selecting, validating and coordinating reconversion projects, without any role in the way these were drawn up. The regeneration of the Ruhr was carried out in the framework of a plan - *Iba Emscher Park (1989-1999)*<sup>6</sup> – that involved an area 800 km<sup>2</sup> in size, along the Emscher River, comprising no fewer than 17 municipal precincts. At the end of its prescribed 10-year mandate, its achievements are highly considerable, with as

many as 91 projects carried out, and a renewed image of the territory displaying the qualities of “*change without growth*” and “*regeneration through heritage*”.

The other example is *Iba Fürst Pückler-Land (2000-2010)*<sup>7</sup>, which selected 30 projects to give impulse to a plan for the structural transformation of Lusatia. The overall scheme was geared towards the conversion of a landscape ravaged by 30 years of open-air lignite mining. The 30 projects were devised in clusters, by reference to 9 “*landscape islands*”, each of which was defined around a particular issue: for example the “*Lauchhammer - Klettwitz: Industrial heritage landscape Island*” salvage project was aimed at rehabilitating the metallurgical and mining ‘friches’ (cokeries and electricity substations).

The exhibition entitled *The Reconquering of a Landscape*, staged at the *IBA Terraces Visitor Centre* (2010), fully documented the bold scale of a project that deliberately avoided any attempt at a return (an impossible return) to the ancient, pre-mining state, or the total removal of traces of the previous mining activity. By contrast, *Iba Fürst Pückler-Land* conceived of a landscape which, although geared towards the future, does not renounce its history. Taking advantage of the damage caused by the mining industry, the former craters left by mine-workings have been turned into lakes for leisure activities, and have become the engine of a process of economic and social development that is firmly on its way towards a virtuous and lasting development of the local area.

These two *IBA* experiences are the best answer to questions concerning the protection of industrial landscapes: if a programme involving pure conservation is no longer feasible, new planning prospects need to be explored that have to combine protection and change, conservation of the memory that is still visible in the remaining facilities, and, at the same time, a functional reorganization of the former industrial sites in new spaces and activities.

However, it would be an over-simplification to argue that the category of “landscape” can be applied only to mining landscapes (as would seem to be confirmed by the aforementioned examples). Indeed, the category of landscape proves to be especially suitable to also include the urban industrial heritage, as shown by two case studies in Germany presented in the article by Marion Steiner: the inclusion (in 2008) on the WHL of the Berlin Modernism Housing Estates as “*settlements that illustrate important facets of everyday life in the industrial metropolis of the 1920s*”, and the probable candidacy of Berlin as an “*Electropolis*”, namely an urban landscape also determined by the geography

of the public electricity grid, the development of which has given the city a lead role on the European continent, and which has made it an example for technical developments worldwide.

#### *Regeneration through Heritage*

The notion of *Regeneration through Heritage* was launched by HRH The Prince of Wales in 1998<sup>8</sup> in order “*to promote awareness of the opportunities offered by heritage industrial buildings, and to assist community-based partnerships to develop proposals for them*”.

This approach involves a radical rethink of the principles of architectural conservation, and abandoning (or revitalizing) the paradigms of protection based on the criteria of a total absence of alteration to the site or asset to be conserved. This on the basis of several, indisputable reasons:

- especially in the case of industrial heritage, and 20th century heritage generally, the sheer scale demands the installation of functions (including, not infrequently, commercial functions) that can finance the upkeep of the facilities;
- often the modern construction systems adopted require the replacement of the original materials used that are more subject to rapid obsolescence (iron that rusts, concrete that breaks down); therefore, the authenticity of materials represents a principle that allows some exceptions, in such cases;
- finally, a new notion of “*cultural heritage as a social construction*”<sup>9</sup> is increasingly gaining ground: “*conservation is a complex and continual process that involves determination about what constitutes heritage, how it is used, cared for, interpreted, and so on, by whom and for whom*”. In this case, decisions on what to conserve, and how to conserve it, are no longer solely reserved for experts (the people ultimately responsible for “*conservation discourse*”<sup>10</sup>), but are also the expression of the aspirations and values of the local communities (families, social groups, ethnic groups etc.). The heritage ceases to be something only to be conserved and protected; instead it becomes a subject for transformation (into something better or worse) by each new generation (David Lowenthal).

If the management of heritage thus becomes a variable mixture of conservation and transformation, if there is no longer a consolidated system of values, and these start to be restricted, in relative terms, what can curb the uncontrolled deregulation of the criteria of protection?



The templates for charting the value of the industrial heritage that emerge in the *Heritage Forum* articles offer up initial answers to this kind of concern. A well-reasoned theory on the margins for the potential transformation of disused industrial facilities could find a useful foundation in a careful distinction between the various profiles of [historical value] of [industrial monuments] suggested by Axel Föhl: historically typical, historically unique, the start or end members of a series, expression of profound social changes, etc. (Steiner M., 2011, 8).

Or else one could think of measuring the intensity of interventions relating to the system of values of the industrial heritage, formulated for the Czech Republic by Miloš Matěj (typological importance – technological solutions are more important than the architecture qualities; technological flow – relation of the production continuity to preserved objects; authenticity – purity, originality, believability of the site; architecture qualities) that open up the possibility of three possible routes for intervention: *“the first museum reuse enables to preserve the heritage very close to what it was. The second adaptive reuse with a respect to authenticity represents the opportunity to get the heritage object back to life, without being dependent on public subsidy. The third renewal is applied to the technical heritage where the loss of function, characterizing industrial heritage, did not come up”* (Jana Hoňková and Tomáš Šenbergerii, 2013, 12-13).

However, it is certain that one will have to provide oneself with a solid set of interpretive criteria, and criteria for making judgments, to prevent the risks of *“rampant rehabilitation”*<sup>11</sup> which often irreversibly efface the industrial heritage that is subjected to adaptive reuse interventions.

#### THE SEARCH FOR THE HERITAGE LABEL FOR THE INDUSTRIAL PATRIMONY

It is a fact that there are growing efforts to confer increasingly high forms of heritage recognition to industrial archaeological sites and monuments found deserving of conservation and development. In the articles by the various authors, we have already seen the classificatory systems adopted for the recognition of the most prominent industrial assets: in Spain after the approval

of the Industrial Heritage National Plan in 2002, 49 heritage assets across the country have been selected according to prior studies realised by the Spanish Historical Heritage Institute<sup>12</sup>; in France, industrial sites recognized as “historical monuments” benefit from regimes that bestow a higher level of protection. Currently, out of a total of 43,000 protected sites, around 1,000 can be regarded as industrial monuments. In the Czech Republic, 20 technical and industrial heritage objects have been included on the “National Culture Heritage” list.

However, the biggest efforts are those aimed at registering the technical and industrial heritage on international lists. First and foremost, the UNESCO World Heritage List: in a 2008 ICOMOS study<sup>13</sup>, 46 UNESCO industrial archeology sites were found worldwide; 32 (69.6%) are located in Europe. Today that number has risen even higher. However, as well as the quantitative increase, there are other new aspects as regards the designated sites: in most cases, especially in more recent cases, the prophecy announced by Kate Clark, a *“Death of Site”* and, as a result, *“the idea of conserving the historic environment as opposed to a series of discrete heritage assets”*<sup>14</sup>, seems to be largely fulfilled.

The constant progression from the protection of individual property toward the protection of the environment that property belongs to has already been highlighted in the case of the mining landscapes registered with the WHL. The recent listing of the *Bassin Minier Nord Pas de Calais*, despite its unusual spatial scale, does not mark the maximum size for uninterrupted process on expansion from the individual asset to the local area. The unit of the landscape crosses borderlines, and, in order to be protected, it demands transnational candidacy projects, such as that of the Mining Cultural Landscape Erzgebirge/Krušnohoří, promoted jointly by Germany and the Czech Republic. On other occasions, the idea of the historic environment, as opposed to a series of discrete heritage assets, is not translated into the spatial continuity of a landscape, so much as in the grouping together of a certain number of sites which, despite being spatially unconnected, have value only when taken together. In such cases, the unifying element derives not from a territorial continuity, but rather from the fact that several sites take part in a common historical event that give them full meaning. The joint registration of Almaden (Spain) and Idrija with the WHL as Heritage of Mercury (2012) bears testimony

to the intercontinental trade in mercury which generated important trade between Europe and America over the centuries, because of its decisive role in the extraction of silver from deposits in the New World. In the very recent addition of Tomioka Silk Mill and Related Sites to the list (2014), what appears remarkable was the ability to bring out the underlying logical unity of four sites that are apparently disconnected, by recognizing the specific role of each of them in the manufacturing process: farming silkworms at Tajima House; storing the cocoons at Fuketsu; silk production at Tomioka, and research and training at Takayama-sha (Toshitaka Matsuura, 2012, 09/10)<sup>15</sup>.

Apart from the UNESCO label, another label that is sought-after to get recognition of the industrial heritage is ERIH (*European Route of Industrial Heritage*). In ERIH, we find both the elements present in the last two sites to join UNESCO, mentioned here: the network element, and the transnational element. As made clear by Wolfgang Ebert in his contribution (Ebert W., 2012, 09/10), ERIH came into being drawing its inspiration from the *Route der Industriekultur* model, devised with the aim of linking together, in a single itinerary, the tourist attractions related to the industrial heritage in the Ruhr area in Germany. ERIH's mission is to "integrate the Ruhr Industrial Heritage Route into a bigger European Industrial Heritage Route, in order to demonstrate that industry is no purely a national affair, and never has been, and the industrial division of labour has never stopped at national borders. To that extent, industrial heritage forms part of the joint European memory".

The distinction between the UNESCO label and the ERIH label is, however, very clear: in both lists, listing is reserved for industrial heritage sites of significant value, and in the established presence of specialist management systems: the management plan for UNESCO, and the quality of services for the public for ERIH, both those more specifically museum-related, and visitor support services (orientation services, and services devoted to the public, such as multi-lingual media, interpretative installations, children etc.). However, ERIH listing is heavily geared towards taking part in the advantages deriving from participation in a network that promotes "the transnational transfer of knowledge, and the development of joint marketing strategies and cross-border initiatives". Successful experiences in this connection have proved to be the regional routes (Upper Silesia in Poland etc.) which, by associating together a certain number of sites and landscapes, manage to integrate a

heritage that would otherwise be broken up into isolated episodes devoid of their own ability to act as tourist attractions.

Finally, another label of recognition is registration on the *European Geoparks Network* (EGN), a transnational association, set up in 2000. Membership of the networks commits to pursuing models of sustainable economic development, to preserve the geological and environmental heritage within their area, and to encourage geo-tourism. A few years after the start of the *European Network of Geoparks*, in February 2004, a group of UNESCO international experts, meeting in Paris, discussed and agreed the creation of the *Global Geoparks Network* (GGN). The official launch of the GGN was formalized on the occasion of the 1st UNESCO International Conference on Geoparks held in Beijing (China), in June 2004. This Network was designed to pursue three prime objectives: conserving the environment, promoting education in Earth Sciences, and fostering sustainable local economic development. The *Global Geoparks Network* (GGN), under the aegis of UNESCO, currently has 100 territories with the involvement of 33 nations worldwide. Italy is the leading European country in terms of the number of Geoparks (9): both the *Sardinian Geomining Park* and the *Colline Metallifere Mining Park* (Casini Alessandra, 2014) have joined the *Global Geoparks Network* (in 2007 and 2010 respectively). Inclusion within the *Global Geoparks Network* has meant that these two parks have had a rethink of their cultural mission: the mining heritage is no longer dominant, as in the past, in drafting conservation and development policies. The natural environment is no longer seen as a passive spectator of human history, connected to events surrounding the exploitation of mineral deposits. On the contrary, it has a history of its own that deserves to be narrated appropriately, and "geodiversity" is the most complete expression of its previous history.

The last label to be mentioned (but not the least important one) is the *Council of Europe's "Landscape Award"*, intended to raise awareness, on the part of society at large, of the value of landscapes, of their role, and of changes to them. Its objective is to reward exemplary practical initiatives aimed at successful landscape quality objectives on the territories of the Parties to the Convention. In 2011 the jury gave the award to the Carbonia mining town (Italy) for its collective actions aimed at reconverting, restoring, and protecting the urban and architectural fabric of a 20th century industrial town.



In the introduction to the first edition of Heritage Forum, it was noted that *"the transnational approach is the appropriate approach for people interested in the conservation and advancement of the industrial heritage: not only to reconstruct exhaustively the formal repertoire of industrial architecture, but also to embrace a complexity of phenomena that would be done justice to if considered individually"*.

To this end, TICCIH (*The International Committee for the Conservation of the Industrial Heritage*) is certainly the body that has made most efforts. With the drafting of the *Nizhny Tagil Charter for the Industrial Heritage* in July 2003, the main reference values for industrial heritage, and the criteria for conservation and change of use (adaptation) were established. In 2012, on the occasion of TICCIH's 15<sup>th</sup> General Assembly in Taiwan, the *"Taipei Declaration for Asian Industrial Heritage"* was signed. This recognized the *"shared interest in the distinctive elements of the Asian experience of industrialization and a shared dedication to a cooperative effort to support preservation and interpretation of that heritage"*<sup>16</sup>. But it is above all in the context of cooperation programmes with ICOMOS that the most clear efforts were manifested by TICCIH to develop an overall system of guidelines aimed at encouraging national policies on behalf of the industrial heritage, giving them a common platform of principles and methods. With the ICOMOS-TICCIH Collaboration Agreement, signed on occasion of TICCIH's General Assembly in London (2000), the two bodies undertook to *"implement a common policy in order to ensure that the knowledge, expertise of their members... be widely shared by all specialists"*; moreover, under this agreement, it was agreed *"that, in respect of matters relating to the study and preservation of the industrial heritage, TICCIH is officially recognized by ICOMOS as the scientific consultative body for ICOMOS... in expertising application for the World Heritage List, and in writing reports for the World Heritage Committee that cover the main field and branches in industrial heritage"*<sup>17</sup>. With the *Dublin Principles* (2011)<sup>18</sup>, ICOMOS and TICCIH again reaffirmed their intention to *"expand their cooperation by adopting and promoting the dissemination and use of the Principles"*, drawn up specifically with the aim of *"assisting in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the world"*. Compared with

the Nizny Tagil Charter, the new document contained both confirmations, and a number of significant new features. For example, there was a new declaration that *"the joint principles' primary interests coincide with the common notions of the Modern Era Industrial Revolution"*. However, compared with the document of 11 years before, we find greater attention to issues such as:

- the intangible dimensions of the industrial heritage, such as technical know-how, the organization of work and workers, and the complex social and cultural legacy that shaped the life of communities;
- policies aimed at extending the life-cycle of existing structures and their embodied energy, conservation of the built industrial heritage, in order to achieve the goals of sustainable development;
- the development of appropriate criteria of adaptive reuse that may constitute a sustainable way of ensuring the conservation of industrial heritage, only if they are able to take in account and respect heritage significance;
- the development of programmes and facilities aimed at ensuring the best communication of the meaning of the industrial heritage for contemporary societies.

Finally, the collaboration between ICOMOS and TICCIH was further perfected in the Memorandum of Understanding (which is set to be approved imminently) *"regarding a framework for collaboration on joint areas of interest for the conservation of industrial heritage"*. Since this document is not yet definitive, a detailed analysis would not be appropriate. Among its most significant features, we will only highlight provision for a "work plan" which ICOMOS and TICCIH undertake to set in place annually, in order to better schedule the activities designed to implement collaboration.

## TOWARDS A EUROPEAN HERITAGE OF INDUSTRY

The points made so far would be incomplete without a reference to the attempts currently under way to move beyond the national scale, and to develop a European vision of the industrial heritage.

This need has been expressed by the *Industrial and Engineering Heritage Committee* (IEHC), set up in 2008 by members of Europa Nostra. In the *Greenwich Declaration* (2011), there is a call for the urgent need *"to draw*

particular attention to the transnational features of Europe's common industrial and technical past", and "show how the industrial and engineering heritage is an integral part of the European heritage as a whole".

The Council for Europe<sup>19</sup> is also taking action in the same direction: in the final resolution (no. 1924 for 2013, deliberated by the Parliamentary Assembly) there is a preliminary statement to the effect that the industrial heritage – including both its tangible and intangible components – is a building block of European identity. To this end, the assembly recommends:

- the creation of a European label for industrial heritage to provide an intermediary (European) level of protection for the sites of European significance ("heritage constellations", ie sites that are thematically or territorially interconnected);
- the creation of a pan-European exchange and networking grouping all the relevant organizations having expertise in industrial heritage;
- a series of objectives including establishing a catalogue of good practice and case studies, preparing thematic (sector-by-sector) studies to underline the role of industrial heritage in forging the European identity, establishing a comprehensive and representative list of European industrial monuments etc;

In light of the above, the Assembly voices full support for the campaign of the *European Federation of Associations of Industrial and Technical Heritage* (E-FAITH) calling for a European Industrial Heritage Year in 2015.

This proposal echoes a similar initiative taken by the Council of Europe in 1975: the proclamation of the Year of the European Architectural Heritage. E-FAITH, a federation devoted to cooperation between industrial and technical heritage associations and volunteers in Europe, has spearheaded the reclamation of this celebratory formula, to apply it to the industrial heritage. With this proposal, E-FAITH sets out to follow up on the urging by the Council of Europe to encourage public involvement and volunteer work that generates awareness and appreciation of the value of the industrial heritage. E-FAITH claims that, to date, "more than 150 organizations and institutions from 19 European countries have backed the initiative, and in many places volunteers and associations, as well as institutions and public authorities, are already working on projects and programmes to be set up in 2015".

Similar goals are pursued by the *Central European Project SHIFT X* whose partners have achieved significant experiences on how industrial heritage can be used for fostering sustainable endogenous development, and promoting the

economic and social transition of old industrial regions"<sup>20</sup>. SHIFT X shares the goals of jointly developing a European label for the industrial heritage, and to support E-FAITH's campaign for a European Industrial Heritage Year in 2015. In a document circulated in May of this year, SHIFT X suggested a number of supplementary elements to the resolution by the Council of Europe's General Assembly (no. 1924 for 2013) for a vision, no longer at the national scale, but at the European scale, of the industrial heritage. Indeed, the document recognizes that "*Industrial Heritage is a truly European topic: even though national histories may differ in details, the industrial past is one of the main common roots of Europe*".

If the heritage is European, then the policies for its conservation and enhancement must also be European. The document's closing section is dedicated specifically to listing specific measures to be adopted to give centrality on the agendas of the main European institutions to the need to develop a joint European approach on industrial heritage promotion. To this end, SHIFT X urges all relevant national and European administrations to provide dedicated European and national funding programmes for the sphere of industrial heritage.

The requests put forward are subdivided into three topics.

In Topic 1 - *Cooperation* – an improvement is urged in the coordination and cooperation between regional, national and European industrial heritage stakeholders. To this end, it is recommended that "*mediating coordination bodies*" be set up in order to promote collaboration between involved stakeholders on all spatial levels. The proposal could prove to be useful, if for no other reason than to combat the fragmentation of the many initiatives undertaken; to date, these have been uncoordinated.

Topic 2 - *Preservation and Utilization of Industrial Heritage* – urges the preliminary recognition of industrial heritage components worthy of protection in order to ensure the possibility of re-use. With a view to this, there is call for the development of inventories of industrial heritage objects in European countries, and the installing of a platform linking national inventories for public access. Less convincing is the proposal to "*draw up a European Declaration on Industrial Heritage, supported jointly by all European stakeholders*". This would merely be yet another document in an already fairly full range of industrial heritage charters (Nizny Tagil, Dublin Principles etc).

In Topic 3 - *Developing the Image of "Industrial Heritage"* – among the many

proposals designed to correct the often negative perception of the old industrial places, there are the proposals to establish European awards for industrial heritage, and to improve liaison between industrial heritage institutions and active industry, seen as a manifestation of the "living industrial heritage".

Overall, the document puts itself forward as a useful "road map" to increase a perception of the industrial heritage as a "European heritage" and thus as a major, "undivided" cultural resource that can be used in the construction of a stronger sense of identity in the Union.

Usefully, the SHIFT X document stresses that "the first steps towards today's unified Europe were based on industry, with the founding of the European Coal and Steel Community (ECSC) in 1951". Many years later, Jean Monnet, one of the leading architects of that project, looking back over the long process that had led up to that point, asked himself: "What if we had started out from culture, instead of coal and steel?". Perhaps he did not realize how unfounded his doubt was: the coal and the steel that he thought of as being an antithesis of culture had nevertheless become culture, a powerful culture: that same culture, indeed, that has ensured a successful, prolonged period of peace in Europe.



1. I am deeply grateful to the editors of Patrimonio Industriale, in the shape of Roberto Parisi, Manuel Ramello and Augusto Ciuffetti, for the constant encouragement and support they have given to the column.
2. In addition to the articles that appeared in the Heritage Forum column, the articles brought together in this volume comprise other writings, such as: *Leçons italiennes sur le patrimoine de l'industrie* by Louis Bergeron, which does not feature in Heritage Forum, but which first appeared in the AIPAI magazine column Ricerche e Documenti, 2011, 06; *La démarche de candidature du Bassin minier du Nord-Pas de Calais (France) à une inscription sur la liste du Patrimoine mondial de l'UNESCO* by Marie Patou, 2011, 07, and *The Tomioka Silk Mill and Related Sites* by Toshitaka Matsuura, 2012, 09-10 (both in column Salvaguardia e Tutela); *The Colline Metallifere Grossetane National Park: from mining park to geopark* by Alessandra Casini, originally due to appear in issue 14 of Patrimonio Industriale, was subsequently published in issue 31 of Industrial Patrimony.
3. HEWISON Robert, "La prise de conscience du patrimoine en Grande-Bretagne", in NORA Pierre (ed.), *Science et conscience du patrimoine*, Fayard/Éditions du Patrimoine, Paris 1997, pp. 357-362.
4. TOSCO Carlo, *Il paesaggio storico: le fonti e i metodi di ricerca*, Roma - Bari, Editori Laterza, 2009.
5. FOWLER Peter, "World Heritage Cultural Landscapes, 1992 – 2002 : a Review and Prospect", Proceedings of Ferrara Workshop Cultural Landscapes 11 – 12 November 2012), *Cultural Landscapes : the Challenges of Conservation, World Heritage Papers* 7, UNESCO, 2003.
6. International Building Exhibition Emscher Park, *The projects 10 years later*, Essen, Klartext Verlag, 2008
7. Internationale Bauausstellung (IBA) Fürst-Pückler-Land 2000-2010 (Hrsg.-Ed.), *Bergbau Folge Landschaft, Post – Mining Landscape, Konferenzdokumentation*, Berlin, Jovis Verlag, 2010
8. STRATTON Michael (ed.), *Industrial Buildings, Conservation and Regeneration*, E & F Spon, Cambridge (UK), 2000.
9. AVRAMI Erika, MASON Ranall, DE LA TORRE Marta, *Values and Heritage Conservation*, The Getty Conservation Institute, Los Angeles, 2000.
10. SMITH Laurajane, *Uses of Heritage*, Routledge, London and New York, 2006
11. COSSONS Neil, *The BP Book of Industrial Archaeology*, David & Charles, Newton Abbot, 2000.
12. ÁLVAREZ ARECES Miguel, "Spain. National Report 2006-2009", in ALBRECHT Helmuth, KIERDORF Alexander, TEMPEL Norbert (eds), *TICCIH National Reports 2009*, Sächsisches Industriemuseum IWGT/TU Bergakademie, Freiberg 2009.
13. ICOMOS, *World Heritage Industrial Sites, Description of World Heritage Industrial*



Sites with a Bibliography of Supporting Documents at the ICOMOS Documentation Centre, UNESCO-ICOMOS Documentation Centre, May 2008.

14. CLARK Kate, "From Valve to Values: Industrial Archaeology and Heritage Practice", in CASELLA Eleanor Conlin, SYMONDS James (eds), *Industrial Archaeology, Future Directions*, Springer, Library of Congress Cataloging-in Publication Data, 2005.

15. The inclusion of Toshitaka Matsuura's article in this collection may appear inconsistent, but this is not the case: the development of the silk industry at Tomioka (Japan) is the product of the importing of technologies from Europe (France and Italy). Also, one must remember that European experts were invited on several occasions for intermediate check-ups on the candidacy dossier.

16. MARTIN Patrick, "Foreword", *Selected Papers of the XVth International Congress of the International Committee for the Conservation of the Industrial Heritage*, Taiwan, 2013.

17. So far 6 thematic studies have been drawn up: *Les villages ouvriers comme éléments du patrimoine de l'industrie*, by BERGERON Louis, 1995; *Context for World Heritage Bridges*, by DELONY Eric 1996; *The International Canal Monuments List*, by HUGHES Stephen, 1996; *Railways as World Heritage Sites*, by COULLS Anthony, 1999; *The International Collieries Study*, by HUGHES Stephen, 2001; and *The International context for textile sites*, by WATSON Mark, 2007.

18. Joint ICOMOS-TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes, adopted by the 17th ICOMOS General Assembly on 28 November 2011.

19. II Council of Europe had already organized, together with the French section of ICOMOS, a symposium at Lyons, Vaulx-en Velin, in October 1985, entitled *Industrial heritage: what policies?*

20. ALBRECHT Helmuth, WALTHER Daniela, "SHIFT X, Industrial heritage as a promoter of sustainable economic development", *Industrial Patrimony*, 2013, 29. In the partnership scheme, there are six post-industrial cities and two central European university institutes.

## HERITAGE FORUM

de la France a été bien démontré aujourd'hui par de nombreux historiens: Serge Benoit, Serge Chassagne, Denis Woronoff, Jean-François Belhoste, Claudine Cartier et l'équipe de l'Ecomusée du Beauvaisis, Claude-Isabelle Brelot et les historiens ou ethno-historiens de l'Université de Franche-Comté, sans oublier bien d'autres chercheurs travaillant dans les régions et affiliés au CILAC dont La revue a accueilli bien souvent leurs textes.

## HERITAGE FORUM

### Foreword

*The parallelism between the main topic of this issue of «Industrial Patrimony» and the particular topic of this edition of Heritage Forum is fruit of a certain premeditation. However, from their fortuitous combination an undeniable and deep analogy emerges.*

*In the magazine the celebration of the 150° anniversary of national unification of Italy, to which the monographic section is dedicated, is an occasion for an articulated reflection upon the vicissitudes of Italian industrial patrimony. At the same time, Heritage Forum, deals with another case of unification, the most recent one of the two Germanies, throwing light upon how this union recomposed two stories of patrimonial development within a common interpretative framework that for most of the second half of the 20th century proceeded separately. Marion Steiner's contribution, an expert geographer and researcher of industrial archaeology, probably represents one of the first attempts at reinterpreting the unusual path of two patrimonial conservation practices that were born from a common industrial past, distinguishing themselves in the moment in which Germany was divided to then be reunited once again under the German reunification. As afore-mentioned, an unusual path, that takes its origin from a patrimonial basis that disintegrated with the catastrophe of the great Germany in 1945 and, to be precise, not even two stories are enough to represent it. In fact, in the reshaping of the Federal Republic's national borders on one side (that included Sahr and Ruhr) and the Democratic Republic on the other (including Saxony and Turingia) some areas were left outside. Slesia, for example, was incorporated into Poland and the history of its industrial patrimony followed an even more diverse path that would have been dispersive to investigate.*

*Opportunely Marion Steiner limits her reconstruction only to the German vicissitudes and in this way more effectively manages to make the distinctive events of these two cultures of industrial patrimony emerge, as well as the memory projects that these cultures have inspired. To East Germany goes the merit of having developed, well in advance, a prompt recognition of the monumental value of technical patrimony: since 1952, the category of "technical monument" became part of the "code for the conservation of*

cultural monuments". A short while after, in the 60s, a systematic work of classification commenced that continued throughout the following years culminating in as many as four re-editions of *Technische Denkmale der DDR*, of which the last was published in 1989, a fatal year that marked the end of the Democratic Republic.

A retrospective stock of activities shows a certain instrumental use of industrial patrimony culture with the aim of a "public use of history" that this patrimony is able to conjure up: industrialization, meant as a foundation process of a relational production system which is no longer antagonistic and acts as a strong ideological bond of the new socialist society. The factory, machinery and industrial sites are the ground upon which decisive comparisons can be made between the old world, that of the declining capitalism, and the new one that announces a system which is no longer exploited. The strange thing, and for certain aspects paradox, is the fact that poor modernization of plants in Democratic Germany to a certain extent excluded them from technological change and immortalized their functioning right up until recent times; this explains why nowadays Saxony is one of the regions which has the most industrial monuments (over 8,000) representing XIX<sup>th</sup> century technology.

West Germany is a different story. Attention towards industrial patrimony developed later in respect to East Germany. Ruhr's industrial patrimony seriously risked being wiped out in the absence of a sufficiently widespread perception of its value. The first signs of a new awareness were manifested in North Rhine Westfalia with the rescue of Zollern 2/4 (threatened by demolition) and with the issuing of the NRW Program of 1975, that gave propriety to the conservation of industrial monuments for the first time. In this period, Steiner comments, it is possible to grasp an important moment of change, the formulation of a new discipline, i.e. *Industriekultur*, that emancipates the notion of "monument" from its traditional study environment (art history), redefining it in terms of "cultural document" and investing it with a multitude of contributions stemming from various disciplines dealing with the industrial society.

*Industriekultur* revealed itself to be an exceptionally fertile concept from a theoretical-cognitive point of view; at the same time issuing forth the best operative merits which are at the basis of the noteworthy initiative of industrial patrimony recovery at the time of the German unification in 1989. Exactly in that year, the Iba Emscher Park experience started-up that launched more than 100 projects over the next ten years exercising the

profound reconversion of a vast disused territory such as Ruhr, positively redeeming its disqualified image associated with the devastating effects of deindustrialization. As known, this miracle was carried out without renouncing the testimony of its industrial past. On the contrary, it was brought back to splendour through the exploitation of the age-old production sites (mines, steelworks, gasholders, etc.). I repeat, it is a well-known experience highly appreciated by those dealing with industrial patrimony in Italy. However I must confess that I still cannot understand how it could have worked, and how a structure such as Iba, lacking its own resources, therefore without any kind of financing, not qualified to plan, only competent in coordinating and assessing other projects, managed to carry out such a vast programme in such a fairly short time.

The teachings that can be gained from this extraordinary experience are many. I will just mention two. First consideration: industrial patrimony played an important role, recovery interventions of disused productive plants were excellent, however the conservation of industrial patrimony was not the primary objective of the programme and, paradoxically for us as it is so dear to our heart, we would placed it at the top of the list, is not necessarily a bad thing. On the contrary, to follow a system of multiple objectives (sustainable economical development, environmental redevelopment and promotion of new cultural activities) most surely granted the possibility of conserving and exploiting a much larger number of disused sites compared to those which could have been salvaged by an intervention simply orientated towards safeguarding industrial patrimony. What we want to say is that the resources triggered from a wide-scale project of reconversion and industrial and social revitalization were incomparably much higher to those that could have come from a project only concerned with the conservation of industrial heritage. The second consideration concerns the territorial scale invested by the programme. More often than not the history of industrial patrimony concerns the conservation and exploitation of single assets, or at the most of complexes that, even though part of an ensemble of factories and other auxiliary structures, still have an individual character. Iba Emscher Park is the first example of redevelopment of an entire landscape whose transformation and conservation join forces with the common aim of reaffirming identity without being crystallized in a sterile picture. Identity is more of an arrival point orientated towards the future and not merely a historical site: the category of the "evolution of cultural landscape" that Iba Emscher Park and other ongoing ambitious wide-scale projects of



patrimonial exploitation come under (such as Iba Fürst Pückler Land and Berlin Electropolis) is the best example of political patrimony application that is no longer strictly of a preservative nature. It is excluded that certain XX century industrial landscapes, such as the Lusazia mines or the energy industry of great Berlin, can remain integral; the challenge is that of piloting transition towards another landscape which, without renouncing values of undeniable industrial worth, succeeds in creating new landscapes with uncommon values, fruit of our imagination (just like those before us created the landscapes we appreciate today).

(Massimo Preite)

## INDUSTRIAL HERITAGE IN GERMANY

### Marion Steiner

Marion Steiner, geographer and member of TICCIH, earned a doctorate at the Bauhaus University di Weimar with a thesis on *The electrified city: the intangible heritage of public electricity supply and Berlin's urban landscape - a critical interpretation*

Heritage Conservation, as an institutionalized, state-organized activity in Germany, only emerged during the last two thirds of the 19<sup>th</sup> century. Over a long period of time, it exclusively focused on churches, castles and palaces, classifying them according to art styles and periods.

Around 1900, German engineers aimed at «connecting to the general cultural understanding of the bourgeois-aristocratic society of the Empire»<sup>1</sup>. Their emancipation movement strove for social recognition of technology as a «cultural achievement» and for their recognition as equals in academic. By 1900, the Association of German Engineers (VDI) was able to enforce that technical universities would be allowed to grant doctoral titles to engineers (Dr. Ing.). In 1906 the German Museum of Science and Technology in Munich was founded. The real beginning of technical heritage preservation in Germany emerged in the 1920s. In 1926-27, a first nationwide survey on technical monuments was initiated, focusing on Saxony, Silesia, the Rhineland and Westphalia. As a result, in 1932, Conrad Mantschoß, engineer and the director of VDI, and Werner Lindner, architect and director of Deutscher Heimatschutzbund, published the book *Technische Kulturdenkmale*. These early inventories documented an early industrial world that, at the dawn of modern industrialization, now disappeared behind the horizon.

Yet the breakthrough to a modern industrial heritage conservation, which also included the high industrial era with its specific buildings and facilities such as mines, iron works, train stations, or textile factories, only came about around 1970.



Iba Fürst Pückler-Land (2000-2010)  
Photo Peter Radke, LMBV 2008



Iba Fürst Pückler-Land (2000-2010)  
Photo Peter Radke, LMBV 2008

After the lost war and the division of Germany, the traditional German industrial regions belonged to different territories. Silesia became a part of Poland. The Federal Republic of Germany (FRG) possessed two major industrial centers with the Saar and the Ruhr; the latter became the cradle of the West German economic miracle in the 1950s – despite repair payments to the allies and first coal and steel crisis. The German Democratic Republic (GDR) possessed important industrial sites in Saxony, Thuringia, among other regions. However, on its own turf it only had scarce access to primary raw materials for energy production. As part of the new geopolitical situation, energy independence from the West became a national priority of GDR policies. Its economic and industrial development focused primarily on a merge with the Eastern Bloc, especially the Soviet Union. Lusatia with its huge lignite deposits was transformed into the No. 1 energy source of the GDR; Saxony came to be one of the most important centers of uranium mining in the Eastern Bloc.

In the GDR, the way of understanding the historical development and significance of the industrialized society changed earlier than in the FRG. From the viewpoint of a (presumed) victory of socialism, the GDR's new political and social self-positioning allowed (and required) a reinterpretation of history which facilitated a sharp analysis of the social transition from feudalism to the industrialized society, as well as of the capitalist features of the early industrialized society and major associated social injustices<sup>2</sup>. This new historization highlighted the social importance of the labor movement, influenced the critical spheres of western society, and maintains currency today. In the political context of building a new socialist society in the young workers' and peasants' state, conservation of technical monuments represented a way to create new identity and culture. Attributed with state-prescribed cultural and political functions, GDR industrial heritage conservation took lead over the FRG, albeit temporarily.

As early as in 1951, the Dresden state curator and architect Hans Nadler started to systematically record and document technical monuments in Saxony. Only a year later, the category "technical monument" was included in the GDR's Regulation for the preservation and conservation of cultural monuments. Since the mid-1960s, monuments, sites and objects throughout the GDR, related to a history of technical, industrial and agricultural production and transport, were



systematically recorded. The GDR law on the preservation of monuments dating from 1975 classified these monuments according to their importance at county, district and state level. Within the GDR's Society for preservation founded in 1977, a Central Committee for technical monuments emerged. In 1979, the GDR published a Central List of monuments counting about 400 nationally and internationally important objects, among which figured 37 industrial monuments and sites. Edited by Eberhard Wächtler and Otfried Wagenbreth, the first edition of the famous documentation *Technische Denkmale der DDR* was published in 1973. Organized by districts, it listed 63 individual technical monuments and sites. The fourth edition from 1989 covered a few hundred monuments and sites, arranged in 15 categories. These represented virtually the entire spectrum of technical and industrial monuments from both pre-industrial and industrial era in the territory of the GDR<sup>3</sup>.

In West Germany, the traditional "bourgeois" conception of heritage conservation was only to be cast aside around 1970, in the light of the global liberation movements. The theoretical debates in the FRG, initiated by the leftist intellectual scene and inspired by ideas from the GDR, profoundly changed the way of looking at social processes. Aiming at a comprehensive understanding of history, popular culture and the social struggles of the working class were then, for the first time, seriously taken into account in the West.

Forerunner of industrial heritage preservation in the FRG became the State of North Rhine-Westphalia (NRW). As a response to the continuing coal and steel crisis, demolition in the Ruhr had reached a scale of *tabula rasa*. Public resistance grew. The struggle for preservation reached a culmination point in 1968, when the machine hall at coal mine Zollern 2/4 in Dortmund was threatened by demolition. This hall had been erected in 1902 as a significant steel and glass construction and decorated in 1904 in ways unusual in industrial buildings. Perhaps even more effective, because connected to even more publicity, was the fight against the large-scale demolition of the miner's housing estates in the Ruhr. Dozens of so-called "workers' initiatives" arose and were advised by critical intellectuals in the matters of dealing with the press, politicians, and legal issues. One of the pioneers of industrial heritage preservation in West Germany was Roland Günter, an art and cultural historian who had been recording industrial monuments in the Ruhr since the late 1960s. In 1974, he, together with his wife Marianne, co-founder of Oral History in Germany, moved into the miner's



The Machine Hall of coal mine Zollern 2/4, Dortmund  
Photo Holtappels, Hudemann\_LWL-Industriemuseum



settlement Eisenheim, the oldest worker's housing estate in the Ruhr, in order to continue the fight for preservation on location.

A broad public desire rose to protect unique sites of the industrial era as historical monuments. Inspired by the pulse of the time, the proactive state government (SPD/FDP) adopted the NRW Program 1975 as early as in 1970, explicitly stating the intention to preserve industrial monuments<sup>4</sup>. Additional funds were attributed to conservation in order to seriously record the legacies of the industrial age. For the first time, the two technical departments for conservation in NRW contracted special curators for industrial monuments, Helmut Bönninghausen in 1973 and Axel Föhl in 1974. From the early 1970s, numerous publications emerged<sup>5</sup>. Another success of the NRW Program was the preservation of industrial monuments by transforming them into industrial museums. In the late 1970s, this didactic approach was new for Germany. Inspired by English concepts, the idea was to present and interpret the life and work of all social strata of industrialized society authentically and comprehensibly in their original environments, through original objects, additional presentations, and praxis-oriented demonstrations. In NRW today there are fourteen such industrial museum sites<sup>6</sup>.

#### INDUSTRIEKULTUR: TURNING POINT 1968

Not precisely for the glory of institutional conservation in the FRG must be noted that it was particularly critical outsiders from art, science, and journalism who stood up against demolition in the Ruhr and became politically active. For instance, Hilla and Bernd Becher, a couple of photographers who later got internationally famous for their black-and-white photos of industrial monuments worldwide, became involved early on. Well-known social scientists<sup>7</sup> also engaged intensively with the intangible and material heritage of the industrial age and its influence on the (post-)industrial society. As a result, art history lost its monopoly position as the "mother science" of conservation in Germany and the "monument" became understood as a historical document of social processes. With the German term *Industriekultur* a new concept emerged, facilitating a global perspective on the phenomena of the industrial age. Until today, the term stands for a comprehensive study of the diverse impacts industrialization has had on human culture, also including a critical interpretation of present-day processes. The term

*Industriearchäologie* could not prevail in German, partially due to a language problem<sup>8</sup>. Facilitating a much broader understanding of the industrialized society, the concept of *Industriekultur* proved to be more useful in the German context.

Critical voices in the GDR were, in contrast to those in the FRG, structurally weak and limited by the democratic deficit of state socialism. The official state line had to be followed strictly – especially abroad. The two most important representatives of industrial heritage conservation in the GDR were Eberhard Wächtler from Bergakademie Freiberg and Otfried Wagenbreth from Bauhaus-University Weimar<sup>9</sup>. Wächtler had good contacts with the GDR political leadership and was allowed to travel abroad. Yet, despite his good contacts, he was still likely to have been surveilled by the Stasi (GDR Secret Service) when he participated in the first TICCIIH congresses in Ironbridge in 1973 and in Bochum in 1975. Helmuth Albrecht, chair of industrial heritage in Freiberg since 1997<sup>10</sup>, suggests that by not including critical examination of contemporary social reality, official industrial heritage conservation in the GDR «ultimately stuck to highlighting the role of techniques and personalities until 1990»<sup>11</sup>. While there is certainly truth to his point, we should not only examine the declared official programmatic content to get a picture of industrial heritage debates in the GDR but also consider the institutional mediations between science, policy, and professional practice. After all, the GDR also had its 1968 movement; and the growing gap between state-declared reality and individual perception significantly contributed to the subsequent fall of the system. The search for critical voices inside the East German professional debate on industrial heritage preservation, not covered yet, could be started at the universities who have been working on the subject. The university in Weimar, incidentally, was known for critical approaches already in GDR times. Interestingly, their Institute for European urban studies currently works on reconstructing GDR discourses on urban development policies. Cross-cutting links with the neighboring discipline Heritage Conservation might be found here.

#### CURRENT REGULATIONS AND CRITERIA

In the Federal Republic of Germany conservation falls within the jurisdiction of the federal states. Each state has its own conservation law; the ministerial

assignment varies and may change from one election period to another. In eastern Germany after 1990, the FRG system took over completely and six new states were created. To this day, the State Ministries serve as Upper Conservation Authorities. Exceptions are North Rhine-Westphalia where its two provinces, Rhineland and Westphalia, each maintain Departments for Monuments and Schleswig-Holstein where apart from the State Ministry the Hanseatic city of Lübeck maintains its own upper conservation authority.

All current German conservation laws use specific terms to define monuments that allow for inclusion of technical objects and industrial buildings. In eight states, half of all German federal states, the fact is explicitly mentioned (Brandenburg, Bremen, Hesse, North Rhine-Westphalia, Rhineland-Palatinate, Saarland, Saxony-Anhalt and Thuringia). Currently, some states are preparing amendments of their laws. The liberal-conservative government of Schleswig-Holstein for example, believing in better opportunities for economic development, aims at further strengthening the legal priority already given to new constructions in the face of existing buildings. For industrial heritage conservation, in particular, this is bad news.

Given the federal structure of the FRG, the German conservation authorities, in contrast to other European countries, usually cannot rely on a pan-national institution. Established in 1983 by the National Association of Conservators (VdL), the Working Group on Industrial Heritage serves as a platform for nationwide information exchange on industrial monuments<sup>12</sup>. This national network of experts is also helpful in that no one working in any conservation department can overlook the full range of technical developments of the past 250 years. The German National Committee of TICCIEH whose official organ is the magazine «Industrie-kultur»<sup>13</sup>, published four times a year, also works on an informal basis. Since 2010, however, a greater collaboration developed with the association Georg-Agricola Society for the promotion of History of science and Technology<sup>14</sup> who started including *Industriekultur* in their agenda. Criteria for the cultural significance of industrial buildings are different from "conventional", i.e. art-historically-determined assessments because the design of the building is often closely related with its technical purposes. As early as 1976, Axel Föhl suggested qualifiers for industrial monuments that remain, by and large, without opposition to this day<sup>15</sup>. According to these qualifiers, technical and industrial buildings and

equipment have to firstly belong to the spheres of "production", "traffic" or "supply" to qualify as "industrial monuments".

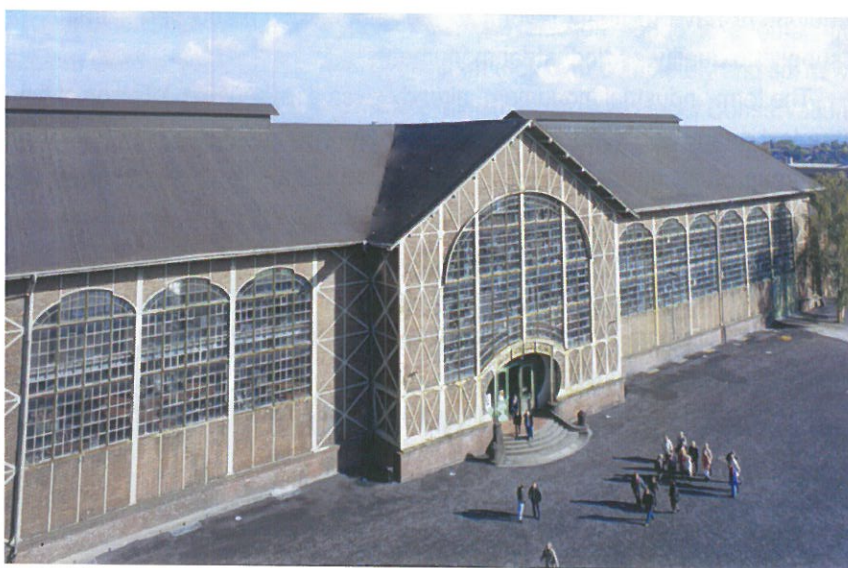
The term "industrial monument" already gives a reasonable definition of time (the last nearly 250 years of the industrial age) to distinguish this group from the group of "technical monuments" which include all time periods. Secondly, industrial monuments have a differentiated historical value if:

- they are historically typical. Unlike art monuments, the historical significance of industrial monuments lies not in its artistic uniqueness but in their seriality. Despite standardization, their architectural appearance (shape and material) can vary greatly;
- they are historically unique. Typical of the 19th and 20th century was the race-like competition for the tallest or largest building or the one with the boldest design. Superlatives in dimensioning, design and technical solutions have a special historical value;
- they are the start or end members of a series of technical development in the headlong rush of technical solutions of the industrial age;
- they make understand the profound social changes associated with the accelerating development of technology which impinged on the daily lives of millions of people;
- their design represents artistic styles or makes use of mental or cultural-historical facts.

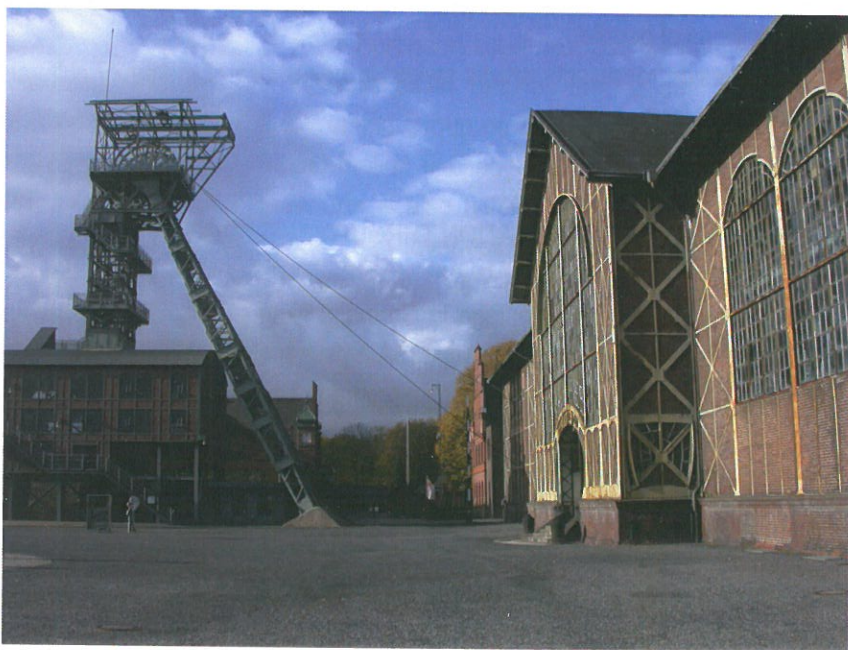
## IBA IN THE RUHR: REGENERATION THROUGH HERITAGE

In the 1990s, industrial heritage in Germany experienced a quantum leap with the International building exhibition IBA Emscher Park. NRW had a leading role again. The state put on an extensive program, financed from special funds, whose purpose it was to drive change in the most heavily industrialized part of the Ruhr and enhance regional development. From 1989 to 1999, more than 100 projects have been realized in 19 cities and towns in an area of more than 70 km from east to west and 15 km from north to south. The cost amounted to around 2.3 billion EUR. Karl Ganser, a geographer from southern Germany, served as the director. With his view from outside the region, he realized at once the tremendous potential for future development inherent to the industrial





The Machine Hall of coal mine Zollern 2/4, Dortmund  
Photo Axel Föhl\_jpg



The Machine Hall of coal mine Zollern 2/4, Dortmund  
Photo Norbert Tempel

ruins of the Ruhr. With visionary foresight and always referring to the new concept *Industriekultur*, he succeeded in stopping demolition and starting a public reflection process on the Ruhr, understanding it as an industrial cultural landscape. In the second half of IBA, some major flagship projects have been realized all over the region. The ministerial assignment of conservation to urban development policy, established in NRW in 1980, proved to be very fortunate. Thus, IBA could take industrial heritage conservation “piggyback” into previously unaccustomed magnitudes of conservation planning.

After IBA Emscher Park, the permanent preservation and management of large sites is perhaps the greatest challenge. Due to profitability pressures, private investors are hard to find. In 2008, the institutional responsibility for the six most important projects developed by IBA (Landscape Park Duisburg-Nord, Gasometer Oberhausen, Zeche Zollverein in Essen, Nordstern Park in Gelsenkirchen, Centennial Hall Bochum, Hansa coking plant in Dortmund) were handed over to the regional level. The federation of municipalities in the Ruhr, Regionalverband Ruhr (RVR), laid on a Master Plan regulating not only the preservation of sites but also their touristic development. The state NRW still participates financially<sup>16</sup>. Luckily, industrial heritage is regarded as “trendy” today; this makes it much easier to create partnerships with the private sector. Not infrequently though, conservation is forced to unpleasant compromises. In many cases, new uses are the only way to ensure the survival of a building but often they demand force-cutting structural changes.

All in all, IBA Emscher Park managed to traverse a very long way in a short time. In a few years only and both inside the region and in the rest of the world, the picture of a derelict region without future has been transformed into that of a fascinating industrial cultural landscape. IBA also established culture as a tool of regional development. While according to plans of the city of Essen, the Zollverein industrial complex was to be transformed into a waste dump by 1983, it became a World Heritage site in 2001. A few years later the Ruhr region won the title European Capital of Culture 2010. Another big success of IBA has been the sustainable impact of the methods it initiated: participative planning processes and a democratization of conservation work – opening up to the greater public – became major trends for subsequent projects in and outside Germany.



The new approach of IBA Emscher Park to understand an entire region as a thematic unity also caused a transition in the minds of preservationists who now moved on from single objects to landscapes. Somehow initiated by Ganser, fruitful interactions developed with geographers who see landscape interpretation as their genuine task and integrate industrial regions in a natural way. The new concept of "cultural landscapes" made it possible, too, to develop qualified tourism as a tool both to promote regional economy and – by selling appropriate messages – to strengthen public understanding of heritage values. The classic example for qualified industrial heritage tourism is Route der Industriekultur which opened in 1999 in the Ruhr and is now imitated nationwide. It also served as a model for the European Route of Industrial Heritage (ERIH)<sup>17</sup>.

In addition to such "institutional" forms, small private companies developed that operate regionally with a social commitment, creating new jobs and promoting the local economy. One example is the agency Zollverein Touristik ([www.zollverein-touristik.de](http://www.zollverein-touristik.de), German only), domiciled on the Zollverein coking plant since 2004. Back in 1998, current director Anne Brosk started with a small tourist association in Essen-Katernberg relying on miner's widows who felt isolated after their husbands' deaths living alone in apartments that had become too big for them. The idea to rent private rooms to tourists looking for accommodation proved to be very successful. A little later, the agency extended their offer to touristic tours by foot, bicycle and bus. In 2006, they also took over the management of the agency Zeitsprung which had emerged from the IBA managing body, offering study tours and events for international professionals throughout the Ruhr region in several languages ([www.zeitsprung-agentur.de](http://www.zeitsprung-agentur.de)). The Capital of Culture year 2010 has had a sustainable impact on both agencies' business.

Another example can be found in Lusatia in eastern Germany, some 150 km south of Berlin. Striving for energy independence, the GDR extracted lignite from this region in extensive open cast mining over 40 years, and Lusatia turned into a moonscape. Today, only five of the former 20 open cast lignite mines of the GDR are still operating. Aiming at reconstructing the destructed landscape of Lusatia, local actors initiated IBA Fürst Pückler Land ([www.iba-see2010.de](http://www.iba-see2010.de)) which took place from 2000 to 2010, directly following the IBA in the Ruhr. The closed-down mines are being flooded in different stages until 2018, creating a new landscape

dominated by lakes. In addition to these activities, thirty creative projects aim at stimulating a new perception of Lusatia, strengthening the regional identity and improving the region's image. The logo "see" which emerged during the work process linguistically expresses this idea (German "See" = "lake" in English). IBA's concern also was to accompany the social and cultural change after the breakdown of the GDR, to catch fears and give hope for the future. All projects have been developed based on local initiatives, some of them together with former workers.

Early on, IBA integrated qualified tourism in its program. In 2007, the head of the IBA Tourism Department, Karsten Feucht, left with the idea to make this project last in time. With the City Council and the Swedish company Vattenfall he had found two committed partners in Welzow, a small city of 4.000 residents right on the edge of one of the region's last active mines that could still consume some more settlements in the coming years. The alliance of the tourism association Bergbautourismus-Verein Stadt Welzow e.V. ([www.bergbautourismus.de](http://www.bergbautourismus.de)) and the operator of the mine represents an innovative and successful financing model. Both share the goal of local development, and even though the company, of course, covers its need for legitimacy in the region by participating in the project, the association maintains complete free hand – not the least because their work has proven very successful. Their range of touristic products includes tours into the active open cast mine and perception walks through the moonscapes. In October 2010 the association moved into the old station of Welzow which has been transformed into a Centre for tourism and culture. A year later the project received the national award Place of Ideas. Lacking knowledge of foreign languages is the main challenge. Professional training for tour managers and guides are part of the concept. When IBA ended, the association took over the coordination of the regional network ENERGIE-Route der Lausitzer Industriekultur ([www.energie-route-lausitz.de](http://www.energie-route-lausitz.de)). This route connects ten locations and is one of 15 regional routes in the European network ERIH.

#### AFTER GERMAN REUNIFICATION... IN SAXONY

Compared to the West, the GDR barely modernized the technical facilities of its industry. Many plants from the 19th century remained almost in their original condition and were operating until the large-scale closure of East German



Zollverein coal mine and coking plant, Essen  
Photo Christoph Oboth



Zollverein coal mine and coking plant, Essen  
Photo Christoph Oboth

enterprises following the political turn in 1989. Many of the buildings are now protected monuments. With estimated 8.000 the Free State of Saxony counts the nation's largest number of industrial monuments. But, as in all German states, it is a huge problem to find sustainable funding for their preservation. In times of scarce public budgets, the attempt to preserve everything seems hopeless. Priorities have to be defined. For Saxony, Helmuth Albrecht suggests a complete and thorough collection and reassessment of the entire portfolio and its division into three categories: A) to be preserved by all means, even without a foreseeable reuse; B) worth saving, reuse seems foreseeable or possible; C) possibility to remove the protection and to permit demolition<sup>18</sup>. The establishment of a foundation like the Industrial Monuments Foundation in NRW could be a way to preserve outstanding monuments for a transitional period, prevent further deterioration and gain time to develop alternative funding models and new low-budget preservation concepts<sup>19</sup>. In any case, there is an urgent need for political action – while public interest is at its lowest due to growing existential fears in times of crisis.

The political debate in Saxony is largely influenced by the World Heritage project Ore Mountains Mining Region. More than 800 years of mining tradition, from silver-mining in the Middle Ages to large-scale uranium mining in the 20<sup>th</sup> century, gave rise to a unique industrial landscape which cared little for the constantly changing national frontiers in this region. Transnational right from the start, the project is registered on the German and Czech Tentative Lists. Founded in 2003, the supporting association ([www.montanregion-erzgebirge.de](http://www.montanregion-erzgebirge.de)) has spread the message to the general public. Pressure on Saxon politicians also increased with the international TICCIIH conference taking place within the very heart of the World Heritage project in 2009. The current coalition agreement of the liberal-conservative government (2009-2014) explicitly includes preservation and development of industrial heritage in Saxony. In 2009, the Saxon Ministry of Science and Arts founded a special Advisory Board which currently develops a global concept for Saxony's industrial heritage. Nonetheless, bringing together the various sectors and levels of politics, with their different perspectives and interests, represents a huge challenge. Additionally, when Dresden lost its World Heritage status in 2009, due to the construction of a new bridge across the river Elbe, doubts rose as to whether conservation and development could at all be successfully combined. In mid-2011, the Saxon government suddenly



announced that it would prefer to submit its application to UNESCO without its Czech partner<sup>20</sup>. It revised its position, however, after the 31 municipalities and two counties overseeing the project voiced their support for a joint implementation with the Czech Republic alongside representatives of all parliamentary parties.

## INDUSTRIEKULTUR AND HISTORIC URBAN LANDSCAPES

Next to Saxony, Lusatia, the Ruhr and the Saar, Berlin is currently becoming a new regional focus for industrial heritage in Germany. In 2008, the Berlin Modernism Housing Estates have been recognized as a World Heritage. The justification basically referred to their outstanding architectural value (Bruno Taut, Walter Gropius and others) but the settlements also illustrate important facets of everyday life in the industrial metropolis of the 1920s. Additionally, international experts attest World Heritage potential to Berlin as Electropolis. Its public electricity supply and electrical industry turned the city temporarily into a leader on the European continent and played a key role for technical developments worldwide. Due to the special political situation of the divided city, which prevented a fundamental modernization during the Cold War, an extraordinarily large number of the 120-year-old buildings are still there today. The fact that many kept their original use and remain in operation promises particular authenticity and integrity. One of the regional highlights of Electropolis Berlin is the district Schöneeweide with the former AEG Cable Works Oberspree<sup>21</sup>.

The Berlin development, particularly the World Heritage initiative, represents a new way of looking at industrial heritage in Germany. This is the first time that an urban, metropolitan landscape, not an industrial agglomeration, is put at the center of attention<sup>22</sup>. The question of how technical infrastructure (in this case, public electricity supply) influences urban life has also been little addressed so far. A particular challenge in Berlin is to re-visualize its industrial history, which has supposedly disappeared behind the latest pictures of the emerging global city and from which lessons can be learned that are useful for our times. Furthermore, the desolate financial situation of the public sector and the extreme downsizing of state agencies in recent years (especially in conservation) demand complex collaborations between a multitude of actors with very different interests. To understand conservation as a development strategy that combines the cultural,

social and economic needs of a region will be a very helpful approach here that potentially enriches the theoretical debate on the new HUL Recommendation<sup>23</sup> and on how it can be adapted to industrial heritage cases.

## A GLOBAL OUTLOOK

A part from the challenges already mentioned, what are the global questions industrial heritage conservation in Germany should address in the future? I only want to mention three. Firstly: with several generations of immigrants, many of whom came to work in Germany's industrial sectors, identity and identification processes work differently in our present-day heterogeneous society. Yet the idea of a homogeneous nation-state still determines many facets of German policies where self-recognition as an intercultural society is not, yet, achieved. Secondly: over 250 years, knowledge has been boxed into specialized scientific domains to make industrial production work most efficiently. The complex process of merging all the findings from different disciplines into new, creative and usable contexts has only started.

Thirdly: after unification in 1871, Germany rapidly advanced to one of the most important industrial powers of the world-economy. Technological and economic progress was accompanied by great struggles for social justice. Thus, the worker's unions contributed essentially to creating the German welfare state. This legacy counts without doubt among Germany's most important universal intangible industrial heritage. When solidarity is only applied to one's own national territory, however, the resulting international division of labor is fundamentally unfair. I believe that German industrial heritage preservation has a moral duty to treat this schizophrenia much more in the future – supporting the young generation's current fight worldwide for a more comprehensive and inclusive Global Society<sup>24</sup>.

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2. very enlightening is Eberhard Wächter, *Soziale Revolution und Industriearchäologie*, lecture at the TICCIH Conference 1975 in Bochum, in «Ethnographisch-Archäologische Zeitschrift», 18. Jg., n. 3, 1977, pp. 399-417.
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4. Ministerpräsident des Landes Nordrhein-Westfalen, *Nordrhein-Westfalen Programm 1975*, Düsseldorf 1970, p. 118. For details see also Axel Föhl, *Bauten der Industrie und Technik*, in «Schriftenreihe des Deutschen Nationalkomitees für Denkmalschutz», n. 47, 1996, p. 35.
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6. The Westphalian Industrial Museum includes eight sites ([www.lwl.org/LWL/Kultur/wim](http://www.lwl.org/LWL/Kultur/wim)), the Rhenish Industrial Museum six ([www.industriemuseum.lvr.de](http://www.industriemuseum.lvr.de), German only).
7. Such as Hermann Glaser, *Maschinenwelt und Alltagsleben. Industriekultur in Deutschland vom Biedermeier bis zur Weimarer Republik*, Krüger, Frankfurt am Main 1981. An expanded second edition was published in 1994 with the title *Industriekultur und Alltagsleben. Vom Biedermeier zur Postmoderne*.
8. The meaning of *Industriearchäologie* in German is much more restrictive than Industrial Archaeology in English. In addition, when the English concept of Industrial Archaeology started arriving on the European continent, the German concept of *Industriekultur* had already emerged and both concepts competed with each other. See also Albrecht, *Zum Verhältnis von Industriearchäologie*, cit., pp. 22-23.
9. In GDR times, Wächter taught at the Mining University Bergakademie Freiberg (from 1968 to 1990); Wagenbreth taught at Hochschule für Architektur und Bauwesen Weimar (since 1996: Bauhaus-Universität Weimar) and the Technical University Dresden. After the political purge of ex GDR-Universities, Wagenbreth took over Wächter's chair for Industrial Archaeology in Freiberg in 1992.
10. The Institute for Industrial Archaeology, History of Science and Technology (IWTG) at the Technical University Bergakademie Freiberg is the only chair for Industrial Heritage in Germany today. IWTG offers a Bachelor and Master program for Industrial Archaeology and a Master for *Industriekultur* since 2004.
11. Albrecht, *Zum Verhältnis von Industriearchäologie*, cit., p. 21, original quotation in German.
12. The original German names are: Vereinigung der Landesdenkmalpfleger, VdL, [www.denkmalpflege-forum.de](http://www.denkmalpflege-forum.de) (German only), and Arbeitsgruppe Industriedenkmalpflege, AG 5.
13. The full title is: Magazine for Conservation, Landscape, social, environmental and

- technological History. Homepage: [www.industrie-kultur.de](http://www.industrie-kultur.de) (German only).
14. Homepage: [www.georg-agricola-gesellschaft.de](http://www.georg-agricola-gesellschaft.de) (German only).
15. See Axel Föhl, *Technische Denkmale im Rheinland*, cit., and Axel Föhl, *Bauten der Industrie und Technik*, cit., pp. 26-28. The latter, edited by the VdL Working Group on Industrial Heritage and published in 1994 and 1996 in more than 50.000 copies, provided a lot of information, especially at the local level.
16. In the next ten years from 2008 onward, the RVR will provide a total of 25 million EUR for the structural safety of the sites. Additional state funds amount to 36 million EUR (source: online archive [www.industrie-kultur.de](http://www.industrie-kultur.de)).
17. Route der Industriekultur in the Ruhr: [www.route-industriekultur.de](http://www.route-industriekultur.de); in the Frankfurt RhineMain region: [www.krfrm.de/c/rdik/](http://www.krfrm.de/c/rdik/) (German only); European Route of Industrial Heritage: [www.erih.net](http://www.erih.net).
18. See Helmuth Albrecht, *Verlorene Fäden? - Zur Situation der Industriedenkmalpflege in Sachsen am Beispiel der historischen Spinnmühlen in den Tälern von Flöha und Zschopau*, in Stefan Brüggerhoff, Michael Farrenkopf and Wilhelm Gerlings, *Montan - und Industriegeschichte. Dokumentation und Forschung, Industriearchäologie und Museum. Festschrift für Rainer Slotta zum 60. Geburtstag*, Schöningh, Paderborn 2006, pp. 391-414.
19. For Stiftung Industriedenkmalpflege und Geschichtskultur in NRW see [www.industriedenkmal-stiftung.de](http://www.industriedenkmal-stiftung.de). For Saxony see Helmuth Albrecht, *Projektskizze für eine Industriedenkmalstiftung in Sachsen*, in Hans-Rudolf Meier, *Denkmale in der Stadt - Die Stadt als Denkmal. Probleme und Chancen für den Stadtumbau*, TUD Press, Dresden 2006, pp. 165-170.
20. See Eva-Maria Simon, *Wir sind das Erzgebirge!*, in «Die Zeit» (ZeitOnline), n. 34, 2011.
21. For more information on the Electropolis World Heritage initiative see Jörg Haspel, Hubert Staroste, *Elektropolis Berlin - Erbe von Weltrang*, in «Industrie-kultur», n. 3, 2011, pp. 28-30.
22. Current industrial World Heritage sites in Germany are: the Rammelsberg ore mines with the Old Town of Goslar (1992), the iron works Völklingen (1994), the coal mine and coking plant Zollverein in Essen (2001) and the shoe factory Fagus Works built by Gropius in Alfeld an der Leine (2011).
23. The *Recommendation on the Historic Urban Landscape* (HUL) is a new, joint initiative between ICOMOS and UNESCO. For more information and the current draft see <http://whc.unesco.org/en/activities/638>.
24. What Immanuel Wallerstein says about the Modern World-System and the emerging Global Society is the most brilliant and helpful analysis of present day processes I know up to date: [www.iwallerstein.com](http://www.iwallerstein.com). Heritage Work should really start working with these ideas for they enable us to develop messages that give orientation and hope for the future.

Louis Bergeron passed away while this book was being printed.

In his memory, we reprint the urging he made, which, although dating from 1993, still remain highly relevant today:

*"Le respect de la mémoire de l'industrie est au coeur du développement"*

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edizioni  
**Effigi**