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Opinion

Contemporary ruins: a contradiction in terms

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How can we differentiate between “classical” and “contemporary” ruins? Can they be in the same (aesthetic) category? Here I am arguing that no, they cannot. But even if they don’t have the same characteristics or qualities as the classical ones, “contemporary ruins” are surprisingly popular, and the interest in them can still be somehow compared to that of Antique ruins.

To understand this better, let’s see the features of classical ruins first. Classical ruins are defined by three criteria: lack of function, absence and time. A classical ruin has to be functionless, not in use neither in its original nor another function or for any kind of practical aim. Absence is also a crucial feature in the case of classical ruins, whose form is constantly shaped by Nature through the ever-growing void that is added to it. And last but not least: time. Classical ruins are by definition old. This great amount of time is needed for Nature, being the key actor of the ruination process, to take the original building in its possession. Nature continuously “eats up” the building, starting with the still almost entire building, until so little has remained, that we cannot imagine anymore the splendour of the original building.
Opinion

If we carefully examine these categories or criteria and try to apply them to sites from modern times, we can see that not all of them match. They are of course functionless, and the second criterion is also valid: absence characterises the buildings. But the application of our third criterion, time, is problematic. There should be a significant gap between the date of the original building and the viewer’s own time, hence we cannot call those places and buildings ruins, that are from the recent history, maybe not being older than a half century. Ruin is an outcome of a long ruination process and in this way “contemporary ruins” as an expression is a contradiction in terms, since here the ruined building is our contemporary, so it cannot fascinate us with the aforementioned difference of the time-segments. Therefore we need to find another way of referring to these sites, instead of contemporary ruins that would however refer to their “ruininess”. The term “industrial ruins” is not good either, since they are not all industrial buildings and not even all directly connected to industrial activity or the Industrial Revolution. If we do not want to muddle our categories and definitions, we can only use circumscriptions like: ruined buildings, or buildings on their way to ruination?

Thus what we used to consider as “contemporary ruins” are simply not old enough to be considered “ruins”. But still we are attracted to them in a similar way than to those classical ones. This attraction is similar in the degree of curiosity but not in the emotions generated by their observation. Exploration and curiosity is chiefly dominating not only the visitors of archaeological sites, but of the fanatics of their “modern” versions: the Japanese haikyo and its English equivalent urbex (urban exploration) too. But what do we enjoy in the case of ruined modern buildings and why, if precisely the most decisive criterion of being a ruin – time – is missing? That huge amount of time that has passed from the start of decay of the original building, and that guarantees the sublime effect in which the power of Nature could be manifested. One feature that could help explain the aesthetic attraction is that even if we don’t have temporal sublime, still a kind of occasional, random decay can already be observed in the modern ruins. Thus, modern buildings in ruins are not pleasing because of the time that the site incorporates, but the picturesque appearance still makes them enjoyable.

A further observation is that classical ruins offer not only peace, but a silent, calm or even calming peace, while ruined buildings originating from the recent past make us rather anxious, and when experiencing them, we certainly don’t have the same noble sense of harmony – even if lost harmony – as in the case of antique ruins. The force of antique ruins is exactly that they mediate this calm, settled and refined peace, we could even mention the “radiation” of the winckelmannian “noble simplicity and quiet grandeur” – and this is what we cannot feel amidst the ruined modern buildings. The “settlement time” does not seem to be enough so that the peaceful appearance could be born.

This disturbing feature also derives from our insecurity: we would like to see our present to be just as noble as the past – the past from which we inherited our classical ruins – but we cannot be sure of this, and this makes us face the anxious question: will all, or at least part of our present achievement be as good as the old? This anxious insecurity in our culture’s future helps us very much in explaining the difference of emotional and aesthetic responses when observing classical ruins and modern ruined buildings, and also helps us to understand why we are still interested in them, even if these create heavy concerns in us. This perturbation is understandable when we think of the fact that classical ruins have a canonised certainty, their aesthetic value is secured through both time as well as art tradition. But contemporary buildings on their way of ruination are like enormous question marks. And today’s perspectives are not in our favour when thinking of the future of our aesthetic culture or of the aesthetic culture of our future, or of our future at all.

This article is an extract from a longer essay published in French, Ruines contemporaines. Réflexion sur une contradiction dans les termes (Contemporary ruins. Investigations of a contradiction in terms), Nouvelle Revue de’Esthétique, 13 (2014/1), pp. 111-119.

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The Rosia Montana mining landscape, Romania: an update and call to action

Stefan Bâlici and Irina Iamandescu, Ion Mincu University of Architecture and Urbanism, Bucharest

For the past 18 years a Canadian-Romanian mining company has been pursuing permission for a large new open-cast mining project at Rosia Montana, a well-known gold and silver mining site in the western range of Romania’s Carpathians (See TICCIH Bulletin #55 2012 and #56 2012).

The area is known as the Golden Quadrangle (or more precisely the Auriferous Quadrilateral), very rich in minerals and consequently also rich in mining heritage.

Despite the soothing discourse of the mining company, stressing the conservation of cultural heritage, the mining project would destroy the largest part of the heritage site, and the few spared fringes would not possibly compensate for such a huge and definitive loss. Moreover, the mine would be built on private properties of local people who refuse to sell out, which raises further issues with respect to the constitutional and human rights. All in all, it is a case which has met ever more opposition in Romania – though not from the authorities, which are supporting the mining project.

History of the region
The site was known for its gold deposits as early as the Bronze Age, but it came into systematic exploitation when the Romans conquered Dacia in early 2nd century AD, when the place was named Alburnus Maior. From then on it was worked with certain discontinuities until just a few years ago. For the greatest part of this long existence, the mines were exploited mainly by private individuals and small groups or families, a trait which can be read in many features of the landscape. This period of traditional mining was forced to an end by the communist nationalization in 1948. From that moment on, large-scale, industrial, state-operated mining emerged, and lasted until 2006 when the mine was shut down as unprofitable, in the view of Romania’s adhesion to the European Union.

Over this long period, mining has produced a rich web of traces and vestiges, including Prehistoric surface works, a vast system of deep underground mines started by the Romans and extended further until the 1970s, the corresponding surface features, such as barren mountain faces, small waste heaps, paths and roads, header ponds, water channels, stamping areas, later industrial facilities and the mining town in between, surrounded by natural areas of high ecological value. Together, these substantial features testify to the development of mining in this area over more than three millennia, reflecting a long-lasting positive interaction between man and environment which generated one of the most representative mining landscapes of Europe.

From the industrial stage (starting from late 18th to early 20th century) the site preserved consistent vestiges: the latest of its gallery networks, with the Holy Cross master gallery, the hoist winch shaft, the narrow-gauge railway, the incline and the processing plant at Gura Rosiei. The second industrialization, carried on in the Post-War period under the communist regime, is no less interesting from a historical perspective, including the recent open-cast works in Mt Cetate. These however developed at the cost of significant losses to previous historical elements and areas, which justifies their absence in most cultural assessments of the site. (See the significance assessment by Oxford University Institute for Archaeology).

The threat from re-working
The planned new pits, stone quarries, roads, ponds, huge 300 ha tailings facility and other elements, would be displacing historical and natural features, destroying not only the four mountains of the site, which are holding the very network of Roman and later underground works, as well as very important surface archaeological areas, early modern and early industrial built heritage and landscape.

This combination of threats - to environment (not least because of cyanide leaching), to heritage, to property rights and many more - was crystallized in a bill proposed by the government in summer 2013, with the aim of clearing all legal obstacles in the way of this mining project, and indeed of any other.
Widespread protest continued for four months in major towns across Romania and wherever there was Romanian diaspora, until the government stepped back, set up an investigation commission and finally dropped the bill. This was the most important civic protest movement in the country since the years following the Romanian Revolution.

During the past years more than 150 houses have been demolished by the mining company in Rosia Montana and many more in the surrounding villages, dealing a heavy blow to the vernacular buildings of the area. Furthermore, the industrial layer of the site is constantly lessened, the narrow gauge railway and carts being dismantled for scrap iron under the negligent eye of local mining administration, the workshop and caretaker’s house at the entrance to Holy Cross master gallery demolished by the mining company, and the most recent disappearance of the 19th century hall of the processing plant at Gura Rosiei, dismantled for scrap brick over a period of weeks in the summer of 2014, only to be investigated by police afterwards, with no known results.

Meanwhile, independent heritage initiatives appeared from a heritage NGO ‘ARA – Architecture. Restoration. Archaeology’, hosted and supported by the local community through their organisation Alburnus Maior. A programme of conservation of the built heritage developed over the past years has grown into a volunteer involvement platform called Adopt a House at Rosia Montana, which gave new breadth to the rescue actions, stimulating greatly the public involvement in conservation of cultural heritage, and contributing to the strengthening of the local community.

Several other heritage actions developed for and with the local community, such as a yearly field school, a yearly cultural festival, exhibitions, publications, all help convey the message of the huge cultural value and hence development potential of the site.

A new zoning regulation announced by the municipality and brought to public consultation in summer 2014 turned out to be just the same old one, which translates the mining project in urban planning rules. Under this regulation no development other than mining is allowed in the largest part of the town and surrounding villages, and this only prolongs the development blockade imposed on this community for more than a decade. Not least, the zoning plan draws pits over existing mountains, notwithstanding their legal protection status as historic monuments, listed for the wealth of underground mining vestiges they hold.

**Recent positions in defence of Rosia Montana**

International support for the defence of cultural heritage at Rosia Montana has been voiced for many years now, with repeated resolutions by ICOMOS, but also from IUA (International Union of Architects), CEA (Council of European Architects) and many other bodies, individual professionals and scientist. In 2013 Europa Nostra included Rosia Montana in the first edition of its advocacy and rescue programme “7 Most Endangered”. All of them have raised the issue of the potential World Heritage Listing of Rosia Montana, an idea which had been campaigned for by Romanian organisations, notably the National Chamber of Architects and ARA, the latter filing an official request to the Ministry for Culture in 2008, repeated in 2009 and again in 2010.
In 2011 the case was assessed in the National Commission for Historic Monuments within the ministry, which recommended the inscription on the Tentative List. But the file has never been forwarded to UNESCO.

After so many years of campaigning, an important shift appeared in the most recent positions of ICOMOS and Europa Nostra. Both organisations not just demand rescue action and development planning based on a sustainable use of cultural and natural heritage assets, but they are committed to getting involved into such processes – ICOMOS by creating an internal working group, opened to other organisations as well, of which TICCIH is specifically mentioned as one, and Europa Nostra by supporting local actions and by engaging the Romanian authorities. (See the most recent resolution, November 2014)

Call to action
Despite the on-going political and administrative engagement with the mining project, what can be done is independent actions, research and conservation aimed at those parts of the site owned by the local community. Even larger scale research or monitoring or conservation actions should be attempted, since the whole site collectively and many of its features individually are listed historic monuments, and this entails the duty of conservation and the public interest of any such action – just like it prevents destruction. That does not seem to be understood among the public administration yet.

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More illustration:
- photo-galleries on the underground landscape
- high resolution photographs of the site
- images of the town, landscape and people

Traditional stamping mills; at the communist nationalization, in 1948, more than 400 such installations existed; they were all destroyed

(photo: Csiky Lajos, Verespatak és környéke, s.l., s.a. [ca. 1900])
France

Les Forges de Trignac
Alexandre Granger
Urban planner in the ADDRN (Saint-Nazaire town planning agency)

The Trignac steel mill is a singular and symbolic site in French steel industry history. It inaugurated the concept of a “maritime steel industry”, prefiguring contemporary factories of Dunkerque and Fos-sur-Mer. The steel-making activities in Trignac lasted about a half century, which is not so long. Since the Second World War, the disused site has been occupied and exploited by several economic functions. Despite many projects presented by architects, landscape planners and artists, Trignac steel mill has never been rehabilitated like other mills such as Uckange in eastern France or in the Ruhr, Germany, or the Sloss mills in Alabama, USA.

Trignac steel mill was built in 1879 in the North of Saint-Nazaire (Loire-Atlantique), joining a Breton steel-making tradition. But contrary to the old Paimpont, Salles or Lanouée steel mills, Trignac plant did not work with charcoal.

The Trignac mill was not on a raw materials extraction place, either, but near to a steel consumption site: the shipyards of Saint-Nazaire. Trignac is connected to the Saint-Nazaire port by an effective rail transportation network that enabled it to forge links with other industrial areas in Europe as well as raw materials extraction such as coal mines in Kent (England) and in Rhondda Valley (Wales), but also iron mines in Bilbao (Spain).

A very divers labour force, international and particularly mobile, worked at the steel mills of Trignac. Civil registers attested the presence of Belgian, German, Swiss, Portuguese and Polish workers. Engineers and skilled technicians were hired in French still-industrialized regions: specific knowledge was necessary to operate and maintain such installations. During the First World War an Asian workforce was mobilised to compensate for the lack of men who had gone to fight.

More surprising is the presence also of workers from America. At this time, the transatlantic line between Saint-Nazaire and the ports of the New World could certainly explain their presence. During the 1920s and 30’s, almost 27 nationalities are registered in the steel mills of Trignac. Breton seems to be the most spoken language, and English because Anglo-Saxon workers were the also numerous.

This inrush of population led to a small town dedicated to the steel mills. In 1872, the hamlet of Trignac had 319 inhabitants and increased by 5,600 inhabitants in 1932. A whole range of urban facilities were organized around the steel mills: residential cities for workers, foremen and engineers, shops that included a cooperative for workers, cultural and festive facilities, a rugby stadium…

The Trignac steel mill was made necessary by the new shipyards which build steel boats in the Saint-Nazaire harbour by the middle of 19th century. Saint-Nazaire port and shipyards and Trignac steel mill founded the industrial pole of western Loire estuary which is the major industrial harbour of the metropolitan territory between Nantes and Saint-Nazaire.
The Loire estuary is marked out by symbolic industry-harbour sites, carriers of a strong patrimonial, landscaped and identity value. Trignac steel mill is one of these “beacons” on the estuary horizon, visible from the north and south of the Loire river, as far away from 17km, representing a singular and different identity element for the town.

The steel mill closed definitively in 1943 when the plant occupied about 600 000 m². Having been exploited by several companies, the site was partially reorganized into an economic activity park, from the beginning of 1990s to nowadays.

Remaining buildings of the steel mill are few. The old blast furnaces blowing machine hall and the office building of blast furnaces are on private property. The bases of blast furnaces as well as the basis of a fireplace mark the limit between two company properties.

But the most spectacular set of Trignac steel mill is unquestionably the old cokeworks. The coal-based towers of this complex are probably a unique example in France of steel-making architecture. Completely built with reinforced concrete, they remind certain mining shorings, as “Koepe” tower situated in Nyoiseau iron mines, in the North of Angers (Maine-et-Loire, France), both belonging to the same companies.

This precursory view looks to a future within an exceptional territory where the city, industry, port and sensitive natural spaces live together. In fact, this future is still completely undecided. Further studies might be realized such as evaluating the possibilities to preserve and rehabilitate charcoal towers, the way to reconnect this site to the rest of the city, new possible functions... The consultation of local people about the future of Trignac steel mill could also be a great opportunity to rediscover this symbolic site, and to make popular events based on this heritage.

This report is based on a historic diagnosis of the Trignac steel mill by Alexandre Granger commissioned by the CARENE (Community of towns of the Saint-Nazaire area) and the City of Trignac.
Iran

Adaptive reuse of the Tabriz Khosravi leather factory

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Tabriz (Azerbaijan province) is on the far northern border of Iran, near to Russia and to Turkey to the west, and one of the pioneers of modern building technologies and industries in Iran. Brick kilns, match factories, knitwear, weaving, leather factories and related industries are among Tabriz factories.

Tabriz leather has a long reputation just like its history. Tabriz leather export has attracted many investors from the past till today. Many cultural, economic and political changes, industrial attitudes evolution and replacement of traditional workrooms with modern ones occurred in Iran at the beginning of Pahlavi era (1925-1941). Tabriz was the greatest center of producing shoes, leather and skin in the Near and Middle East.

Leather craftsmen provided primary materials for shoes, boot and saddle makers. Many tanners worked out of the city or next to the rivers because much water was needed to tan the leathers and skins. This was the reason of Dabbaghan (tanners) neighborhood establishment in Tabriz. Tanners abraded the hairs of skins by a special device and then colored them with different paints. State investment and technology development caused replacement of small tanning workrooms with huge factories such as leather and pickled pelts factory.

Accordingly, the Khosravi leather factory was established in 1931 as the third leather factory of Tabriz. It was located on a flat land in southern of Tabriz next to the Vazirabad aqueduct. This complex has 38,000 m2 with eight buildings. Combination of different height buildings with two chimneys provides a satisfying landscape. The machinery of Khosravi factory was made in German and also the architecture of this complex is a combination of Tabriz traditional architecture with German style.

This factory produced army boots and jockey shoes during World War II; and probably exported other products such as leather table linen that is maintained in the safe deposit box of Pullman hotel in Italy.

Their facades are fully brick with stone fusion. The architecture of the complex is a combination of European industrial architecture and Tabriz Qajar architecture. The modular duplicate brick frames on the brick walls decorated the complex. Vertical piers with horizontal tie beams evoke late Qajar architecture (1796-1925). Exterior walls are decorated with brick traditional decorations evoking a classical discipline.

This complex shows German industrial strategies belonging to the period between the two world wars. German architects designed other country factories based on the vernacular architecture. Industrial architecture of Scandinavian countries shows this feature obviously.

In 1987, Khosravi factory moved to an industrial town out of Tabriz city because the residential texture of Tabriz had developed and the factory was restricted, with health problems for settlers. Factory equipment was transferred and the complex reused for Tabriz Islamic University as amphitheater, office building, gym, restaurant, library, praying room and hostel.

Khosravi Leather Factory Buildings Complex is registered on Iran’s National Heritage List. Some of the remaining generators and turbines were repaired and restored creating an industrial museum. It can be developed and changed into a large educational-cultural center because it has the potential to be merged with surrounding buildings. The tall chimneys of Khosravi complex made it a monument for Tabriz. Reuse of this industrial complex is a successful experience providing suitable place for art educations.
Spain

The national industrial heritage plan, 15 years on
Eusebi Casanelles
TICCIH Past President

Some years after the return to Spain of democratic government in 1979, and once the competences for Cultural Heritage were transferred from central to regional governments, the Spanish Ministry of Culture set up ‘National Thematic Heritage Plans’ that had to be managed by the Instituto del Patrimonio Cultural de España (IPCE). These plans are administrative instruments to achieve three targets: first to establish a unified action methodology on ensembles of assets at national level; second to program investments according to conservation needs; and third to coordinate participation of the different institutions intervening in the conservation of these heritage ensembles. The first was the “Cathedral Plan” approved in 1990, all the cathedrals were included and it received a budget from the regional and national government.

Each plan had a set of goals for protecting heritage sites, foster the access to public, promote the dissemination of information related with the sites, do research, and encourage visits. But after twenty years, conservation and restoration of monuments has been the most important issue.

The Industrial Heritage Plan was approved in 2000. Industrial remains are key to understanding the economic development of Spain from the 18th century onwards. Although industrialization was not as relevant as in others European countries, some territories were highly industrialized, such as the Basque Country and Catalonia. Furthermore there were historic manufactures, transport and communication systems, and water and energy production, in many territories, and important extraction sites which were internationally known such as the Almaden mercury mines and Riotinto copper mines.

The second reason was that the IPHE realized the need to value industrial heritage very urgently. There was a continued destruction of sites because of productive obsolescence and deindustrialization in many parts of the country. On the other hand, the rapid spread of new buildings in most parts of Spain during last decades, especially in towns and touristic zones, has led to the demolition of many industrial sites.

A commission was established with the goal of developing criteria and methodology as well as drafting a basic catalogue of industrial assets. Compared with other heritage national plans such as cathedrals or defense architecture, industrial heritage was poorly known and little studied by research centers or universities. Only one or two regions had developed initiatives in this field and a few territorial associations for the conservation of industrial heritage claimed for its study and preservation. One of the first issues that the commission faced was to establish the criteria for choosing which sites which could participate in the plan.

Three sets of criteria were approved:
1. Social evidence of the site and its relevance on the territory related to history, society, architecture, decorative arts and technology.
2. Intrinsic cultural heritage site value defined by typological uniqueness and/or representativeness, authenticity and integrity.
3. Viability and social added value of the future heritage intervention.

There was a chronological delimitation from the 18th century, when new companies such as the Reales Fábricas were set up to sell to new markets and mechanization started, until the 1960s and the beginning of automation, when Spain underwent a very rapid economic development which determined another historical era.

The National Plan for Industrial Heritage helped the government of the regions to carry out inventories, prior-studies before starting a project to advise on costs, master plans, architecture projects and to make architectural conservation works.

At the beginning of the Plan, 49 industrial sites were listed for a possible intervention by the members of the commission representation of the regions but it was not possible to do anything at many of them due to legal and economic problems or because the owners, mainly municipalities, had other priorities. But different sites were added and a total of 25 received a budget for acting.

As part of conservation work, the intangible issues have to be taken into account to evaluate the results of the plan. Many regions or municipalities were not aware of the importance of industrial heritage or of the industrial sites they had in their territories. The Instituto’s interest in investing in them, the dissemination linked to the plan, as well as the exhibition and publication of ‘100 Sites of Industrial Heritage’, was very useful in spreading awareness of their value.

The Plan still continues although with a lower budget because of the new economic situation. In this second phase, the emphasis is on spreading the values of industrial heritage as a factor in territorial identity, in communicating good practice and examples of regeneration of neighborhoods which contribute to social and economic development, in studying which are the most relevant industrial landscapes, and in promoting industrial tourism.

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Austria

The Seeklause at Hallstätter See, Austria
Dr Peter Strasser, Donau-Universität Krems - Universität für Weiterbildung

The weir system Seeklause at the outflow of the lake Hallstätter See in Steeg (Municipality of Bad Goisern), is one of the oldest technical monuments of Austria. Since 1997 it forms part of the World Heritage property Hallstatt / Dachstein – Salzkammergut Cultural Landscape. Constructed around 1540, it represents the most important installation of this kind in Europe.

The weir-system has been maintained on a regular basis and the construction has remained unchanged throughout the centuries. One of the eleven gates has been replaced by a reinforced construction - with the approval of the Federal Office for the Protection of Monuments - to allow the remote-controlled adaptation of the gate according to the water-level.

However, currently there are demands raised by politicians to adapt the Seeklause according to the technical state of the art which would cause the demolition of this unique technical monument.

The Seeklause consists of two individual, separated constructions, the weir system “Klause” and the “Polster”. The Polster represents a counter-weir system some 40 meter downstream of the Klause. The Klause is formed by twelve wooden boxes. The eleven openings between the boxes can be closed by gates. Through the downstream located Polster, the downstream water-level will be raised what leads to the reduction of the pressure on the upstream gates.

Prof. Gerhard Stadler from Vienna University of Technology proposed the implementation of a modern weir system-regulation as legal basis of an operating method which has been already successfully applied at Thuner See in Switzerland: through pre-lowering of the lake level at short notice according to the weather forecast the surplus water could be deducted during a couple of days. As a result, this unique technical monument could be preserved.
Venezuela

The heritage of the national oil industry
Lucía Sánchez Figueroa
PDVSA architect

We cannot address the issue of the industrial heritage of Venezuelan oil without locating oil in the context of the history of technology. From 1860s oil is the central element of the technical system of the second industrialization, the oil/electricity/alloy system. The First and Second World War confirmed oil as the essential component in 20th century industry and transport. In the case of Latin American countries with significant reserves, the emergence of oil had obvious consequences, both in social processes and in the territorial organization of productive spaces.

From the birth of the Venezuela Republic until the late 19th century, coffee was the principal product of export in Venezuela, until a month after the First World War began in 1914, when the Caribbean Petroleum Company (Shell) initiated the intensive exploitation of oil. From that moment on, Venezuela became the focus of international investment.

However, the oil activity was not only about economic exchange. It represented an abrupt social, territorial and technical change. The oil company towns’ experience reconfigured regional identities and introduced new ways of life.

When oil activity stabilized, the settlements that initially developed violently and made up of unstable and unsanitary housing became small city centers with all services subsidized by the company. From 1920 onwards, the oil company towns became the key elements and one of the central topics of social criticism to the oil industry in Venezuela.

Consequently, from 1938, they began to consider ideas that worldwide were being used since the early 20th century. Some ideas with great impact on the urban planning included E. Howard’s “Garden Cities of Tomorrow”, published in 1902.

Thus, open community cities emerged such as Ciudad Ojeda, in 1939, and others of smaller scale appeared as part of the Paraguana Refinery Complex Urban Project, nowadays the second largest refinery of the world, formed by three significant refineries: Amuay (1950, Creole), Cardón (1949, Royal Dutch Shell) and Bajo Grande (1956, Richmond, current Chevron).

The cities built as part of Paraguana are Judibana (former Creole town), designed by the architectural firm Skidmore, Owings & Merrill and Cardón (former Shell town). These open communities represented an innovative approach in terms of urban design.

After nationalization in 1976 the “integration of the oil company towns” was carried through. This transition was carried out in coordination with the related town councils. After many years most municipal buildings are in considerable disrepair.

The industrial heritage of oil has the most potential in the country for its scale, size, proximity, technology and historical importance. However, it remains ignored, considered only from the economical point of view or addressed without industrial heritage’s necessary rigor, and it could disappear: We can consider it an endangered heritage.

Unlike most cases on the issue of worldwide industrial heritage, in Venezuela, this heritage is still active. This is an advantage since it allows a solution to be anticipated before deindustrialization starts, minimizing the traumatic issues historically associated with this stage, as experienced in other countries.
However, the notion of industrial heritage is not yet developed in Venezuela. This lack of consideration about industrial heritage is a consequence of the absence of professional specialization, since even PDVSA, Venezuela’s state oil company, none of the in-house architects, engineers, archaeologists, etc. has been trained in industrial heritage. This omission is also present in the universities and the Institute of Cultural Heritage.

Currently, thanks to academic exchanges with other countries, the author is now PDVSA’s specialist in the field of industrial heritage. A group of professionals and researchers, somehow related with this field and all with extensive experience in the conservation of cultural heritage, are currently working on the creation of TICCIH Venezuela.

Preserving the historical memory of a country through its heritage is to cultivate the identity that ought to keep its role in the national and international heritage scene. It is necessary to include the industrial heritage in the curriculum of universities and companies, starting with the history of technology analysis, followed by the development of the industrial heritage national inventory.

**Slovenia**

**FIVA - motor vehicle conservation**

*Nataša G. Jerina, FIVA Culture Commission*

Fédération Internationale des Véhicules Anciens (FIVA) is an international non-governmental organisation dedicated to preserving, protecting and promoting movable technical heritage - historic vehicles and related culture. The association was founded half a century ago and has come to connect over 1.5 million members from around the globe.

The motor vehicle contains what may be the largest amount of historical, technological, social, stylistic, iconographic and aesthetic information and messages integral to understanding the state and evolution of engineering and technology. Messages contained in the object are the key to assessing the importance of preserving a vehicle and to establishing its heritage status.

The FIVA 2014–2017 strategy places particular emphasis on modernising the organisation itself, which in turn means a greater focus on openness, professional standards and cooperation with similar international organisations. FIVA realises that the goals it has set for itself can only be met by collaborating and networking globally.

FIVA recognises TICCIH as an organisation with a similar mission and believes cooperation on projects and exchange of experience and knowledge would help them both with providing and enabling access to information and knowledge as well as by increasing their visibility and influence internationally. TICCIH and FIVA seek to preserve movable and immovable industrial and technical heritage, meaning that they actually both work with directly interdependent heritage.

Through joint effort they can be even more successful at promoting industrial heritage by exchanging ideas and experience related to its preservation.

To point out but one of the many cases where both organisations need to work together towards preserving heritage, let us draw your attention to TOMOS, one of the most prominent motorcycle and outboard motor factories in Slovenia. In the 60s and 70s, TOMOS was believed to be unmatched Europe-wide by the number of innovations, prototypes and patents. The Slovenian region of Kras had been looking for ways to kick-start industry and jobs in the politically turbulent post-war landscape.

In July 1954, the political circles decided to establish a motorcycle factory in Sežana. The following month, the name TOMOS (TOvarna MOtornih koles v Sežani, meaning Sežana Motorcycle Factory) was first used on record. A few months later, in October 1954, after the fate of Zone B of the Free Territory of Trieste had been settled once and for all (Zone A was taken over by Italy while Zone B became Yugoslav/Slovenian), the Slovenian government decided to relocate the factory to the coastal town of Koper, which had by then emerged as the principal industrial centre in the Slovenian Littoral.

On one hand, there is the factory building and its research and development institute, regarded as one of the top such institutes worldwide, and on the other its “products”. Only an interdisciplinary approach connecting facts on all levels will allow us to correctly determine heritage status and secure sustainable management and preservation of the heritage of the future. In the case of TOMOS this approach would most certainly help and speed up the protection of the factory buildings and of the institute (now both in deterioration), the “products” and promote its great story.
United Kingdom

Reassessing an industrial genius: James Watt

Daniela Wellnitz, STICK Industrial Collections Officer

Matthew Boulton summarised the immense impact of the invention of the separate condenser by his Scottish business partner James Watt in one word: “I sell here, Sir, what all the world desires to have - Power.” It was a direct outcome of Watts famous ‘eureka’ moment during a Sunday walk on Glasgow Green in May 1765 when an idea for enhancing the efficiency of Thomas Newcomen’s steam engine came into his mind. Four years later, Watt patented the separate condenser for engines which substantially set light to the Industrial Revolution. Watt’s invention created a new industrial, technical and economic dynamic and his effective power was in high demand worldwide. Commemorating James Watt’s legacy with the 250th anniversary of the separate condenser this year, followed by the 200th anniversary of his death in 2019, unites us all.

In order to fully determine the nature of Watt’s contribution to the modern world, and the separate condenser’s intellectual and commercial aftermath, the Scottish Transport and Industrial Collections Knowledge Network (STICK) has launched a James Watt commemoration project. It includes a basic catalogue of Watt-related objects and collections across the UK including creative ideas, interesting stories and exciting perspectives for the planning of the Watt commemorative events.

This year STICK will host a spring event concentrating on talks by Watt experts, followed by a conference in October 2015. Both events are intended to build further interest within institutions who aspire to arrange events from steam punk to exhibitions or conservation work (like the repair of a Watt sun and planet engine of 1801 at Dundee) in preparation for the 2019 anniversary of Watt’s death. In regard to the second anniversary, STICK aims for a commemorative festival accommodating the multi-faceted figure of James Watt and his life’s numerous parallels for science, education and industry in the 21st century. For this larger festival approach STICK also seeks cooperation with new partners in an international context. Over and above its Scottish roots, the international significance of the “Watt Story” could be shared and completed with innovative chapters about the global recognition of James Watt as a pioneer of industrial modernity and his impact on international industrial and social history.

In order to establish a knowledge-sharing network and to develop future collaboration, stakeholders are most welcome to visit our website and contact us directly.

James Watt shows his engine to Matthew Boulton, as represented in Doulton tiles in the Cafe Royal in Edinburgh. The separate condenser is green and the “sun and planet” for rotary motion is drawn pinned above Boulton’s head. The engine model looks to be early 19th century in some of its elements.

Photo Mark Watson
The Bohin pin and needle works has been refurbished since 2001 and now combines production on original machinery with a museum of the historic processes and the industrialisation of the region.

The Bohin Manufacture is the last French producer of needles and pins and a rare example of a ‘heritage’ factory still in activity. It is in the town of Saint-Sulpice-sur-Risle in Normandy. Against all the odds, the factory continues to manufacture on machines designed during the 19th century by the firm’s founders. This success is due to two main factors: the continuing production of specialised articles of high quality, which are exported to more than thirty-five countries, and opening the factory to the general public after a complete refurbishment and the creation of a new museum space of 2,000 m2.

In 1839, the firm’s founder, Benjamin Bohin, took over his father’s workshop specialising in the production of boxes in metal and wood. In 1866 he purchased a water mill at Saint-Sulpice-sur-Risle and, with 24 workers, began production of needles and pins. After a fire in 1877, the factory was rebuilt, and it is these buildings which survive today.

Along the Risle valley and in the town of L’Aigle, the firm acquired other sites in order to diversify its production. The members of the Bohin family were of an original frame of mind and capable of many new inventions. The first patents were taken out during the 1840s, and the number increased considerably during the 1880s. Paul Bohin was awarded gold medals at the Paris exhibitions of 1889 and 1900.

In 1914, the Bohin firm employed 600 workers at its different sites. A limited company was set up in 1924. After the Second World War, the firm branched out into new products such as small metallic items for stationery, articles for medical uses or the textile industry. By 1952 it was the last in France to manufacture needles and pins.

In 1997, after five succeeding generations of the Bohin family it was acquired by its present owner, Didier Vrac, who concentrated production in Saint-Sulpice-sur-Risle and who launched, in 2001, a major project for refurbishment and interpretation. In 2010, the company gave several of its factory buildings to the local authorities (Communauté de Communes du Pays d’Aigle) in order to create an international centre for the interpretation of the needle (Centre international d’interprétation de l’Aiguille), which was awarded a special label as a pole of rural excellence. Vrac began an exemplary renovation project with public and private financing. The Paris architect, Jean-Marie Mandon was selected for the renovation of the site and the creation of its new museum spaces. He worked in collaboration with the Swiss museographer, François Confino, already celebrated for his design of the Toyota museum at Tokyo, the Los Angeles aerospace museum and the Pavilion of the future at the Shanghai World Fair.

The cost of the work was evaluated at €3,867,000, shared between the Orne department, the Basse-Normandie region, the State and European funding, along with the Fondation du patrimoine which channelled cultural sponsorship from the Total Foundation (petrol) and from ERDF (electricity distribution).

The site’s large collection of documents, objects and films recounts the history of the pin and needle manufacturing industry. Already described in the encyclopedias of Diderot and d’Alembert, the fabrication of needles requires a succession of steps which have changed little since their mechanisation during the 19th century. Today, visitors can follow the 27 stages with the aid of the latest in museum display techniques, then see these needles and pins in actual production. They can also chat with the factory’s workers, learn about the firm’s history and more generally about the industrial history of the region.
The interpretation of needle-making skills is by a celebrated international museum designer, using slightly abstract figures.

The weaver Sonja Enbuske at work in one of the 170-year old looms. Note the jacquard head at the top.
Conference Reports

ICOMOS 18th General Assembly, Florence 9-14 November 2014

TICCIH and ICOMOS

Prof Patrick Martin, TICCIH President

TICCIH was well represented at the 2014 ICOMOS General Assembly in Florence. In addition to your President, current and recent Board members in attendance included Helmut Albrecht, Stephen Hughes, Irina Iamandescu, Miles Ogletorpe, Massimo Preite, and Neil Cossons. While there were no dedicated Industrial Heritage sessions, papers on the topic were literally scattered throughout the meeting and a number of TICCIH members participated.

The high point of the General Assembly for us was the formal signing of an updated ICOMOS-TICCIH Memorandum of Understanding, the third since ca. 1985, replacing the 2000 version. This agreement recognizes and reinforces the longstanding relationship between the two organizations regarding the field of Industrial Heritage. It emphasizes the mutual benefits of collaboration, cooperation and intellectual exchange, especially in the realm of World Heritage designations.

ICOMOS General Assembly report

Dr Stephen Hughes, TICCIH Secretary

Every three years a sizable proportion of the 11,000 membership of the International Council of Monuments and Sites (ICOMOS), in this case almost 1,000 members from some 140 countries, meet in a location across the world for a week-long exchange of views and to elect a new committee.

Even before the general membership is involved there are preliminary consultations and meetings. As discussed above these involved the TICCIH President, Patrick Martin, in attending a two-day meeting of the Advisory Committee of ICOMOS, a higher-level body designed to co-ordinate the many sectional International Scientific Committees (ISCs) of ICOMOS which carry-out much of its detailed work.

The membership of ICOMOS consists largely of architectural and archaeological professionals and many members of TICCIH are also members of ICOMOS.

I was invited by members of ICOMOS-USA to attend their visit to the nearby ancient marble quarries of Carrera and to explain the ongoing TICCIH/ICOMOS Thematic World Heritage Study of International Building-stone Quarries. There are still some 300 working quarries on mountaintop sites in two main valleys at Carrera where quarrying started in prehistoric times.

I look forward to continued mutual promotion of our activities, such as the Dublin Principles, the Taiwan Declaration, interactions with International Scientific Committees, and expansion of thematic studies related to industrial heritage.

An informal Board meeting focused on matters of enhanced communication between TICCIH and ICOMOS, and the upcoming Congress in Nord Pas de Calais. We welcomed Mary McMahon from Ireland to discuss the possibility of a new ICOMOS International Scientific Committee focused on industrial heritage, a topic of continued conversation in a later session. The consensus conclusion was a commitment to work on improved communication, rather than support for a new organization, and a working group is being formed to follow through on that suggestion.

Florence Hachez-Leroy represented the Congress organizers and gave us a detailed summary of planning to date. Pre-Congress tours will center on Calais and Dunkerque September 5-6, while Post-Congress tours will visit several sites, including some in the Paris area during the period September 12-14. Over 350 proposals from more than 45 countries promise a lively and stimulating set of presentations and posters. Details will appear on the TICCIH website as they are finalized. Members should register and reserve accommodation soon so as not to be disappointed.

An industrial tourism industry has now started with hair-raising Land Rover trips up the zig-zag roads to the quarries’ mountain summit. Our specialist guides, who had been invited by ICOMOS-USA, explained how there was a lack of archaeological supervision of the quarrying process, now greatly accelerated by the introduction of diamond-cutting. The various waste-deposits of workings from the Roman, Medieval and early-modern periods can be distinguished by their form but are being destroyed without record. I gave a presentation on the current international quarrying study and there were several enthusiastic offers of detailed support from specialists in American stone quarrying. We returned to Florence to attend the opening ceremony of the ICOMOS General Assembly in a large Vauban fortress, its military buildings regenerated for cultural purposes.

The first plenary working-session was held on Monday morning in the vast subterranean chamber of the Congress Centre during which the TICCIH President signed the new Memorandum of Understanding (MOU) detailing how TICCIH and ICOMOS are going to work together over the next six years. Patrick Martin gave an illustrated presentation to the assembled delegates explaining how TICCIH gave a prominent position to its joint working with ICOMOS on its website with a link to the ICOMOS website included. Reference was also made to the renewed joint programme of thematic World Heritage Studies which promises to further cement the bonds between the two organisations.
The conference programme split into four parallel two-day workshops dealing with general conservation issues. In these, industrial heritage was integrated and subsumed into a wider discussion of theoretical concepts and case studies. I gave a presentation on the concept of ‘Evolving Authenticity in Mining & other Industrial World Heritage Sites’ explaining that World Heritage Sites with a functioning economic purpose had of necessity to be allowed to evolve and be renewed to achieve a long-term sustainability of their Outstanding Universal Value (OUV). An important factor was recognising this in their OUV at inscription and not classifying mining areas as merely ‘historic’ when their value and industrial-culture lay in a continuance of their historic economic and industrial purpose.

As discussion hosted by Japan the evening before had made clear that ICOMOS thinking is already heading in this direction. This reviewed the recent ‘Nara Declaration on Authenticity+20’ conference in which the case-study of Salt-making Heritage Landscapes in northern Spain had explained the need to recognise the continual renewal and evolution of an economic landscape, and that authenticity in World Heritage was not a static concept.

Discussion afterward considered how authenticity could be applied to the specific industries examined in each study, led to informal discussion on how TICCIH might be involved in further initiatives within ICOMOS and with the participation of the Getty Institute in developing an agenda of the study of the 20th century. This is likely to include the development of Thematic Studies such as those for hydro-electricity and/or electrical generation generally; the motor-car and aircraft industries and infrastructure; steel and concrete construction and the space industry.

At the ICOMOS General Assembly Meeting, Gustavo Araoz of the USA was re-elected as President. In his report he noted that the UNESCO World Heritage Committee was becoming more political in its decisions and that ICOMOS needed to demonstrate the firm foundation of its recommendations for the World Heritage Committee. There was a need to include a broader range of experts and organisations in such meetings as the forthcoming World Heritage Panel.
Industrial Heritage and the World Heritage Panel, 9-14 December, 2014

Stephen Hughes, TICCIH Secretary and member of the ICOMOS World Heritage Panel for 2014.

Issues of confidentiality have previously made the workings of the ICOMOS World Heritage Panel a very secret affair, and impossible to report on. However, in response to the increasing depth of debate from Ambassadors and members of the UNESCO World Heritage Committee more transparency has been needed, as well as a greater breadth of advice, in providing recommendations for built World Heritage Nominations.

TICCIH has been invited to send a representative to the annual week-long Panel intermittently over the years, depending on the number of Industrial Heritage World Heritage Nominations made. This year as a matter of ICOMOS policy (see the report above on the ICOMOS General Assembly) it was decided to widen representation of the Panel and to more consistently include other international archaeological and industrial archaeological organisations. The new Memorandum of Understanding (MOU) recently signed between TICCIH and ICOMOS has ensured that TICCIH remains the primary source of industrial archaeology to ICOMOS and was therefore asked to send a representative to the Panel which I attended as TICCIH Secretary.

Nominations for thirty-five cultural and mixed (i.e. containing elements of both the built & natural heritage) sites have been nominated for possible inscription in 2015. Six of these contained a primary industrial heritage character and I was asked to review and comment on these with the exception of one nomination from my own country. Several other nominations contained a strong functional, or industrial element, and there was a lively and informed discussion on all of these.

Each Panel member reviews several of the nomination files in detail and provides additional comments. At least two of the Panel members comment on each site dossier in detail. Experts from eighteen countries representing all five continents attended the meeting. Each site file contains the desk evaluations of experts assessing whether a particular nomination has Outstanding Universal Value (OUV) and results of the Expert Field Mission whose primary purpose has been to assess the state of conservation, authenticity and integrity of a proposed world heritage site. The Panel members comments were primarily informed by these documents augmented by a primary review by ICOMOS Advisers.

The Panel Members then reviewed each nomination in turn to produce advice and requests for further information from nominees for a further World Heritage Panel in March, which will then pass recommendations to the UNESCO World Heritage Committee in June as to whether a nominated site should be inscribed on the World Heritage List.

The discussions over five and a half days were exhaustive and lasted far into the evening to do justice to the nominations received. Gustavo Araoz, ICOMOS President (USA) was in attendance and commented that he felt that the meeting was the most important of ICOMOS’s during the year and that this Panel’s deliberations had been particularly good and well-informed.

The Panel was very ably chaired by Alfredo Conti, ICOMOS Vice-President (Argentina) and the other three Vice-Presidents of ICOMOS, the Secretary General and Treasurer General were in attendance. Five representatives of ICOMOS Scientific Committees also attended.

TICCIH attended in its role as an ‘Affinity Organization.’ There were six invited experts and six ICOMOS Advisors from the 2014-15 evaluation cycle.

World Heritage Panel Meetings are a particularly important facet of the TICCIH-ICOMOS relationship. Reference was made during the meeting to the importance of the Thematic World Heritage Studies in informing discussion of World Heritage Nominations. Discussions continue on how the production of Industrial Heritage World Heritage Studies can form part of the annual programmes defined under the new TICCIH-ICOMOS MOU.

ICOMOS Gazzola Prize to Dr Henry Cleere

During the General Assembly, the prestigious Gazzola Prize was awarded to Dr Henry Cleere, who was ICOMOS World Heritage Coordinator from 1991, based in Paris. Henry began his working life in the steel industry, where he became involved in archaeology. His PhD thesis form the London Institute of Archaeology was on “The iron industry of Roman Britain.” He was Director of the Council for British Archaeology and had become involved in international as well as national matters, playing an important role in facilitating the eventual coming together of ICOMOS and TICCIH at international level, in association with Neil Cossons and the late Stuart B Smith, in 2000.

Renew your TICCIH membership for 2015 at www.ticcih.org
JAMES DOUET, EQLN COORDINATOR

Stone quarrying is among the oldest of industries but a forceful contemporary sculptor of industrial landscapes. Sites worked in Antiquity are still exploited for dimension stone and aggregate. Today it has become standard to ‘renature’ extinct quarries, a formula entrenched in Europe, which wipes away most traces of stone extraction to create new ‘natural’ landscapes and habitats. But there are plenty of other options for these sites which try to reconcile cultural with natural values. In a seminar in Spain last October archaeologists and geologists, quarrymen and concert promoters, compared the best ways in which to approach this singular heritage.

The seminar was organised by Teruel council. The city is famous for its Medieval Mudéjar architecture of which the brick and tile towers are already a World Heritage site. A large area from which quarrying for brick clay continued until very recently lies close to the town centre, and the council obtained a subvention in 2014 from the EU Life+ fund for an environmental project to rehabilitate the landscape. Establishing a European Quarry Landscapes Network (EQLN) of regions which conserve quarry landscapes forms a part of that project.

The seminar was ideal for presenting TICCIH’s most recent Thematic Report for ICOMOS on criteria for selecting World Heritage sites. Stone quarrying landscapes as world heritage sites is written by Dr David Gwyn in the context of the UK tentative proposal to inscribe the slate quarries of Gwynedd, North Wales, and follows the established template of outlining criteria for internationally significant landscapes, illustrated by examples from around the world. Tentative Lists with stone quarries include Carrara, Italy; Norsk Kvernsteinsenter, Denmark; Lengefeld, Germany; S’Hostal, Spain; and Gwynedd, which has supported Dr Gwyn’s report. The report can be downloaded from the European Quarry Landscapes Network website and will be presented to ICOMOS this year.

Ten presentations supported the contention that there are more options for historic quarries beyond ‘renaturing’. Among the speakers lamenting the consequent historical and archaeological losses was Dr Tim Anderson, an American consultant archaeologist based in Spain specializing in millstone quarries, and Ian Thomas from the English National Stone Centre, who is developing a national research strategy for stone quarries.

Geological surveys in Norway, Ireland and Spain try to preserve important rock exposures revealed by quarrying, as well as the historical evidence for ancient workings. The Spanish Instituto Geológico y Minero de España (IGME) is identifying historic quarries through the international Charrock project, and championing them as a continuing source for historic building stone. Several participants work toward similar goals within the International Heritage Stone Task Group. The IGME’s Enrique Álvarez pressed for conservation legislation covering quarries to be more adaptable, so that traditional stone sources can continue to be worked for maintaining historic buildings.

This issue shares features with the renewed extraction from historic metaliferrous mines discussed in the Report elsewhere in this issue.

Extraction continues at famous international quarries and Carrera (see Stephen Hughes report on the recent ICOMOS General Assembly) or Portland are still worked for their stone, but the maintenance of thousands of historic buildings depends on continued extraction from small abandoned quarries.

Dr Norbert Tempel from TICCIH Germany presented the interpretation of the quarries conserved at the Nightingale colliery museum, part of the Westfälisches Landesmuseum für Industriekultur, and José Bravo showed the well-known Lithica project, a spectacular limestone quarry in Menorca, Spain, whose morphology has been conserved with a beautiful combination of music and gardens. There are other quarry concert venues in Austria, Ireland, Spain and Denmark.

The EQLN hopes to build on the Historic Quarries Project, an EU scheme led by Dr Christian Uhlir of the Research Group for Archaeometry and Cultural Heritage Computing (CHC) in Salzburg University, and which built a database of hundreds of historic quarries in Austria, Poland, Hungary, Czech Republic, and Slovakia.

Finally the industry perspective was presented by Lafarge España, for whom Pilar Gegundez stressed that the cement and aggregate industry, which operates quarries all over the world, is also interested in the cultural options open to quarries after extraction.

The EQLN will publish the papers from the seminar and other relevant articles in English and Spanish in the summer.

Note: the Heritage Stone Group meet in Madison, Wisconsin, USA on 19-20 May 2015.

Teruel plans to turn the moonscape inherited from clay extraction into parkland and cycle routes. The European Quarry Landscapes Network will hold its second seminar in Madrid during 2015.
Erich Mercker and Technical Subjects: A Landscape and Industrial Artist in Twentieth-Century Germany (English and German Editions), Patrick J. Jung and Carma M. Stahnke. MSOE Press, Milwaukee 2014

Axel Föhl

Ever since Francis D. Klingender’s groundbreaking 1947 publication “Art and the Industrial Revolution” the way artists sought to represent the fundamental changes industrialization brought about has been a topic. A treasure trove of material for this is the 700 (other sources speak of 400 or 1000)-piece collection of the German born (1936) American industrialist Eckhart G. Grohmann, since 2001 in the “Man and Work” museum of the Milwaukee School of Engineering. This private collection, brought together since 1960, centres on scenes of industrial work without too much regard to their artistic value, “a subject-oriented collection” (Grohmann in 2007). In 2003 this collection was presented to the German public by Klaus Türk, a Wuppertal sociologist, in his 430-page publication “Mensch und Arbeit – Man and Work”.

Now Patrick J. Jung, assistant professor at the Milwaukee school’s Department of General Studies, together with Carma M. Stahnke (whose contribution is not further described) has published a monograph on Erich Mercker (1891-1973), a German painter whose work is amply represented in the Grohmann collection.

Mercker’s work and Grohmann’s collection principles were at the centre of criticism some years ago because of the painter’s close proximity (in 1933 he joined the NSDAP) to the way the Nazi regime tried to use art showing industry for propaganda purposes. Around 1911 Mercker decided to become a painter after initial engineering studies. After landscape paintings his work from around 1920 was more and more dominated by depictions of industrial scenes such as blast furnace works. His style was thoroughly conservative, his oil paintings following a late-impressionist style. Informed by his childhood years in industrialized Alsace-Lorraine, his aim became to stimulate a perception of the aesthetic beauty of the industrial world, to counteract the widespread view of the world of industry as something filled with smoke and dirt. A certain concept of the aesthetically sublime determined his work as opposed to a school that stressed the dehumanizing aspects of the industrial world. This brought him into a fatal proximity to Germany’s new masters. Especially since 1936 he was - through personal connections to Fritz Todt, Hitler’s supervisor of the “Autobahn”-system - drawn into the Nazi sphere by depicting the heroic constructions of this newly developed propaganda instrument of the regime.

In 1937 Mercker was commissioned to execute four paintings for Speer’s German pavilion at the Paris World Exhibition in 1937. From now on, he concentrated on work for the regime with depictions of the world of technical subjects. He became a regular contributor to the official “Große Deutsche Kunstausstellung” (1937-1944). Next to steel works and bridges his paintings also celebrated buildings like Speer’s “Reichskanzlei” or the system’s Nuremberg party buildings.

So the interest one can find in Mercker’s paintings showing the industrial world of the 20th century is poisoned from the roots by the role that he allowed his work to obtain at the hands of the Nazi regime. Hitler personally acquired nine Mercker paintings. Like other prominent artists of the fatal twelve years, however, Mercker like others till his death denied any political implications of his work.

So it is with very mixed feelings that one gazes at the many depictions of Ruhrgebiet blast furnace works or Autobahn bridges.

Jung/Stahnke attest to Mercker “a contribution to art that will outlast him and his time” – a dictum that vis-à-vis his paintings can be doubted. Although the authors continuously try to embed Mercker’s individual work into the general context, a certain apologetic undertone is not to be overlooked. There is a nasty feeling concerning the Grohmann collection that the attitude of “it’s all only about art” lingers on. Adorno’s dictum “There is no rightful life within the wrongful” comes to mind. Questions like that were not put by big industrial concerns that commissioned works by Mercker also after 1945, amongst them VW, Bayer or MAN.

What remains of Mercker’s work is the documentary character that can be interesting for anybody concerned with the history of the relationship between art and the world of industry. This thoroughly documented volume and its painstaking indexes once again throw light on the question of how art can be seized by non-art interests by unscrupulous forces but also by the artists themselves. Young stresses the importance of looking at Mercker’s entire life’s work but here one can cite the chapter “Artists in the service of economy and state” in the 2002 catalogue of the big Berlin exhibition “The Second Creation”: “In the work of artists who dedicated themselves to the industrial world before 1933 and after 1945, we can observe occasionally an astonishing continuity”.

Autobahn construction in Germany by Erich Mercker (1891-1973), exhibited at the Grohmann Museum, Milwaukee School of Engineering.
Book Review


Betsy Fahlman
Herberger Institute for Design and the Arts, Arizona State University

Brian Hayes's splendid book, Infrastructure, features 750 color photographs, most of which he has taken himself, spectacularly illustrates as broad a range of structures as any industrial archaeologist could possibly wish for. An enthusiastic technophile, the pleasure Hayes has taken in seeking out his subjects and explaining them is evident, and he has produced the essential source to turn to when the question comes up: “What's that thing?” His fascinating volume is a kind of “nature guide” whose theme “is everything that isn’t nature.” (1) Intrigued by “the common sights of the built environment” that we interact with every day, Hayes extensively explored a wonderfully expansive range of “exotic industrial habitats” (1) seeking out significant “species” (4) of North American infrastructure that are essential and common elements of modern life (he has also included some images of foreign and space sites, as well as helpful historic pictures).

Hayes has organized his encyclopedic compendium, revised and updated from the volume he published in 2005, into thirteen captivating chapters. He provides clear explanations of technical terms and processes making this volume useful both to those who have been deeply immersed in industrial archeology and to those new to the field. The author is knowledgeable, yet his prose is accessible, and his accounts are refreshingly clear, without deadening pedantic over-explanation. Topical sidebars give more detailed information and history, for example: “The Human (and the Inhuman) Side of Mining,” (34) “Pumping Our New Orleans,” (104-105) “The Cattle Guard,” (140) “Melt-downs,” (212-213) “The Industrial Ecology of a Utility Pole,” (274) “The Last Trolley Stop,” (402-403) and “Gotham’s Garbage.” (507) While his emphasis is on structures, he includes excellent information on the people who work at these sites.

His first chapter, “Out of the Earth,” presents the extractive industries that mine and process raw materials: fuels, ores, and stone. “Waterworks” is focused on the collecting, storage, and distribution of water. “Food and Farming,” explores our “first industry,” and one that “remains in many ways the most essential.” (107) But while farmers and ranchers own fully half the land area of the United States; (107) the number of farmers has decreased, displaced by giant agribusiness. Rigs, pipelines, refineries, and storage tanks are richly documented in “Oil and Gas.”

“Electricity has become the standard currency of the energy economy,” (191) and in “Power Plants” Hayes presents the structures in which electricity is made from coal, gas, uranium, water, wind, and sun. While electricity is invisible, the structures that transmit it are not. “The Power Grid” presents the gigantic transmission lines and substations that dispatch it throughout the nation. “No aspect of our technological infrastructure has been changing more quickly than communications,” (285) and Hayes's chapter on “Communications” demonstrates the many ways we are connected by wired and wireless technology.

Several of the chapters are focused on transportation modes and networks. The automobile has long been a central part of American life, and that subject is explored in “On the Road,” as are our highway systems. “The Railroad” was at the forefront of nineteenth century technology, and remains so today, continuing to transport goods and passengers. “Bridges and Tunnels” have always been wonders of work, spanning great distances and burrowing underground. Airplanes and airports are the subject of the chapter on “Aviation,” while steel containers, and their means of transport and unloading is the focus of “Shipping.”

Finally, how do we handle all the material that is left over from infrastructure? The last chapter is “Wastes and Recycling.”

Hayes concludes with an “Afterward: The World We've Made.” He remains “fascinated by the machinery of the modern world” and is “full of admiration for the clever people who create and run it.” (523) But he admits that his worrying has increased, citing recent notable disasters: Hurricane Katrina (2005), the bridge collapse in Minneapolis (2007), Deepwater Horizon (2010), and the Fukushima Daiichi nuclear reactor (2011). Hayes is well aware of the considerable deep public suspicion of “the companies and regulatory agencies and other organizations whose decisions have such profound affect on people’s lives.” (523) When the scale is global, so are the consequences and costs. He admires “human ingenuity and engineering,” while recognizing the uneasy intersection of social engineering and technology.

If a reader desires more information, fourteen pages of well-chosen sources organized by chapter title may be found at the end of the book. Whatever infrastructure fascinates you most, this is an essential book for anyone interested in the contemporary industrial landscape.
Book Review


Ian Bapty, Industrial Heritage Support Officer, Ironbridge Gorge Museum Trust

The book is divided into three parts. In Part 1 Oevermann’s and Mieg’s two introductory chapters set the scene and lay out the key concepts, including defining the various ‘discourses’ referred to in the title, and providing an overview of established approaches to the regeneration and reuse of industrial heritage. In truth some of this discussion can seem hard going: I certainly found myself wondering how far an emphasis on ‘synchronous discourse analysis’, as derived from the work of Michel Foucault, would help at a public meeting in Clipstone. But stick with it, because Part 1 does nevertheless effectively underpin the relevance of Part 2 where 11 European and Asian case studies are described.

The case studies – each well written by contributors from a wide range of relevant professional disciplines - are the meat of the book. If at their best when they focus on concrete examples rather than theoretical linkages, they nevertheless collectively offer a timely reality check for accepted methods of industrial heritage preservation. I was struck, for example, by Julian Jain’s analysis of the massive practical challenge of regenerating the former textile mills of the Parel area of Mumbai. The limitations of World Heritage inscription are likewise ably explored both in Dimitry Vorobyev’s and Margaret Sh they’s dissection of the Okhta Center cause célèbre in St Petersburg, and Denis Rodwell’s overview of the Liverpool saga.

But these are not just studies of problems and limitations. They are equally a valuable manual of how industrial heritage really can ‘work’ as a vibrant component of modern places, especially where genuine community engagement is positively connected to opportunistic awareness of local and national political trends. Just one example is Ulrike Macrod’s and Ares Kalandides’ discussion of changing post-war attitudes and approaches to the industrial past in Berlin, and the way in which contrasting re-use of former industrial complexes such as the AEG production site (as a university campus) or the RAW railway workshops (as a community locus for arts activities) exploited the emergence of specific economic and political circumstances. A similar message is insightfully conveyed in Toni Karge’s and Andriy Makarenko’s analysis of the Frunze Street brewery in Kiev, and indeed, although there is not space to mention every contribution in this review, useful pointers to good practice are to be found in every chapter.

The case studies include:

- Dimitry Vorobyev’s and Margaret Shityk’s dissection of the Okhta Center cause célèbre in St Petersburg.
- Denis Rodwell’s overview of the Liverpool saga.
- Julian Jain’s analysis of the massive practical challenge of regenerating the former textile mills of the Parel area of Mumbai.
- Ulrike Macrod’s and Ares Kalandides’ discussion of changing post-war attitudes and approaches to the industrial past in Berlin.

The book is recommended for all professionals and students involved in industrial heritage preservation.

The colliery at Clipstone, England, closed in 2003, challenges advocates of industrial conservation to justify their preservation over alternative uses for the site, such as the construction of new houses.

Photo: Neil Cossons

This promptly published collection makes available the papers from the seminar Industrial and Mining Landscapes within World Heritage Context held in Freiberg, Germany. The book contains thirteen reflections on the particular problems and challenges of the preservation, conservation and re-use of historic industrial sites and landscapes. It especially concerns the difficulties presented by industrial landscapes inscribed on the World Heritage List, as evolving landscapes more and more confronted with external development pressure resulting from economic and infrastructural demands. This is notable with recent conflicts between World Heritage mining landscapes and upcoming new mining activities as in Cornwall or Falun, as well as those described in the report from Romania in this issue of the Bulletin. The publication can be ordered online from the Sächsischen Industriemuseum free of charge.


The Heritage Forum column was published from 2010 in the industrial heritage journal Patrimonio Industriale by the Italian association AIPAI. It offered a platform to a series of international specialists to reflect on safeguarding and reusing industrial archaeological assets. Authors were given a schematic outline of the themes they should consider which has resulted in a topical review of how far policies aimed at this heritage converge on a common core set of principles, both practical and theoretical. Each essay benefits from a perceptive introduction by the editor, and is illustrated with many colour photographs of some of Europe’s most suggestive industrial sites.

Between Glory and Fall: Albania and the industrial experience, Ilir Parangoni, with a foreword by Brian Ayers, Centre for Albanian Cultural Heritage, Tirana, 2015. €8.56.

A commendable summary of the rushed communist industrialization of Albania and its aftermath. Three sections present the 5-yearly planned transformation of the rural nation, the amazing bunker system developed under Enver Hoxha’s paranoid leadership, through to the familiar scenes of toppling Stalin’s statues, and the reassessment of the modern-day ruins as touristic relics of socialist heritage. Four case studies present model projects such as the Stalin textile complex and Enver tractor plant. Copies can be ordered here.


An immaculately produced history of English beer production, its brewers, architecture, technology, geography and brewery landscape. Illustrations on every page, references, bibliography, sites index, as well as a reflection on the re-use possibilities for these complex and specialized sites.
Louis Bergeron (1929-2014)

Bernard André
Researcher at the EHESS (ER), secretary of the CILAC from 1994 to 2013 (Translation Paul Smith)

Louis Bergeron’s role in France and internationally in achieving recognition for the industrial heritage was an enormous and vital one.

His interest for industrial archaeology developed during the 1970s, influenced by Maurice Daumas who was then professor of technical history at the Conservatoire national des arts et métiers (CNAM). All began to understand that the reasoned study and rigorous scientific analysis of industry’s ‘material traces’ was perhaps capable of renewing existing epistemological approaches to the phenomenon of industrialisation. A new ‘source material’, invented around defined corpuses, was acquiring scientific legitimacy. But rather than replacing traditional archival sources, this new source made its contribution in symbiosis and in association with them.To take but one example, in France it is possible today to measure how the approach based on newly acquired field evidence has completely renewed our understanding of the iron and steel industry from the Renaissance up to the 19th century.

During the 1970s then, industrial archaeology represented a novel scientific approach in the world of academic historians. But Louis Bergeron soon realized that at the same time it was vital to engage in a citizen’s combat in order to safeguard and protect this newly appreciated sector of the heritage, at a time when whole swathes of it were apparently doomed to inevitable disappearance. It was necessary to mobilise not only the local history and heritage societies that were emerging at the time, but also to encourage initiatives at the regional level and to convince the highest echelons of the State. A new heritage consciousness was emerging, focussed on the deep-rooted changes that industrialisation has wrought on contemporary society, from the 12th century up to the present day. Industry is a fundamental aspect of our civilization and its multiple ‘material traces’ deserve to be kept and valued in the same way as the material traces of other religious or social aspects of our past.

Louis Bergeron was elected, in 1971, to the post of director of studies at the École des hautes études en sciences sociales (EHESS), where he ran the centre for historical research (CRH) from 1986 to 1992. His own research concentrated at first on the period of the French Revolution and the Empire, going on to encompass the study of banks, of business and, more generally, the social and economic elites of the 19th century.

In 1978 Louis Bergeron was one of the founding members of France’s national industrial archaeology association, the Comité d’information et de liaison pour l’archéologie, l’étude et la mise en valeur du patrimoine industriel (CILAC). This association started out from the intuition that it was vital to bring the various actors that were emerging in the field into closer contact, and to draw the attention of the State’s cultural authorities to the heritage constituted by the material vestiges of industry. This explains the name given to the association, a committee of ‘information and liaison’. In 1981, Louis Bergeron and the CILAC organised TICCIH’s fourth international conference on the industrial heritage, held at Lyon and Grenoble. Louis Bergeron was pursuing two objectives in organizing this conference. He hoped to give more substance to thinking about this new field of enquiry, and to inscribe this thinking in the international context that had been emerging over the previous years. As a result of this fourth conference (which lasted eight days and which was attended by no fewer than four French ministers!), a new ‘cell’ was created in 1984 at the heritage directorate of French Ministry of Culture, entrusted with coordinating a national inventory of the industrial heritage. A new section was also set up within the national commission for historic monument protection, especially devoted to the statutory protection of the sites and objects of the industrial heritage, under the terms of the law of 1913.

Throughout the 1980s, Louis Bergeron pursued his activities at the EHESS, where he organised seminars and guest lectures every year, and supervised several researchers in the preparation of their doctoral theses. He was at the centre of a sort of ‘nursery’ of researchers, many of whom were working on themes associated with the heritage of industry.

Between 1990 and 2000, as President of the International Committee for the Conservation of the Industrial Heritage (TICCIH), Louis Bergeron acquired an international stature. Without abandoning the national association, of which he became an honorary president, he became a tireless organizer of TICCIH’s activities on all five continents. TICCIH undoubtedly owes Louis Bergeron much, in particular in the way it is now officially recognized by organisations such as ICOMOS and UNESCO. In 1999, under TICCIH’s aegis, Louis Bergeron was also the creator of Industrial Patrimony/Patrimoine de l’Industrie, a multilingual periodical which, at the international level, pursues the same aims as the CILAC’s national review L’Archéologie industrielle en France. At his last TICCIH conference as President in London in 2000 he signed the agreement confirming the institutional link between TICCIH and ICOMOS.

Louis Bergeron will be remembered as a man of far-reaching culture, with mastery of several languages, distinguished and affable in his relations. His memory will be particularly cherished by those who followed his seminars at the EHESS for almost thirty years, or who met him at conferences, congresses or study days on the industrial heritage. From an intellectual point of view, his influence will be a lasting one for several generations and he remains today the leading French reference for the world-wide heritage generated by industrialisation.
Conferences and Congresses

2015

May 28- May 31, 2015: Society for Industrial Archeology (SIA) 2015 – Annual Conference, Albany and the Mohawk Region of New York State, USA (Albany, Schenectady, Troy, USA)


August 16-21: ICOHTEC 42nd Symposium, “History of High-Technologies - Call for papers and Their Socio-Cultural Contexts”, Tel Aviv, Israel


BigStuff 2015: the Centre Historique Minier, Liewarde, is proposing a session during the 2015 TICCIH Congress

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TICCIH is the world organization for industrial archaeology promoting conservation, research, recording and education in all aspects of industrial heritage. It holds a triennial conference and organises interim conferences on particular themes. Individual membership is $30 (USD), corporate membership $65, and student membership $15

There is an online membership form on www.ticcih.org

The TICCIH Bulletin welcomes news, comment and (shortish) articles from anyone who has something they want to say related to our field. The Bulletin is the only international newsletter dedicated to industrial archaeology and the conservation of the heritage of industrialisation. The TICCIH Bulletin is published online to members four times a year.

Back issues can be downloaded as a pdf file from the TICCIH website, www.ticcih.org.

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